

ภาคผนวก ค

ใบรับรองผลการตรวจวิเคราะห์

ภาคผนวก ค-1

คุณภาพอากาศในบรรยากาศโดยทั่วไป



Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate 1-1 Road, Map Ta Phut, Muang District, Rayong Thailand 21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location :

Lot ID: 24117278
Date Received : Nov 22, 2024
Date Reported : Nov 26, 2024
Report Number: 3176444-1

Page 1 of 1

Sample Description		Air Quality	
Location	Parameter	โรงเรือนนาพันนาพุด (โกลดนาพันนาพุด) (GPS 47P 0731747, 1404885)	
Measurement Date	Measurement by	Nov 13, 2024 - Nov 20, 2024	
		Anuwet Tema	
Time		24117278-8	24117278-9
		Nov 13, 2024	Nov 14, 2024
01:00 PM - 02:00 PM	Nitrogen dioxide (ppm)	0.0081	0.0194
02:00 PM - 03:00 PM		0.0088	0.0195
03:00 PM - 04:00 PM		0.0081	0.0201
04:00 PM - 05:00 PM		0.0109	0.0193
05:00 PM - 06:00 PM		0.0144	0.0182
06:00 PM - 07:00 PM		0.0155	0.0206
07:00 PM - 08:00 PM		0.0153	0.0254
08:00 PM - 09:00 PM		0.0145	0.0240
09:00 PM - 10:00 PM		0.0141	0.0227
10:00 PM - 11:00 PM		0.0172	0.0208
11:00 PM - 12:00 AM		0.0187	0.0183
12:00 AM - 01:00 AM		0.0176	0.0173
01:00 AM - 02:00 AM		0.0109	0.0182
02:00 AM - 03:00 AM		0.0108	0.0139
03:00 AM - 04:00 AM		0.0109	0.0113
04:00 AM - 05:00 AM		0.0126	0.0135
05:00 AM - 06:00 AM		0.0136	0.0174
06:00 AM - 07:00 AM		0.0105	0.0181
07:00 AM - 08:00 AM		0.0116	0.0207
08:00 AM - 09:00 AM		0.0121	0.0138
09:00 AM - 10:00 AM		0.0119	0.0142
10:00 AM - 11:00 AM		0.0122	0.0136
11:00 AM - 12:00 PM		0.0064	0.0114
12:00 PM - 01:00 PM		0.0157	0.0097
Average		0.0126	0.0176
1hr - Maximum		0.0187	0.0254
Standard 1hr - Average		0.170	0.170
Standard		0.170	0.170
Reference Method : US EPA Method Part 50 App. F (Chemiluminescence)		Notification of the National Environment Board No. 33, 2009 (B.E. 2552).	

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.

Approved by

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



Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
271, Sukhumvit Road, Tambol Map Ta Phut, Amphur Muang, Rayong Thailand 21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location :

Lot ID: 24116968
Date Received : Nov 22, 2024
Date Reported : Nov 26, 2024
Report Number: 3134779-1

Page 1 of 1

Sample Description		Air Quality	
Location	Parameter	โรงเรือนนาพันนาพุด (โกลดนาพันนาพุด) (GPS 47P 0735343, 1406686)	
Measurement Date	Measurement by	Nov 13, 2024 - Nov 20, 2024	
		Anuwet Tema	
Time		24116968-1	24116968-2
		Nov 13, 2024	Nov 14, 2024
09:00 AM - 10:00 AM	Nitrogen dioxide (ppm)	0.0036	0.0120
10:00 AM - 11:00 AM		0.0033	0.0127
11:00 AM - 12:00 PM		0.0030	0.0117
12:00 PM - 01:00 PM		0.0031	0.0122
01:00 PM - 02:00 PM		0.0046	0.0109
02:00 PM - 03:00 PM		0.0067	0.0091
03:00 PM - 04:00 PM		0.0065	0.0078
04:00 PM - 05:00 PM		0.0089	0.0076
05:00 PM - 06:00 PM		0.0129	0.0076
06:00 PM - 07:00 PM		0.0140	0.0077
07:00 PM - 08:00 PM		0.0107	0.0069
08:00 PM - 09:00 PM		0.0037	0.0072
09:00 PM - 10:00 PM		0.0035	0.0079
10:00 PM - 11:00 PM		0.0038	0.0082
11:00 PM - 12:00 AM		0.0041	0.0069
12:00 AM - 01:00 AM		0.0060	0.0073
01:00 AM - 02:00 AM		0.0059	0.0161
02:00 AM - 03:00 AM		0.0092	0.0166
03:00 AM - 04:00 AM		0.0072	0.0124
04:00 AM - 05:00 AM		0.0067	0.0200
05:00 AM - 06:00 AM		0.0115	0.0122
06:00 AM - 07:00 AM		0.0117	0.0110
07:00 AM - 08:00 AM		0.0095	0.0132
08:00 AM - 09:00 AM		0.0128	0.0102
Average		0.0072	0.0106
1hr - Maximum		0.0140	0.0200
Standard 1hr - Average		0.170	0.170
Standard		0.170	0.170
Reference Method : US EPA Method Part 50 App. F (Chemiluminescence)		Notification of the National Environment Board No. 33, 2009 (B.E. 2552).	

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Approved by

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



Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate 1-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location :

Lot ID: 24117278
Date Received : Nov 22, 2024
Date Reported : Nov 26, 2024
Report Number: 3135719-1

Page 1 of 1

Sample Description		Air Quality													
Location		โรงงานพลาสติก (GPS 47P 0729825, 1403308)													
Parameter		Nitrogen dioxide (ppm)													
Measurement Date		Nov 13, 2024 - Nov 20, 2024													
Measurement by		Anuwet Tema													
Time		24117278-1		24117278-2		24117278-3		24117278-4		24117278-5		24117278-6		24117278-7	
11:00 AM - 12:00 PM		Nov 13, 2024	0.0037	Nov 14, 2024	0.0072	Nov 15, 2024	0.0034	Nov 16, 2024	0.0080	Nov 17, 2024	0.0063	Nov 18, 2024	0.0034	Nov 19, 2024	0.0035
12:00 PM - 01:00 PM		0.0029		0.0052		0.0031		0.0029		0.0033		0.0041		0.0031	
01:00 PM - 02:00 PM		0.0028		0.0062		0.0030		0.0026		0.0030		0.0030		0.0030	
02:00 PM - 03:00 PM		0.0029		0.0027		0.0030		0.0029		0.0042		0.0028		0.0030	
03:00 PM - 04:00 PM		0.0026		0.0033		0.0034		0.0038		0.0052		0.0044		0.0042	
04:00 PM - 05:00 PM		0.0023		0.0028		0.0033		0.0141		0.0033		0.0038		0.0029	
05:00 PM - 06:00 PM		0.0022		0.0031		0.0039		0.0055		0.0042		0.0035		0.0034	
06:00 PM - 07:00 PM		0.0029		0.0028		0.0034		0.0026		0.0031		0.0028		0.0028	
07:00 PM - 08:00 PM		0.0028		0.0026		0.0029		0.0024		0.0031		0.0029		0.0027	
08:00 PM - 09:00 PM		0.0029		0.0025		0.0027		0.0024		0.0028		0.0032		0.0031	
09:00 PM - 10:00 PM		0.0025		0.0038		0.0034		0.0025		0.0032		0.0034		0.0039	
10:00 PM - 11:00 PM		0.0023		0.0039		0.0028		0.0027		0.0035		0.0032		0.0036	
11:00 PM - 12:00 AM		0.0022		0.0059		0.0048		0.0031		0.0030		0.0038		0.0034	
12:00 AM - 01:00 AM		0.0022		0.0049		0.0027		0.0025		0.0031		0.0035		0.0044	
01:00 AM - 02:00 AM		0.0024		0.0043		0.0034		0.0024		0.0040		0.0036		0.0045	
02:00 AM - 03:00 AM		0.0025		0.0031		0.0026		0.0025		0.0031		0.0031		0.0034	
03:00 AM - 04:00 AM		0.0026		0.0025		0.0031		0.0028		0.0030		0.0027		0.0032	
04:00 AM - 05:00 AM		0.0026		0.0026		0.0071		0.0031		0.0032		0.0027		0.0029	
05:00 AM - 06:00 AM		0.0028		0.0031		0.0076		0.0025		0.0038		0.0027		0.0028	
06:00 AM - 07:00 AM		0.0031		0.0073		0.0055		0.0053		0.0036		0.0029		0.0028	
07:00 AM - 08:00 AM		0.0048		0.0102		0.0131		0.0179		0.0048		0.0037		0.0041	
08:00 AM - 09:00 AM		0.0045		0.0096		0.0068		0.0045		0.0073		0.0064		0.0046	
09:00 AM - 10:00 AM		0.0057		0.0038		0.0052		0.0081		0.0173		0.0039		0.0037	
10:00 AM - 11:00 AM		0.0080		0.0035		0.0065		0.0139		0.0050		0.0043		0.0049	
Average		0.0032		0.0045		0.0044		0.0050		0.0044		0.0035		0.0035	
1hr - Maximum		0.0080		0.0102		0.0131		0.0179		0.0173		0.0064		0.0049	
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).													
Reference Method		: US EPA Method Part 50 App. F (Chemiluminescence)													

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate 1-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location :

Lot ID: 24117310
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number: 3135734-1

Page 1 of 14

Sample Number	24117310-1						
Sample Date	Nov 13, 2024						
Sample Description	Air Quality						
Location	โรงเรียนบ้านหนองขี้ (GPS 47P 0729825, 1403308)						
Date Analysis Commenced	Nov 22, 2024						
Condition of Sample	Drawn into one 10-L air sampling bag						
Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
Non-Methane Hydrocarbon	13/11/24 - 14/11/24	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (HID)	Rayong
Sampled By : Anuwet Tema							
Remark :							
- LOD : Limit of Detection							
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)							

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

Approved by

Thanita K.

Thanita Kulsriwong
Scientist (4)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location :

Lot ID: 24117310
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number : 3135734-1

Page 2 of 14

Sample Number 24117310-2
Sampled Date Nov 14, 2024
Sample Description Air Quality
Location โรงสีน้ำตาลหนองหนู (GPS 47P 0729825, 1403308)
Date Analysis Commenced Nov 22, 2024
Condition of Sample Drawn into one 10-L air sampling bag

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
Non-Methane Hydrocarbon	14/11/24 - 15/11/24	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema

Remark :

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

Thanitak.

Approved by

Thanita Kulsuriwong
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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location :

Lot ID: 24117310
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number : 3135734-1

Page 3 of 14

Sample Number 24117310-3
Sampled Date Nov 15, 2024
Sample Description Air Quality
Location โรงสีน้ำตาลหนองหนู (GPS 47P 0729825, 1403308)
Date Analysis Commenced Nov 22, 2024
Condition of Sample Drawn into one 10-L air sampling bag

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
Non-Methane Hydrocarbon	15/11/24 - 16/11/24	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema

Remark :

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

Thanitak.

Approved by

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location :

Lot ID: 24117310
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number : 3135734-1

Page 4 of 14

Sample Number 24117310-4
Sampled Date Nov 16, 2024
Sample Description Air Quality
Location โรงสีน้ำตาลหนองหนู (GPS 47P 0729825, 1403308)
Date Analysis Commenced Nov 22, 2024
Condition of Sample Drawn into one 10-L air sampling bag

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
Non-Methane Hydrocarbon	16/11/24 - 17/11/24	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema
Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Approved by
Thanita Kulsuriwong
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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location :

Lot ID: 24117310
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number : 3135734-1

Page 5 of 14

Sample Number 24117310-5
Sampled Date Nov 17, 2024
Sample Description Air Quality
Location โรงสีน้ำตาลหนองหนู (GPS 47P 0729825, 1403308)
Date Analysis Commenced Nov 22, 2024
Condition of Sample Drawn into one 10-L air sampling bag

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
Non-Methane Hydrocarbon	17/11/24 - 18/11/24	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema
Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Thanitak.

Approved by
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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location :

Lot ID: 24117310
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number : 3135734-1

Page 6 of 14

Sample Number 24117310-6
Sampled Date Nov 18, 2024
Sample Description Air Quality
Location โรงสีน้ำตาลหนองหนู (GPS 47P 0729825, 1403308)
Date Analysis Commenced Nov 22, 2024
Condition of Sample Drawn into one 10-L air sampling bag

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
Non-Methane Hydrocarbon	18/11/24 - 19/11/24	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema

Remark :

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Approved by

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Scientist (4)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location :

Lot ID: 24117310
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number : 3135734-1

Page 7 of 14

Sample Number 24117310-7
Sampled Date Nov 19, 2024
Sample Description Air Quality
Location โรงสีน้ำตาลหนองหนู (GPS 47P 0729825, 1403308)
Date Analysis Commenced Nov 22, 2024
Condition of Sample Drawn into one 10-L air sampling bag

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
Non-Methane Hydrocarbon	19/11/24 - 20/11/24	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema

Remark :

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

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMW-23-11
Project Name : Environmental Monitoring
Project Location :
Lot ID: 24117310
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number : 3135734-1

Page 8 of 14

Sample Number : 24117310-8
Sampled Date : Nov 13, 2024
Sample Description : Air Quality
Location : อาคารสำนักงานของโรงงาน TPE (Site 1) (GPS 47P 0731747, 1404885)
Date Analysis Commenced : Nov 22, 2024
Condition of Sample : Drawn into one 10-L air sampling bag

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
Non-Methane Hydrocarbon	13/11/24 - 14/11/24	ppm	-	1.0	1.2	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema
Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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



Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMW-23-11
Project Name : Environmental Monitoring
Project Location :
Lot ID: 24117310
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number : 3135734-1

Page 9 of 14

Sample Number : 24117310-9
Sampled Date : Nov 14, 2024
Sample Description : Air Quality
Location : อาคารสำนักงานของโรงงาน TPE (Site 1) (GPS 47P 0731747, 1404885)
Date Analysis Commenced : Nov 22, 2024
Condition of Sample : Drawn into one 10-L air sampling bag

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
Non-Methane Hydrocarbon	14/11/24 - 15/11/24	ppm	-	1.0	2.1	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema
Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Thanitak.

Approved by

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMW-23-11
Project Name : Environmental Monitoring
Project Location :
Lot ID: 24117310
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number : 3135734-1

Page 10 of 14

Sample Number 24117310-10
Sampled Date Nov 15, 2024
Sample Description Air Quality
Location อาคารสำนักงานของโรงงาน TPE (Site 1) (GPS 47° 07'31.747", 140°48'55")
Date Analysis Commenced Nov 22, 2024
Condition of Sample Drawn into one 10-L air sampling bag

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
Non-Methane Hydrocarbon	15/11/24 - 16/11/24	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema
Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Approved by

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMW-23-11
Project Name : Environmental Monitoring
Project Location :
Lot ID: 24117310
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number : 3135734-1

Page 11 of 14

Sample Number 24117310-11
Sampled Date Nov 16, 2024
Sample Description Air Quality
Location อาคารสำนักงานของโรงงาน TPE (Site 1) (GPS 47° 07'31.747", 140°48'55")
Date Analysis Commenced Nov 22, 2024
Condition of Sample Drawn into one 10-L air sampling bag

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
Non-Methane Hydrocarbon	16/11/24 - 17/11/24	ppm	-	1.0	1.7	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema
Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMW-23-11
Project Name : Environmental Monitoring
Project Location :

Lot ID: 24117310
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number : 3135734-1

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Sample Number 24117310-12
Sampled Date Nov 17, 2024
Sample Description Air Quality
Location อาคารสำนักงานของศูนย์โรงงาน TPE (Site 1) (GPS 47° 07'31.747", 140°48'55")
Date Analysis Commenced Nov 22, 2024
Condition of Sample Drawn into one 10-L air sampling bag

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
Non-Methane Hydrocarbon	17/11/24 - 18/11/24	ppm	-	1.0	1.6	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema
Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMW-23-11
Project Name : Environmental Monitoring
Project Location :

Lot ID: 24117310
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number : 3135734-1

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Sample Number 24117310-13
Sampled Date Nov 18, 2024
Sample Description Air Quality
Location อาคารสำนักงานของศูนย์โรงงาน TPE (Site 1) (GPS 47° 07'31.747", 140°48'55")
Date Analysis Commenced Nov 22, 2024
Condition of Sample Drawn into one 10-L air sampling bag

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
Non-Methane Hydrocarbon	18/11/24 - 19/11/24	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema
Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMW-23-11
Project Name : Environmental Monitoring
Project Location :

Lot ID: 24117310
Date Received : Nov 21, 2024
Date Reported : Nov 27, 2024
Report Number : 3135734-1

Page 14 of 14

Sample Number 24117310-14
Sampled Date Nov 19, 2024
Sample Description Air Quality
Location อาคารสำนักงานของโรงงาน TPE (Site 1) (GPS 47° 07'31.747", 140°48'5")
Date Analysis Commenced Nov 22, 2024
Condition of Sample Drawn into one 10-L air sampling bag

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
Non-Methane Hydrocarbon	19/11/24 - 20/11/24	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema
Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Scientist (4)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10M uT Enl - git Road, Ta- Dol c ap Ta Phit, A- phir c Ian2, Rayon2 Thailand 1W63
P/O : Pc c vlnMM
Project Name : Nigron- ental c onitorin2
Project Location : 47 PMW

Lot ID: 24116976
7ate ReQiged : bog 11, 131f
7ate Reported : bog 10, 131f
Report b1 - Der : mMrO((VM

Page 14 of 14

Sample Number 1f MW905VM
Sampled Date bog Mj 131f
Sample Description Air 81ality
Location โรงเจี้น้ำมันบนทางรถไฟ (ใกล้ถนนทางรถไฟสาย)HPu fOP 30n5fcm M3SS(Sw
Date Analysis Commenced bog 11, 131f
Condition of Sample 7raz n into one MBx air sa- plin2 Da2

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
bonvc ethane 4hydroQqrDon	Mj/Mj1f vMf/Mj1f	pp-	v	M3	OM3	Total 4 ydroQqrDon AnalyPer)4Z/W	Rayon2

Sampled By : Aniz et Te- a
Re- arE :
- L'7 : L- it oGr decQlon
- KOK : Loe er than L'8)Ju- it oG81 antitationw/ L' R)Ju- it oGrReportin2w

Thanitak.

Approved by
Thanita x1 lsi riz on2
uQentist: JfW

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10M uEHl - git Road, Ta- Dol c ap Ta Phlt, A- phir c Ian2, Rayon2 Thailand 1W63
P/O : Pc c vlnMM
Project Name : Nngiron- ental c onitorin2
Project Location : 47PNM

Lot ID: 24116976
7ate ReQiged : bog 11, 131f
7ate Reported : bog 10, 131f
Report b1- Der : nMfO((vM

Page 1 of 60

Sample Number	1f M690SvI																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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Sampled By : AnIz et Te- a
Re- arE :
- L'7 : LI- it oG7etQon
- KOK : Loz er than L'8)LI- it oG81 antitionw/ L' R)LI- it oGReportin2w

Thanitak.

Approved by

Thanita xIIsIriz on2
uQentist: Jf w

Read its apply to the sa- phelywas sID- mied, I nless the sa- phin2 z as Qand Qand Dy
Allu bo part cedis report - ay de report d in any de- z thott z r then Qnent
de- the laboratory this report is not report Qand Qent in QLI.

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10M uEHl - git Road, Ta- Dol c ap Ta Phlt, A- phir c Ian2, Rayon2 Thailand 1W63
P/O : Pc c vlnMM
Project Name : Nngiron- ental c onitorin2
Project Location : 47PNM

Lot ID: 24116976
7ate ReQiged : bog 11, 131f
7ate Reported : bog 10, 131f
Report b1- Der : nMfO((vM

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ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10M uEHl - git Road, Ta- Dol c ap Ta Phlt, A- phir c Ian2, Rayon2 Thailand 1W63
P/O : Pc c vlnMM
Project Name : Nngiron- ental c onitorin2
Project Location : 47PNM

Lot ID: 24116976
7ate ReQiged : bog 11, 131f
7ate Reported : bog 10, 131f
Report b1- Der : nMfO((vM

Page 1 of 600

Sample Number : 1f M690Sf
Sampled Date : bog M6, 131f
Sample Description : Air 81 ality
Location : ไร่จันทน์บ้านตาพูด (ไร่จันทน์บ้านตาพูด)HPu fOP 30n5f m M3SS(Sw
Date Analysis Commenced : bog 11, 131f
Condition of Sample : 7raz n into one M6v air sa- plin2 Da2

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
bonvc ethane 4ydroQirDn	M6/MW1f vM0/MW1f	pp-	v	M3	OM3	Total 4ydroQirDn AnalyfEr)47w	Rayon2

Sampled By : AnIz et Te- a
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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10M uEHl - git Road, Ta- Dol c ap Ta Phlt, A- phir c Ian2, Rayon2 Thailand 1W63
P/O : Pc c vlnMM
Project Name : Nngiron- ental c onitorin2
Project Location : 47PNM

Lot ID: 24116976
7ate ReQiged : bog 11, 131f
7ate Reported : bog 10, 131f
Report b1- Der : nMfO((vM

Page 5 of 600

Sample Number : 1f M690Sv6
Sampled Date : bog M0, 131f
Sample Description : Air 81 ality
Location : ไร่จันทน์บ้านตาพูด (ไร่จันทน์บ้านตาพูด)HPu fOP 30n5f m M3SS(Sw
Date Analysis Commenced : bog 11, 131f
Condition of Sample : 7raz n into one M6v air sa- plin2 Da2

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
bonvc ethane 4ydroQirDn	M0/MW1f vM0/MW1f	pp-	v	M3	OM3	Total 4ydroQirDn AnalyfEr)47w	Rayon2

Sampled By : AnIz et Te- a
Re- arE :
- L' 7 : Lf- it oG7etecQion
- KOK : Loz er than L' 8)Ju- it oG81 antitationw/ L' R)Ju- it oGReportin2w

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Approved by

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10M uEHl - git Road, Ta- Dol c ap Ta Phlt, A- phir c Ian2, Rayon2 Thailand 1W63
P/O : Pc c vlnMM
Project Name : Nngiron- ental c onitorin2
Project Location : 47PNn

Lot ID: 24116976
7ate ReQiged : bog 11, 131f
7ate Reported : bog 10, 131f
Report b1- Der : nMfO((vM

Page 5 of 6

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ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10M uEHl - git Road, Ta- Dol c ap Ta Phlt, A- phir c Ian2, Rayon2 Thailand 1W63
P/O : Pc c vlnMM
Project Name : Nngiron- ental c onitorin2
Project Location : 47PNn

Lot ID: 24116976
7ate ReQiged : bog 11, 131f
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Page 6 of 6

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ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong Thailand
21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location :

Lot ID: 24117312
Date Received :Nov 21, 2024
Date Reported :Nov 26, 2024
Report Number :3135735-1

Analysis / Test Report

Sample Number : 24117312-1 to 7
Parameter : Wind Speed / Wind Direction
Location : อากาศหัดการณ์ทางอุตุนิยมวิทยา TPE (Site 1) (GPS 47P 0731747, 1404885)
Sampling Date : Nov 13 - Nov 20, 2024
Sampling by : Anuwit Tema

Time	Nov 13 - Nov 14, 2024		Nov 14 - Nov 15, 2024		Nov 15 - Nov 16, 2024		Nov 16 - Nov 17, 2024		Nov 17 - Nov 18, 2024		Nov 18 - Nov 19, 2024		Nov 19 - Nov 20, 2024											
	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	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	1.3	298.0	WNW	0.4	252.0	WSW	0.9	275.0	W	1.3	258.0	WSW	0.6	272.0	W	0.3	249.0	WSW	0.2	-				
02:00 PM - 03:00 PM	0.9	236.0	SW	0.6	188.0	S	0.5	258.0	WSW	0.9	217.0	SW	0.3	291.0	WNW	0.7	238.0	WSW	0.7	221.0	SW			
03:00 PM - 04:00 PM	1.1	294.0	WNW	1.0	252.0	WSW	0.1	-	-	0.8	270.0	W	3.3	142.0	SE	0.9	124.0	SE	1.3	267.0	WNW			
04:00 PM - 05:00 PM	0.0	-	-	0.0	-	0.0	-	0.0	-	0.0	-	0.6	356.0	N	0.0	-	0.0	-	0.0	-	-			
05:00 PM - 06:00 PM	1.0	359.0	N	0.8	48.0	NE	0.0	-	0.1	-	0.4	3.0	N	1.6	319.0	NW	0.4	349.0	N	-	-			
06:00 PM - 07:00 PM	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	1.9	23.0	NNE	0.9	27.0	NNE	-			
07:00 PM - 08:00 PM	0.0	-	0.3	50.0	NE	0.3	359.0	N	0.0	-	0.5	0.0	N	1.0	63.0	ENE	1.7	352.0	N	-	-			
08:00 PM - 09:00 PM	0.0	-	0.0	-	0.4	0.0	N	0.0	-	0.4	0.0	N	0.0	-	1.2	0.0	N	2.6	49.0	NE	1.1	0.0	N	
09:00 PM - 10:00 PM	0.0	-	1.5	27.0	NNE	0.0	-	0.0	-	0.0	-	2.0	348.0	NNW	0.7	0.0	N	2.6	352.0	N	-	-		
10:00 PM - 11:00 PM	0.5	344.0	NNW	0.0	-	0.0	-	0.0	-	0.4	359.0	N	0.0	-	0.9	25.0	NNE	0.2	-	1.6	331.0	NNW		
11:00 PM - 12:00 AM	0.0	-	0.1	-	0.0	-	0.0	-	0.4	359.0	N	0.0	-	1.0	16.0	NNE	1.8	352.0	N	2.4	359.0	N		
12:00 AM - 01:00 AM	0.0	-	0.0	-	0.3	19.0	NNE	0.0	-	0.3	19.0	NNE	0.0	-	1.6	16.0	NNE	1.0	2.0	N	1.5	37.0	NE	
01:00 AM - 02:00 AM	0.0	-	0.0	-	1.3	358.0	N	0.0	-	1.3	358.0	N	0.0	-	0.9	359.0	N	0.8	352.0	N	2.0	316.0	NW	
02:00 AM - 03:00 AM	0.3	357.0	N	0.0	-	1.1	351.0	N	0.0	-	1.1	351.0	N	0.0	-	0.9	359.0	N	0.8	352.0	N	2.0	316.0	NW
03:00 AM - 04:00 AM	0.4	359.0	N	0.5	350.0	N	1.0	350.0	N	1.4	16.0	NNE	1.2	6.0	N	1.9	13.0	NNE	1.3	359.0	N	-	-	
04:00 AM - 05:00 AM	0.7	342.0	NNW	0.8	198.0	SSW	0.0	-	-	0.6	0.0	N	0.7	9.0	N	1.7	350.0	N	1.2	70.0	ENE			
05:00 AM - 06:00 AM	1.3	359.0	N	0.6	316.0	NW	0.3	0.0	N	0.0	-	-	2.3	346.0	NNW	2.0	343.0	NNW	2.9	9.0	N			
06:00 AM - 07:00 AM	1.1	24.0	NNE	0.7	114.0	ESE	1.2	52.0	NE	0.0	-	1.2	354.0	N	3.0	350.0	N	1.2	9.0	N	-	-		
07:00 AM - 08:00 AM	1.9	359.0	N	1.1	189.0	S	0.7	20.0	NNE	1.6	353.0	N	1.8	37.0	NE	1.7	0.0	N	2.7	355.0	N			
08:00 AM - 09:00 AM	1.4	0.0	N	0.7	307.0	NW	0.0	-	0.0	-	1.1	349.0	N	0.3	359.0	N	3.4	13.0	NNE	-	-			
09:00 AM - 10:00 AM	1.4	52.0	NE	0.0	-	0.1	-	0.5	249.0	WSW	1.8	22.0	NNE	1.2	10.0	N	2.5	43.0	NE	-	-			
10:00 AM - 11:00 AM	0.9	156.0	SSE	0.5	201.0	SSW	0.7	188.0	S	0.6	165.0	SSE	2.6	342.0	NNW	2.3	24.0	NNE	3.0	48.0	NE			
11:00 AM - 12:00 PM	2.0	200.0	SSW	1.2	172.0	S	1.1	204.0	SSW	1.2	181.0	S	0.0	-	-	2.3	246.0	WNW	5.2	111.0	ESE			
12:00 PM - 01:00 PM	0.9	242.0	WSW	2.0	198.0	SSW	0.8	242.0	WSW	1.2	252.0	WSW	1.2	201.0	SSW	2.7	83.0	E	0.2	-	-			

Reference Method : Cup Anemometer & Anodized Aluminum Vane Method

The above results are valid only for the analyzed/tested 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) strongly recommends that this report is not reproduced except in full.

Approved by

Sirayuth Jitranont
Assistant General Manager

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Approved by

Sirayuth Jitranont
Assistant General Manager

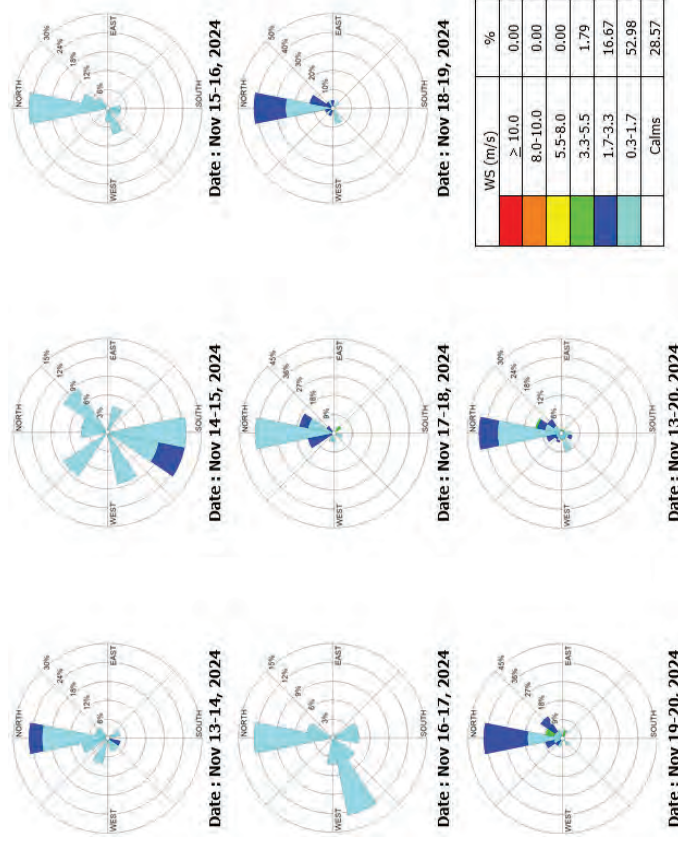


Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong Thailand
21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location :

Lot ID: 24117312
Date Received :Nov 21, 2024
Date Reported :Nov 26, 2024
Report Number :3135735-1

Analysis / Test Report

Wind Rose



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ภาคผนวก ค-2

คุณภาพน้ำทิ้ง



Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong Thailand 21150

P/O : PHM-SCGCH-2019-343

Project Name : Environmental Monitoring

Project Location: Site 1

TESTING
No.0042

Lot ID: 2469118

Date Received : Jul 05, 2024

Date Reported : Jul 23, 2024

Report Number : 3027937-1 C22

Page 1 of 2

Sample Number	2469118-1
Sampled Date	Jul 05, 2024 11:15 AM
Sample Description	Wastewater
Location	PP2 : น้ำทิ้ง API Separator
Date Analysis Commenced	Jul 05, 2024
Condition of Sample	Contained in one amber glass bottle, four glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	Result	LOQ (LOR)	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	3.7	2.0	≤20	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	34	25	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	10	5	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	9	5	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	<3	3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	7.4	-	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	32.2	-	≤40	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	-	404	5	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Technical Management

Photchanas S.

Photchanas Seedla
Scientist (4)
พณณแสนท์ ๓-323-๓-9446

Approved by

D. Phumma

Dej Changchong
Senior Manager
พณณแสนท์ ๓-323-๓-9442

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong Thailand 21150

P/O : PHM-SCGCH-2019-343

Project Name : Environmental Monitoring

Project Location: Site 1

TESTING
No.0042

Lot ID: 2469118

Date Received : Jul 05, 2024

Date Reported : Jul 23, 2024

Report Number : 3027937-1 C22

Page 2 of 2

Sample Number	2469118-1
Sampled Date	Jul 05, 2024 11:15 AM
Sample Description	Wastewater
Location	PP2 : น้ำทิ้ง API Separator
Date Analysis Commenced	Jul 05, 2024
Condition of Sample	Contained in one amber glass bottle, four glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	Result	LOQ (LOR)	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	<5	5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Phongthep Sithithon พณณแสนท์ ๓-323-๓-0023 , Thanasoun Namakunna พณณแสนท์ ๓-204-๓-0101

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

Technical Management

Photchanas S.

Photchanas Seedla
Scientist (4)
พณณแสนท์ ๓-323-๓-9446

Approved by

D. Phumma

Dej Changchong
Senior Manager
พณณแสนท์ ๓-323-๓-9442

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PHM-SCGH-2019-343
Project Name : Environmental Monitoring
Project Location: Site 1

Lot ID: 2469118
Date Received : Jul 05, 2024
Date Reported : Aug 07, 2024
Report Number : 3027937-2 C22

Page 1 of 1

Sample Number 2469118-1
Sampled Date Jul 05, 2024 11:15 AM
Sample Description Wastewater
Location PP2 : น้ำทิ้ง API Separator
Date Analysis Commenced Jul 05, 2024
Condition of Sample Contained in one amber glass bottle, four glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing Chloride as Cl	mg/L	0.5	1	101	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Flow rate	m3/s	-	-	0.007	No Standard	Flow meter	Rayong
Total Organic Carbon	mg/L	0.01	0.1	8.96	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampled By : Phongthep Sitthiloh , Thanasoun Namakunna

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

Photochanna S.

Approved by

Photochanna Seeda
Scientist (4)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
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Thailand 21150
P/O : PHM-SCGH-2019-343
Project Name : Environmental Monitoring
Project Location: Site 1

Lot ID: 2479564
Date Received : Aug 02, 2024
Date Reported : Aug 10, 2024
Report Number : 3052416-1 C22

Page 1 of 2

Sample Number 2479564-1
Sampled Date Aug 02, 2024 10:02 AM
Sample Description Wastewater
Location PP2 : น้ำทิ้ง API Separator
Date Analysis Commenced Aug 02, 2024
Condition of Sample Contained in four glass vials, one amber glass bottle and three 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	≤20	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	≤120	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	10	≤300	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	9	≤300	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	32.4	≤40	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	420	≤3000	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Photochanna S.

Approved by

Dej Chingchong
Senior Manager

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong Thailand 21150

P/O : PHM-SCGCH-2019-343

Project Name : Environmental Monitoring

Project Location: Site 1

TESTING
No.0042

Lot ID: 2479564

Date Received : Aug 02, 2024

Date Reported : Aug 10, 2024

Report Number : 3052416-1 C22

Page 2 of 2

Sample Number	2479564-1				
Sampled Date	Aug 02, 2024 10:02 AM				
Sample Description	Wastewater				
Location	PP2 : น้ำทิ้ง API Separator				
Date Analysis Commenced	Aug 02, 2024				
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)				

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Paramet Sattayakun รหัสประจำตัว 7-323-3-9476 , Pattarapol Sawangjaitam รหัสประจำตัว 7-204-3-0002

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked "*" 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

Photochanna S.

Photochanna Seeda
Scientist (4)
เบอร์โทร 7-323-3-9446

Approved by

D. Phum

Dej Changchon
Senior Manager
เบอร์โทร 7-323-3-9442

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong Thailand 21150

P/O : PHM-SCGCH-2019-343

Project Name : Environmental Monitoring

Project Location: Site 1

Lot ID: 2479564

Date Received : Aug 02, 2024

Date Reported : Aug 10, 2024

Report Number : 3052416-2 C22

Page 1 of 1

Sample Number	2479564-1				
Sampled Date	Aug 02, 2024 10:02 AM				
Sample Description	Wastewater				
Location	PP2 : น้ำทิ้ง API Separator				
Date Analysis Commenced	Aug 02, 2024				
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)				

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	113	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Flow rate	m3/s	-	-	0.007	No Standard	Flow meter, Analyzed by Client	Rayong
Total Organic Carbon	mg/L	0.01	0.1	7.83	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Paramet Sattayakun , Pattarapol Sawangjaitam

Remark :

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

Approved by

Photochanna S.

Photochanna Seeda
Scientist (4)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PHM-SCGH-2019-343
Project Name : Environmental Monitoring
Project Location: Site 1

TESTING
No.0042
Lot ID: 24112643
Date Received : Sep 27, 2024
Date Reported : Oct 10, 2024
Report Number : 3123948-1 C22

Page 1 of 2

Sample Number	24112643-1			
Sampled Date	Sep 27, 2024	3:20 PM		
Sample Description	Wastewater			
Location	PP2 : น้ำทิ้ง API Separator			
Date Analysis Commenced	Sep 27, 2024			
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)			

Analyte	Unit	LOD	Result	LOQ (LOR)	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.1	2.0	≤20	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	31	25	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	11	5	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	10	5	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Oil & Grease	mg/L	-	<3	3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	8.0	-	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	33.3	-	≤40	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	-	756	5	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong

Technical Management

Photchanas S.

Photchana Seedla
Scientist (4)
พจนานนท์ ๓-323-๓-0028

Approved by

D. Phum.

Dej Changchon
Senior Manager
พจนานนท์ ๓-323-๓-0001

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PHM-SCGH-2019-343
Project Name : Environmental Monitoring
Project Location: Site 1

TESTING
No.0042
Lot ID: 24112643
Date Received : Sep 27, 2024
Date Reported : Oct 10, 2024
Report Number : 3123948-1 C22

Page 2 of 2

Sample Number	24112643-1			
Sampled Date	Sep 27, 2024	3:20 PM		
Sample Description	Wastewater			
Location	PP2 : น้ำทิ้ง API Separator			
Date Analysis Commenced	Sep 27, 2024			
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)			

Analyte	Unit	LOD	Result	LOQ (LOR)	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	<5	5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Narunat thammassaro พจนานนท์ ๓-323-๓-0052 , Kardbundit Kitisupavant พจนานนท์ ๓-204-๓-0001

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

Technical Management

Photchanas S.

Photchana Seedla
Scientist (4)
พจนานนท์ ๓-323-๓-0028

Approved by

D. Phum.

Dej Changchon
Senior Manager
พจนานนท์ ๓-323-๓-0001

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PHM-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location: Site 1

Lot ID: 24112643
Date Received : Sep 27, 2024
Date Reported : Oct 11, 2024
Report Number : 3123948-2 C22

Page 1 of 1

Sample Number	24112643-1						
Sampled Date	Sep 27, 2024 3:20 PM						
Sample Description	Wastewater						
Location	PP2 : น้ำทิ้ง API Separator						
Date Analysis Commenced	Sep 27, 2024						
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	179	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-Cl (D)	Rayong
Flow rate	m3/s	-	-	0.007	No Standard	Flow meter	Rayong
Total Organic Carbon	mg/L	0.01	0.1	11.7	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5310 B	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Narunat thammassaro , Kerdbundit Kitupavant

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

Photochana S.

Approved by

Photochana Seeda
Scientist (4)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PHM-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location: Site 1

Lot ID: 24107336
Date Received : Oct 04, 2024
Date Reported : Oct 12, 2024
Report Number : 3113393-1 C22

Page 1 of 2

Sample Number	24107336-1						
Sampled Date	Oct 04, 2024 9:50 AM						
Sample Description	Wastewater						
Location	PP2 : น้ำทิ้ง API Separator						
Date Analysis Commenced	Oct 04, 2024						
Condition of Sample	Contained in two glass vials, one amber glass bottle and three 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	≤20	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	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	10	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	9	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	32.9	≤40	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	588	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong

Photochana S.

Approved by

Def Chingchong
Senior Manager

พณณชาติ ๓-323-๔-0001

พณณชาติ ๓-323-๔-0028

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150

P/O : PHM-SCGH-2019-343

Project Name : Environmental Monitoring

Project Location: Site 1

TESTING
No.0042

Lot ID: 24107336

Date Received : Oct 04, 2024

Date Reported : Oct 12, 2024

Report Number : 3113393-1 C22

Page 2 of 2

Sample Number	24107336-1
Sampled Date	Oct 04, 2024 9:50 AM
Sample Description	Wastewater
Location	PP2 : น้ำทิ้ง API Separator
Date Analysis Commenced	Oct 04, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Paramet Sattayakun รหัสประจำตัว 7-323-3-0051, Pattarapol Sawangjaitam รหัสประจำตัว 7-204-3-0002

Remark:

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked "*" 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

Photchanas S.

Photchanas Seeda

Scientist (4)

รหัสประจำตัว 7-323-3-0028

Approved by

D. Phum.

Dej Changchon

Senior Manager

รหัสประจำตัว 7-323-3-0001

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150

P/O : PHM-SCGH-2019-343

Project Name : Environmental Monitoring

Project Location: Site 1

Lot ID: 24107336

Date Received : Oct 04, 2024

Date Reported : Oct 12, 2024

Report Number : 3113393-2 C22

Page 1 of 1

Sample Number	24107336-1
Sampled Date	Oct 04, 2024 9:50 AM
Sample Description	Wastewater
Location	PP2 : น้ำทิ้ง API Separator
Date Analysis Commenced	Oct 04, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	133	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-Cl (D)	Rayong
Flow rate	m3/s	-	-	0.007	No Standard	Flow meter, Analyzed by Client	Rayong
Total Organic Carbon	mg/L	0.01	0.1	8.23	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Paramet Sattayakun , Pattarapol Sawangjaitam

Remark :

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

Approved by

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
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Thailand 21150
P/O : PHM-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location: Site 1

TESTING
No.0042
Lot ID: 24117369
Date Received : Nov 08, 2024
Date Reported : Nov 18, 2024
Report Number : 3135850-1 C22

Page 1 of 2

Sample Number	24117369-1			
Sampled Date	Nov 08, 2024	9:44 AM		
Sample Description	Wastewater			
Location	PP2 : น้ำทิ้ง API Separator			
Date Analysis Commenced	Nov 08, 2024			
Condition of Sample	Contained in one amber glass bottle, four glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)			

Analyte	Unit	LOD	Result	LOQ (LOR)	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	<2.0	2.0	≤20	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	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	8	5	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	8	5	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Oil & Grease	mg/L	-	<3	3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	7.7	-	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	31.0	-	≤40	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	-	460	5	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong

Technical Management
Photchanas S.
Photchana Seeda
Scientist (4)
พจนานนท์ 3-323-3-0028

Approved by
D. Phum.
Dej Changchon
Senior Manager
พจนานนท์ 3-323-3-0001

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PHM-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location: Site 1

TESTING
No.0042
Lot ID: 24117369
Date Received : Nov 08, 2024
Date Reported : Nov 18, 2024
Report Number : 3135850-1 C22

Page 2 of 2

Sample Number	24117369-1			
Sampled Date	Nov 08, 2024	9:44 AM		
Sample Description	Wastewater			
Location	PP2 : น้ำทิ้ง API Separator			
Date Analysis Commenced	Nov 08, 2024			
Condition of Sample	Contained in one amber glass bottle, four glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)			

Analyte	Unit	LOD	Result	LOQ (LOR)	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	<5	5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Chainusorn Lertthanakunchai พจนานนท์ 3-323-3-0041 , Pattarapol Sawangjittam พจนานนท์ 3-204-3-0002

Remark :
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- < : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management
Photchanas S.
Photchana Seeda
Scientist (4)
พจนานนท์ 3-323-3-0028

Approved by
D. Phum.
Dej Changchon
Senior Manager
พจนานนท์ 3-323-3-0001

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PHM-SCGH-2019-343
Project Name : Environmental Monitoring
Project Location: Site 1

Lot ID: 24117369
Date Received : Nov 08, 2024
Date Reported : Dec 26, 2024
Report Number : 3135850-2 Rev. No.1 C22

Page 1 of 1

Sample Number		24117369-1	
Sampled Date		Nov 08, 2024 9:44 AM	
Sample Description		Wastewater	
Location		PP2 : น้ำทิ้ง API Separator	
Date Analysis Commenced		Nov 08, 2024	
Condition of Sample		Contained in one amber glass bottle, four glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)	

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	115	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-Cl (D)	Rayong
Flow rate	m3/s	-	-	0.007	No Standard	Flow meter	Rayong
Total Organic Carbon	mg/L	0.01	0.1	6.87	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Note : This Analysis test report is issued to supersede report No.3135850-2, Date Reported : Nov. 16, 2024 due to revise analytical information.
Sampled By : Chainusorn Lertnathakunchai , Pattarapol Sawangjittam

Remark :
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Photochanna S.

Approved by

Photochanna Seeda
Scientist (4)

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Analysis / Test Report

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10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PHM-SCGH-2019-343
Project Name : Environmental Monitoring
Project Location: Site 1

Lot ID: 24131589
Date Received : Dec 11, 2024
Date Reported : Dec 24, 2024
Report Number : 3170068-1 C22

Page 1 of 2

Sample Number		24131589-1	
Sampled Date		Dec 11, 2024 9:43 AM	
Sample Description		Wastewater	
Location		PP2 : น้ำทิ้ง API Separator	
Date Analysis Commenced		Dec 11, 2024	
Condition of Sample		Contained in four glass vials, one amber glass bottle and three 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	≤20	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	39	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	14	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	14	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C	-	-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	32.3	≤40	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	704	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong

Photochanna S.

Approved by

Def Chingchong
Senior Manager

พณณณณณณ 3-323-0-0001

พณณณณณณ 3-323-0-0028

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150

P/O : PHM-SCGH-2019-343

Project Name : Environmental Monitoring

Project Location: Site 1

TESTING

No.0042

Lot ID: 24131589

Date Received : Dec 11, 2024

Date Reported : Dec 24, 2024

Report Number : 3170068-1 C22

Page 2 of 2

Sample Number	24131589-1			
Sampled Date	Dec 11, 2024	9:43 AM		
Sample Description	Wastewater			
Location	PP2 : น้ำทิ้ง API Separator			
Date Analysis Commenced	Dec 11, 2024			
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)			

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	11	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Wasan Kinunti รหัสพนักงาน 3-323-3-0019 , Samart Khumphlee รหัสพนักงาน 3-204-3-0084

Remark:

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

Technical Management

Photochana S.

Photochana Seeda
Scientist (4)

รหัสพนักงาน 3-323-3-0028

Approved by

D. Phum

Dej Changchon
Senior Manager

รหัสพนักงาน 3-323-3-0001

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150

P/O : PHM-SCGH-2019-343

Project Name : Environmental Monitoring

Project Location: Site 1

Lot ID: 24131589

Date Received : Dec 11, 2024

Date Reported : Dec 26, 2024

Report Number : 3170068-2 Rev. No.1 C22

Page 1 of 1

Sample Number	24131589-1			
Sampled Date	Dec 11, 2024	9:43 AM		
Sample Description	Wastewater			
Location	PP2 : น้ำทิ้ง API Separator			
Date Analysis Commenced	Dec 11, 2024			
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)			

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	176	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-Cl (D)	Rayong
Flow rate	m3/s	-	-	0.006	No Standard	Flow meter	Rayong
Total Organic Carbon	mg/L	0.01	0.1	11.8	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Note : This Analysis test report is issued to supersede report No.3170068-2, Date Reported : Dec 19, 2024 due to revise analytical information.

Sampled By : Wasan Kinunti , Samart Khumphlee

Remark :

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

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PHM-SCGH-2019-343
Project Name : Environmental Monitoring
Project Location: PP2_S1

TESTING
No.0042
Lot ID: 2469064
Date Received : Jul 05, 2024
Date Reported : Jul 23, 2024
Report Number : 3027873-1 C4

Page 1 of 2

Sample Number	2469064-1
Sampled Date	Jul 05, 2024 10:05 AM
Sample Description	Wastewater
Location	โรงงานน้ำตาล
Date Analysis Commenced	Jul 05, 2024
Condition of Sample	Contained in one amber glass bottle, four glass vials and three 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	≤20	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	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	10	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	7	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.0	≤40	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	322	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Technical Management
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Photochana Seedla
Scientist (4)
พจนานนท์ ๓-323-๓-9446

Approved by
D. Phum.
Dej Changchon
Senior Manager
พจนานนท์ ๓-323-๓-9442

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PHM-SCGH-2019-343
Project Name : Environmental Monitoring
Project Location: PP2_S1

TESTING
No.0042
Lot ID: 2469064
Date Received : Jul 05, 2024
Date Reported : Jul 23, 2024
Report Number : 3027873-1 C4

Page 2 of 2

Sample Number	2469064-1
Sampled Date	Jul 05, 2024 10:05 AM
Sample Description	Wastewater
Location	โรงงานน้ำตาล
Date Analysis Commenced	Jul 05, 2024
Condition of Sample	Contained in one amber glass bottle, four glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	14	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Phongthep Sithithon พจนานนท์ ๓-323-๓-0023 , Thanasoun Namakunna พจนานนท์ ๓-204-๓-0101

Remark :
- LOD : Limit of Detection
- LOR : Limit of Quantitation / LOR (Limit of Reporting)
- "<" : 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 : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PHM-SCGH-2019-343
Project Name : Environmental Monitoring
Project Location: PP2_S1

Lot ID: 2469064
Date Received : Jul 05, 2024
Date Reported : Jul 23, 2024
Report Number : 3027873-2 C4

Page 1 of 1

Sample Number	2469064-1
Sampled Date	Jul 05, 2024 10:05 AM
Sample Description	Wastewater
Location	โรงงานกระดาษ
Date Analysis Commenced	Jul 05, 2024
Condition of Sample	Contained in one amber glass bottle, four glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	72	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Flow rate	m3/s	-	-	0.041	No Standard	Flow meter	Rayong
Total Organic Carbon	mg/L	0.01	0.1	6.58	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Phongthep Sitthiloh , Thanasoun Namakunna

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

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Photochanna Seeda
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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
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Thailand 21150
P/O : PHM-SCGH-2019-343
Project Name : Environmental Monitoring
Project Location: PP2_S1

Lot ID: 2479048
Date Received : Aug 02, 2024
Date Reported : Aug 10, 2024
Report Number : 3051075-1 C4

Page 1 of 2

Sample Number	2479048-1
Sampled Date	Aug 02, 2024 10:58 AM
Sample Description	Wastewater
Location	โรงงานกระดาษ
Date Analysis Commenced	Aug 02, 2024
Condition of Sample	Contained in four glass vials, one amber glass bottle and three 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	≤20	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	36	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	9	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	7	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	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
Temperature *	Degree C	-	-	33.8	≤40	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	420	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Photochanna S.

Technical Management

Photochanna Seeda
Scientist (4)

หน้างานที่ ๓-323-๙-9442

Approved by

D. Phum.

Def Chingchon
Senior Manager

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150

P/O : PHM-SCGCH-2019-343

Project Name : Environmental Monitoring

Project Location: PP2_S1

TESTING
No.0042

Lot ID: 2479048

Date Received : Aug 02, 2024

Date Reported : Aug 10, 2024

Report Number: 3051075-1 C4

Page 2 of 2

Sample Number	2479048-1				
Sampled Date	Aug 02, 2024 10:58 AM				
Sample Description	Wastewater				
Location	โรงงานอุตสาหกรรม				
Date Analysis Commenced	Aug 02, 2024				
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)				

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	17	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Paramet Sattayakun เลขที่ใบอนุญาต ร-204-3-0002

Remark:

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

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Approved by

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Client : Thai Polyethylene Co., Ltd.

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Thailand 21150

P/O : PHM-SCGCH-2019-343

Project Name : Environmental Monitoring

Project Location: PP2_S1

Lot ID: 2479048

Date Received : Aug 02, 2024

Date Reported : Aug 10, 2024

Report Number: 3051075-2 C4

Page 1 of 1

Sample Number	2479048-1				
Sampled Date	Aug 02, 2024 10:58 AM				
Sample Description	Wastewater				
Location	โรงงานอุตสาหกรรม				
Date Analysis Commenced	Aug 02, 2024				
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)				

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	106	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Flow rate	m3/s	-	-	0.021	No Standard	Flow meter, Analyzed by Client	Rayong
Total Organic Carbon	mg/L	0.01	0.1	6.89	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Paramet Sattayakun , Pattarapol Sawangjaitam

Remark :

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

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Client : Thai Polyethylene Co., Ltd.

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P/O : PHM-SCGCH-2019-343

Project Name : Environmental Monitoring

Project Location: PP2_S1

TESTING
No.0042
Lot ID: 2495520

Date Received : Sep 12, 2024

Date Reported : Sep 21, 2024

Report Number : 3087129-1 C4

Page 1 of 2

Sample Number	2495520-1
Sampled Date	Sep 12, 2024 9:51 AM
Sample Description	Wastewater
Location	โรงงานอุตสาหกรรม
Date Analysis Commenced	Sep 12, 2024
Condition of Sample	Contained in one amber glass bottle, four glass vials and three 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	≤20	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	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	13	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	12	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.6	≤40	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	716	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Technical Management

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Photchanas Seedla
Scientist (4)
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Approved by

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Senior Manager
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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150

P/O : PHM-SCGCH-2019-343

Project Name : Environmental Monitoring

Project Location: PP2_S1

TESTING
No.0042
Lot ID: 2495520

Date Received : Sep 12, 2024

Date Reported : Sep 21, 2024

Report Number : 3087129-1 C4

Page 2 of 2

Sample Number	2495520-1
Sampled Date	Sep 12, 2024 9:51 AM
Sample Description	Wastewater
Location	โรงงานอุตสาหกรรม
Date Analysis Commenced	Sep 12, 2024
Condition of Sample	Contained in one amber glass bottle, four glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	14	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Nattawut Athomprommarat พจนานนท์ ๓-323-๓-0006 , Thanasoun Namakuma พจนานนท์ ๓-204-๓-0101

Remark :

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- < : 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

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Approved by

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
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Thailand 21150
P/O : PHM-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location: PP2_S1

Lot ID: 2495520
Date Received : Sep 12, 2024
Date Reported : Sep 21, 2024
Report Number : 3087129-2 C4

Page 1 of 1

Sample Number	2495520-1				
Sampled Date	Sep 12, 2024 9:51 AM				
Sample Description	Wastewater				
Location	โรงงาน				
Date Analysis Commenced	Sep 12, 2024				
Condition of Sample	Contained in one amber glass bottle, four glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)				

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	119	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Flow rate	m3/s	-	-	0.022	No Standard	Flow meter, Analyzed by Client	Rayong
Total Organic Carbon	mg/L	0.01	0.1	9.83	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Nattawat Athomprommarat , Thanasoun Namakunna

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

Swimon C.

Approved by
Suwimon Chairuangwut
Scientist (3)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PHM-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location: PP2_S1

Lot ID: 24107287
Date Received : Oct 04, 2024
Date Reported : Oct 12, 2024
Report Number : 3113299-1 C4

Page 1 of 2

Sample Number	24107287-1				
Sampled Date	Oct 04, 2024 11:06 AM				
Sample Description	Wastewater				
Location	โรงงาน				
Date Analysis Commenced	Oct 04, 2024				
Condition of Sample	Contained in four glass vials, one amber glass bottle and three 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	≤20	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	≤120	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	15	≤300	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	14	≤300	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	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 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.0	≤40	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	576	≤3000	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong

Photchanas S.

Technical Management
Photchanas Seeda
Scientist (4)
วันจันทร์ที่ ๓-๓๒๓-๐๐๒๘

Approved by
D. Phum...

Def Changdon
Senior Manager
วันจันทร์ที่ ๓-๓๒๓-๐๐๐๑

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1980-261 / EMAIL



Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PHM-SCGH-2019-343
Project Name : Environmental Monitoring
Project Location: PP2_S1

TESTING
No.0042
Lot ID: 24107287
Date Received : Oct 04, 2024
Date Reported : Oct 12, 2024
Report Number : 3113299-1 C4

Page 2 of 2

Sample Number	24107287-1				
Sampled Date	Oct 04, 2024 11:06 AM				
Sample Description	Wastewater				
Location	โรงงานน้ำตาล				
Date Analysis Commenced	Oct 04, 2024				
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)				

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Paramet Sattayakun เลขที่ใบอนุญาต ร-204-3-0002

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked "*" 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

Photchanas S.

Photchanas Seeda
Scientist (4)
หมายเลข ร-323-3-0028

Approved by

D. Phum.

Dej Changchon
Senior Manager
หมายเลข ร-323-3-0001

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Analysis / Test Report

Lot ID: 24107287
Date Received : Oct 04, 2024
Date Reported : Oct 12, 2024
Report Number : 3113299-2 C4

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PHM-SCGH-2019-343
Project Name : Environmental Monitoring
Project Location: PP2_S1

Page 1 of 1

Sample Number	24107287-1				
Sampled Date	Oct 04, 2024 11:06 AM				
Sample Description	Wastewater				
Location	โรงงานน้ำตาล				
Date Analysis Commenced	Oct 04, 2024				
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)				

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	115	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-Cl (D)	Rayong
Flow rate	m3/s	-	-	0.030	No Standard	Flow meter	Rayong
Total Organic Carbon	mg/L	0.01	0.1	9.29	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Paramet Sattayakun , Pattarapol Sawangjaitam

Remark :

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150

P/O : PHM-SCGCH-2019-343

Project Name : Environmental Monitoring

Project Location: PP2_S1

TESTING
No.0042
Lot ID: 24116909

Date Received : Nov 08, 2024

Date Reported : Nov 18, 2024

Report Number : 3134663-1 C4

Page 1 of 2

Sample Number	24116909-1			
Sampled Date	Nov 08, 2024	10:31 AM		
Sample Description	Wastewater			
Location	โรงงานน้ำตาล			
Date Analysis Commenced	Nov 08, 2024			
Condition of Sample	Contained in one amber glass bottle, four glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)			

Analyte	Unit	LOD	Result	LOQ (LOR)	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	<2.0	2.0	≤20	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	31	25	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	8	5	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	6	5	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Oil & Grease	mg/L	-	<3	3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	7.7	-	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	31.1	-	≤40	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	-	492	5	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong

Technical Management

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Photchanas Seedla
Scientist (4)
พจนานนท์ 3-323-3-0028

Approved by

D. Phumma

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

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150

P/O : PHM-SCGCH-2019-343

Project Name : Environmental Monitoring

Project Location: PP2_S1

TESTING
No.0042
Lot ID: 24116909

Date Received : Nov 08, 2024

Date Reported : Nov 18, 2024

Report Number : 3134663-1 C4

Page 2 of 2

Sample Number	24116909-1			
Sampled Date	Nov 08, 2024	10:31 AM		
Sample Description	Wastewater			
Location	โรงงานน้ำตาล			
Date Analysis Commenced	Nov 08, 2024			
Condition of Sample	Contained in one amber glass bottle, four glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)			

Analyte	Unit	LOD	Result	LOQ (LOR)	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	12	5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Chainusorn Lertthanakunchai พจนานนท์ 3-323-3-0041 , Pattarapol Sawangjittam พจนานนท์ 3-204-3-0002

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.

Technical Management

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Scientist (4)
พจนานนท์ 3-323-3-0028

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Dej Changchon
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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PHM-SCGH-2019-343
Project Name : Environmental Monitoring
Project Location: PP2_S1

Lot ID: 24116909
Date Received : Nov 08, 2024
Date Reported : Nov 18, 2024
Report Number : 3134663-2 C4

Page 1 of 1

Sample Number		24116909-1	
Sampled Date	Nov 08, 2024 10:31 AM	Sample Description	Wastewater
Location	โรงงานพลาสติก	Date Analysis Commenced	Nov 09, 2024
Condition of Sample	Contained in one amber glass bottle, four glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)		

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing Chloride as Cl	mg/L	0.5	1	126	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-Cl (D)	Rayong
	mg/L	0.01	0.1	8.29	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5310 B	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Chainusorn Lertnathakunchai , Pattarapol Sawangjaitam

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

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Photochanna Seeda
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Thailand 21150
P/O : PHM-SCGH-2019-343
Project Name : Environmental Monitoring
Project Location: PP2_S1

Lot ID: 24116909
Date Received : Nov 08, 2024
Date Reported : Dec 26, 2024
Report Number : 3134663-3 C4

Page 1 of 1

Sample Number		24116909-1	
Sampled Date	Nov 08, 2024 10:31 AM	Sample Description	Wastewater
Location	โรงงานพลาสติก	Date Analysis Commenced	Nov 08, 2024
Condition of Sample	Contained in one amber glass bottle, four glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)		

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing Flow rate	m3/s	-	-	0.029	No Standard	Flow meter	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Chainusorn Lertnathakunchai , Pattarapol Sawangjaitam

Remark :
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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150

P/O : PHM-SCGH-2019-343

Project Name : Environmental Monitoring

Project Location: PP2_S1

TESTING
No.0042
Lot ID: 24131543

Date Received : Dec 11, 2024

Date Reported : Dec 24, 2024

Report Number : 3169916-1 C4

Page 1 of 2

Sample Number	24131543-1			
Sampled Date	Dec 11, 2024 10:57 AM			
Sample Description	Wastewater			
Location	โรงงานอุตสาหกรรม			
Date Analysis Commenced	Dec 11, 2024			
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)			

Analyte	Unit	LOD	Result	LOQ (LOR)	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	<2.0	2.0	≤20	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	31	25	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	12	5	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	12	5	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Oil & Grease	mg/L	-	<3	3	≤5	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 4500 - H (B)	Rayong
Temperature *	Degree C	-	31.9	-	≤40	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	-	640	5	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong

Technical Management

Photchanas S.

Photchanas Seedla
Scientist (4)

พจนานนท์ ๓-323-๓-0028

Approved by

D. Phumma

Dej Changchon
Senior Manager

พจนานนท์ ๓-323-๓-0001

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150

P/O : PHM-SCGH-2019-343

Project Name : Environmental Monitoring

Project Location: PP2_S1

TESTING
No.0042
Lot ID: 24131543

Date Received : Dec 11, 2024

Date Reported : Dec 24, 2024

Report Number : 3169916-1 C4

Page 2 of 2

Sample Number	24131543-1			
Sampled Date	Dec 11, 2024 10:57 AM			
Sample Description	Wastewater			
Location	โรงงานอุตสาหกรรม			
Date Analysis Commenced	Dec 11, 2024			
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)			

Analyte	Unit	LOD	Result	LOQ (LOR)	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	18	5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Wasan Kinunti พจนานนท์ ๓-323-๓-0019 , Samart Khumphee พจนานนท์ ๓-204-๓-0084

Remark :

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- < : 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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Scientist (4)

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D. Phumma

Dej Changchon
Senior Manager

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Analysis / Test Report

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10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PHM-SCGH-2019-343
Project Name : Environmental Monitoring
Project Location: PP2_S1

Lot ID: 24131543
Date Received : Dec 11, 2024
Date Reported : Dec 24, 2024
Report Number : 3169916-2 C4

Page 1 of 1

Sample Number	24131543-1							
Sampled Date	Dec 11, 2024 10:57 AM							
Sample Description	Wastewater							
Location	โรงงานอุตสาหกรรม							
Date Analysis Commenced	Dec 11, 2024							
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location	
Water Testing Chloride as Cl	mg/L	0.5	1	138	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-Cl (D)	Rayong	
	Flow rate	m3/s	-	-	0.018	No Standard	Flow meter	Rayong
	Total Organic Carbon	mg/L	0.01	0.1	9.94	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Wasan Kinunti , Samart Khumphlee

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

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ภาคผนวก ค-3

ระดับเสียงทั่วไป



TESTING
No.0042

Lot ID: 24116890

Date Received : Nov 21, 2024
Date Reported : Nov 26, 2024
Report Number: 3176731-1

Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong Thailand 21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location : TPE Site 1

Sample Number	24116890-1
Parameter	Noise (Leq 24 hrs.)
Location	อาคารสำนักงานของโรงงาน TPE Site#1 (GPS 47P 0731760, 1404872)
Measurement Date	Nov 13 - Nov 14, 2024
Measurement by	Anuwet Tena
Sound Level meter	Serial No. 597169

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	59.2	81.0	56.8
02:00 PM - 03:00 PM	59.0	74.7	57.0
03:00 PM - 04:00 PM	59.2	75.1	57.4
04:00 PM - 05:00 PM	60.2	81.5	58.1
05:00 PM - 06:00 PM	60.6	80.3	58.0
06:00 PM - 07:00 PM	59.7	75.9	58.3
07:00 PM - 08:00 PM	59.5	76.7	58.0
08:00 PM - 09:00 PM	60.0	77.7	58.5
09:00 PM - 10:00 PM	59.9	74.5	58.8
10:00 PM - 11:00 PM	59.0	72.7	57.6
11:00 PM - 12:00 AM	58.1	72.7	56.4
12:00 AM - 01:00 AM	59.1	83.6	57.9
01:00 AM - 02:00 AM	58.7	73.6	57.5
02:00 AM - 03:00 AM	59.0	66.2	58.3
03:00 AM - 04:00 AM	60.0	87.9	58.1
04:00 AM - 05:00 AM	59.8	83.7	58.6
05:00 AM - 06:00 AM	60.6	77.5	58.9
06:00 AM - 07:00 AM	61.4	78.1	59.5
07:00 AM - 08:00 AM	61.7	77.7	59.6
08:00 AM - 09:00 AM	62.4	82.1	60.6
09:00 AM - 10:00 AM	61.8	77.6	60.3
10:00 AM - 11:00 AM	61.2	79.7	59.3
11:00 AM - 12:00 PM	59.2	74.0	57.1
12:00 PM - 01:00 PM	59.6	81.2	57.4

Leq Average 24 hrs. (dB(A)) 60.1
Lmax (dB(A)) 87.9
L90 (dB(A)) 58.1
Ldn (dB(A)) 70
Standard (dB(A)) 115
Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกระทรวงมหาดไทย เรื่อง ค่าระดับเสียงที่อนุญาตให้ประชาชนได้รับโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่ากำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่ถือว่าการรบกวนการ
โรงงาน พ.ศ. 2548
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Chontichak
Chonticha Subongkodi
Scientist (3)

Approved by

Supot Salameh
Section Head

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



TESTING
No.0042

Lot ID: 24116890

Date Received : Nov 21, 2024
Date Reported : Nov 26, 2024
Report Number: 3176732-1

Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong Thailand 21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location : TPE Site 1

Sample Number	24116890-2
Parameter	Noise (Leq 24 hrs.)
Location	อาคารสำนักงานของโรงงาน TPE Site#1 (GPS 47P 0731760, 1404872)
Measurement Date	Nov 14 - Nov 15, 2024
Measurement by	Anuwet Tena
Sound Level meter	Serial No. 597169

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	64.6	87.2	58.8
02:00 PM - 03:00 PM	61.2	86.8	59.1
03:00 PM - 04:00 PM	61.6	89.3	59.4
04:00 PM - 05:00 PM	61.3	81.6	59.4
05:00 PM - 06:00 PM	65.3	90.1	59.6
06:00 PM - 07:00 PM	63.3	87.8	59.9
07:00 PM - 08:00 PM	60.9	73.1	59.6
08:00 PM - 09:00 PM	60.2	82.2	59.1
09:00 PM - 10:00 PM	60.2	75.6	59.1
10:00 PM - 11:00 PM	59.6	75.7	58.4
11:00 PM - 12:00 AM	60.6	72.4	58.8
12:00 AM - 01:00 AM	60.0	75.6	58.9
01:00 AM - 02:00 AM	59.8	80.0	58.3
02:00 AM - 03:00 AM	59.6	71.2	58.6
03:00 AM - 04:00 AM	59.6	68.7	58.2
04:00 AM - 05:00 AM	59.8	69.7	58.8
05:00 AM - 06:00 AM	60.6	78.5	59.9
06:00 AM - 07:00 AM	61.7	76.1	59.7
07:00 AM - 08:00 AM	61.2	76.7	58.8
08:00 AM - 09:00 AM	60.5	75.6	58.7
09:00 AM - 10:00 AM	59.9	78.6	57.5
10:00 AM - 11:00 AM	59.9	72.9	57.7
11:00 AM - 12:00 PM	58.9	75.5	56.8
12:00 PM - 01:00 PM	59.7	79.7	57.8

Leq Average 24 hrs. (dB(A)) 61.2
Lmax (dB(A)) 90.1
L90 (dB(A)) 58.8
Ldn (dB(A)) 66.8
Standard (dB(A)) 115
Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกระทรวงมหาดไทย เรื่อง ค่าระดับเสียงที่อนุญาตให้ประชาชนได้รับโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่ากำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่ถือว่าการรบกวนการ
โรงงาน พ.ศ. 2548
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Chontichak
Chonticha Subongkodi
Scientist (3)

Approved by

Supot Salameh
Section Head

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong Thailand 21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location : TPE Site 1

TESTING
No.0042
Lot ID: 24116890
Date Received : Nov 21, 2024
Date Reported : Nov 26, 2024
Report Number: 3176733-1

Page 1 of 1

Sample Number	24116890-3
Parameter	Noise (Leq 24 hrs.)
Location	อาคารสำนักงานของโรงงาน TPE Site#1 (GPS 47P 0731760, 1404872)
Measurement Date	Nov 15 - Nov 16, 2024
Measurement by	Anuwet Tenna
Sound Level meter	Serial No. 597169

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	59.5	78.3	57.5
02:00 PM - 03:00 PM	59.4	80.7	57.0
03:00 PM - 04:00 PM	59.9	80.0	57.6
04:00 PM - 05:00 PM	59.8	71.7	58.0
05:00 PM - 06:00 PM	59.8	75.6	58.0
06:00 PM - 07:00 PM	59.4	77.5	57.3
07:00 PM - 08:00 PM	59.4	76.6	57.6
08:00 PM - 09:00 PM	59.2	72.5	57.9
09:00 PM - 10:00 PM	59.7	80.4	58.7
10:00 PM - 11:00 PM	59.3	74.1	58.0
11:00 PM - 12:00 AM	58.9	74.5	57.5
12:00 AM - 01:00 AM	59.3	76.3	57.8
01:00 AM - 02:00 AM	59.7	76.7	58.3
02:00 AM - 03:00 AM	58.8	80.0	57.6
03:00 AM - 04:00 AM	59.4	69.4	58.6
04:00 AM - 05:00 AM	59.4	67.2	58.3
05:00 AM - 06:00 AM	60.3	74.4	59.0
06:00 AM - 07:00 AM	61.1	74.2	59.3
07:00 AM - 08:00 AM	60.9	74.8	58.7
08:00 AM - 09:00 AM	59.8	75.7	58.3
09:00 AM - 10:00 AM	59.1	70.5	57.3
10:00 AM - 11:00 AM	58.2	77.4	56.4
11:00 AM - 12:00 PM	57.7	71.2	56.0
12:00 PM - 01:00 PM	58.9	73.2	56.6

Leq Average 24 hrs. (dB(A))	59.5
Lmax (dB(A))	80.7
L90 (dB(A))	57.8
Ldn (dB(A))	
Standard (dB(A))	115

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกระทรวงมหาดไทย เรื่อง ค่าระดับเสียงในชุมชน พ.ศ. 2540 (พ.ศ. 2540) ค่ากำหนดมาตรฐานเสียงในชุมชน
2. ประกาศกระทรวงมหาดไทย เรื่อง ค่ากำหนดระดับเสียงการจราจร และระดับเสียงที่เกิดจากการประกอบกิจการ
ฐาน พ.ศ. 2548
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Chonticha Subongkodi
Scientist (3)

Approved by
Supot Salamteh
Section Head

ภาคผนวก ค-4

คุณภาพอากาศภายในสถานประกอบการ



Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMW-23-11
Project Name : Environmental Monitoring
Project Location : PP2

Lot ID: 2479502
Date Received : Sep 03, 2024
Date Reported : Sep 13, 2024
Report Number : 3052352-1

Page 1 of 3

Sample Number 2479502-1
Sampled Date Sep 02, 2024
Sample Description Air Quality
Location พลาซาด้าอุตสาหกรรม
Date Analysis Commenced Sep 04, 2024
Condition of Sample Drawn into one 10-L air sampling bag and one sorbent tube, refrigerated
Barometric Pressure 755 mmHg
Atmospheric Temperature 30.2 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Ethylene	09:00 AM - 11:00 AM	ppm	-	1.0	<1.0	200	Based on ASTM, D 2712-18	ACGIH	Bangkok
n-Hexane	09:00 AM - 11:00 AM	ppm	-	0.03	0.55	500	NIOSH (2003), 1500	MOL	Bangkok
Propylene	09:00 AM - 11:00 AM	ppm	-	1.0	<1.0	500	Based on ASTM, D 2712-91	ACGIH	Bangkok

Guideline :
ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2024).
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 : Norranon Tathongkham

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

Orawan R.

Approved by
Orawan Rakyong
Scientist (3)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. This report is for the client's use only and is not to be used for any other purpose. This report is not reproduced except in full.

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



Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMW-23-11
Project Name : Environmental Monitoring
Project Location : PP2

Lot ID: 2479502
Date Received : Sep 03, 2024
Date Reported : Sep 13, 2024
Report Number : 3052352-1

Page 2 of 3

Sample Number 2479502-2
Sampled Date Sep 02, 2024
Sample Description Air Quality
Location พลาซาด้าอุตสาหกรรม
Date Analysis Commenced Sep 06, 2024
Condition of Sample Drawn into one filter paper placed in plastic cassette
Barometric Pressure 755 mmHg
Atmospheric Temperature 30.2 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Total Dust	09:00 AM - 11:00 AM	mg/m3	-	0.15	<0.15	15	Based on NIOSH (1994), 0500	OSHA	Rayong

Guideline :
OSHA : Occupational Safety and Health Administration
Sampled By : Norranon Tathongkham

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

Orawan R.

Approved by
Orawan Rakyong
Scientist (3)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMW-23-11
Project Name : Environmental Monitoring
Project Location : PP2

Lot ID: 2479502
Date Received : Sep 03, 2024
Date Reported : Sep 13, 2024
Report Number : 3052352-1

Page 3 of 3

Sample Number	2479502-3										
Sampled Date	Sep 02, 2024										
Sample Description	Air Quality										
Location	Extruder (ขบวนการอัด)										
Date Analysis Commenced	Sep 04, 2024										
Condition of Sample	Drawn into one 10-L air sampling bag and one sorbent tube, refrigerated										
Barometric Pressure	755 mmHg										
Atmospheric Temperature	30.2 °C										
Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location		
Air Testing											
Ethylene	09:00 AM - 11:00 AM	ppm	-	1.0	<1.0	200	Based on ASTM, D 2712-18	ACGIH	Bangkok		
n-Hexane	09:00 AM - 11:00 AM	ppm	-	0.03	<0.03	500	NIOSH (2003), 1500	MOL	Bangkok		
Propylene	09:00 AM - 11:00 AM	ppm	-	1.0	<1.0	500	Based on ASTM, D 2712-91	ACGIH	Bangkok		

Guideline :
ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2024).
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 : Norranon Tathongkham

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

Orawan R.

Approved by
Orawan Rakyong
Scientist (3)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMW-23-11
Project Name : Environmental Monitoring
Project Location : PP2

Lot ID: 24117336
Date Received : Nov 06, 2024
Date Reported : Nov 18, 2024
Report Number : 3135753-1

Page 1 of 3

Sample Number	24117336-1											
Sampled Date	Nov 04, 2024											
Sample Description	Air Quality											
Location	พบตัวเพลิงไหม้รถตู้											
Date Analysis Commenced	Nov 07, 2024											
Condition of Sample	Drawn into one 10-L air sampling bag and one sorbent tube, refrigerated											
Barometric Pressure	756 mmHg											
Atmospheric Temperature	32.6 °C											
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location			
Air Testing												
Ethylene	09:30 AM - 11:30 AM	ppm	-	1.0	<1.0	200	Based on ASTM, D 2712-18	ACGIH	Bangkok			
n-Hexane	09:30 AM - 11:30 AM	ppm	-	0.03	0.06	500	NIOSH (2003), 1500	MOL	Bangkok			
Propylene	09:30 AM - 11:30 AM	ppm	-	1.0	<1.0	500	Based on ASTM, D 2712-91	ACGIH	Bangkok			

Guideline :
ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2024).
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 : Annat Wongsakhen

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

Thanita K.

Approved by
Thanita Kulsriwong
Scientist (4)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location : PP2

Lot ID: 24117336
Date Received : Nov 06, 2024
Date Reported : Nov 18, 2024
Report Number : 3135753-1

Page 2 of 3

Sample Number	24117336-2
Sampled Date	Nov 04, 2024
Sample Description	Air Quality
Location	พลาซาดูรสารเคมี (พว)
Date Analysis Commenced	Nov 08, 2024
Condition of Sample	Drawn into one filter paper placed in plastic cassette
Barometric Pressure	756 mmHg
Atmospheric Temperature	32.6 °C
Analyte	
Air Testing	
Total Dust	09:30 AM - 11:30 AM mg/m3 - 0.15 <0.15 15 Based on NIOSH (1994), OSHA 0500 Rayong

Guideline :
OSHA : Occupational Safety and Health Administration
Sampled By : Annat Wongsakhen

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

Thanita K.

Approved by

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location : PP2

Lot ID: 24117336
Date Received : Nov 06, 2024
Date Reported : Nov 18, 2024
Report Number : 3135753-1

Page 3 of 3

Sample Number	24117336-3
Sampled Date	Nov 04, 2024
Sample Description	Air Quality
Location	Extruder (พว)
Date Analysis Commenced	Nov 07, 2024
Condition of Sample	Drawn into one 10-L air sampling bag and one sorbent tube, refrigerated
Barometric Pressure	756 mmHg
Atmospheric Temperature	32.6 °C
Analyte	
Air Testing	
Ethylene	09:30 AM - 11:30 AM ppm - 1.0 <1.0 200 Based on ASTM, D 2712-18 Bangkok
n-Hexane	09:30 AM - 11:30 AM ppm - 0.03 0.29 500 NIOSH (2003), 1500 MOL Bangkok
Propylene	09:30 AM - 11:30 AM ppm - 1.0 <1.0 500 Based on ASTM, D 2712-91 Bangkok

Guideline :
ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2024).
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 : Annat Wongsakhen

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

Thanita K.

Approved by

Thanita Kulsuriwong
Scientist (4)

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ภาคผนวก ค-5

ระดับเสียงภายในสถานประกอบการ



Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong Thailand 21150
Lot ID: 2479509
Date Received : Sep 26, 2024
Date Reported : Oct 02, 2024
Report Number: 3127063-1
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location : PP2

Sample Number	2479509-1
Parameter	Noise (Leq 8 hrs.)
Location	หน่วยผลิตโพรเพน
Measurement Date	Sep 25, 2024
Measurement by	Amnat Wongsakhen

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:04 AM - 09:04 AM	84.1	86.0	83.3
09:04 AM - 10:04 AM	84.6	86.4	83.5
10:04 AM - 11:04 AM	84.4	86.4	83.4
11:04 AM - 12:04 PM	84.4	86.4	83.2
12:04 PM - 01:04 PM	84.3	86.3	83.2
01:04 PM - 02:04 PM	84.3	86.3	83.2
02:04 PM - 03:04 PM	84.2	86.0	83.2
03:04 PM - 04:04 PM	84.7	92.3	83.5

Leq Average 8 hrs. (dB(A))	84.4
Lmax (dB(A))	92.3
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดความดังเสียง ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖	

Technical Management
Chonticha Subongkodi
Scientist (3)

Approved by
Supot Salameh
Section Head

Supt S.

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



Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong Thailand 21150
Lot ID: 2479509
Date Received : Sep 26, 2024
Date Reported : Oct 02, 2024
Report Number: 3127064-1
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location : PP2

Sample Number	2479509-2
Parameter	Noise (Leq 8 hrs.)
Location	หน่วยผลิตโพร
Measurement Date	Sep 25, 2024
Measurement by	Amnat Wongsakhen

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:47 AM - 09:47 AM	83.5	90.2	82.8
09:47 AM - 10:47 AM	83.2	85.3	82.8
10:47 AM - 11:47 AM	82.8	85.8	82.5
11:47 AM - 12:47 PM	83.5	85.2	83.0
12:47 PM - 01:47 PM	83.8	87.1	83.4
01:47 PM - 02:47 PM	83.3	89.4	82.6
02:47 PM - 03:47 PM	83.0	84.3	82.6
03:47 PM - 04:47 PM	84.3	97.8	81.2

Leq Average 8 hrs. (dB(A))	83.4
Lmax (dB(A))	97.8
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดความดังเสียง ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖	

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Scientist (3)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong Thailand 21150
Lot ID: 2479509
Date Received : Sep 26, 2024
Date Reported : Oct 02, 2024
Report Number: 3127065-1
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location : PP2

Page 1 of 1

Sample Number	2479509-3			
Parameter	Noise (Leq 8 hrs.)			
Location	Compressor (Wanna3 Vent Gas uae Nitrogen)			
Measurement Date	Sep 25, 2024			
Measurement by	Annat Wongsakhen			
	Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
	08:36 AM - 09:36 AM	77.1	79.6	76.8
	09:36 AM - 10:36 AM	77.3	78.7	76.9
	10:36 AM - 11:36 AM	77.3	81.6	76.8
	11:36 AM - 12:36 PM	77.2	78.7	76.8
	12:36 PM - 01:36 PM	77.1	78.5	76.8
	01:36 PM - 02:36 PM	77.1	78.6	76.7
	02:36 PM - 03:36 PM	77.1	78.3	76.7
	03:36 PM - 04:36 PM	78.7	98.0	76.8

Reference Method : ISO1996-1 and 1996-2
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการควบคุมความลอดับ
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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong Thailand 21150
Lot ID: 24117337
Date Received : Sov 06, 2024
Date Reported : Sov 12, 2024
Report SumQr: 3163031-1
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location : PP2

Page 1 of 1

Sample Number	2411N3N-1			
Parameter	Soise Lef 9 hrs.(
Location	พดณพาลับไทรเช็ก			
Measurement Date	Sov 04, 2024			
Measurement by	Annat q ongsakhen			
Time		Lef (b) dB((LmaWb) bA((Lk0 (b) dB((
0k:39 AM - 10:39 AM		92.4	93.k	92.0
10:39 AM - 11:39 AM		92.2	9N0	91.N
11:39 AM - 12:39 PM		92.2	96.4	91.N
12:39 PM - 01:39 PM		92.1	93.5	91.6
01:39 PM - 02:39 PM		92.3	93.9	91.k
02:39 PM - 03:39 PM		92.3	93.6	91.k
03:39 PM - 04:39 PM		92.9	99.k	91.k
04:39 PM - 05:39 PM		92.6	9N0	92.2

Reference Method : IBx1kk6-1 and 1kk6-2
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการควบคุมความลอดับ
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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong Thailand 21150
Lot ID: 24117337
Date Received : Sov 06, 2024
Date Reported : Sov 12, 2024
Report SumOr: 3163032-1
P/O : PPM-23-11
Project Name : Environmental Monitoring
Project Location : PP2

Sample Number	2411N33N2			
Parameter	Soise llef 9 hrs.(พริ้วน้ำดัดเฒ			
Location	Sov 04, 2024			
Measurement Date	Amnat q orgsa8hen			
Measurement by				
Time	Lef b)ba((LmaWtd) bA((Lk0 b)ba((
0k:2k AM - 10:2k AM	94.3	95.5	93.k	
10:2k AM - 11:2k AM	94.3	99.k	94.0	
11:2k AM - 12:2k PM	93.k	95.5	93.5	
12:2k PM - 01:2k PM	93.4	94.4	92.k	
01:2k PM - 02:2k PM	93.N	95.4	93.3	
02:2k PM - 03:2k PM	94.3	95.9	93.9	
03:2k PM - 04:2k PM	93.6	95.3	93.2	
04:2k PM - 05:2k PM	93.N	95.2	93.2	

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong Thailand 21150
Lot ID: 24117337
Date Received : Sov 06, 2024
Date Reported : Sov 12, 2024
Report SumOr: 3163033-1
P/O : PPM-23-11
Project Name : Environmental Monitoring
Project Location : PP2

Sample Number	2411N33N-3				
Parameter	Soise llef 9 hrs.(
Location	Compressor bhanuuds qent 8as uaw Nitrogen(
Measurement Date	Sov 04, 2024				
Measurement by	Amnat) ongsaVhen				
Time	Lef bA((LmaWtd)A((Lk0 bA((
0k:1N AM - 10:1N AM	N6.0	N9.6	N5.5		
10:1N AM - 11:1N AM	N6.5	92.5	N5.5		
11:1N AM - 12:1N PM	NN.3	92.0	N6.4		
12:1N PM - 01:1N PM	N6.2	N9.2	N5.6		
01:1N PM - 02:1N PM	N6.2	NN.4	N5.N		
02:1N PM - 03:1N PM	N6.3	NN.2	N5.k		
03:1N PM - 04:1N PM	N6.6	92.1	N6.1		
04:1N PM - 05:1N PM	N6.3	91.1	N5.k		

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150

P/O :

Project Name : Industrial Hygiene Monitoring
Project Location : PP1,2

Lot ID: 2495802
Date Received : Nov 06, 2024
Date Reported : Nov 12, 2024
Report Number : 3153767-1

Page 1 of 2

Sample Number	2495802-1
Sampled Date	Nov 04, 2024
Sample Description	Noise Dose
Location	ผู้ควบคุมพลังงานกล : ส่วนผลิต PP 1,2
Personal Sampling	คุณแสงอาทิตย์ ไชยวรรณ
Date Analysis Commenced	Nov 08, 2024

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:30 AM - 07:30 PM	%	-	1	170	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong
Noise Dose (8 hrs.)	07:30 AM - 07:30 PM	%	-	1	162	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong
TWA (12 hrs.) (Calculated from Lavg)	07:30 AM - 07:30 PM	dB(A)	-	-	85.3	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong
TWA (8 hrs.)	07:30 AM - 07:30 PM	dB(A)	-	-	87.1	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong

Guideline :
MOL : 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. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Annat Wongsakhen

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

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Approved by

Supot Salamteh
Section Head

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. This report is not reproduced except in full.

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150

P/O :

Project Name : Industrial Hygiene Monitoring
Project Location : PP1,2

Lot ID: 2495802
Date Received : Nov 06, 2024
Date Reported : Nov 12, 2024
Report Number : 3153767-1

Page 2 of 2

Sample Number	2495802-2
Sampled Date	Nov 04, 2024
Sample Description	Noise Dose
Location	Field pelletization #2 : ส่วนผลิต PP 2
Personal Sampling	คุณอดุลย์ คำนิ้ง
Date Analysis Commenced	Nov 08, 2024

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:30 AM - 07:30 PM	%	-	1	93.3	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong
Noise Dose (8 hrs.)	07:30 AM - 07:30 PM	%	-	1	87.1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong
TWA (12 hrs.) (Calculated from Lavg)	07:30 AM - 07:30 PM	dB(A)	-	-	82.7	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong
TWA (8 hrs.)	07:30 AM - 07:30 PM	dB(A)	-	-	84.4	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong

Guideline :
MOL : 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. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Annat Wongsakhen

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

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ภาคผนวก ค-6

ระดับความร้อนภายในสถานประกอบการ



Analysis / Test Report

Lot ID: 2479511

Date Received : Sep 03, 2024
Date Reported : Sep 07, 2024
Report Number: 3052355-1

Client : Thai Polyethylene Co., Ltd.

10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District,
Rayong, Thailand 21150

P/O : PMW-23-11

Project Name : Environmental Monitoring

Project Location : PP2

Page 1 of 1

Sample Number	2479511-1					
Parameter	Heat Stress (Sampling Time : 10:00 AM - 12:00 PM)					
Measurement Date	Sep 02, 2024					
Measurement by	Norranon Tathongkham					
Location	ปล่องโรงงาน 1 พื้นที่ (ปล่อง-งานสกรู ฝักรูปถังโรงงาน : - แรก : -)					

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
พุ่มต้นมะม่วง	120	28.6	27.0	32.2	32.0
Average (WBGT)		28.6			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

- 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)
- 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

Note:

%Humidity = 60.2% Heat Index= 38.0 C

Technical Management

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Analysis / Test Report

Lot ID: 24117338

Date Received : Sov 04, 2027
Date Reported : Sov 12, 2027
Report Number: 3135W5-1

Client : Thai Polyethylene Co., Ltd.

10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District,
Rayong, Thailand 21150

P/O : PMW-23-11

Project Name : Environmental Monitoring

Project Location : PP2

Page 1 of 1

Sample Number	271NG39-1					
Parameter	Heat (stress) (Sampling Time : 10:00 AM - 12:00 PM)					
Measurement Date	Sov 07, 2027					
Measurement by	Amnat 8 ongsohden					
Location	ปล่องโรงงาน 1 พื้นที่ (ปล่อง-งานสกรู ฝักรูปถังโรงงาน : - แรก : -)					

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
พุ่มต้นมะม่วง	120	31.4	30.2	37.9	37.4
Average (WBGT)		31.4			
Guideline WBGT (°C)		37.0			

Reference Method : 8 et Wet Bulb Globe Temperature

Guideline:

- Satification of Department Labour Protection and 8 effare on the Criteria and Procedures for Measurement and Analysis of 8 ording Conditions in relation to Heat, Light or Soise Levels, including Duration and Types of Winess that must perform (WE: 2541k
- Ministerial Regulation on Prescribing of (standard for Administration and Management of ° occupational (afety, Health and Environment in relation to Heat, Light and Soise, WE:2550

Note:

%Humidity = 42.0 %, Heat Index= 30.0 C

Technical Management

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