

ภาคผนวก ค

ใบรับรองผลการตรวจวิเคราะห์

ภาคผนวก ค-1

คุณภาพอากาศในบรรยากาศ



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

Lot ID: 23122550

Date Received : Nov 14, 2023

Date Reported : Nov 21, 2023

Report Number : 2812669-1

Page 1 of 7

Sample Number 23122550-1
Sampled Date Nov 03, 2023
Sample Description Air Quality
Location โรงเรียนบ้านหนองแฟบ
Date Analysis Commenced Nov 15, 2023
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	03/11/23 - 04/11/23	ppm	-	1.0	1.1	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema

Remark :

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

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. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Thanita K.

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 : TPE Site 1

Lot ID: 23122550

Date Received : Nov 14, 2023

Date Reported : Nov 21, 2023

Report Number : 2812669-1

Page 2 of 7

Sample Number 23122550-2
Sampled Date Nov 04, 2023
Sample Description Air Quality
Location โรงเรียนบ้านหนองแฟบ
Date Analysis Commenced Nov 15, 2023
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	04/11/23 - 05/11/23	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema

Remark :

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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 : PMM-23-11
Project Name : Environmental Monitoring
Project Location : TPE Site 1

Lot ID: 23122550

Date Received : Nov 14, 2023

Date Reported : Nov 21, 2023

Report Number : 2812669-1

Page 3 of 7

Sample Number 23122550-3
Sampled Date Nov 05, 2023
Sample Description Air Quality
Location โรงเรียนบ้านหนองแฟบ
Date Analysis Commenced Nov 15, 2023
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	05/11/23 - 06/11/23	ppm	-	1.0	1.2	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema

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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 : PMM-23-11
Project Name : Environmental Monitoring
Project Location : TPE Site 1

Lot ID: 23122550

Date Received : Nov 14, 2023

Date Reported : Nov 21, 2023

Report Number : 2812669-1

Page 4 of 7

Sample Number 23122550-4
Sampled Date Nov 06, 2023
Sample Description Air Quality
Location โรงเรียนบ้านหนองแฟบ
Date Analysis Commenced Nov 15, 2023
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	06/11/23 - 07/11/23	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema

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Analysis / Test Report

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Thailand 21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location : TPE Site 1

Lot ID: 23122550

Date Received : Nov 14, 2023

Date Reported : Nov 21, 2023

Report Number : 2812669-1

Page 5 of 7

Sample Number 23122550-5
Sampled Date Nov 07, 2023
Sample Description Air Quality
Location โรงเรียนบ้านหนองแฟบ
Date Analysis Commenced Nov 15, 2023
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	07/11/23 - 08/11/23	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema

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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 : PMM-23-11
Project Name : Environmental Monitoring
Project Location : TPE Site 1

Lot ID: 23122550

Date Received : Nov 14, 2023

Date Reported : Nov 21, 2023

Report Number : 2812669-1

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Sample Number 23122550-6
Sampled Date Nov 08, 2023
Sample Description Air Quality
Location โรงเรียนบ้านหนองแฟบ
Date Analysis Commenced Nov 15, 2023
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	08/11/23 - 09/11/23	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema

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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

Lot ID: 23122550

Date Received : Nov 14, 2023

Date Reported : Nov 21, 2023

Report Number : 2812669-1

Page 7 of 7

Sample Number 23122550-7
Sampled Date Nov 09, 2023
Sample Description Air Quality
Location โรงเรียนบ้านหนองแฟบ
Date Analysis Commenced Nov 15, 2023
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	09/11/23 - 10/11/23	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema

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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

Lot ID: 23122551

Date Received : Nov 14, 2023

Date Reported : Nov 21, 2023

Report Number : 2812676-1

Page 1 of 7

Sample Number 23122551-1
Sampled Date Nov 03, 2023
Sample Description Air Quality
Location อาคารสำนักงานของกลุ่มโรงงาน TPE (Site 1)
Date Analysis Commenced Nov 15, 2023
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	03/11/23 - 04/11/23	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema

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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

Lot ID: 23122551

Date Received : Nov 14, 2023
Date Reported : Nov 21, 2023
Report Number : 2812676-1

Page 2 of 7

Sample Number 23122551-2
Sampled Date Nov 04, 2023
Sample Description Air Quality
Location อาคารสำนักงานของกลุ่มโรงงาน TPE (Site 1)
Date Analysis Commenced Nov 15, 2023
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	04/11/23 - 05/11/23	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema

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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 : TPC Site 1

Lot ID: 23122551

Date Received : Nov 14, 2023

Date Reported : Nov 21, 2023

Report Number : 2812676-1

Page 3 of 7

Sample Number 23122551-3
Sampled Date Nov 05, 2023
Sample Description Air Quality
Location อาคารสำนักงานของกลุ่มโรงงาน TPE (Site 1)
Date Analysis Commenced Nov 15, 2023
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	05/11/23 - 06/11/23	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema

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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

Lot ID: 23122551

Date Received : Nov 14, 2023
Date Reported : Nov 21, 2023
Report Number : 2812676-1

Page 4 of 7

Sample Number 23122551-4
Sampled Date Nov 06, 2023
Sample Description Air Quality
Location อาคารสำนักงานของกลุ่มโรงงาน TPE (Site 1)
Date Analysis Commenced Nov 15, 2023
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	06/11/23 - 07/11/23	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

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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

Lot ID: 23122551

Date Received : Nov 14, 2023

Date Reported : Nov 21, 2023

Report Number : 2812676-1

Page 5 of 7

Sample Number 23122551-5
Sampled Date Nov 07, 2023
Sample Description Air Quality
Location อาคารสำนักงานของกลุ่มโรงงาน TPE (Site 1)
Date Analysis Commenced Nov 15, 2023
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	07/11/23 - 08/11/23	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema

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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

Lot ID: 23122551

Date Received : Nov 14, 2023

Date Reported : Nov 21, 2023

Report Number : 2812676-1

Page 6 of 7

Sample Number 23122551-6
Sampled Date Nov 08, 2023
Sample Description Air Quality
Location อาคารสำนักงานของกลุ่มโรงงาน TPE (Site 1)
Date Analysis Commenced Nov 15, 2023
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	08/11/23 - 09/11/23	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema

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Project Name : Environmental Monitoring
Project Location : TPE Site 1

Lot ID: 23122551

Date Received : Nov 14, 2023

Date Reported : Nov 21, 2023

Report Number : 2812676-1

Page 7 of 7

Sample Number 23122551-7
Sampled Date Nov 09, 2023
Sample Description Air Quality
Location อาคารสำนักงานของกลุ่มโรงงาน TPE (Site 1)
Date Analysis Commenced Nov 15, 2023
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	09/11/23 - 10/11/23	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema

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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

Lot ID: 23122552

Date Received : Nov 14, 2023
Date Reported : Nov 21, 2023
Report Number : 2812680-1

Page 1 of 7

Sample Number 23122552-1
Sampled Date Nov 03, 2023
Sample Description Air Quality
Location Ban Map Ta Phut School (โรงเรียนราชประชานุเคราะห์)
Date Analysis Commenced Nov 15, 2023
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	03/11/23 - 04/11/23	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema

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Project Name : Environmental Monitoring
Project Location : TPE Site 1

Lot ID: 23122552

Date Received : Nov 14, 2023

Date Reported : Nov 21, 2023

Report Number : 2812680-1

Page 4 of 7

Sample Number 23122552-4
Sampled Date Nov 06, 2023
Sample Description Air Quality
Location Ban Map Ta Phut School (โรงเรียนบ้านมัทประดู่)
Date Analysis Commenced Nov 15, 2023
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	06/11/23 - 07/11/23	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 : PMM-23-11
Project Name : Environmental Monitoring
Project Location : TPE Site 1

Lot ID: 23122552

Date Received : Nov 14, 2023

Date Reported : Nov 21, 2023

Report Number : 2812680-1

Page 5 of 7

Sample Number 23122552-5
Sampled Date Nov 07, 2023
Sample Description Air Quality
Location Ban Map Ta Phut School (โรงเรียนบางมดประทุมพร)
Date Analysis Commenced Nov 15, 2023
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	07/11/23 - 08/11/23	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema

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 : PMM-23-11

Project Name : Environmental Monitoring

Project Location : TPE Site 1

Lot ID: 23122552

Date Received : Nov 14, 2023

Date Reported : Nov 21, 2023

Report Number : 2812680-1

Page 6 of 7

Sample Number 23122552-6
Sampled Date Nov 08, 2023
Sample Description Air Quality
Location Ban Map Ta Phut School (โรงเรียนราชประชานุเคราะห์)
Date Analysis Commenced Nov 15, 2023
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	08/11/23 - 09/11/23	ppm	-	1.0	<1.0	Total Hydrocarbon Analyzer (FID)	Rayong

Sampled By : Anuwet Tema

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 : PMM-23-11
Project Name : Environmental Monitoring
Project Location : TPE Site 1

Lot ID: 23122552

Date Received : Nov 14, 2023

Date Reported : Nov 21, 2023

Report Number : 2812680-1

Page 7 of 7

Sample Number 23122552-7
Sampled Date Nov 09, 2023
Sample Description Air Quality
Location Ban Map Ta Phut School (โรงเรียนชุมชนบึงพระ)
Date Analysis Commenced Nov 15, 2023
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	09/11/23 - 10/11/23	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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Thanita K.

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 : TPE Site 1

Lot ID: 23122532
Date Received : Nov 14, 2023
Date Reported : Nov 20, 2023
Report Number: 2812648-1

Page 1 of 1

Sample Description	Air Quality						
Location	โรงเรียนบ้านหนองเพ						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Nov 03, 2023 - Nov 10, 2023						
Measurement by	Anuwet Tema						
	23122532-1	23122532-2	23122532-3	23122532-4	23122532-5	23122532-6	23122532-7
Time	Nov 03, 2023	Nov 04, 2023	Nov 05, 2023	Nov 06, 2023	Nov 07, 2023	Nov 08, 2023	Nov 09, 2023
01:00 PM - 02:00 PM	0.006	0.007	0.012	0.006	0.008	0.008	0.007
02:00 PM - 03:00 PM	0.005	0.008	0.013	0.005	0.005	0.008	0.009
03:00 PM - 04:00 PM	0.003	0.010	0.014	0.005	0.005	0.006	0.006
04:00 PM - 05:00 PM	0.004	0.008	0.012	0.005	0.008	0.005	0.004
05:00 PM - 06:00 PM	0.005	0.010	0.012	0.009	0.014	0.014	0.006
06:00 PM - 07:00 PM	0.010	0.020	0.017	0.012	0.010	0.008	0.008
07:00 PM - 08:00 PM	0.016	0.020	0.009	0.013	0.014	0.009	0.008
08:00 PM - 09:00 PM	0.008	0.014	0.007	0.019	0.016	0.016	0.008
09:00 PM - 10:00 PM	0.014	0.015	0.006	0.026	0.013	0.015	0.007
10:00 PM - 11:00 PM	0.009	0.016	0.007	0.025	0.013	0.016	0.008
11:00 PM - 12:00 AM	0.007	0.014	0.013	0.020	0.011	0.018	0.010
12:00 AM - 01:00 AM	0.009	0.012	0.007	0.020	0.013	0.014	0.009
01:00 AM - 02:00 AM	0.012	0.011	0.006	0.017	0.010	0.012	0.007
02:00 AM - 03:00 AM	0.013	0.012	0.007	0.011	0.008	0.009	0.007
03:00 AM - 04:00 AM	0.012	0.012	0.007	0.009	0.004	0.008	0.010
04:00 AM - 05:00 AM	0.010	0.012	0.007	0.015	0.004	0.009	0.011
05:00 AM - 06:00 AM	0.011	0.012	0.007	0.014	0.006	0.010	0.011
06:00 AM - 07:00 AM	0.012	0.011	0.008	0.008	0.009	0.010	0.010
07:00 AM - 08:00 AM	0.011	0.011	0.010	0.007	0.007	0.012	0.010
08:00 AM - 09:00 AM	0.013	0.009	0.007	0.014	0.011	0.013	0.012
09:00 AM - 10:00 AM	0.018	0.008	0.011	0.015	0.008	0.011	0.015
10:00 AM - 11:00 AM	0.016	0.014	0.010	0.010	0.008	0.009	0.013
11:00 AM - 12:00 PM	0.012	0.016	0.007	0.010	0.008	0.012	0.010
12:00 PM - 01:00 PM	0.010	0.012	0.009	0.009	0.007	0.009	0.006
Average	0.010	0.012	0.009	0.013	0.009	0.011	0.009
1hr - Maximum	0.018	0.020	0.017	0.026	0.016	0.018	0.015
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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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 : TPE Site 1

Lot ID: 23122542

Date Received : Nov 14, 2023

Date Reported : Nov 20, 2023

Report Number: 2812658-1

Page 1 of 1

Sample Description	Air Quality						
Location	อาคารสำนักงานของกลุ่มโรงงาน TPE (Site 1)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Nov 03, 2023 - Nov 10, 2023						
Measurement by	Anuwet Tema						
	23122542-1	23122542-2	23122542-3	23122542-4	23122542-5	23122542-6	23122542-7
Time	Nov 03, 2023	Nov 04, 2023	Nov 05, 2023	Nov 06, 2023	Nov 07, 2023	Nov 08, 2023	Nov 09, 2023
02:00 PM - 03:00 PM	<0.001	0.011	0.022	0.024	0.025	0.028	0.011
03:00 PM - 04:00 PM	0.023	0.020	0.017	0.021	0.020	0.023	0.026
04:00 PM - 05:00 PM	0.017	0.034	0.014	0.018	0.017	0.016	0.028
05:00 PM - 06:00 PM	0.019	0.037	0.015	0.018	0.022	0.021	0.023
06:00 PM - 07:00 PM	0.020	0.035	0.016	0.022	0.019	0.022	0.027
07:00 PM - 08:00 PM	0.022	0.034	0.013	0.042	0.029	0.041	0.027
08:00 PM - 09:00 PM	0.017	0.034	0.015	0.041	0.029	0.037	0.029
09:00 PM - 10:00 PM	0.018	0.029	0.015	0.040	0.026	0.033	0.028
10:00 PM - 11:00 PM	0.031	0.031	0.016	0.037	0.023	0.038	0.024
11:00 PM - 12:00 AM	0.030	0.027	0.018	0.035	0.021	0.030	0.022
12:00 AM - 01:00 AM	0.027	0.024	0.016	0.033	0.020	0.024	0.021
01:00 AM - 02:00 AM	0.026	0.022	0.017	0.026	0.014	0.021	0.020
02:00 AM - 03:00 AM	0.022	0.021	0.011	0.018	0.019	0.019	0.020
03:00 AM - 04:00 AM	0.018	0.021	0.013	0.013	0.016	0.017	0.020
04:00 AM - 05:00 AM	0.017	0.018	0.011	0.018	0.012	0.016	0.021
05:00 AM - 06:00 AM	0.020	0.020	0.011	0.015	0.016	0.016	0.021
06:00 AM - 07:00 AM	0.024	0.016	0.013	0.020	0.015	0.017	0.019
07:00 AM - 08:00 AM	0.025	0.018	0.017	0.021	0.017	0.018	0.020
08:00 AM - 09:00 AM	0.028	0.022	0.022	0.019	0.021	0.020	0.020
09:00 AM - 10:00 AM	0.027	0.021	0.017	0.020	0.019	0.022	0.020
10:00 AM - 11:00 AM	0.030	0.019	0.018	0.024	0.020	0.020	0.020
11:00 AM - 12:00 PM	0.032	0.019	0.018	0.017	0.022	0.014	0.012
12:00 PM - 01:00 PM	0.028	0.024	0.019	0.036	0.018	0.013	0.006
01:00 PM - 02:00 PM	0.025	0.024	0.021	0.026	0.030	0.008	0.007
Average	0.023	0.024	0.016	0.025	0.021	0.022	0.021
1hr - Maximum	0.032	0.037	0.022	0.042	0.030	0.041	0.029
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)

Approved by

Orawan R.

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 : PMM-23-11
Project Name : Environmental Monitoring
Project Location : TPE Site 1

Lot ID: 23122548
Date Received : Nov 14, 2023
Date Reported : Nov 20, 2023
Report Number: 2812661-1

Page 1 of 1

Sample Description	Air Quality						
Location	Ban Map Ta Phut School (โรงเรียนบางมด)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Nov 03, 2023 - Nov 10, 2023						
Measurement by	Anuwet Tema						
	23122548-1	23122548-2	23122548-3	23122548-4	23122548-5	23122548-6	23122548-7
Time	Nov 03, 2023	Nov 04, 2023	Nov 05, 2023	Nov 06, 2023	Nov 07, 2023	Nov 08, 2023	Nov 09, 2023
10:00 AM - 11:00 AM	0.002	0.022	0.014	0.006	0.005	0.002	0.002
11:00 AM - 12:00 PM	0.001	0.027	0.014	0.005	0.003	0.002	0.002
12:00 PM - 01:00 PM	<0.001	0.020	0.015	0.004	0.002	0.001	0.002
01:00 PM - 02:00 PM	0.001	0.019	0.007	0.002	0.004	0.001	0.002
02:00 PM - 03:00 PM	<0.001	0.032	0.007	0.002	0.002	<0.001	0.001
03:00 PM - 04:00 PM	0.001	0.026	0.007	0.002	0.004	0.005	0.002
04:00 PM - 05:00 PM	<0.001	0.015	0.007	0.006	0.004	0.006	0.003
05:00 PM - 06:00 PM	0.001	0.019	<0.001	0.009	0.005	0.002	0.016
06:00 PM - 07:00 PM	0.001	0.011	<0.001	0.006	0.004	0.011	0.012
07:00 PM - 08:00 PM	0.001	0.012	0.002	0.002	0.008	0.006	0.010
08:00 PM - 09:00 PM	0.001	0.012	<0.001	0.007	0.008	0.009	0.009
09:00 PM - 10:00 PM	0.001	0.014	<0.001	0.008	0.008	0.023	0.006
10:00 PM - 11:00 PM	<0.001	0.018	<0.001	0.004	0.005	0.013	0.005
11:00 PM - 12:00 AM	<0.001	0.014	0.002	0.004	0.004	0.005	0.002
12:00 AM - 01:00 AM	<0.001	0.012	<0.001	0.005	0.002	0.004	0.002
01:00 AM - 02:00 AM	<0.001	0.009	<0.001	0.003	0.003	0.002	0.001
02:00 AM - 03:00 AM	<0.001	0.009	<0.001	0.006	0.004	0.004	0.002
03:00 AM - 04:00 AM	<0.001	0.009	<0.001	0.010	0.004	0.002	0.001
04:00 AM - 05:00 AM	<0.001	0.008	0.001	0.006	0.007	0.004	0.001
05:00 AM - 06:00 AM	0.001	0.008	0.003	0.011	0.008	0.008	0.002
06:00 AM - 07:00 AM	0.001	0.007	0.003	0.020	0.008	0.009	0.003
07:00 AM - 08:00 AM	0.002	0.007	0.002	0.015	0.005	0.003	0.002
08:00 AM - 09:00 AM	0.004	0.008	0.002	0.004	0.002	0.003	0.001
09:00 AM - 10:00 AM	0.003	0.010	0.003	0.014	0.002	0.006	0.005
Average	0.001	0.015	0.004	0.007	0.005	0.005	0.004
1hr - Maximum	0.004	0.032	0.015	0.020	0.008	0.023	0.016
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)

Approved by

Orawan R.

Orawan Rakyong
Scientist (3)

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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 : PMH-23-11
Date Received : Nov 14, 2023
Date Reported : Nov 22, 2023
Project Name : Environmental Monitoring
Report Number : 2818040-1
Project Location : TPE Site 1

Sample Number : 23125292-1 to 7
Parameter : Wind Speed / Wind Direction
Location : โรงงานอุตสาหกรรมพลาสติก (อุตสาหกรรมพลาสติก)
Sampling Date : Nov 03 - Nov 10, 2023
Sampling by : Anusorn Terna

Time	Nov 03 - Nov 04, 2023		Nov 04 - Nov 05, 2023		Nov 05 - Nov 06, 2023		Nov 06 - Nov 07, 2023		Nov 07 - Nov 08, 2023		Nov 08 - Nov 09, 2023		Nov 09 - Nov 10, 2023								
	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)							
10:00 AM - 11:00 AM	1.2	11.0	N	1.7	327.0	NNW	0.7	7.0	N	1.1	294.0	WNW	0.7	312.0	NW	0.8	309.0	NW	1.7	348.0	NNW
11:00 AM - 12:00 PM	1.8	7.0	N	0.4	266.0	W	0.0	-	-	0.4	339.0	WNW	0.0	-	-	1.8	0.0	N	0.8	291.0	WNW
12:00 PM - 01:00 PM	0.6	301.0	WNW	0.6	172.0	S	0.6	303.0	WNW	1.6	252.0	WSW	0.6	193.0	SSW	2.1	359.0	N	0.9	339.0	NNW
01:00 PM - 02:00 PM	0.6	350.0	N	2.4	289.0	WNW	0.8	241.0	WSW	1.8	204.0	SSW	0.6	181.0	S	1.3	316.0	NW	2.0	341.0	NNW
02:00 PM - 03:00 PM	1.8	234.0	SW	1.0	289.0	WNW	0.9	149.0	SSE	1.2	162.0	SSE	0.8	164.0	SSE	0.5	203.0	SSW	1.2	155.0	SSE
03:00 PM - 04:00 PM	0.5	200.0	SSW	0.9	342.0	NNW	0.6	242.0	WSW	0.4	208.0	SSW	0.7	255.0	WNW	1.8	267.0	W	0.6	156.0	SSE
04:00 PM - 05:00 PM	0.3	174.0	S	0.3	359.0	N	0.5	142.0	SE	0.5	302.0	WNW	1.6	21.0	NNE	0.9	339.0	NNW	0.1	-	-
05:00 PM - 06:00 PM	0.9	168.0	SSE	0.5	280.0	W	1.0	315.0	NW	1.5	316.0	NW	1.5	293.0	WNW	0.8	337.0	NNW	0.2	-	-
06:00 PM - 07:00 PM	0.4	172.0	S	0.0	-	0.4	337.0	NNW	0.0	-	0.0	-	0.0	-	0.8	310.0	NW	1.0	350.0	N	
07:00 PM - 08:00 PM	0.0	-	0.0	-	0.0	-	1.1	296.0	WNW	0.0	-	1.3	14.0	NNE	1.0	304.0	NW	0.1	-	-	
08:00 PM - 09:00 PM	1.5	127.0	SE	0.2	-	0.0	-	0.2	-	0.2	-	1.1	333.0	NNW	1.1	349.0	N	0.0	-	-	
09:00 PM - 10:00 PM	0.0	-	0.0	-	0.0	-	0.2	-	0.8	300.0	WNW	0.1	-	0.5	353.0	N	0.5	348.0	NNW	-	-
10:00 PM - 11:00 PM	0.1	-	0.0	-	0.3	310.0	NW	0.0	-	1.0	332.0	NNW	0.0	-	-	0.5	329.0	NNW	-	-	-
11:00 PM - 12:00 AM	0.0	-	0.4	317.0	NW	0.1	-	0.0	-	0.0	-	0.0	-	0.1	-	0.0	-	-	-	-	-
12:00 AM - 01:00 AM	0.6	356.0	N	0.5	319.0	NW	1.1	340.0	NNW	0.6	306.0	NW	0.3	312.0	NW	0.0	-	-	0.1	-	-
01:00 AM - 02:00 AM	0.9	354.0	N	0.0	-	0.6	10.0	N	0.3	344.0	NNW	0.1	-	0.3	3.0	N	1.0	351.0	N	-	-
02:00 AM - 03:00 AM	0.7	359.0	N	0.2	-	0.1	-	0.0	-	0.2	-	0.2	-	0.0	-	0.0	-	0.0	-	-	-
03:00 AM - 04:00 AM	0.0	-	0.0	-	0.0	-	0.1	-	0.4	355.0	N	0.1	-	-	0.8	358.0	N	0.3	13.0	NNE	-
04:00 AM - 05:00 AM	0.1	-	0.2	-	0.2	-	0.2	-	0.9	399.0	NW	0.3	346.0	NNW	0.0	-	0.0	-	0.0	-	-
05:00 AM - 06:00 AM	0.0	-	0.1	-	0.4	308.0	NW	0.4	340.0	NNW	0.1	-	-	0.1	-	-	0.3	6.0	N	-	-
06:00 AM - 07:00 AM	0.2	-	0.1	-	0.0	-	0.0	-	0.0	-	0.1	-	0.1	-	0.0	-	0.1	-	0.1	-	-
07:00 AM - 08:00 AM	0.1	-	0.3	330.0	NNW	0.1	-	0.4	331.0	NNW	0.3	312.0	NW	0.3	338.0	NNW	0.0	-	-	-	-
08:00 AM - 09:00 AM	0.1	-	0.0	-	0.0	-	0.8	359.0	N	0.3	298.0	WNW	1.4	345.0	NNW	0.3	359.0	N	-	-	-
09:00 AM - 10:00 AM	0.0	-	1.2	359.0	N	0.6	5.0	N	1.8	359.0	N	0.8	0.0	N	0.1	-	1.0	18.0	NNE	-	-

Reference Method : Cup Anemometer & Anodized Aluminum Vane Method

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Sarayu Jitranont
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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 : PMH-23-11
Date Received : Nov 14, 2023
Date Reported : Nov 22, 2023
Project Name : Environmental Monitoring
Report Number : 2818040-1
Project Location : TPE Site 1



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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 : PMH-23-11
Date Received : Nov 14, 2023
Date Reported : Nov 22, 2023
Report Number : 2814312-1 C4

Project Name : Environmental Monitoring
Project Location : PP2

Sample Number : 23123366-1 to 7

Parameter : Wind Speed / Wind Direction
Location : อวนวัดทิศทางลมและทิศทาง TPE Site#1
Sampling Date : Nov 03 - Nov 10, 2023
Sampling by : Anuwat Tema

Page 1 of 2

Time	Nov 03 - Nov 04, 2023		Nov 04 - Nov 05, 2023		Nov 05 - Nov 06, 2023		Nov 06 - Nov 07, 2023		Nov 07 - Nov 08, 2023		Nov 08 - Nov 09, 2023		Nov 09 - Nov 10, 2023								
	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)							
02:00 PM - 03:00 PM	0.1	-	-	0.7	335.0	NNW	1.3	215.0	SW	1.5	195.0	SSW	0.1	-	-	0.4	247.0	WSW	1.5	179.0	SE
03:00 PM - 04:00 PM	0.1	-	-	0.1	-	-	1.2	201.0	SSW	0.6	178.0	S	0.4	355.0	N	1.2	164.0	SSE	0.4	130.0	SE
04:00 PM - 05:00 PM	0.5	225.0	SW	0.5	27.0	NNE	0.9	18.0	NNE	0.2	-	-	0.8	359.0	N	1.0	335.0	NNW	1.2	321.0	NW
05:00 PM - 06:00 PM	0.3	239.0	WSW	0.5	25.0	NNE	1.9	12.0	NNE	1.2	10.0	N	0.9	347.0	NNW	2.0	14.0	NNE	0.0	-	-
06:00 PM - 07:00 PM	0.2	-	-	0.3	25.0	NNE	0.8	11.0	N	0.4	343.0	NNW	2.8	5.0	N	2.2	22.0	NNE	0.0	-	-
07:00 PM - 08:00 PM	0.1	-	-	-	-	-	0.6	15.0	NNE	1.5	359.0	N	1.9	339.0	NNW	2.6	5.0	N	0.7	352.0	N
08:00 PM - 09:00 PM	0.1	-	-	0.2	-	-	0.3	88.0	E	1.5	152.0	SSE	0.7	13.0	NNE	0.5	351.0	N	0.7	353.0	N
09:00 PM - 10:00 PM	1.0	345.0	NNW	0.5	349.0	N	1.3	243.0	WSW	0.2	-	-	0.3	10.0	N	1.2	359.0	N	0.5	318.0	NW
10:00 PM - 11:00 PM	1.3	345.0	NNW	1.1	329.0	NNW	0.1	-	-	0.9	359.0	N	0.8	359.0	N	2.4	359.0	N	0.3	359.0	N
11:00 PM - 12:00 AM	0.4	3.0	N	1.7	343.0	NNW	0.1	-	-	0.2	-	-	0.6	346.0	NNW	0.7	359.0	N	0.3	15.0	NNE
12:00 AM - 01:00 AM	0.5	17.0	NNE	1.4	346.0	NNW	2.7	345.0	NNW	0.1	-	-	0.7	352.0	N	0.7	172.0	S	0.5	17.0	NNE
01:00 AM - 02:00 AM	0.1	-	-	1.4	356.0	N	0.8	337.0	NNW	0.5	23.0	NNE	1.3	255.0	WSW	0.2	-	-	1.5	338.0	NNW
02:00 AM - 03:00 AM	0.1	-	-	1.4	359.0	N	0.8	359.0	N	0.2	-	-	0.4	346.0	NNW	1.1	355.0	N	1.2	358.0	N
03:00 AM - 04:00 AM	0.2	-	-	1.7	0.0	N	2.4	349.0	N	0.2	-	-	0.6	9.0	N	2.0	324.0	NW	0.8	7.0	N
04:00 AM - 05:00 AM	0.2	-	-	1.0	352.0	N	0.7	11.0	N	0.2	-	-	0.0	-	-	0.7	354.0	N	0.3	304.0	NW
05:00 AM - 06:00 AM	0.0	-	-	0.9	343.0	NNW	0.7	359.0	N	0.1	-	-	0.5	340.0	NNW	1.6	359.0	N	0.3	11.0	N
06:00 AM - 07:00 AM	0.4	353.0	N	2.4	350.0	N	1.7	349.0	N	0.3	13.0	NNE	0.0	-	-	1.0	6.0	N	1.4	352.0	N
07:00 AM - 08:00 AM	0.7	337.0	NNW	2.2	18.0	NNE	1.7	27.0	NNE	0.3	14.0	NNE	0.3	9.0	N	1.3	341.0	NNW	1.0	349.0	N
08:00 AM - 09:00 AM	0.6	354.0	N	1.5	22.0	NNE	0.6	359.0	N	1.0	23.0	NNE	0.4	24.0	NNE	1.1	312.0	NW	1.4	264.0	W
09:00 AM - 10:00 AM	0.1	-	-	0.4	359.0	N	0.4	342.0	NNW	0.2	-	-	0.4	359.0	N	0.8	325.0	NW	1.4	355.0	N
10:00 AM - 11:00 AM	0.1	-	-	0.9	266.0	W	0.9	349.0	N	0.2	-	-	0.6	0.0	N	0.6	31.0	NNE	1.5	12.0	NNE
11:00 AM - 12:00 PM	0.2	-	-	1.8	151.0	SSE	0.8	152.0	SSE	1.2	233.0	SW	0.3	349.0	N	1.8	13.0	NNE	1.4	26.0	NNE
12:00 PM - 01:00 PM	0.6	252.0	WSW	1.1	241.0	WSW	0.3	187.0	S	0.8	197.0	SSW	0.3	326.0	NW	1.1	256.0	WNW	0.6	22.0	NNE
01:00 PM - 02:00 PM	0.3	355.0	N	1.4	185.0	S	0.2	-	-	0.0	-	-	0.5	195.0	SSW	1.5	74.0	ENE	0.5	21.0	NNE

Reference Method : Cup Anemometer & Anodized Aluminum Vane Method

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Approved by

Sirayuth Jitrantorn

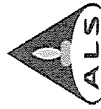
Assistant General Manager

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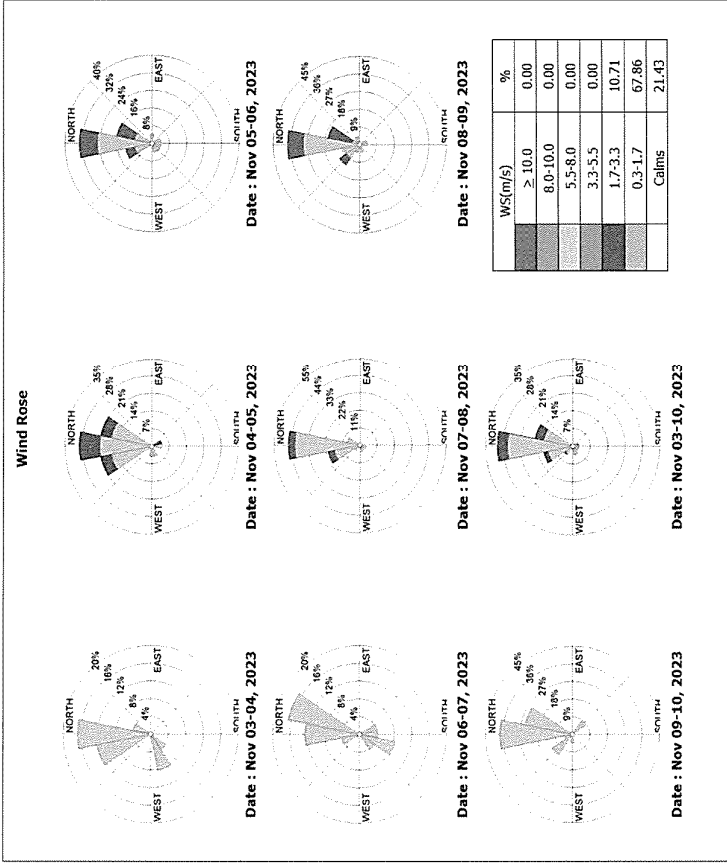


Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate 1-1 Road, Map Ta Phut, Muang District, Rayong Thailand 21150
P/O : PMH-23-11
Date Received : Nov 14, 2023
Date Reported : Nov 22, 2023
Report Number : 2814312-1 C4

Project Name : Environmental Monitoring
Project Location : PP2

Page 2 of 2



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Approved by

Sirayuth Jitrantorn

Assistant General 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 : PMH-23-11
Date Received : Nov 14, 2023
Date Reported : Nov 22, 2023
Report Number : 2814321-1 C4
Project Name : Environmental Monitoring
Project Location : PP2

Sample Number : 23123377-1 to 7

Parameter : Wind Speed / Wind Direction
Location : โรงเรือนพลาสติกแบบอุโมงค์พลาสติกขนาดใหญ่
Sampling Date : Nov 03 - Nov 10, 2023
Sampling by : Anuwat Tema

Time	Nov 03 - Nov 04, 2023		Nov 04 - Nov 05, 2023		Nov 05 - Nov 06, 2023		Nov 06 - Nov 07, 2023		Nov 07 - Nov 08, 2023		Nov 08 - Nov 09, 2023		Nov 09 - Nov 10, 2023								
	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	0.8	35.0	NE	1.4	251.0	WSW	0.6	86.0	E	0.8	82.0	E	0.3	110.0	ESE	1.2	38.0	NE	1.3	35.0	NE
02:00 PM - 03:00 PM	0.5	16.0	NNE	0.0	-	-	0.5	62.0	ENE	0.3	86.0	E	0.7	94.0	E	0.9	42.0	NE	1.1	290.0	NNW
03:00 PM - 04:00 PM	1.4	13.0	NNE	0.2	-	-	1.7	116.0	ESE	0.7	109.0	ESE	0.6	106.0	ESE	0.4	65.0	ENE	0.5	319.0	NW
04:00 PM - 05:00 PM	0.2	-	-	1.0	218.0	SW	1.4	42.0	NE	0.2	-	-	1.6	108.0	ESE	0.6	43.0	NE	0.9	314.0	NW
05:00 PM - 06:00 PM	0.1	-	-	0.0	-	-	1.5	117.0	ESE	0.1	-	-	0.3	37.0	NE	1.1	92.0	E	0.2	-	-
06:00 PM - 07:00 PM	1.0	74.0	ENE	0.0	-	-	0.2	-	-	0.3	103.0	ESE	0.0	-	-	1.0	34.0	NE	0.6	315.0	NW
07:00 PM - 08:00 PM	1.0	83.0	E	0.3	230.0	SW	0.5	125.0	SE	0.1	-	-	0.3	53.0	NE	1.0	250	ENE	0.7	304.0	NW
08:00 PM - 09:00 PM	0.1	-	-	0.2	-	-	0.6	114.0	ESE	0.1	-	-	0.2	-	-	0.3	36.0	NE	0.4	75.0	ENE
09:00 PM - 10:00 PM	0.2	-	-	0.1	-	-	0.1	-	-	0.2	-	-	0.7	41.0	NE	0.4	22.0	NNE	0.0	-	-
10:00 PM - 11:00 PM	0.3	88.0	E	0.3	346.0	NNW	0.1	-	-	0.3	26.0	NNE	0.6	80.0	E	0.1	-	-	0.3	37.0	NE
11:00 PM - 12:00 AM	0.2	-	-	0.6	232.0	SW	0.3	235.0	SW	0.0	-	-	0.3	19.0	NNE	0.2	-	-	0.6	26.0	NNE
12:00 AM - 01:00 AM	1.0	43.0	NE	0.2	-	-	0.2	-	-	0.4	31.0	NNE	0.1	-	-	0.0	-	-	0.0	-	-
01:00 AM - 02:00 AM	0.1	-	-	0.1	-	-	0.2	-	-	0.5	29.0	NNE	0.3	114.0	ESE	1.2	20.0	NNE	0.2	-	-
02:00 AM - 03:00 AM	0.2	-	-	0.1	-	-	0.5	148.0	SSE	0.0	-	-	0.8	123.0	ESE	1.0	26.0	NNE	0.0	-	-
03:00 AM - 04:00 AM	0.3	26.0	NNE	0.6	254.0	WSW	0.0	-	-	0.5	33.0	NNE	0.7	135.0	SE	0.8	105.0	ESE	1.2	352.0	N
04:00 AM - 05:00 AM	0.9	39.0	NE	0.4	277.0	W	0.3	25.0	NNE	0.7	10.0	N	0.4	24.0	WSW	1.1	50.0	NE	0.0	-	-
05:00 AM - 06:00 AM	1.1	34.0	NE	0.1	-	-	0.1	-	-	0.4	28.0	N	0.0	-	-	1.3	51.0	NE	0.0	-	-
06:00 AM - 07:00 AM	1.0	19.0	NNE	0.1	-	-	0.3	146.0	SE	0.7	31.0	NNE	0.7	35.0	NW	1.2	69.0	ENE	0.2	-	-
07:00 AM - 08:00 AM	0.3	38.0	NE	0.1	-	-	0.5	158.0	SSE	0.9	26.0	NNE	0.0	-	-	0.9	285.0	NNW	1.0	31.0	NNE
08:00 AM - 09:00 AM	0.1	-	-	0.7	248.0	WSW	0.4	129.0	SE	0.2	-	-	0.0	-	-	1.4	268.0	W	1.0	31.0	NNE
09:00 AM - 10:00 AM	0.5	21.0	NNE	0.3	244.0	WSW	0.3	109.0	ESE	0.8	223.0	SW	0.2	-	-	0.8	28.0	NNE	1.2	27.0	NNE
10:00 AM - 11:00 AM	0.6	265.0	W	0.6	256.0	WSW	0.3	118.0	ESE	1.5	100.0	E	0.5	256.0	WSW	0.9	15.0	NNE	0.8	23.0	NNE
11:00 AM - 12:00 PM	1.9	271.0	W	0.0	-	-	1.0	136.0	SE	1.1	103.0	ESE	0.5	115.0	ESE	1.5	350.0	N	0.7	18.0	NNE
12:00 PM - 01:00 PM	1.4	264.0	W	0.2	-	-	0.6	62.0	ENE	0.5	104.0	ESE	1.1	103.0	ESE	1.6	357.0	N	0.3	126.0	SE

Reference Method : Cup Anemometer & Anodized Aluminum Vane Method

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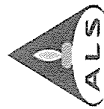
Sarayuht Jitranont
Assistant General Manager

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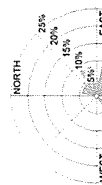


Analysis / Test Report

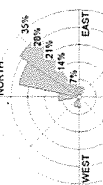
Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong Thailand 21150
P/O : PMH-23-11
Date Received : Nov 14, 2023
Date Reported : Nov 22, 2023
Report Number : 2814321-1 C4
Project Name : Environmental Monitoring
Project Location : PP2

Page 2 of 2

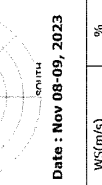
Wind Rose



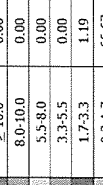
Date : Nov 03-04, 2023



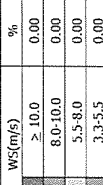
Date : Nov 04-05, 2023



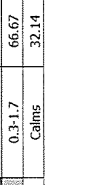
Date : Nov 05-06, 2023



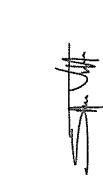
Date : Nov 06-07, 2023



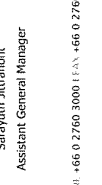
Date : Nov 07-08, 2023



Date : Nov 08-09, 2023



Date : Nov 09-10, 2023



WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.00
1.7-3.3	1.19
0.3-1.7	66.67
Calms	32.14

Approved by

Sarayuht Jitranont
Assistant General Manager

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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 : PP2_S1

Page 1 of 2

TESTING
No.0042
Lot ID: 2369891
Date Received : Jul 04, 2023
Date Reported : Jul 13, 2023
Report Number : 2686802-1 C4

Sample Number 2369891-1
Sampling Date Jul 04, 2023 10:51 AM
Sample Description Wastewater
Location โรงงานอุตสาหกรรม
Date Analysis Commenced Jul 04, 2023
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	Guideline / Specification	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	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	32	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	16	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	17	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	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	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.7	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	1090	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

N. Ban-ngit
Narumon Banchongkit
Supervisor
โทรศัพท์ 3-323-9-9445

Approved by

D. Jansou
Dej Changchon
Manager
โทรศัพท์ 3-323-9-5283

Technical Management

N. Ban-ngit
Narumon Banchongkit
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Approved by

D. Jansou
Dej Changchon
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

Page 2 of 2

TESTING
No.0042
Lot ID: 2369891
Date Received : Jul 04, 2023
Date Reported : Jul 13, 2023
Report Number : 2686802-1 C4

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).
Sampling By : Wanlop Hunchaiyaw, Korbundit Kitisupavant
Remark :
- LOD : Limit of Detection
- <LOD : Lower than LOD (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management

N. Ban-ngit
Narumon Banchongkit
Supervisor
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Approved by

D. Jansou
Dej Changchon
Manager
โทรศัพท์ 3-323-9-5283

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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-SCGH-2019-343
Project Name : Environmental Monitoring
Project Location : PP2_51

Lot ID: 2369891

Date Received : Jul 04, 2023
Date Reported : Jul 13, 2023
Report Number : 2686802-2 C4

Page 1 of 1

Sample Number 2369891-1
Sampling Date Jul 04, 2023 10:51 AM
Sample Description Wastewater
Location บึงน้ำดิบ
Date Analysis Commenced Jul 04, 2023
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	305	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Total Organic Carbon	mg/L	0.01	0.1	13.8	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).

Remark : Sampling By : Wanlop Hunchanaow, Kardsundit Kitisupavant

• LOD : Limit of Detection
• <L : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Approved by Siriluk P.
Siriluk Puengpong
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 : PMW-23-11
Project Name : Environmental Monitoring
Project Location : TPE Site 1

TESTING

No.0042
Lot ID: 2370529
Date Received : Jul 04, 2023
Date Reported : Jul 12, 2023
Report Number : 2688669-1

Page 1 of 2

Sample Number 2370529-1
Sample Date Jul 04, 2023 9:46 AM
Sample Description Wastewater
Location บึงน้ำดิบ API Separator
Date Analysis Commenced Jul 04, 2023
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	4.0	≤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	32	≤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	10	≤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 *	-	-	-	7.6	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	-	-	34.6	≤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	528	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
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, 23rd ed., 2017, part 2540 D	Rayong

Technical Management N.Banyat
Narumon Banchoangkit
Supervisor
Approved by Dhanu
Daj Changchon
Senior Manager

วิบูลย์ 7-323-9-9445

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Silpaorn, A. (s.orn)



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 : PHM-23-11
Project Name : Environmental Monitoring
Project Location : TPE Site 1



TESTING
No.0042
Lot ID: 2370529
Date Received : Jul 04, 2023
Date Reported : Jul 12, 2023
Report Number : 2688669-1

Page 2 of 2

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).
Sampling By : Kirdbuddit Kitisupavanit รหัสพนักงาน 3-204-a-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

N. Banphit
Narumon Banchoangkit
Supervisor
รหัสพนักงาน 3-323-a-9415

Approved by

D. Changdon
Dej Changdon
Senior Manager
รหัสพนักงาน 3-323-a-9442

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
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Thailand 21150
P/O : PHM-23-11
Project Name : Environmental Monitoring
Project Location : TPE Site 1

Lot ID: 2370529

Date Received : Jul 04, 2023
Date Reported : Jul 12, 2023
Report Number : 2688669-2

Page 1 of 1

Sample Number 2370529-1

Sample Date Jul 04, 2023 9:46 AM

Sample Description Wastewater

Location PP2 : wifaihu API Separator

Date Analysis Commenced Jul 04, 2023

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	193	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	-	-	0.009	No Standard	Flow meter	Rayong
Total Organic Carbon	mg/L	0.01	0.1	11.4	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).
Sampling By : Kirdbuddit Kitisupavanit

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

Approved by

Siriluk P.
Siriluk Puangpang
Section Head

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Analysis / Test Report

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

Page 1 of 2

Page 1 of 1

Sample Number	2384316-1						
Sampling Date	Aug 04, 2023 11:05 AM						
Sample Description	Wastewater						
Location	โรงงานบำบัดน้ำ						
Date Analysis Commenced	Aug 04, 2023						
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	2.3	≤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	38	≤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	11	≤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	11	≤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	-	-	33.4	≤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	508	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	21	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management
N. Banphit
Narumon Banchongkit
Supervisor
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Approved by
D. Jansan
Dej Changchon
Manager
โทรศัพท์ ๐-๓๒๓-๐-๕๒๘๓

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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 : PMH-SCGH-2019-343
Project Name : Environmental Monitoring
Project Location: PP2_S1

Page 2 of 2

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).
Sampling By : Sunsoen Khuyoksul , Thanasoun Namakunna

Remark :
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- LOQ : 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
N. Banphit
Narumon Banchongkit
Supervisor
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Approved by
D. Jansan
Dej Changchon
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 : PPM-SCCH-2019-343
Project Name : Environmental Monitoring
Project Location: PP2_51

Page 1 of 1

Sample Number 2384316-1
Sampling Date Aug 04, 2023 11:05 AM
Sample Description Wastewater
Location โรงงานผลิตพลาสติก
Date Analysis Commenced Aug 04, 2023
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 (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing Chloride as Cl	mg/L	0.5	1	156	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed, 2017, part 4500-Cl (D)	Rayong
Total Organic Carbon	mg/L	0.01	0.1	9.41	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).

Sampling By : Sansen Khuyoksu, Thanasoun Namakumma

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

Approved by
Siriluk P.
Siriluk Puenggang
Section Head

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Thailand 21150
P/O : PPM-23-11
Project Name : Environmental Monitoring
Project Location: TPE Site 1

Page 1 of 2

Sample Number 2384578-1
Sampling Date Aug 11, 2023 1:58 PM
Sample Description Wastewater
Location PP2 : น้ำหนู API Separator
Date Analysis Commenced Aug 11, 2023
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	Result	Guideline / Specification	Method	Testing Location
Water Testing BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	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	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	7	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	≤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	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520-B	Rayong
pH at 25 degree C *	-	-	-	8.3	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-H (9)	Rayong
Temperature *	Degree C	-	-	≤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	270	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540-C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540-D	Rayong

Technical Management
N.Banyatit
Narumon Banchoangkit
Supervisor
yi2323-a-9445

Approved by
D. Chongchon
Dol Chongchon
Senior Manager
yi2323-a-9442

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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 : PMM-23-11
Project Name : Environmental Monitoring
Project Location : TPE Site 1



TESTING
No.0042
Lot ID: 2384578
Date Received : Aug 11, 2023
Date Reported : Aug 21, 2023
Report Number : 2722965-1

Page 2 of 2

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 estate of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampling By : Paramet Sattayakun วชิรณัฐ 7-323-9-9476 , Karubandit Kitapapont 7-201-4-0001.

Remark :

- LOD : Limit of Detection
- Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte has been tested in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banphit
Naumon Banchongkit
Supervisor

Approved by

D. Chingchon
Dej Chingchon
Senior Manager

วชิรณัฐ 7-323-9-9442

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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 : PMM-23-11
Project Name : Environmental Monitoring
Project Location : TPE Site 1

Lot ID: 2384578
Date Received : Aug 11, 2023
Date Reported : Aug 21, 2023
Report Number : 2722965-2

Page 1 of 1

Sample Number 2384578-1

Sampled Date Aug 11, 2023 1:58 PM

Sample Description Wastewater

Location PP2 : Wastewater API Separator

Date Analysis Commenced Aug 11, 2023

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	Result	Guideline / Specification	Method	Testing Location
Water Testing Chloride as Cl	mg/L	0.5	1	92	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)
Flow rate	m3/s	-	-	0.006	No Standard	Flow meter
Total Organic Carbon	mg/L	0.01	0.1	5.04	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B

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 estate of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampling By : Paramet Sattayakun , Karubandit Kitapapont

Remark :

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

Approved by

N. Banphit
Naumon Banchongkit
Supervisor

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2395904
Date Received : Sep 08, 2023
Date Reported : Sep 26, 2023
Report Number : 2746944-1 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 : 5002206655, 5002206778
Project Name : Environmental Monitoring
Project Location: PP2_51

Page 1 of 2

Sample Number	2395904-1
Sample Date	Sep 08, 2023 11:20 AM
Sample Description	Wastewater
Location	โรงงานอุตสาหกรรม
Date Analysis Commenced	Sep 08, 2023
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	Guideline / Specification	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	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	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADHI	-	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)	ADHI	-	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	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5320 B	Rayong
pH at 25 degree C *		-	-	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	-	-	≤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	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

N. Ban-jiit
Narumon Banchoangkit
Supervisor
โทรศัพท์ ๖-323-๙-9445

Approved by

D. Chuan
Dej Changchon
Senior Manager
โทรศัพท์ ๖-323-๙-9442

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2395904
Date Received : Sep 08, 2023
Date Reported : Sep 26, 2023
Report Number : 2746944-1 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 : 5002206655, 5002206778
Project Name : Environmental Monitoring
Project Location: PP2_51

Page 2 of 2

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 วัฒินานนท์ ๖-323-๙-9476, Thanasoun Namkuma วัฒินานนท์ ๖-204-๙-8592

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

Technical Management

N. Ban-jiit
Narumon Banchoangkit
Supervisor
โทรศัพท์ ๖-323-๙-9445

Approved by

D. Chuan
Dej Changchon
Senior Manager
โทรศัพท์ ๖-323-๙-9442

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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 : 500206655, 500206778
Project Name : Environmental Monitoring
Project Location: PP2_51

Lot ID: 2395904

Date Received : Sep 08, 2023
Date Reported : Sep 26, 2023
Report Number : 2746944-2 C4

Page 1 of 1

Sample Number	2395904-1							Page 1 of 1
Sample Date	Sep 08, 2023 11:20 AM							
Sample Description	Wastewater							
Location	โรงงานอาหารหมู							
Date Analysis Commenced	Sep 08, 2023							
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	Result	Guideline / Specification	Method	Testing Location	
Water Testing								
Chloride as Cl	mg/L	0.5	1	226	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-C (D)	Rayong	
Total Organic Carbon	mg/L	0.01	0.1	12.0	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 , Thanassou Namakuma

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

Approved by
Siriuk P.
Sirilux Puengpang
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 : PHR-23-11
Project Name : Environmental Monitoring
Project Location: TPE Site 1

TESTING

No.0042

Lot ID: 2395935

Date Received : Sep 14, 2023
Date Reported : Sep 22, 2023
Report Number : 2747006-1

Page 1 of 2

Sample Number	2395935-1						
Sample Date	Sep 14, 2023 10:00 AM						
Sample Description	Wastewater						
Location	PP2 : น้ำเสีย API Separator						
Date Analysis Commenced	Sep 14, 2023						
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	8.3	≤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	38	≤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	20	≤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	18	≤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 *	-	-	-	7.3	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	-	-	34.4	≤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	584	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	9	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management
N. Ban-ut
Narumon Banchoangkit
Supervisor

Approved by
D. Chuan
Dej Changchon
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-23-11
Project Name : Environmental Monitoring
Project Location: TPE Site 1



TESTING
No.0042
Lot ID: 2395935
Date Received : Sep 14, 2023
Date Reported : Sep 22, 2023
Report Number : 2747006-1

Page 2 of 2

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).
Sampling By : Paramet Saitayakun วิวัฒน์ 3-323-9-9476 , Thanassoun Namakunna วิวัฒน์ 3-323-9-8592

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

Technical Management

N. Banthit
Narumon Banchoangkit
Supervisor
วิวัฒน์ 3-323-9-9445

Approved by

D. Chongchon
Dej Chongchon
Senior Manager
วิวัฒน์ 3-323-9-9442

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S. Waporn, AL, Gr. ref. (1.1.2019)



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-23-11
Project Name : Environmental Monitoring
Project Location: TPE Site 1

Lot ID: 2395935
Date Received : Sep 14, 2023
Date Reported : Sep 22, 2023
Report Number : 2747006-2

Page 1 of 1

Sample Number : 2395935-1
Sample Date : Sep 14, 2023 10:00 AM
Sample Description : Wastewater
Location : PP2 : Wasthu API Separator
Date Analysis Commenced : Sep 14, 2023
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	Result	Guideline / Specification	Method	Testing Location
Water Testing Chloride as Cl	mg/L	0.5	1	152	No Standard	Rayong
Flow rate	m3/s	-	-	0.007	No Standard	Rayong
Total Organic Carbon	mg/L	0.01	0.1	11.1	No Standard	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).
Sampling By : Paramet Saitayakun , Thanassoun Namakunna

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

Approved by

S. Waporn
Suwimon C.
Suwimon Chaiuangwut
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 : 50020655, 50020678
Project Name : Environmental Monitoring
Project Location : PP2_S1

Page 1 of 1

Sample Number 23110572-1
Sampled Date Oct 06, 2023 11:01 AM
Sample Description Wastewater
Location โรงงานพลาสติก
Date Analysis Commenced Oct 06, 2023
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							
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	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 *	-	-	-	7.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 -H (D)	Rayong
Temperature *	Degree C	-	-	33.0	≤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	356	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	22	≤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 : Surawit Narapong วสุวิภาณุรักษ์ 3-323-9-0011, Thanassou Namakuma วสุวิภาณุรักษ์ 3-204-9-8592

Technical Management N. Banphit
Narumon Banchoangkit
Supervisor
วสุวิภาณุรักษ์ 3-323-9-9445

Approved by D. Changchon
Dej Changchon
Senior Manager
วสุวิภาณุรักษ์ 3-323-9-9442

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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 : 50020655, 50020678
Project Name : Environmental Monitoring
Project Location : PP2_S1

Page 1 of 1

Sample Number 23110572-1
Sampled Date Oct 06, 2023 11:01 AM
Sample Description Wastewater
Location โรงงานพลาสติก
Date Analysis Commenced Oct 06, 2023
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	124	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 -Cl (D)	Rayong
Total Organic Carbon	mg/L	0.01	0.1	63.3	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 : Surawit Narapong , Thanassou Namakuma

Remark :
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Approved by N. Banphit
Narumon Banchoangkit
Supervisor

Approved by N. Banphit
Narumon Banchoangkit
Supervisor

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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-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location : PP2_51

Page 1 of 1

Sample Number	23121015-1
Sampling Date	Oct 19, 2023 10:30 AM
Sample Description	Wastewater
Location	โรงงานพลาสติก
Date Analysis Commenced	Oct 19, 2023
Condition of Sample	Contained in two 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

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).

Sampling By : Paramet Saityaykun

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

Technical Management

Narumon Banchongkiet
Supervisor
โทรศัพท์ 3-323-9-9445

Approved by

Dej Changchon
Manager
โทรศัพท์ 3-323-9-5283

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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 : TPE Site 1

Page 1 of 1

Sample Number	23111004-1
Sample Date	Oct 06, 2023 9:54 AM
Sample Description	Wastewater
Location	PP2 : น้ำทิ้ง API Separator
Date Analysis Commenced	Oct 06, 2023
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							
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 *	-	-	-	7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (6)	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	440	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 100-105 degree C	mg/L	-	5	15	≤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).

Sampling By : Suravit Nararong Wittanuwat 3-323-9-0011, Thanasoon Namakuma Wittanuwat 3-204-4-8892

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

Technical Management

Narumon Banchongkiet
Supervisor
โทรศัพท์ 3-323-9-9445

Approved by

Dej Changchon
Senior Manager
โทรศัพท์ 3-323-9-9442

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S. Reports, All GL (ref 4 8899)



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 : PMH-23-11
Project Name : Environmental Monitoring
Project Location : TPE Site 1

Lot ID: 23111004
Date Received : Oct 06, 2023
Date Reported : Oct 17, 2023
Report Number : 2785625-2

Page 1 of 1

Sample Number	23111004-1			
Sample Date	Oct 06, 2023 9:54 AM			
Sample Description	Wastewater			
Location	PP2 : น้ำเสีย API Separator			
Date Analysis Commenced	Oct 06, 2023			
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	Result	Guideline / Specification	Method	Testing Location
Water Testing						
Chloride as Cl	mg/L	0.5	1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Flow rate	m ³ /s	-	0.007	No Standard	Flow meter	Rayong
Total Organic Carbon	mg/L	0.01	110	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).
Sampling By : Surawit Narapong wattitummau ๓-๓23-๓-003.1 , Thanassou Namakuma wattitummau ๓-204-๔-8592

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

Approved by
N. Ban-Phit
Narumon Banchongkit
Supervisor

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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 : PMH-23-11
Project Name : Environmental Monitoring
Project Location : TPE Site 1

TESTING
No.0042
Lot ID: 23111004
Date Received : Oct 06, 2023
Date Reported : Oct 17, 2023
Report Number : 2785625-3

Page 1 of 1

Sample Number	23111004-1			
Sample Date	Oct 06, 2023 9:54 AM			
Sample Description	Wastewater			
Location	PP2 : น้ำเสีย API Separator			
Date Analysis Commenced	Oct 07, 2023			
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	Result	Guideline / Specification	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	15.7	520	Rayong
COD	mg/L	1.5	25	469	5120	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).
Sampling By : Surawit Narapong wattitummau ๓-๓23-๓-003.1 , Thanassou Namakuma wattitummau ๓-204-๔-8592

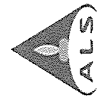
Remark :
- LOD : Limit of Detection
- LOQ : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- "C" : Analytical method is not included in scope of ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
N. Ban-Phit
Narumon Banchongkit
Supervisor

Approved by
D. Chuan-
Dej Changchon
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 :
Project Name : Environmental Monitoring
Project Location: PP2

Page 1 of 1

Sample Number 23121017-1
Sample Date Oct 18, 2023 9:55 AM
Sample Description Wastewater
Location PP2 : Wasthu API Separator
Date Analysis Commenced Oct 19, 2023
Condition of Sample Contained in two 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	29	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 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).

Sampling By : Paramet Sattayakun Vittitumant ๓-323-๙-9146

Remark :
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Technical Management

N. Banphit
Narumon Banchoanglitt
Supervisor
ติดต่อ ๓-323-๙-9445

Approved by

D. Changchon
Daj Changchon
Senior Manager
ติดต่อ ๓-323-๙-9442

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1900-261/PMAL

S. Rajeev, AL, GE, pr (4/5/2014)



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 : Environmental Monitoring
Project Location: PP2

Page 1 of 1

Sample Number 23125487-1
Sample Date Oct 30, 2023 3:00 PM
Sample Description Wastewater
Location PP2 : Wasthu API Separator
Date Analysis Commenced Oct 31, 2023
Condition of Sample Contained in two vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing Total Organic Carbon	mg/L	0.01	0.1	9.60	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).

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

Approved by

S. Wimon C.
Sawimon Chuanuagwut
Scientist (3)

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S. Rajeev, AL, GE, pr (4/5/2014)



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-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location : PP2_S1

Page 1 of 2

Sample Number 23122354-1
Sampling Date Nov 01, 2023 10:58 AM
Sample Description Wastewater
Location โรงงานอุตสาหกรรม
Date Analysis Commenced Nov 01, 2023
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	13	≤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 *	-	-	-	7.6	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	-	-	32.9	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 D	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	544	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
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

Technical Management

N. Banphit
Narumon Banchoangkit
Supervisor
โทรศัพท์ ๖-323-๙-9445

Approved by

D. Chuan
Dej Changchon
Manager
โทรศัพท์ ๖-225-๙-5283

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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-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location : PP2_S1

Page 2 of 2

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).
Sampling By : Wanlop Hunchanaow , Kerdbundit Kitisupavant

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

N. Banphit
Narumon Banchoangkit
Supervisor
โทรศัพท์ ๖-323-๙-9445

Approved by

D. Chuan
Dej Changchon
Manager
โทรศัพท์ ๖-225-๙-5283

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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-SCCH-2019-343
Project Name : Environmental Monitoring
Project Location : PP2_S1

Lot ID: 2016269
Date Received : Mar 10, 2020
Date Reported : Dec 11, 2023
Report Number : 1587409-2 Rev. No.1 C4

Page 1 of 1

Sample Number : 2016269-1
Sampling Date : Mar 10, 2020 10:00 AM
Sample Description : Wastewater
Location : โรงบำบัดน้ำเสีย
Date Analysis Commenced : Mar 10, 2020
Condition of Sample : Contained in four glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD (LOE)	Result	Guideline / Specification	Method	Testing Location
Water Testing						
Chloride as Cl	mg/L	0.5	1	242	Based on APHA (2017), 4500-Cl (D)	Rayong
Total Organic Carbon	mg/L	0.01	0.1	17.8	Based on APHA (2017), 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. 1587409-2, Date Reported : Mar 18, 2020

Sampling By : Chaimusorn Lerthanakunhai

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

Approved by

Narumon Banchongkit
Supervisor

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1580-251/FM01



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

Lot ID: 23122644
Date Received : Nov 01, 2023
Date Reported : Nov 09, 2023
Report Number : 2812715-1

Page 1 of 2

Sample Number : 23122644-1
Sampling Date : Nov 01, 2023 10:04 AM
Sample Description : Wastewater
Location : PP2 : น้ำทิ้งจาก API Separator
Date Analysis Commenced : Nov 01, 2023
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 (LOE)	Result	Guideline / Specification	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	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	37	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	15	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	14	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	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	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.8	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	472	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	9	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

Narumon Banchongkit
Supervisor

Approved by

Dej Changchon
Senior Manager

ยัติพลวัฒน์ 3-323-9-9445

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1580-251/FM01



Analysis / Test Report

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Thailand 21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location : TPE Site 1



TESTING
No 0042
Lot ID: 23122644
Date Received : Nov 01, 2023
Date Reported : Nov 09, 2023
Report Number : 2812715-1

Page 2 of 2

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, 8.E-2560 (2017).
Sampling By : Wanlop Hunchanaow ๖323-๙9457, Kerdbundit Kitisupavannit ๖204-๙0001

Remark :
- LOD : Limit of Detection
- LOQ : Limit of Quantitation / LOR (Limit of Reporting)
- Analyte(s) marked * below included in scope of laboratory complying with the ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banphit
Narumon Banchoangkit
Supervisor

Approved by

D. Changchon
Dej Changchon
Senior Manager

๖323-๙9445

๖323-๙9442

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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

Lot ID: 23122644

Date Received : Nov 01, 2023
Date Reported : Nov 09, 2023
Report Number : 2812715-2

Page 1 of 1

Sample Number 23122644-1

Sampled Date Nov 01, 2023 10:04 AM

Sample Description Wastewater

Location PP2 : Wasthu API Separator

Date Analysis Commenced Nov 01, 2023

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	129	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	-	-	0.006	No Standard	Flow meter	Rayong
Total Organic Carbon	mg/L	0.01	0.1	9.50	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, 8.E-2560 (2017).
Sampling By : Wanlop Hunchanaow, Kerdbundit Kitisupavannit

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

Approved by

N. Banphit
Narumon Banchoangkit
Supervisor

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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 : PHM-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location : PP2_51

Page 1 of 2



TESTING
No.0042
Lot ID: 23128923
Date Received : Dec 08, 2023
Date Reported : Dec 16, 2023
Report Number : 2825459-1 C4

Sample Number : 23128923-1
Sampling Date : Dec 08, 2023 10:45 AM
Sample Description : Wastewater
Location : โรงงานพลาสติก
Date Analysis Commenced : Dec 08, 2023
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	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 5200 - O G	Rayong
COD	mg/L	1.5	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	16	≤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	15	≤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 3520 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	652	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	5	28	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

N. Ban-phet
Narumon Banchongkiet
Supervisor
โทรศัพท์ 3-323-4-9445

Approved by

D. Chuan
Dej Changchon
Manager
โทรศัพท์ 3-225-4-5283

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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 : PHM-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location : PP2_51

Page 2 of 2



TESTING
No.0042
Lot ID: 23128923
Date Received : Dec 08, 2023
Date Reported : Dec 16, 2023
Report Number : 2825459-1 C4

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).

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

Technical Management

N. Ban-phet
Narumon Banchongkiet
Supervisor
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Approved by

D. Chuan
Dej Changchon
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 : PMH-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location: PP2_S1

Lot ID: 23128923
Date Received : Dec 08, 2023
Date Reported : Dec 16, 2023
Report Number : 2825459-2 C4

Page 1 of 1

Sample Number 23128923-1
Sampling Date Dec 08, 2023 10:45 AM
Sample Description Wastewater
Location โรงงานอุตสาหกรรม
Date Analysis Commenced Dec 08, 2023
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	202	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-C (D)	Rayong
Total Organic Carbon	mg/L	0.01	0.1	9.95	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).

Sampling By : Chainusorn Lertnakhakunchai , Pattarapol Sawangjalam

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

Approved by
Swimon C.
Swimon Chuanrueangwut
Scientist (3)

Please apply to the sample(s) if 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. ALS Laboratory Group (Thailand) strongly recommends that 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 : PMH-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location: LLDPE_S1

Lot ID: 23129530
Date Received : Dec 08, 2023
Date Reported : Dec 16, 2023
Report Number : 2826923-1 C5

Page 1 of 2

Sample Number 23129530-1
Sampling Date Dec 08, 2023 9:45 AM
Sample Description Wastewater
Location PP2 : โรงงาน API Separator
Date Analysis Commenced Dec 08, 2023
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	4.5	≤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	49	≤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	16	≤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	16	≤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 *	-	-	-	7.6	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	524	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	10	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management
N. Banphit
Narumon Banchongkitt
Supervisor
โทรศัพท์ ๓-323-๙-9445

Approved by
D. Chuan
Dej Changchon
Manager
โทรศัพท์ ๓-225-๙-5283

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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: LLDPE_S1

Lot ID: 23129530
Date Received : Dec 08, 2023
Date Reported : Dec 16, 2023
Report Number: 2826923-1 CS



TESTING
No.0042

Page 2 of 2

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).
Sampling By : Chainusorn Lertmanthakunchai, Pattarapong Sawangjittam

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

Technical Management

N. Banphit
Narumon Bandhongsit
Supervisor
โทร : 09-00000000-323-3-9445

Approved by

D. Changchon
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Manager
โทร : 09-00000000-225-5-5283

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.

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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: LLDPE_S1

Lot ID: 23129530
Date Received : Dec 08, 2023
Date Reported : Dec 16, 2023
Report Number: 2826923-2 CS

Sample Number
23129530-1

Sampling Date
Dec 08, 2023 9:45 AM

Sample Description
Wastewater

Location
PP2 : WASTHW API Separator

Date Analysis Commenced
Dec 08, 2023

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	129	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	9.57	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).
Sampling By : Chainusorn Lertmanthakunchai, Pattarapong Sawangjittam

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

Approved by

S. Suwimon C.
Suwimon Chaiwangwut
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.

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ภาคผนวก ค-3

ระดับเสียงทั่วไป



Analysis / Test Report



TESTING
No.0042

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

Lot ID: 23122080

Date Received : Nov 15, 2023

Date Reported : Nov 20, 2023

Report Number: 2841074-1

Page 1 of 1

Sample Number 23122080-1
Parameter Noise (Leq 24 hrs.)
Location อาคารสำนักงานของกลุ่มโรงงาน TPE Site#1
Measurement Date Nov 03 - Nov 04, 2023
Measurement by Anuwet Tema
Sound Level meter Serial No. 900072

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	58.6	75.9	56.7
11:00 AM - 12:00 PM	58.1	71.1	56.0
12:00 PM - 01:00 PM	58.7	76.7	57.0
01:00 PM - 02:00 PM	58.6	84.1	56.2
02:00 PM - 03:00 PM	58.1	82.8	55.9
03:00 PM - 04:00 PM	58.5	76.9	55.9
04:00 PM - 05:00 PM	58.3	73.2	56.3
05:00 PM - 06:00 PM	58.3	77.5	55.4
06:00 PM - 07:00 PM	57.5	73.9	55.2
07:00 PM - 08:00 PM	59.2	84.8	55.5
08:00 PM - 09:00 PM	62.0	88.2	57.0
09:00 PM - 10:00 PM	58.4	85.7	56.4
10:00 PM - 11:00 PM	57.1	72.1	55.7
11:00 PM - 12:00 AM	56.9	72.4	55.4
12:00 AM - 01:00 AM	58.0	86.6	55.5
01:00 AM - 02:00 AM	58.1	84.7	56.5
02:00 AM - 03:00 AM	56.0	67.0	55.0
03:00 AM - 04:00 AM	56.9	66.1	56.2
04:00 AM - 05:00 AM	55.6	67.8	54.5
05:00 AM - 06:00 AM	57.7	67.4	56.5
06:00 AM - 07:00 AM	59.7	79.6	56.7
07:00 AM - 08:00 AM	60.1	78.9	57.5
08:00 AM - 09:00 AM	57.7	70.8	55.3
09:00 AM - 10:00 AM	58.1	75.1	56.3

Leq Average 24 hrs. (dB(A))

58.4

Lmax (dB(A))

88.2

L90 (dB(A))

56.0

Ldn (dB(A))

64.1

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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S:\Reports_Air Noise.rpt (3:37PM)



Analysis / Test Report



TESTING
No.0042

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

Lot ID: 23122080

Date Received : Nov 15, 2023

Date Reported : Nov 20, 2023

Report Number: 2841075-1

Page 1 of 1

Sample Number 23122080-2
Parameter Noise (Leq 24 hrs.)
Location อาคารสำนักงานของกลุ่มโรงงาน TPE Site#1
Measurement Date Nov 04 - Nov 05, 2023
Measurement by Anuwet Tema
Sound Level meter Serial No. 900072

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	57.5	75.6	55.5
11:00 AM - 12:00 PM	58.6	81.4	55.9
12:00 PM - 01:00 PM	71.5	109.3	56.3
01:00 PM - 02:00 PM	67.0	102.1	57.7
02:00 PM - 03:00 PM	59.0	71.2	57.1
03:00 PM - 04:00 PM	59.0	72.4	57.4
04:00 PM - 05:00 PM	58.9	73.4	56.4
05:00 PM - 06:00 PM	58.0	80.2	54.9
06:00 PM - 07:00 PM	57.9	76.8	56.0
07:00 PM - 08:00 PM	57.6	75.0	54.7
08:00 PM - 09:00 PM	58.0	76.4	56.5
09:00 PM - 10:00 PM	57.1	75.5	55.9
10:00 PM - 11:00 PM	56.9	67.7	56.2
11:00 PM - 12:00 AM	55.4	64.1	54.3
12:00 AM - 01:00 AM	56.5	67.6	55.8
01:00 AM - 02:00 AM	55.6	65.5	54.8
02:00 AM - 03:00 AM	56.5	73.2	55.8
03:00 AM - 04:00 AM	55.5	71.4	54.6
04:00 AM - 05:00 AM	56.7	65.7	55.9
05:00 AM - 06:00 AM	56.1	67.9	54.4
06:00 AM - 07:00 AM	59.6	76.4	57.4
07:00 AM - 08:00 AM	59.3	77.6	56.0
08:00 AM - 09:00 AM	58.2	69.4	56.5
09:00 AM - 10:00 AM	56.9	77.1	54.1

Leq Average 24 hrs. (dB(A))

61.2

Lmax (dB(A))

109.3

L90 (dB(A))

55.9

Ldn (dB(A))

64.7

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

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

Lot ID: 23122080

Date Received : Nov 15, 2023

Date Reported : Nov 20, 2023

Report Number: 2841076-1

Page 1 of 1

Sample Number 23122080-3
Parameter Noise (Leq 24 hrs.)
Location อาคารสำนักงานของกลุ่มโรงงาน TPE Site#1
Measurement Date Nov 05 - Nov 06, 2023
Measurement by Anuwet Tema
Sound Level meter Serial No. 900072

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	58.5	79.8	56.0
11:00 AM - 12:00 PM	57.3	72.8	53.9
12:00 PM - 01:00 PM	57.3	74.9	54.7
01:00 PM - 02:00 PM	56.6	70.9	54.1
02:00 PM - 03:00 PM	57.3	74.2	54.8
03:00 PM - 04:00 PM	57.7	74.3	54.9
04:00 PM - 05:00 PM	59.2	84.7	56.3
05:00 PM - 06:00 PM	57.3	72.1	55.5
06:00 PM - 07:00 PM	57.6	78.2	55.8
07:00 PM - 08:00 PM	57.3	74.6	55.7
08:00 PM - 09:00 PM	57.2	78.4	54.6
09:00 PM - 10:00 PM	57.5	82.6	56.1
10:00 PM - 11:00 PM	56.8	76.9	55.7
11:00 PM - 12:00 AM	56.0	68.9	54.5
12:00 AM - 01:00 AM	56.2	81.5	54.5
01:00 AM - 02:00 AM	56.0	65.4	54.9
02:00 AM - 03:00 AM	55.9	72.1	54.8
03:00 AM - 04:00 AM	55.9	70.9	55.2
04:00 AM - 05:00 AM	56.2	67.3	54.8
05:00 AM - 06:00 AM	57.9	78.9	56.5
06:00 AM - 07:00 AM	59.3	76.2	56.5
07:00 AM - 08:00 AM	61.1	80.0	57.5
08:00 AM - 09:00 AM	58.0	75.5	54.7
09:00 AM - 10:00 AM	58.9	78.8	56.6

Leq Average 24 hrs. (dB(A))

57.7

Lmax (dB(A))

84.7

L90 (dB(A))

54.9

Ldn (dB(A))

63.5

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report



TESTING

No.0042

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

Lot ID: 23122081

Date Received : Nov 15, 2023

Date Reported : Nov 20, 2023

Report Number: 2841077-1

Page 1 of 1

Sample Number 23122081-1
Parameter Noise (Leq 24 hrs.)
Location อาคารสำนักงานของกลุ่มโรงงาน TPE Site#1
Measurement Date Nov 06 - Nov 07, 2023
Measurement by Anuwet Tema
Sound Level meter Serial No. 900072

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	57.9	74.0	55.1
11:00 AM - 12:00 PM	58.7	79.0	56.3
12:00 PM - 01:00 PM	58.1	79.3	55.3
01:00 PM - 02:00 PM	58.2	75.0	56.5
02:00 PM - 03:00 PM	57.0	72.2	54.2
03:00 PM - 04:00 PM	59.0	83.0	57.0
04:00 PM - 05:00 PM	57.8	72.6	55.8
05:00 PM - 06:00 PM	57.8	70.5	55.9
06:00 PM - 07:00 PM	57.6	74.7	55.0
07:00 PM - 08:00 PM	57.8	76.1	56.0
08:00 PM - 09:00 PM	57.5	76.0	54.4
09:00 PM - 10:00 PM	57.3	74.6	55.4
10:00 PM - 11:00 PM	56.4	69.7	54.4
11:00 PM - 12:00 AM	56.6	79.3	55.0
12:00 AM - 01:00 AM	57.1	73.2	55.9
01:00 AM - 02:00 AM	57.1	78.8	56.0
02:00 AM - 03:00 AM	56.6	75.4	55.1
03:00 AM - 04:00 AM	56.4	73.3	55.3
04:00 AM - 05:00 AM	57.0	76.9	54.6
05:00 AM - 06:00 AM	57.4	76.1	55.4
06:00 AM - 07:00 AM	59.5	75.0	57.2
07:00 AM - 08:00 AM	59.6	75.5	56.9
08:00 AM - 09:00 AM	58.0	76.8	55.3
09:00 AM - 10:00 AM	58.3	75.3	55.7

Leq Average 24 hrs. (dB(A))

57.8

Lmax (dB(A))

83.0

L90 (dB(A))

55.4

Ldn (dB(A))

63.8

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

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

Lot ID: 23122081

Date Received : Nov 15, 2023

Date Reported : Nov 20, 2023

Report Number: 2841078-1

Page 1 of 1

Sample Number	23122081-2		
Parameter	Noise (Leq 24 hrs.)		
Location	อาคารสำนักงานของกลุ่มโรงงาน TPE Site#1		
Measurement Date	Nov 07 - Nov 08, 2023		
Measurement by	Anuwet Tema		
Sound Level meter	Serial No. 900072		

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	59.1	81.0	55.4
11:00 AM - 12:00 PM	58.1	75.9	55.2
12:00 PM - 01:00 PM	64.3	88.8	57.6
01:00 PM - 02:00 PM	59.2	77.9	56.8
02:00 PM - 03:00 PM	59.3	75.1	57.0
03:00 PM - 04:00 PM	59.9	74.0	56.7
04:00 PM - 05:00 PM	60.1	75.0	58.1
05:00 PM - 06:00 PM	59.7	79.2	57.3
06:00 PM - 07:00 PM	59.1	85.1	56.9
07:00 PM - 08:00 PM	58.6	74.5	56.4
08:00 PM - 09:00 PM	58.4	74.4	56.6
09:00 PM - 10:00 PM	58.5	75.5	55.7
10:00 PM - 11:00 PM	58.5	71.1	57.0
11:00 PM - 12:00 AM	57.6	80.1	55.9
12:00 AM - 01:00 AM	57.6	74.1	56.7
01:00 AM - 02:00 AM	57.0	70.9	55.7
02:00 AM - 03:00 AM	56.9	61.4	56.3
03:00 AM - 04:00 AM	56.6	72.7	55.7
04:00 AM - 05:00 AM	57.5	73.0	56.7
05:00 AM - 06:00 AM	57.4	70.1	55.6
06:00 AM - 07:00 AM	60.1	73.4	58.1
07:00 AM - 08:00 AM	59.5	77.2	56.5
08:00 AM - 09:00 AM	59.2	79.6	56.9
09:00 AM - 10:00 AM	58.2	77.6	55.9
<hr/>			
Leq Average 24 hrs. (dB(A))	59.1		
Lmax (dB(A))		88.8	
L90 (dB(A))			56.6
Ldn (dB(A))	64.6		
Standard (dB(A))	70	115	
Reference Method : ISO1996-1 and 1996-2			
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป			
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ			
โรงงาน พ.ศ. 2548			
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.			

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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1980-261/ EMAIL

S:\Reports\Air Noise.rpt (3:40PM)



Analysis / Test Report



TESTING
No.0042

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

Lot ID: 23122081

Date Received : Nov 15, 2023

Date Reported : Nov 20, 2023

Report Number: 2841079-1

Page 1 of 1

Sample Number	23122081-3
Parameter	Noise (Leq 24 hrs.)
Location	อาคารสำนักงานของกลุ่มโรงงาน TPE Site#1
Measurement Date	Nov 08 - Nov 09, 2023
Measurement by	Anuwet Tema
Sound Level meter	Serial No. 900072

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	58.7	79.5	57.0
11:00 AM - 12:00 PM	65.7	85.5	55.7
12:00 PM - 01:00 PM	58.3	76.6	56.4
01:00 PM - 02:00 PM	57.8	73.0	55.4
02:00 PM - 03:00 PM	58.2	77.1	55.9
03:00 PM - 04:00 PM	60.9	84.2	56.9
04:00 PM - 05:00 PM	59.6	79.3	57.5
05:00 PM - 06:00 PM	58.7	75.1	56.4
06:00 PM - 07:00 PM	58.3	75.3	56.5
07:00 PM - 08:00 PM	58.0	72.2	55.9
08:00 PM - 09:00 PM	58.0	75.1	55.8
09:00 PM - 10:00 PM	56.9	76.9	54.7
10:00 PM - 11:00 PM	56.9	83.2	55.5
11:00 PM - 12:00 AM	57.2	83.8	55.6
12:00 AM - 01:00 AM	58.0	82.6	56.8
01:00 AM - 02:00 AM	57.4	84.6	55.6
02:00 AM - 03:00 AM	56.4	79.7	55.3
03:00 AM - 04:00 AM	55.3	81.5	53.9
04:00 AM - 05:00 AM	56.1	63.5	55.2
05:00 AM - 06:00 AM	57.2	76.7	55.0
06:00 AM - 07:00 AM	60.4	78.1	58.3
07:00 AM - 08:00 AM	60.2	80.5	57.0
08:00 AM - 09:00 AM	58.6	77.6	56.6
09:00 AM - 10:00 AM	58.4	72.4	56.1
<hr/>			
Leq Average 24 hrs. (dB(A))	59.0		
Lmax (dB(A))		85.5	
L90 (dB(A))			55.9
Ldn (dB(A))	64.3		
Standard (dB(A))	70	115	
Reference Method : ISO1996-1 and 1996-2			
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป			
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ			
โรงงาน พ.ศ. 2548			
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.			

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

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

Lot ID: 23122081

Date Received : Nov 15, 2023

Date Reported : Nov 20, 2023

Report Number: 2841080-1

Page 1 of 1

Sample Number 23122081-4
Parameter Noise (Leq 24 hrs.)
Location อาคารสำนักงานของกลุ่มโรงงาน TPE Site#1
Measurement Date Nov 09 - Nov 10, 2023
Measurement by Anuwet Tema
Sound Level meter Serial No. 900072

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	58.7	80.7	56.8
11:00 AM - 12:00 PM	58.7	77.6	56.8
12:00 PM - 01:00 PM	62.9	94.2	57.7
01:00 PM - 02:00 PM	66.6	98.0	57.8
02:00 PM - 03:00 PM	59.3	74.3	57.1
03:00 PM - 04:00 PM	59.0	78.9	55.6
04:00 PM - 05:00 PM	58.9	76.9	57.2
05:00 PM - 06:00 PM	59.8	83.6	57.3
06:00 PM - 07:00 PM	59.5	75.6	57.7
07:00 PM - 08:00 PM	58.2	72.1	55.9
08:00 PM - 09:00 PM	58.8	76.1	56.9
09:00 PM - 10:00 PM	57.9	70.9	55.8
10:00 PM - 11:00 PM	58.0	77.7	56.5
11:00 PM - 12:00 AM	56.8	74.3	55.7
12:00 AM - 01:00 AM	56.9	69.4	55.4
01:00 AM - 02:00 AM	55.8	70.0	54.0
02:00 AM - 03:00 AM	56.6	78.5	55.1
03:00 AM - 04:00 AM	55.8	70.6	54.5
04:00 AM - 05:00 AM	56.4	72.2	55.1
05:00 AM - 06:00 AM	57.6	75.1	55.8
06:00 AM - 07:00 AM	59.5	74.3	56.9
07:00 AM - 08:00 AM	60.0	81.2	56.2
08:00 AM - 09:00 AM	59.9	74.7	57.3
09:00 AM - 10:00 AM	59.2	76.7	57.4

Leq Average 24 hrs. (dB(A))

59.6

Lmax (dB(A))

98.0

L90 (dB(A))

56.5

Ldn (dB(A))

64.3

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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ภาคผนวก ค-4

คุณภาพอากาศในสถานประกอบการ



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 : PMH-23-11
Project Name : Environmental Monitoring
Project Location : PP2

Lot ID: 2384580
Date Received : Aug 17, 2023
Date Reported : Aug 29, 2023
Report Number : 2722971-1

Page 1 of 3

Sample Number : 2384580-1
Sampled Date : Aug 16, 2023
Sample Description : Air Quality
Location : within the plant
Date Analysis Commenced : Aug 18, 2023
Condition of Sample : Drawn into one 10-L air sampling bag and one sorbent tube, refrigerated
Barometric Pressure : 756 mmHg
Atmospheric Temperature : 31.0 °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	0.09	500	NIOSH (1994), 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 (2022).
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 : Noranon Tathongkham

Remark :

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

Approved by

Orawan R.

Orawan Rakyong
Scientist (3)

The above results are valid only for the analyzed sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that 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 1-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMH-23-11
Project Name : Environmental Monitoring
Project Location : PP2

Lot ID: 2384580
Date Received : Aug 17, 2023
Date Reported : Aug 29, 2023
Report Number : 2722971-1

Page 2 of 3

Sample Number : 2384580-2
Sampled Date : Aug 16, 2023
Sample Description : Air Quality
Location : within the plant
Date Analysis Commenced : Aug 17, 2023
Condition of Sample : Drawn into one filter paper placed in plastic cassette
Barometric Pressure : 756 mmHg
Atmospheric Temperature : 31.0 °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 : Noranon Tathongkham

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

Approved by

Orawan R.

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 : PMK-23-11
Project Name : Environmental Monitoring
Project Location : PP2

Lot ID: 2384580

Date Received : Aug 17, 2023
Date Reported : Aug 29, 2023
Report Number : 2722971-1

Page 3 of 3

Sample Number : 2384580-3
Sample Date : Aug 16, 2023
Sample Description : Air Quality
Location : Extruder (within site)
Date Analysis Commenced : Aug 18, 2023
Condition of Sample : Drawn into one 10-L air sampling bag and one sorbent tube, refrigerated
Barometric Pressure : 756 mmHg
Atmospheric Temperature : 31.0 °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 (1994), 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 (2022).
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 : Noranon Talhongkham

Remark :

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

The above results are valid only for the analyzed sample(s) as indicated in this report. Any other use of the results without written consent from the Laboratory (ALS Laboratory Group (Thailand)) strongly recommends that this report is not reproduced except in full.

Approved by

Orawan R.

Orawan Rakying
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 : PMK-23-11
Project Name : Environmental Monitoring
Project Location : PP2

Lot ID: 23122588

Date Received : Nov 08, 2023
Date Reported : Nov 20, 2023
Report Number : 2812701-1

Page 1 of 3

Sample Number : 23122588-1
Sample Date : Nov 07, 2023
Sample Description : Air Quality
Location : within industrial area
Date Analysis Commenced : Nov 09, 2023
Condition of Sample : Drawn into one 10-L air sampling bag and one sorbent tube, refrigerated
Barometric Pressure : 753 mmHg
Atmospheric Temperature : 31.0 °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	0.44	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 (2022).
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 : Chanon Booncheun

Remark :

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

Approved by

Orawan R.

Orawan Rakying
Scientist (3)

The above results are valid only for the analyzed sample(s) as indicated in this report. Any other use of the results without written consent from the Laboratory (ALS Laboratory Group (Thailand)) strongly recommends that 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 : PMK-23-11
Project Name : Environmental Monitoring
Project Location : PP2

Lot ID: 23122588

Date Received : Nov 08, 2023
Date Reported : Nov 20, 2023
Report Number : 2812701-1

Page 2 of 3

Sample Number 23122588-2
Sampled Date Nov 07, 2023
Sample Description Air Quality
Location โรงงานผลิตพลาสติก
Date Analysis Commenced Nov 09, 2023
Condition of Sample Drawn into one filter paper placed in plastic cassette
Barometric Pressure 753 mmHg
Atmospheric Temperature 31.0 °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), 0300	OSHA	Rayong

Guideline :
OSHA : Occupational Safety and Health Administration
Sampled By : Chanon Booncheun

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

Approved by

Orawan R.

Orawan Rakying
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 : PMK-23-11
Project Name : Environmental Monitoring
Project Location : PP2

Lot ID: 23122588

Date Received : Nov 08, 2023
Date Reported : Nov 20, 2023
Report Number : 2812701-1

Page 3 of 3

Sample Number 23122588-3
Sampled Date Nov 07, 2023
Sample Description Air Quality
Location Extruder (nitrocellulose)
Date Analysis Commenced Nov 09, 2023
Condition of Sample Drawn into one 10-L air sampling bag and one sorbent tube, refrigerated
Barometric Pressure 753 mmHg
Atmospheric Temperature 31.0 °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	0.14	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 (2022).
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 : Chanon Booncheun

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

Approved by

Orawan R.

Orawan Rakying
Scientist (3)

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ภาคผนวก ค-5

ระดับเสียงในสถานประกอบการ



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 : PMH-23-11
Project Name : Environmental Monitoring
Project Location : PP2

Lot ID: 2384584
Date Received : Aug 17, 2023
Date Reported : Aug 19, 2023
Report Number: 2750927-1

Page 1 of 1

Sample Number	2384584-1
Parameter	Noise (Leq 8 hrs.)
Location	บริเวณพลาซ่าโรงสี
Measurement Date	Aug 16, 2023
Measurement by	Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:11 AM - 10:11 AM	84.6	94.7	82.2
10:11 AM - 11:11 AM	83.2	90.9	81.6
11:11 AM - 12:11 PM	83.2	86.9	81.6
12:11 PM - 01:11 PM	82.6	86.3	81.0
01:11 PM - 02:11 PM	82.1	85.6	80.9
02:11 PM - 03:11 PM	82.4	93.3	80.8
03:11 PM - 04:11 PM	82.0	87.1	80.7
04:11 PM - 05:11 PM	82.0	85.3	80.5

Leq Average 8 hrs. (dB(A)) 82.9

Lmax (dB(A)) 94.7

Standard (dB(A)) 90

Reference Method : ISO1996-1 and 1996-2

Standard : กรมควบคุมมลพิษ พ.ร.บ. ๒๕๖๑
Turn to the standard of the Ministry of Natural Resources and Environment

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Tharitat.

Approved by

Supt S.

Supot Salameh
Section Head

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S-Report_Air Noise rpt (4 11PM)



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 : PMH-23-11
Project Name : Environmental Monitoring
Project Location : PP2

Lot ID: 2384584
Date Received : Aug 17, 2023
Date Reported : Aug 19, 2023
Report Number: 2750928-1

Page 1 of 1

Sample Number	2384584-2
Parameter	Noise (Leq 8 hrs.)
Location	บริเวณพลาซ่า
Measurement Date	Aug 16, 2023
Measurement by	Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	83.1	90.7	82.2
10:00 AM - 11:00 AM	82.3	87.7	81.7
11:00 AM - 12:00 PM	82.7	87.8	82.3
12:00 PM - 01:00 PM	83.1	90.2	82.6
01:00 PM - 02:00 PM	83.2	84.5	82.8
02:00 PM - 03:00 PM	83.3	85.2	82.8
03:00 PM - 04:00 PM	83.9	86.6	83.3
04:00 PM - 05:00 PM	83.7	85.8	83.1

Leq Average 8 hrs. (dB(A)) 83.2

Lmax (dB(A)) 90.7

Standard (dB(A)) 90

Reference Method : ISO1996-1 and 1996-2

Standard : กรมควบคุมมลพิษ พ.ร.บ. ๒๕๖๑
Turn to the standard of the Ministry of Natural Resources and Environment

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Supt S.

Supot Salameh
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S-Report_Air Noise rpt (4 11PM)



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 : PP2

Lot ID: 2384584
Date Received : Aug 17, 2023
Date Reported : Aug 19, 2023
Report Number: 275929-1

Page 1 of 1

Sample Number	2384584-3
Parameter	Noise (Leq 8 hrs.)
Location	Compressor (Mabusa Vent Gas use Nitrogen)
Measurement Date	Aug 16, 2023
Measurement by	Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:16 AM - 10:16 AM	79.1	90.5	76.8
10:16 AM - 11:16 AM	79.3	85.9	77.2
11:16 AM - 12:16 PM	79.4	86.6	77.3
12:16 PM - 01:16 PM	79.2	86.2	77.2
01:16 PM - 02:16 PM	78.9	85.4	76.8
02:16 PM - 03:16 PM	79.1	86.8	76.8
03:16 PM - 04:16 PM	79.1	85.6	77.1
04:16 PM - 05:16 PM	79.1	85.8	76.9

Leq Average 8 hrs. (dB(A))
Lmax (dB(A))
Standard (dB(A))
Reference Method : ISO1996-1 and 1996-2
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง การกำหนดค่ามาตรฐานเสียง
ตามข้อกำหนดการรายงานผลการตรวจวัดค่าเสียงตาม พ.ร.บ.ร.ด.ร.

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Supt S.

Supot Salimteh
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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 : PP2

Lot ID: 23122599
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 2835043-1

Page 1 of 1

Sample Number	23122599-1
Parameter	Noise (Leq 8 hrs.)
Location	พื้นที่วัดน้ำประปา
Measurement Date	Nov 07, 2023
Measurement by	Siriwit Ruangsom

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	85.1	112.9	82.7
09:00 AM - 10:00 AM	82.6	87.4	80.9
10:00 AM - 11:00 AM	81.2	82.8	80.2
11:00 AM - 12:00 PM	82.2	93.1	80.9
12:00 PM - 01:00 PM	82.3	84.5	81.5
01:00 PM - 02:00 PM	81.8	84.0	81.0
02:00 PM - 03:00 PM	81.5	83.2	80.5
03:00 PM - 04:00 PM	81.5	84.6	80.5

Leq Average 8 hrs. (dB(A))
Lmax (dB(A))
Standard (dB(A))
Reference Method : ISO1996-1 and 1996-2
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง การกำหนดค่ามาตรฐานเสียง
ตามข้อกำหนดการรายงานผลการตรวจวัดค่าเสียงตาม พ.ร.บ.ร.ด.ร.

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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: 23122599
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 2835044-1

Page 1 of 1

Sample Number	23122599-2
Parameter	Noise (Leq 8 hrs.)
Location	หน้าเครื่อง
Measurement Date	Nov 07, 2023
Measurement by	Sirwit Ruangsom

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	85.2	112.3	81.4
09:00 AM - 10:00 AM	81.9	83.2	81.3
10:00 AM - 11:00 AM	81.2	99.0	80.3
11:00 AM - 12:00 PM	82.3	86.7	81.5
12:00 PM - 01:00 PM	82.1	84.7	81.6
01:00 PM - 02:00 PM	82.0	83.3	81.6
02:00 PM - 03:00 PM	82.0	84.4	81.5
03:00 PM - 04:00 PM	81.9	84.2	81.1
Leq Average 8 hrs. (dB(A))	82.5		
Lmax (dB(A))	112.3		
Standard (dB(A))	90		
Reference Method	: ISO 1996-1 and 1996-2		
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง การกำหนดค่ามาตรฐานเสียง ตามระดับการวัดการสั่นสะเทือนและเสียงในสถานที่ทำงาน พ.ศ.๒๕๕๘		

Tharitak.

Approved by

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Section Head

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Thanita Kulsurwong
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S. Reports_Air Noise ppt (9.2344p)



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: 23122599
Date Received : Nov 08, 2023
Date Reported : Nov 14, 2023
Report Number: 2835045-1

Page 1 of 1

Sample Number	23122599-3
Parameter	Noise (Leq 8 hrs.)
Location	Compressor (Vinauda Vent Gas iaz Nitrogen)
Measurement Date	Nov 07, 2023
Measurement by	Sirwit Ruangsom

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:30 AM - 09:30 AM	76.9	88.6	76.4
09:30 AM - 10:30 AM	76.8	78.8	76.1
10:30 AM - 11:30 AM	76.3	87.1	75.4
11:30 AM - 12:30 PM	77.2	84.8	76.2
12:30 PM - 01:30 PM	76.8	78.7	75.9
01:30 PM - 02:30 PM	76.5	78.9	75.9
02:30 PM - 03:30 PM	76.7	78.3	76.2
03:30 PM - 04:30 PM	76.7	78.6	76.1
Leq Average 8 hrs. (dB(A))	76.7		
Lmax (dB(A))	88.6		
Standard (dB(A))	90		
Reference Method	: ISO 1996-1 and 1996-2		
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง การกำหนดค่ามาตรฐานเสียง ตามระดับการวัดการสั่นสะเทือนและเสียงในสถานที่ทำงาน พ.ศ.๒๕๕๘		

Tharitak.

Approved by

Supot Salameh
Section Head

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Thanita Kulsurwong
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S. Reports_Air Noise ppt (9.2344p)

ภาคผนวก ค-6

ระดับความร้อนในสถานประกอบการ



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-23-11
Project Name : Environmental Monitoring
Project Location : PPZ

Lot ID: 2384583
Date Received : Aug 17, 2023
Date Reported : Aug 21, 2023
Report Number: 2722973-1

Page 1 of 1

Sample Number	2384583-1
Parameter	Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date	Aug 16, 2023
Measurement by	Noranon Tathongkham
Location	บริเวณงาน 1 ชั้น (ใต้-อาคาร อุปกรณ์งาน : - อุณหภูมิ : -)
Location	
Duration (min)	120
WBGT (°C)	30.1
NWB (°C)	27.7
GT (°C)	35.7
DB (°C)	35.6
Average (WBGT)	30.1
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

Technical Management

Supt S.
Supt Salameh
Section Head

Approved by

Wichan Choonharat
Wichan Choonharat
Assistant Manager

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S Report, Air Market (5 day)



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-23-11
Project Name : Environmental Monitoring
Project Location : PPZ

Lot ID: 23122597
Date Received : Nov 08, 2023
Date Reported : Nov 10, 2023
Report Number: 2812709-1

Page 1 of 1

Sample Number	23122597-1
Parameter	Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date	Nov 07, 2023
Measurement by	Chanon Booncheun
Location	บริเวณงาน 1 ชั้น (ใต้-อาคาร อุปกรณ์งาน : - อุณหภูมิ : -)
Location	
Duration (min)	120
WBGT (°C)	28.8
NWB (°C)	27.6
GT (°C)	31.7
DB (°C)	31.6
Average (WBGT)	28.8
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

Technical Management

Supt S.
Supt Salameh
Section Head

Approved by

Wichan Choonharat
Wichan Choonharat
Assistant Manager

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S Report, Air Market (5 day)