

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

Lot ID : 22125289

Date Received : Nov 18, 2022

Date Reported : Nov 25, 2022

Report Number : 2461207-1 C3

P/O :

Project Name : Environmental Monitoring

Project Location : PP1

Page 1 of 2

Sample Number : 22125289-1 to 7
Parameter : Wind Speed / Wind Direction
Location : อาคารสำนักงานของกลุ่มโรงงาน TPE (Site 1) (GPS 47P 0731744, 1404885)
Sampling Date : Nov 09 - Nov 16, 2022
Sampling by : Satcha Phetsawaeng

Time	Nov 09 - Nov 10, 2022			Nov 10 - Nov 11, 2022			Nov 11 - Nov 12, 2022			Nov 12 - Nov 13, 2022			Nov 13 - Nov 14, 2022			Nov 14 - Nov 15, 2022			Nov 15 - Nov 16, 2022		
	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)	
09:00 AM - 10:00 AM	1.5	5.0	N	1.7	39.0	NE	0.8	45.0	NE	2.4	122.0	ESE	2.9	77.0	ENE	1.1	217.0	SW	1.2	98.0	E
10:00 AM - 11:00 AM	2.7	10.0	N	1.0	14.0	NNE	1.1	34.0	NE	2.7	87.0	E	3.3	13.0	NNE	0.5	225.0	SW	0.6	175.0	S
11:00 AM - 12:00 PM	2.5	22.0	NNE	1.1	2.0	N	3.1	354.0	N	1.2	126.0	SE	1.5	9.0	N	0.5	254.0	WSW	0.4	187.0	S
12:00 PM - 01:00 PM	2.7	323.0	NW	1.0	34.0	NE	0.8	163.0	SSE	3.7	60.0	ENE	1.5	92.0	E	1.2	136.0	SE	0.8	255.0	WSW
01:00 PM - 02:00 PM	1.0	359.0	N	0.1	-	-	2.0	166.0	SSE	0.2	-	-	1.6	2.0	N	0.9	235.0	SW	0.7	229.0	SW
02:00 PM - 03:00 PM	0.3	338.0	NNW	1.2	251.0	WSW	0.8	137.0	SE	0.8	230.0	SW	1.0	22.0	NNE	0.5	264.0	W	0.8	289.0	WNW
03:00 PM - 04:00 PM	1.0	199.0	SSW	0.3	234.0	SW	0.7	253.0	WSW	0.7	272.0	W	1.6	33.0	NNE	1.6	185.0	S	1.1	267.0	W
04:00 PM - 05:00 PM	0.1	-	-	1.5	224.0	SW	1.3	271.0	W	0.5	1.0	N	0.5	35.0	NE	0.4	337.0	NNW	0.4	241.0	WSW
05:00 PM - 06:00 PM	1.6	226.0	SW	1.2	239.0	WSW	1.2	221.0	SW	1.4	48.0	NE	1.6	273.0	W	0.1	-	-	1.6	220.0	SW
06:00 PM - 07:00 PM	1.1	62.0	ENE	1.6	15.0	NNE	1.6	249.0	WSW	0.6	15.0	NNE	1.4	53.0	NE	3.3	173.0	S	0.5	265.0	W
07:00 PM - 08:00 PM	1.5	359.0	N	0.4	13.0	NNE	1.4	297.0	WNW	1.6	341.0	NNW	1.5	18.0	NNE	1.5	119.0	ESE	0.6	225.0	SW
08:00 PM - 09:00 PM	2.4	352.0	N	1.3	49.0	NE	0.5	359.0	N	1.5	83.0	E	0.5	14.0	NNE	1.5	6.0	N	0.4	226.0	SW
09:00 PM - 10:00 PM	0.5	359.0	N	1.2	359.0	N	0.9	46.0	NE	1.6	297.0	WNW	1.6	39.0	NE	1.6	34.0	NE	1.6	359.0	N
10:00 PM - 11:00 PM	1.1	7.0	N	1.2	194.0	SSW	1.2	359.0	N	0.5	55.0	NE	1.5	93.0	E	0.5	359.0	N	1.5	356.0	N
11:00 PM - 12:00 AM	0.2	-	-	2.1	359.0	N	0.6	359.0	N	1.6	359.0	N	0.6	69.0	ENE	1.6	71.0	ENE	1.3	5.0	N
12:00 AM - 01:00 AM	2.2	359.0	N	1.2	324.0	NW	0.9	56.0	NE	0.5	139.0	SE	1.5	7.0	N	1.4	25.0	NNE	1.0	67.0	ENE
01:00 AM - 02:00 AM	2.4	357.0	N	1.0	31.0	NNE	0.8	40.0	NE	1.4	9.0	N	1.4	343.0	NNW	1.3	359.0	N	0.2	-	-
02:00 AM - 03:00 AM	1.3	359.0	N	1.2	1.0	N	0.5	20.0	NNE	0.6	17.0	NNE	1.6	50.0	NE	0.2	-	-	1.6	326.0	NW
03:00 AM - 04:00 AM	1.0	34.0	NE	0.4	56.0	NE	0.6	44.0	NE	2.7	29.0	NNE	0.7	340.0	NNW	1.6	23.0	NNE	0.4	4.0	N
04:00 AM - 05:00 AM	0.7	2.0	N	1.2	75.0	ENE	0.9	42.0	NE	1.5	359.0	N	0.4	2.0	N	0.5	13.0	NNE	2.6	42.0	NE
05:00 AM - 06:00 AM	1.9	8.0	N	0.1	-	-	0.6	22.0	NNE	0.6	20.0	NNE	0.2	-	-	1.3	50.0	NE	0.7	17.0	NNE
06:00 AM - 07:00 AM	2.8	357.0	N	1.1	42.0	NE	1.1	39.0	NE	0.3	298.0	WNW	1.1	3.0	N	1.1	359.0	N	1.5	26.0	NNE
07:00 AM - 08:00 AM	2.6	348.0	NNW	2.0	26.0	NNE	1.8	359.0	N	0.7	21.0	NNE	1.3	41.0	NE	1.2	11.0	N	0.8	35.0	NE
08:00 AM - 09:00 AM	2.3	26.0	NNE	2.6	73.0	ENE	1.6	5.0	N	0.7	9.0	N	1.4	33.0	NNE	2.2	0.0	N	2.3	7.0	N

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jittrantont
Assistant General Manager



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 : PP1

Lot ID : 22125289

Date Received : Nov 18, 2022

Date Reported : Nov 25, 2022

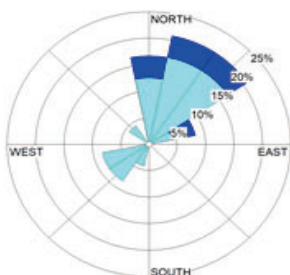
Report Number : 2461207-1 C3

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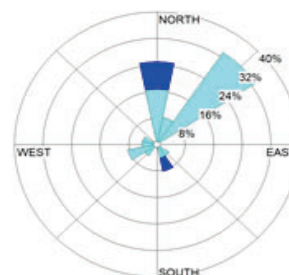
Wind Rose



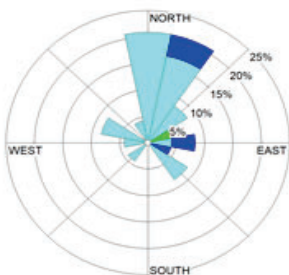
Date : Nov 09-10, 2022



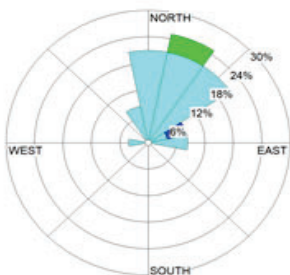
Date : Nov 10-11, 2022



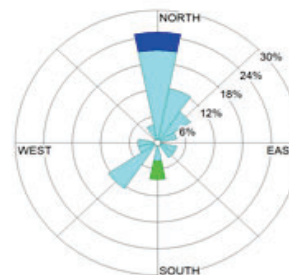
Date : Nov 11-12, 2022



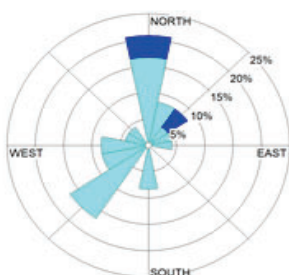
Date : Nov 12-13, 2022



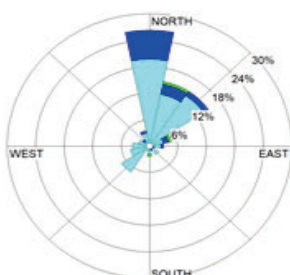
Date : Nov 13-14, 2022



Date : Nov 14-15, 2022



Date : Nov 15-16, 2022



Date : Nov 09-16, 2022

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	1.78
1.7-3.3	14.29
0.3-1.7	78.57
Calms	5.36

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Approved by

Sarayuth Jitranont
Assistant General Manager



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 : PP1

Lot ID: 22125379

Date Received : Nov 17, 2022

Date Reported : Nov 25, 2022

Report Number : 2461493-1

Page 1 of 21

Sample Number 22125379-1
Sampled Date Nov 09, 2022
Sample Description Air Quality
Location อาคารสำนักงานของกลุ่มโรงงาน TPE (Site # 1) (GPS 47P 0731744, 1404885)
Date Analysis Commenced Nov 18, 2022
Condition of Sample Drawn into one 25-L air sampling bag and one sorbent tube, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	09/11/22 - 10/11/22	ppm	-	0.10	<0.10	Based on NIOSH, 1500	Bangkok
Propylene	09/11/22 - 10/11/22	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Satcha Phetsawaeng

Remark :

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

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Saranya C.

Saranya Chalermthamrong
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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 : PP1

Lot ID: 22125379

Date Received : Nov 17, 2022

Date Reported : Nov 25, 2022

Report Number : 2461493-1

Page 2 of 21

Sample Number 22125379-2
Sampled Date Nov 10, 2022
Sample Description Air Quality
Location อาคารสำนักงานของกลุ่มโรงงาน TPE (Site # 1) (GPS 47P 0731744, 1404885)
Date Analysis Commenced Nov 18, 2022
Condition of Sample Drawn into one 25-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	Method	Testing Location
Air Testing							
n-Hexane	10/11/22 - 11/11/22	ppm	-	0.10	<0.10	Based on NIOSH, 1500	Bangkok
Propylene	10/11/22 - 11/11/22	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Satcha Phetsawaeng

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 :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125379

Date Received : Nov 17, 2022

Date Reported : Nov 25, 2022

Report Number : 2461493-1

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Sample Number 22125379-3
Sampled Date Nov 11, 2022
Sample Description Air Quality
Location อาคารสำนักงานของกลุ่มโรงงาน TPE (Site # 1) (GPS 47P 0731744, 1404885)
Date Analysis Commenced Nov 18, 2022
Condition of Sample Drawn into one 25-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	Method	Testing Location
Air Testing							
n-Hexane	11/11/22 - 12/11/22	ppm	-	0.10	<0.10	Based on NIOSH, 1500	Bangkok
Propylene	11/11/22 - 12/11/22	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Satcha Phetsawaeng

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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 : PP1

Lot ID: 22125379

Date Received : Nov 17, 2022

Date Reported : Nov 25, 2022

Report Number : 2461493-1

Page 4 of 21

Sample Number 22125379-4
Sampled Date Nov 12, 2022
Sample Description Air Quality
Location อาคารสำนักงานของกลุ่มโรงงาน TPE (Site # 1) (GPS 47P 0731744, 1404885)
Date Analysis Commenced Nov 18, 2022
Condition of Sample Drawn into one 25-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	Method	Testing Location
Air Testing							
n-Hexane	12/11/22 - 13/11/22	ppm	-	0.10	<0.10	Based on NIOSH, 1500	Bangkok
Propylene	12/11/22 - 13/11/22	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Satcha Phetsawaeng

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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 : PP1

Lot ID: 22125379

Date Received : Nov 17, 2022

Date Reported : Nov 25, 2022

Report Number : 2461493-1

Page 5 of 21

Sample Number 22125379-5
Sampled Date Nov 13, 2022
Sample Description Air Quality
Location อาคารสำนักงานของกลุ่มโรงงาน TPE (Site # 1) (GPS 47P 0731744, 1404885)
Date Analysis Commenced Nov 18, 2022
Condition of Sample Drawn into one 25-L air sampling bag and one sorbent tube, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	13/11/22 - 14/11/22	ppm	-	0.10	<0.10	Based on NIOSH, 1500	Bangkok
Propylene	13/11/22 - 14/11/22	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Satcha Phetsawaeng

Remark :

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Thailand 21150

P/O :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125379

Date Received : Nov 17, 2022

Date Reported : Nov 25, 2022

Report Number : 2461493-1

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Sample Number 22125379-6
Sampled Date Nov 14, 2022
Sample Description Air Quality
Location อาคารสำนักงานของกลุ่มโรงงาน TPE (Site # 1) (GPS 47P 0731744, 1404885)
Date Analysis Commenced Nov 18, 2022
Condition of Sample Drawn into one 25-L air sampling bag and one sorbent tube, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 30.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	14/11/22 - 15/11/22	ppm	-	0.10	<0.10	Based on NIOSH, 1500	Bangkok
Propylene	14/11/22 - 15/11/22	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Satcha Phetsawaeng

Remark :

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Thailand 21150

P/O :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125379

Date Received : Nov 17, 2022

Date Reported : Nov 25, 2022

Report Number : 2461493-1

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Sample Number 22125379-7
Sampled Date Nov 15, 2022
Sample Description Air Quality
Location อาคารสำนักงานของกลุ่มโรงงาน TPE (Site # 1) (GPS 47P 0731744, 1404885)
Date Analysis Commenced Nov 18, 2022
Condition of Sample Drawn into one 25-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	Method	Testing Location
Air Testing							
n-Hexane	15/11/22 - 16/11/22	ppm	-	0.10	<0.10	Based on NIOSH, 1500	Bangkok
Propylene	15/11/22 - 16/11/22	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Satcha Phetsawaeng

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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 : PP1

Lot ID: 22125379

Date Received : Nov 17, 2022

Date Reported : Nov 25, 2022

Report Number : 2461493-1

Page 8 of 21

Sample Number 22125379-8
Sampled Date Nov 09, 2022
Sample Description Air Quality
Location โรงเรียนบ้านนาบตาพุด (โศภณราษฎร์บูรณะ) (GPS 47P 0735355, 1406724)
Date Analysis Commenced Nov 18, 2022
Condition of Sample Drawn into one 25-L air sampling bag and one sorbent tube, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	09/11/22 - 10/11/22	ppm	-	0.10	<0.10	Based on NIOSH, 1500	Bangkok
Propylene	09/11/22 - 10/11/22	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Satcha Phetsawaeng

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 :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125379

Date Received : Nov 17, 2022

Date Reported : Nov 25, 2022

Report Number : 2461493-1

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Sample Number 22125379-9
Sampled Date Nov 10, 2022
Sample Description Air Quality
Location โรงเรียนบ้านนาบตาพุด (โศภณราษฎร์บูรณะ) (GPS 47P 0735355, 1406724)
Date Analysis Commenced Nov 18, 2022
Condition of Sample Drawn into one 25-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	Method	Testing Location
Air Testing							
n-Hexane	10/11/22 - 11/11/22	ppm	-	0.10	<0.10	Based on NIOSH, 1500	Bangkok
Propylene	10/11/22 - 11/11/22	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Satcha Phetsawaeng

Remark :

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

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Thailand 21150

P/O :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125379

Date Received : Nov 17, 2022

Date Reported : Nov 25, 2022

Report Number : 2461493-1

Page 10 of 21

Sample Number 22125379-10
Sampled Date Nov 11, 2022
Sample Description Air Quality
Location โรงเรียนบ้านนาบตาพุด (โศภณราษฎร์บูรณะ) (GPS 47P 0735355, 1406724)
Date Analysis Commenced Nov 18, 2022
Condition of Sample Drawn into one 25-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	Method	Testing Location
Air Testing							
n-Hexane	11/11/22 - 12/11/22	ppm	-	0.10	<0.10	Based on NIOSH, 1500	Bangkok
Propylene	11/11/22 - 12/11/22	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Satcha Phetsawaeng

Remark :

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Thailand 21150

P/O :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125379

Date Received : Nov 17, 2022

Date Reported : Nov 25, 2022

Report Number : 2461493-1

Page 11 of 21

Sample Number 22125379-11
Sampled Date Nov 12, 2022
Sample Description Air Quality
Location โรงเรียนบ้านนาบตาพุด (โศภนราษฎร์บุรณะ) (GPS 47P 0735355, 1406724)
Date Analysis Commenced Nov 18, 2022
Condition of Sample Drawn into one 25-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	Method	Testing Location
Air Testing							
n-Hexane	12/11/22 - 13/11/22	ppm	-	0.10	<0.10	Based on NIOSH, 1500	Bangkok
Propylene	12/11/22 - 13/11/22	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Satcha Phetsawaeng

Remark :

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Thailand 21150

P/O :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125379

Date Received : Nov 17, 2022

Date Reported : Nov 25, 2022

Report Number : 2461493-1

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Sample Number 22125379-12
Sampled Date Nov 13, 2022
Sample Description Air Quality
Location โรงเรียนบ้านนาบตาพุด (โศภณราษฎร์บูรณะ) (GPS 47P 0735355, 1406724)
Date Analysis Commenced Nov 18, 2022
Condition of Sample Drawn into one 25-L air sampling bag and one sorbent tube, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	13/11/22 - 14/11/22	ppm	-	0.10	<0.10	Based on NIOSH, 1500	Bangkok
Propylene	13/11/22 - 14/11/22	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Satcha Phetsawaeng

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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 : PP1

Lot ID: 22125379

Date Received : Nov 17, 2022

Date Reported : Nov 25, 2022

Report Number : 2461493-1

Page 13 of 21

Sample Number 22125379-13
Sampled Date Nov 14, 2022
Sample Description Air Quality
Location โรงเรียนบ้านนาบตาพุด (โศภนราษฎร์บุรณะ) (GPS 47P 0735355, 1406724)
Date Analysis Commenced Nov 18, 2022
Condition of Sample Drawn into one 25-L air sampling bag and one sorbent tube, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 30.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	14/11/22 - 15/11/22	ppm	-	0.10	<0.10	Based on NIOSH, 1500	Bangkok
Propylene	14/11/22 - 15/11/22	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Satcha Phetsawaeng

Remark :

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Thailand 21150

P/O :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125379

Date Received : Nov 17, 2022

Date Reported : Nov 25, 2022

Report Number : 2461493-1

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Sample Number 22125379-14
Sampled Date Nov 15, 2022
Sample Description Air Quality
Location โรงเรียนบ้านนาบตาพุด (โศภณราษฎร์บูรณะ) (GPS 47P 0735355, 1406724)
Date Analysis Commenced Nov 18, 2022
Condition of Sample Drawn into one 25-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	Method	Testing Location
Air Testing							
n-Hexane	15/11/22 - 16/11/22	ppm	-	0.10	<0.10	Based on NIOSH, 1500	Bangkok
Propylene	15/11/22 - 16/11/22	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Satcha Phetsawaeng

Remark :

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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Thailand 21150

P/O :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125379

Date Received : Nov 17, 2022

Date Reported : Nov 25, 2022

Report Number : 2461493-1

Page 15 of 21

Sample Number 22125379-15
Sampled Date Nov 09, 2022
Sample Description Air Quality
Location โรงเรียนบ้านหนองแฟบ (GPS 47P 0729823, 1403307)
Date Analysis Commenced Nov 18, 2022
Condition of Sample Drawn into one 25-L air sampling bag and one sorbent tube, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	09/11/22 - 10/11/22	ppm	-	0.10	<0.10	Based on NIOSH, 1500	Bangkok
Propylene	09/11/22 - 10/11/22	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Satcha Phetsawaeng

Remark :

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Thailand 21150

P/O :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125379

Date Received : Nov 17, 2022

Date Reported : Nov 25, 2022

Report Number : 2461493-1

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Sample Number 22125379-16
Sampled Date Nov 10, 2022
Sample Description Air Quality
Location โรงเรียนบ้านหนองแฟบ (GPS 47P 0729823, 1403307)
Date Analysis Commenced Nov 18, 2022
Condition of Sample Drawn into one 25-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	Method	Testing Location
Air Testing							
n-Hexane	10/11/22 - 11/11/22	ppm	-	0.10	<0.10	Based on NIOSH, 1500	Bangkok
Propylene	10/11/22 - 11/11/22	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Satcha Phetsawaeng

Remark :

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Thailand 21150

P/O :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125379

Date Received : Nov 17, 2022

Date Reported : Nov 25, 2022

Report Number : 2461493-1

Page 17 of 21

Sample Number 22125379-17
Sampled Date Nov 11, 2022
Sample Description Air Quality
Location โรงเรียนบ้านหนองแฟบ (GPS 47P 0729823, 1403307)
Date Analysis Commenced Nov 18, 2022
Condition of Sample Drawn into one 25-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	Method	Testing Location
Air Testing							
n-Hexane	11/11/22 - 12/11/22	ppm	-	0.10	<0.10	Based on NIOSH, 1500	Bangkok
Propylene	11/11/22 - 12/11/22	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Satcha Phetsawaeng

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 :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125379

Date Received : Nov 17, 2022

Date Reported : Nov 25, 2022

Report Number : 2461493-1

Page 18 of 21

Sample Number 22125379-18
Sampled Date Nov 12, 2022
Sample Description Air Quality
Location โรงเรียนบ้านหนองแฟบ (GPS 47P 0729823, 1403307)
Date Analysis Commenced Nov 18, 2022
Condition of Sample Drawn into one 25-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	Method	Testing Location
Air Testing							
n-Hexane	12/11/22 - 13/11/22	ppm	-	0.10	<0.10	Based on NIOSH, 1500	Bangkok
Propylene	12/11/22 - 13/11/22	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Satcha Phetsawaeng

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Thailand 21150

P/O :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125379

Date Received : Nov 17, 2022

Date Reported : Nov 25, 2022

Report Number : 2461493-1

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Sample Number 22125379-19
Sampled Date Nov 13, 2022
Sample Description Air Quality
Location โรงเรียนบ้านหนองแฟบ (GPS 47P 0729823, 1403307)
Date Analysis Commenced Nov 18, 2022
Condition of Sample Drawn into one 25-L air sampling bag and one sorbent tube, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	13/11/22 - 14/11/22	ppm	-	0.10	<0.10	Based on NIOSH, 1500	Bangkok
Propylene	13/11/22 - 14/11/22	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Satcha Phetsawaeng

Remark :

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P/O :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125379

Date Received : Nov 17, 2022

Date Reported : Nov 25, 2022

Report Number : 2461493-1

Page 20 of 21

Sample Number 22125379-20
Sampled Date Nov 14, 2022
Sample Description Air Quality
Location โรงเรียนบ้านหนองแฟบ (GPS 47P 0729823, 1403307)
Date Analysis Commenced Nov 18, 2022
Condition of Sample Drawn into one 25-L air sampling bag and one sorbent tube, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 30.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	14/11/22 - 15/11/22	ppm	-	0.10	<0.10	Based on NIOSH, 1500	Bangkok
Propylene	14/11/22 - 15/11/22	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Satcha Phetsawaeng

Remark :

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P/O :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125379

Date Received : Nov 17, 2022

Date Reported : Nov 25, 2022

Report Number : 2461493-1

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Sample Number 22125379-21
Sampled Date Nov 15, 2022
Sample Description Air Quality
Location โรงเรียนบ้านหนองแฟบ (GPS 47P 0729823, 1403307)
Date Analysis Commenced Nov 18, 2022
Condition of Sample Drawn into one 25-L air sampling bag and one sorbent tube, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 30.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	14/11/22 - 15/11/22	ppm	-	0.10	<0.10	Based on NIOSH, 1500	Bangkok
Propylene	15/11/22 - 16/11/22	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Satcha Phetsawaeng

Remark :

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ภาคผนวก ค-2

คุณภาพน้ำทิ้ง



Analysis / Test Report

TESTING

No.0042

Lot ID: 2273768

Date Received : Jul 08, 2022

Date Reported : Jul 18, 2022

Report Number : 2344978-1

Client : Thai Polyethylene Co., Ltd.

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

P/O :

Project Name : Environmental Monitoring

Project Location: PP1

Page 1 of 1

Sample Number	2273768-1
Sampled Date	Jul 08, 2022 10:00 AM
Sample Description	Wastewater
Location	PP1 : หลังผ่าน API Separator
Date Analysis Commenced	Jul 08, 2022
Condition of Sample	Contained in one amber glass bottle, two 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	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	29	≤120	APHA (2017), 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	14	≤300	APHA (2017), 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	13	≤300	APHA (2017), 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH at 25 degree C		-	-	7.6	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	35.9	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	612	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤50	APHA (2017), 2540 D	Rayong

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

Sampled By : Paramet Sattayakun , Thanasoun Namakunna

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. Banchongkit

Narumon Banchongkit
Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ ว-323-ค-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 :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 2273768

Date Received : Jul 08, 2022

Date Reported : Jul 18, 2022

Report Number : 2344978-2

Page 1 of 1

Sample Number	2273768-1
Sampled Date	Jul 08, 2022 10:00 AM
Sample Description	Wastewater
Location	PP1 : หลังผ่าน API Separator
Date Analysis Commenced	Jul 08, 2022
Condition of Sample	Contained in one amber glass bottle, two 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	184	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong
Flow rate	m3/s	-	-	0.000	No Standard	Flow meter	Rayong
n-Hexane	mg/L	-	0.001	<0.001	No Standard	Based on US EPA, Method 5030B and 8260D	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 , Thanasoun Namakunna

Remark :

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

Approved by

Siriluk P.

Siriluk Puengpang
Supervisor

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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 :

Project Name : Environmental Monitoring

Project Location: PP1

Lot ID: 2275009

Date Received : Aug 15, 2022

Date Reported : Aug 21, 2022

Report Number : 2J83433-1

Page 1 of 1

Sample Number	223500b-1
Sampled Date	Aug 15, 2022 8:55 AM
Sample Description	Water sample
Location	PP1 : หลังบ้าน API Separator
Date Analysis Commenced	Aug 15, 2022
Condition of Sample	Contained in two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards WAPSA, (WEPAN)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Unfiltered water at 20 Degree C	mg/L	-	2	2	≤20	APSA v2013H 5210 U	Rayong
Filtered water	mg/L	1.5	5	10	≤120	APSA v2013H 5220 D	Rayong
Color (natural) pH	ADMI	-	5	11	≤100	APSA v2013H 2120 B	Rayong
Color (pH 3.0H)	ADMI	-	5	11	≤100	APSA v2013H 2120 B	Rayong
Dissolved Oxygen	mg/L	-	1	8	≤5	Used on APSA v2013H 5520 U	Rayong
pH at 25 degree C		-	-	3.8	5.5-8.0	Used on APSA v2013H 8500-S pH	Rayong
Temperature F	Degree C	-	-	12.1	≤80	Used on APSA v2013H 2550 U	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	320	≤1000	APSA v2013H 2580 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	5	≤50	APSA v2013H 2580 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 03, U.E.2540 v2013H

Sampled By : Tanasit Fongsachai, Panupong Manit

Remark:

- LOD : Limit of Detection
- QLO : Lower than LOD limit of quantitation (LOR) is limit of reporting
- Analytes marked F is/are not included in scope of Accreditation IAW/IEC 13025.
- The laboratory has been accepted as an accredited laboratory complying with the IAW/IEC 13025.

Technical Management

N. Banthit

Parumon Uanchongkit

Supervisor

ทะเบียนเลขที่ ว-จ21-ค-บ885

Approved by

D. Chumon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-จ21-ค-บ882

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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: PP1

Lot ID: 2275009

Date Received : Aug 15, 2022

Date Reported : Aug 23, 2022

Report Number : 2347677-2

Page 1 of 1

Sample Number	2275009-1
Sampled Date	Aug 15, 2022 9:55 AM
Sample Description	Wastewater
Location	PP1 : หลังผ่าน API Separator
Date Analysis Commenced	Aug 15, 2022
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	328	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong
Flow rate	m3/s	-	-	0.005	No Standard	Flow meter	Rayong
n-Hexane	mg/L	-	0.001	<0.001	No Standard	Based on US EPA, Method 5030B and 8260D	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 : Tanasit Wongsachai , Panupong Mani

Remark :

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

Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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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 :

Project Name : Environmental Monitoring

Project Location: PP1

Lot ID: 2275099

Date Received : Sep 02, 2022

Date Reported : Sep 10, 2022

Report Number : 2398410-1

Page 1 of 1

Sample Number	2297055-1
Sampled Date	Sep 02, 2022 10:02 AM
Sample Description	Wastewater
Location	PP1 : หลังผ่าน API Separator
Date Analysis Commenced	Sep 02, 2022
Condition of Sample	Contained in
Physical Property	two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Rnit	LOD	LOQ (LOM)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	28	≤120	APHA (2017), 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	11	≤300	APHA (2017), 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	10	≤300	APHA (2017), 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH at 25 degree C		-	-	7.6	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	35.9	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	468	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	5	≤50	APHA (2017), 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 : Pathompong Kornasawat, Thanasoun Namakunna

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. Banchongkit

Narumon Banchongkit
Supervisor

ทะเบียนเลขที่ จ-323-จ-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ จ-323-ค-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 :

Project Name : Environmental Monitoring

Project Location: PP1

Lot ID: 2275099

Date Received : Sep 02, 2022

Date Reported : Sep 10, 2022

Report Number : 2398410-2

Page 1 of 1

Sample Number	2297055-1
Sampled Date	Sep 02, 2022 10:02 AM
Sample Description	Wastewater
Location	PP1 : หลังผ่าน API Separator
Date Analysis Commenced	Sep 02, 2022
Condition of Sample	Contained in
Physical Property	two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Rnit	LOD	LOQ (LOM)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	127	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong
Flow rate	m3/s	-	-	0.006	No Standard	Flow meter	Rayong
n-Hexane	mg/L	-	0.001	<0.001	No Standard	Based on US EPA, Method 5030B and 8260D	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 : Pathompong Kornawat , Thanasoun Namakunna

Remark :

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

Approved by

Narumon Banchongkit
Supervisor

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Analysis / Test Report

TESTING

No.0042

Lot ID: 22108337

Date Received : Oct 23, 2022

Date Reported : Nov 08, 2022

Report Number : 2821108-1

Client : Thai Polyethylene Co., Ltd.

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

P/O :

Project Name : Environmental Monitoring

Project Location: PP1

Page 1 of 1

Sample Number	22108337-1
Sampled Date	Oct 23, 2022 7:30 AM
Sample Description	Wastewater
Location	PP1 : หลังบ้าน API (separator)
Date Analysis Commenced	Oct 23, 2022
Condition of Sample	Contained in one amber glass bottle, two glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards HAPUA,) (EPAB

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
OSD 15 days at 20 Degree C	mg/L	-	2	<2	≤20	APUA H2013B 5210 O	Rayong
CSD	mg/L	1.5	5	ff	≤120	APUA H2013B 5220 D	Rayong
Color Hat Original pUB	ADMI	-	5	10	≤f 00	APUA H2013B 2120 F	Rayong
Color Hat pU 3.0B	ADMI	-	5	10	≤f 00	APUA H2013B 2120 F	Rayong
Sil & Grease	mg/L	-	f	<f	≤5	Based on APUA H2013B 5520 O	Rayong
pU at 25 degree C		-	-	3.8	5.5-7.0	Based on APUA H2013B 8500-U HDB	Rayong
Temperature 6	Degree C	-	-	f 1.3	≤80	Based on APUA H2013B 2550 O	Rayong
Total Dissolved (solids Dried at 105 degree C)	mg/L	-	5	588	≤f 000	APUA H2013B 2580 C	Rayong
Total (suspended) (solids Dried at 105 degree C)	mg/L	-	5	<5	≤50	APUA H2013B 2580 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and the Ministry of Industry dated June 03, O.E.2530 H2013B

Sampled By : Pathompong Kornasawat, Panupong Manit

Remark :

- LSD : Limit of Detection
- "<" : Lower than LSQ Limit of Quantitation / LSR Limit of Reporting
- Analyte H2013B 6 is/are not included in scope of Accreditation I (S/IEC 13025).
- The laboratory has been accepted as an accredited laboratory complying with the I (S/IEC 13025).

Technical Management

N. Banthit

Parumon Oanchongkit

(supervisor)

ทะเบียนเลขที่ ว-ฟ 2f-จ-7885

Approved by

D. Changchon

Dej Changchon

(Senior Manager)

ทะเบียนเลขที่ ว-ฟ 2f-ค-7882

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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 : PP1

Lot ID: 22108337

Date Received : Oct 23, 2022

Date Reported : Nov 08, 2022

Report Number : 2821108-2

Page 1 of 1

Sample Number	22108337-1
Sampled Date	Oct 23, 2022 7:30 AM
Sample Description	Wastewater
Location	PP1 : หลังบ้าน API (separator)
Date Analysis Commenced	Oct 23, 2022
Condition of Sample	Contained in one amber glass bottle, two glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards HAPUA,) (EPAB

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	1.1	90 (standard	Fused on APUA H2013B 8500-Cl HDB	Rayong
Flow rate	mf /s	-	-	0.00x	90 (standard	Flow meter	Rayong
n-Hexane	mg/L	-	0.001	0.08	90 (standard	Fused on APUA H2013B x200F	Fang-d<

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 03, F.E.25x0 H2013B

Sampled By : Pathompong Kornawat , Panupong Manit

Remark :

- LSD : Limit of Detection
- Q/Q : Lower than LSO Limit of Quantitation / LSR Limit of Reporting

Approved by

N. Banmit

Parumon Fanchongdit
(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 :

Project Name : Environmental Monitoring

Project Location: PP1

TESTING

No.0042

Lot ID: 22125409

Date Received : J ov 08, 2022

Date Reported : J ov 12, 2022

Report J um9er : 2831524-1

Page 1 of 71

Sample Number	2212580N-1
Sampled Date	J ov 08, 2022 10:10 AM
Sample Description	b astef ater
Location	PP1 : หลังผ่าน API 6eparator
Date Analysis Commenced	J ov 08, 2022
Condition of Sample	Contained in tf o glass vials, one am9er glass 9ottle and three plastic 9ottles, sample containers comply to pretreatment - preservation standards WWPwA, S6EPA(

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
HUD W3 days at 20 Degree C(	mg/L	-	2	3	≤20	APwA W01)(, 5210 H	Rayong
CUD	mg/L	1.5	5	2N	≤120	APwA W01)(, 5220 D	Rayong
Color Wlt Original pw(	ADMI	-	5	15	≤400	APwA W01)(, 2120 B	Rayong
Color Wlt pw).0(	ADMI	-	5	18	≤400	APwA W01)(, 2120 B	Rayong
Uil O <rease	mg/L	-	4	F 4	≤5	Hased on APwA W01)(, 5520 H	Rayong
pw at 25 degree C		-	-	).&	5.5-N.0	Hased on APwA W01)(, 8500-w W(	Rayong
Temperature G	Degree C	-	-	40.&	≤80	Hased on APwA W01)(, 2550 H	Rayong
Total Dissolved 6olids Dried at 180 degree C	mg/L	-	5	330	≤4000	APwA W01)(, 2580 C	Rayong
Total 6uspended 6olids Dried at 104-105 degree C	mg/L	-	5	&	≤50	APwA W01)(, 2580 D	Rayong

Guideline : E7luent standard 7or 7actories, industrial estate and industrial par* set 9y J otification o7the Ministry o7J atural Resource and Environment and e7luent standard 7or 7actories and industrial par* set 9y J otification o7The Ministry o7Industry dated kune 0), H.E.2530 W01)(.

Sampled By : Paramet 6attaya*un , Panupong Manit

Remar* :

- LUD : Limit o7Detection
- "F" : Lof er than LUQ Wimit o7Quantitation(/ LUR Wimit o7Reporting(
- AnalyteW(mar*ed G is/are not included in scope o7Accreditation I6U/IEC 1)025.
- The la9oratory has 9een accepted as an accredited la9oratory complying f ith the I6U/IEC 1)025.

Technical Management

N. Banngmit

J arumon Hanchong*it

6upervisor

ทะเบียนเลขที่ จ-424-จ-น885

Approved by

D. Changchon

Dej Changchon

Genior Manager

ทะเบียนเลขที่ จ-424-ค-น882

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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: PP1

Lot ID: 22125409

Date Received : 30v 04, 2022

Date Reported : 30v 12, 2022

Report Number : 2471526-2

Page 1 of 1

Sample Number	2212540f-1
Sampled Date	30v 04, 2022 10:10 AM
Sample Description	9 asteWater
Location	PP1 : หลังผ่าน API separator
Date Analysis Commenced	30v 04, 2022
Condition of Sample	Contained in two glass vials, one amber glass Nottle and three plastic Nottles, sample containers comply to pretreatment - preservation standards SAP(A, HwEPAU

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	202	30v standard	Used on AP(A S201BU 4500-Cl DU	Rayong
Flow rate	m6/s	-	-	0.007	30v standard	Flow meter	Rayong
n-(eFane	mg/L	-	0.001	0.04	30v standard	Used on HwEPA, Method 5060) and x270D	Angkok

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 08, 2557 S201BU

Sampled By : Paramet wattayakun , Panupong Mani

Remark :

- L D : Limit of Detection
- Q Q : Lower than L O S Limit of Quantitation / L R S Limit of Reporting

Approved by

N. Banmit

Samon) anchongkit
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 :

Project Name : Environmental Monitoring

Project Location: PP1

TESTING

No.0042

Lot ID: 22136554

Date Received : Dec 01, 2022

Date Reported : Dec 15, 2022

Report Number : 2831049-1

Page 1 of 2

Sample Number	221f9558-1						
Sampled Date	Dec 01, 2022 4:18 AM						
Sample Description	6 asteWater						
Location	PP1 : หลังผ่าน API weparator						
Date Analysis Commenced	Dec 01, 2022						
Condition of Sample	Contained in two glass vials, one amNer glass Nottle and three plastic Nottles, sample containers comply to pretreatment - preservation standards SAP(A, HwEPAU						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
) BD 55 days at 20 Degree CU	mg/L	-	2	8	≤20	wtandard Methods for the EQamination ob6 ater and 6 asteWater. AP(A, A6 6 A < 6 EF, 2f rd ed., 2011, part 5210)	Rayong
CBD	mg/L	1.5	5	29	≤120	wtandard Methods for the EQamination ob6 ater and 6 asteWater. AP(A, A6 6 A < 6 EF, 2f rd ed., 2011, part 5220 D	Rayong
Color Sat Briginal p(U	ADMI	-	5	11	≤f 00	wtandard Methods for the EQamination ob6 ater and 6 asteWater. AP(A, A6 6 A < 6 EF, 2f rd ed., 2011, part 2120 F	Rayong
Color Sat p(J.0U	ADMI	-	5	15	≤f 00	wtandard Methods for the EQamination ob6 ater and 6 asteWater. AP(A, A6 6 A < 6 EF, 2f rd ed., 2011, part 2120 F	Rayong
Bil < &rease G	mg/L	-	f	* f	≤5	wtandard Methods for the EQamination ob6 ater and 6 asteWater. AP(A, A6 6 A < 6 EF, 2f rd ed., 2011, part 5520)	Rayong
p(at 25 degree C G		-	-	9.3	5.5-4.0	wtandard Methods for the EQamination ob6 ater and 6 asteWater. AP(A, A6 6 A < 6 EF, 2f rd ed., 2011, part 8500 - (S) U	Rayong
Temperature G	Degree C	-	-	f 0.0	≤80	wtandard Methods for the EQamination ob6 ater and 6 asteWater. AP(A, A6 6 A < 6 EF, 2f rd ed., 2011, part 2550)	Rayong
Total Dissolved wolds Dried at 130 degree C	mg/L	-	5	933	≤f 000	wtandard Methods for the EQamination ob6 ater and 6 asteWater. AP(A, A6 6 A < 6 EF, 2f rd ed., 2011, part 2580 C	Rayong
Total wuspended wolds Dried at 10f -105 degree C	mg/L	-	5	11	≤50	wtandard Methods for the EQamination ob6 ater and 6 asteWater. AP(A, A6 6 A < 6 EF, 2f rd ed., 2011, part 2580 D	Rayong

Technical Management

N. Banthit

Warumon) anchongkit

supervisor

ทะเบียนเลขที่ ว-ฟ 2f -จ-4885

Approved by

D. Changchon

DeQ Changchon

senior Manager

ทะเบียนเลขที่ ว-ฟ 2f -ค-4882

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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: PP1

TESTING

No.0042

Lot ID: 22136554

Date Received : Dec 01, 2022

Date Reported : Dec 15, 2022

Report Number : 2831049-1

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 01, 2550 (E.2590 S2011U)

Sampling By : 6 anlop (unchainaoW ทะเบียนเลขที่ ว-ฟ 2f-จ-4851 , Panupong Manit ทะเบียนเลขที่ ว-208-จ-3900

Remark :

- LBD : Limit of Detection
- _* : Lower than LB \ Limit of quantitation / LBR \ Limit of Reporting
- Analytes marked G is/are not included in scope of Accreditation IwB/IEC 11025.
- The Laboratory has been accepted as an accredited Laboratory complying with the IwB/IEC 11025.

Technical Management

N. Banphit

Warumon Anchongkit

Supervisor

ทะเบียนเลขที่ ว-ฟ 2f-จ-4885

Approved by

D. Changchon

DeQ Changchon

Senior Manager

ทะเบียนเลขที่ ว-ฟ 2f-ค-4882

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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: PP1

Lot ID: 22136554

Date Received : Dec 07, 2022

Date Reported : Jan 05, 2023

Report Number : 2487096-2

Page 1 of 1

Sample Number	22136554-1
Sampled Date	Dec 07, 2022 9:14 AM
Sample Description	Wastewater
Location	PP1 : หลังผ่าน API Separator
Date Analysis Commenced	Dec 07, 2022
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	196	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
n-Hexane	mg/L	-	0.001	<0.001	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 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 vy : Wanlop Hunchainaow ทะเบียนเลขที่ ว-323-จ-9457 , Panupong Manit ทะเบียนเลขที่ ว-204-จ-8600

Remark :

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

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ApproBed by

Narin Saiseng
Supervisor



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-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location: PP1_S1

Lot ID: 2273652

Date Received : Jul 08, 2022
Date Reported : Aug 08, 2022
Report Number : 2344859-1 C3

Page 1 of 1

Sample Number	2273652-1						
Sampling Date	Jul 08, 2022 11:00 AM						
Sample Description	Wastewater						
Location	รางระบายน้ำรวม						
Date Analysis Commenced	Jul 08, 2022						
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	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	29	≤120	APHA (2017), 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	44	≤300	APHA (2017), 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	40	≤300	APHA (2017), 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH at 25 degree C		-	-	7.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	32.7	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	708	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	5	≤50	APHA (2017), 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 : Paramet Sattayakun , Thanasoun Namakunna

Remark :

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

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by

D. Changchon

Dej Changchon
Manager
ทะเบียนเลขที่ ว-225-ค-5283

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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-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location: PP1_S1

Lot ID: 2274522

Date Received : Aug 15, 2022
Date Reported : Aug 30, 2022
Report Number : 2346648-1 C3

Page 1 of 1

Sample Number	2274522-1						
Sampling Date	Aug 15, 2022 10:40 AM						
Sample Description	Wastewater						
Location	รางระบายน้ำรวม						
Date Analysis Commenced	Aug 15, 2022						
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	2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	29	≤120	APHA (2017), 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	12	≤300	APHA (2017), 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	13	≤300	APHA (2017), 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH at 25 degree C		-	-	7.5	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	32.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	580	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 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 : Tanasit Wongsachai , Panupong Manit

Remark :

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

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by

D. Changchon

Dej Changchon
Manager
ทะเบียนเลขที่ ว-225-ค-5283

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Analysis / Test Report

TESTING
No.0009

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: PP1_S1

Lot ID: 2297011

Date Received : Sep 02, 2022
Date Reported : Oct 06, 2022
Report Number : 2398234-1 C3

Page 1 of 1

Sample Number	2297011-1						
Sampling Date	Sep 02, 2022 11:25 AM						
Sample Description	Wastewater						
Location	รางระบายน้ำรวม						
Date Analysis Commenced	Sep 02, 2022						
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	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	24	≤120	APHA (2017), 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	12	≤300	APHA (2017), 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	11	≤300	APHA (2017), 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH at 25 degree C		-	-	7.6	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	32.5	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	362	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	15	≤50	APHA (2017), 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 : Pathompong Kornawat , Thanasoun Namakunna

Remark :

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

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by

Kanok Korn Anek

Kanok Korn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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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: PP1_S1

Lot ID: 2297011

Date Received : Sep 02, 2022
Date Reported : Oct 06, 2022
Report Number : 2398234-2 C3

Page 1 of 1

Sample Number	2297011-1						
Sampling Date	Sep 02, 2022 11:25 AM						
Sample Description	Wastewater						
Location	รางระบายน้ำรวม						
Date Analysis Commenced	Sep 02, 2022						
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	89.7	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong
n-Hexane	mg/L	-	0.001	<0.001	No Standard	Based on US EPA, Method 5030B and 8260D	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 : Pathompong Kornawat , Thanasoun Namakunna

Remark :

- LOD : Limit of Detection
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Approved by

Siriluk P.

Siriluk Puenggang
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 : PMM-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location: PP1_S1

Lot ID: 2274522

Date Received : Aug 15, 2022
Date Reported : Aug 30, 2022
Report Number : 2346648-2 C3

Page 1 of 1

Sample Number	2274522-1						
Sampling Date	Aug 15, 2022 10:40 AM						
Sample Description	Wastewater						
Location	รางระบายน้ำรวม						
Date Analysis Commenced	Aug 15, 2022						
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	313	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong
n-Hexane	mg/L	-	0.001	<0.001	No Standard	Based on US EPA, Method 5030B and 8260D	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 : Tanasit Wongsachai , Panupong Mani

Remark :

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

Approved by

Siriluk P.

Siriluk Puenggang
Supervisor

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Analysis / Test Report

TESTING
No.0042

Client : Thai Polyethylene Co., Ltd.
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Thailand 21150
P/O : PMM-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location: PP1_S1

Lot ID: 22108158
Date Received : Oct 07, 2022
Date Reported : Nov 08, 2022
Report Number : 2420921-1 C3

Page 1 of 1

Sample Number 22108158-1
Sampling Date Oct 07, 2022 10:20 AM
Sample Description Wastewater
Location โรงระบายน้ำรวม
Date Analysis Commenced Oct 07, 2022
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	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	17	≤120	APHA (2017), 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	21	≤300	APHA (2017), 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	19	≤300	APHA (2017), 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH at 25 degree C		-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	31.9	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	400	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 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 : Pathompong Kornawat , Panupong Mani

Remark :

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

N. Banchongkit

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by

D. Changchon

Dej Changchon
Manager
ทะเบียนเลขที่ ว-225-ค-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: PP1_S1

Lot ID: 22108158

Date Received : Oct 07, 2022

Date Reported : Nov 08, 2022

Report Number : 2420921-2 C3

Page 1 of 1

Sample Number	22108158-1						
Sampling Date	Oct 07, 2022 10:20 AM						
Sample Description	Wastewater						
Location	รางระบายน้ำรวม						
Date Analysis Commenced	Oct 07, 2022						
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	111	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong
n-Hexane	mg/L	-	0.001	<0.001	No Standard	Based on US EPA, Method 5030B and 8260D	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 : Pathompong Kornawat , Panupong Mani

Remark :

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Approved by

Narin Saiseng
Supervisor

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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-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location: PP1_S1

Lot ID: 22124982

Date Received : Nov 04, 2022
Date Reported : Nov 15, 2022
Report Number : 2460389-1 C3

Page 1 of 1

Sample Number	22124982-1						
Sampling Date	Nov 04, 2022 10:55 AM						
Sample Description	Wastewater						
Location	รางระบายน้ำรวม						
Date Analysis Commenced	Nov 04, 2022						
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	5	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	26	≤120	APHA (2017), 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	9	≤300	APHA (2017), 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	8	≤300	APHA (2017), 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH at 25 degree C		-	-	7.6	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	29.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	552	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	16	≤50	APHA (2017), 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 : Paramet Sattayakun , Panupong Manit

Remark :

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

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by

D. Changchon

Dej Changchon
Manager
ทะเบียนเลขที่ ว-225-ค-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: PP1_S1

Lot ID: 22124982

Date Received : Nov 04, 2022

Date Reported : Nov 15, 2022

Report Number : 2460389-2 C3

Page 1 of 1

Sample Number	22124982-1						
Sampling Date	Nov 04, 2022 10:55 AM						
Sample Description	Wastewater						
Location	รางระบายน้ำรวม						
Date Analysis Commenced	Nov 04, 2022						
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	159	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong
n-Hexane	mg/L	-	0.001	0.80	No Standard	Based on US EPA, Method 5030B and 8260D	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 Sattayakun , Panupong Mani

Remark :

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

Approved by

Narumon Banchongkit
Supervisor

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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-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location: PP1_S1

Lot ID: 22136499
Date Received : Dec 07, 2022
Date Reported : Jan 04, 2023
Report Number : 2487032-1 C3

Page 1 of 2

Sample Number	22136499-1						
Sampling Date	Dec 07, 2022 8:43 AM						
Sample Description	Wastewater						
Location	วางระบายน้ำรวม						
Date Analysis Commenced	Dec 07, 2022						
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	3	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD	mg/L	1.5	5	27	≤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	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 *		-	-	7.2	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	-	-	30.9	≤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	660	≤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	8	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by

D. Changchon

Dej Changchon
Manager
ทะเบียนเลขที่ ว-225-ค-5283

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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-SCGCH-2019-343

Project Name : Environmental Monitoring

Project Location: PP1_S1

Lot ID: 22136499

Date Received : Dec 07, 2022

Date Reported : Jan 04, 2023

Report Number : 2487032-1 C3

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 Hunchainaow , Panupong Manit

Remark :

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

Technical Management

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

Approved by

Dej Changchon

Manager

ทะเบียนเลขที่ ว-225-ค-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: PP1_S1

Lot ID: 22136499

Date Received : Dec 07, 2022

Date Reported : Jan 04, 2023

Report Number : 2487032-2 C3

Page 1 of 1

Sample Number	22136499-1						
Sampling Date	Dec 07, 2022 8:43 AM						
Sample Description	Wastewater						
Location	รางระบายน้ำรวม						
Date Analysis Commenced	Dec 07, 2022						
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	158	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
n-Hexane	mg/L	-	0.001	<0.001	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 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 : Wanlop Hunchainaow , Panupong Manit

Remark :

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

Approved by

Siriluk P.

Siriluk Puenggang
Supervisor

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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-SCGCH-2019-343

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22124958

Date Received : Nov 18, 2022

Date Reported : Nov 24, 2022

Report Number: 2500392-1C3

Page 1 of 1

Sample Number 22124958-1
Parameter Noise (Leq 24 hrs.)
Location อาคารสำนักงานของกลุ่มโรงงาน TPE Site#1 (GPS 47P 0731763, 1404874)
Measurement Date Nov 09 - Nov 10, 2022
Measurement by Satcha Phetsawaeng
Sound Level meter Serial No. 1173611

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	61.2	86.1	59.7
10:00 AM - 11:00 AM	66.8	87.3	58.9
11:00 AM - 12:00 PM	62.5	76.3	59.9
12:00 PM - 01:00 PM	61.5	81.8	58.4
01:00 PM - 02:00 PM	62.9	86.3	58.2
02:00 PM - 03:00 PM	61.8	84.5	58.1
03:00 PM - 04:00 PM	59.5	79.1	57.6
04:00 PM - 05:00 PM	59.7	72.0	57.8
05:00 PM - 06:00 PM	60.5	79.2	58.6
06:00 PM - 07:00 PM	60.0	77.2	57.9
07:00 PM - 08:00 PM	60.0	81.2	58.4
08:00 PM - 09:00 PM	59.9	80.0	58.2
09:00 PM - 10:00 PM	60.5	74.7	59.3
10:00 PM - 11:00 PM	60.2	75.8	58.8
11:00 PM - 12:00 AM	60.0	74.3	58.7
12:00 AM - 01:00 AM	59.8	79.1	58.4
01:00 AM - 02:00 AM	59.8	80.4	58.7
02:00 AM - 03:00 AM	59.1	79.1	57.5
03:00 AM - 04:00 AM	59.4	74.2	58.4
04:00 AM - 05:00 AM	60.1	72.2	58.7
05:00 AM - 06:00 AM	61.1	72.9	59.8
06:00 AM - 07:00 AM	61.7	80.3	60.1
07:00 AM - 08:00 AM	61.7	78.0	59.6
08:00 AM - 09:00 AM	60.2	84.7	58.5

Leq Average 24 hrs. (dB(A)) 61.2
Lmax (dB(A)) 87.3
L90 (dB(A)) 58.5
Ldn (dB(A)) 66.9
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location : PP1

Lot ID: 22124958

Date Received : Nov 18, 2022
Date Reported : Nov 24, 2022
Report Number: 2500393-1C3

Page 1 of 1

Sample Number	22124958-2		
Parameter	Noise (Leq 24 hrs.)		
Location	อาคารสำนักงานของกลุ่มโรงงาน TPE Site#1 (GPS 47P 0731763, 1404874)		
Measurement Date	Nov 10 - Nov 11, 2022		
Measurement by	Satcha Phetsawaeng		
Sound Level meter	Serial No. 1173611		

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	60.7	87.1	58.9
10:00 AM - 11:00 AM	60.6	81.3	58.6
11:00 AM - 12:00 PM	59.8	83.5	57.6
12:00 PM - 01:00 PM	59.5	80.5	57.2
01:00 PM - 02:00 PM	60.1	78.7	57.6
02:00 PM - 03:00 PM	59.6	76.7	57.3
03:00 PM - 04:00 PM	59.0	80.7	56.9
04:00 PM - 05:00 PM	59.4	85.1	56.9
05:00 PM - 06:00 PM	59.1	77.9	56.5
06:00 PM - 07:00 PM	58.5	79.2	56.5
07:00 PM - 08:00 PM	58.2	81.7	56.2
08:00 PM - 09:00 PM	58.7	79.7	57.1
09:00 PM - 10:00 PM	58.6	78.2	57.2
10:00 PM - 11:00 PM	57.9	75.3	56.6
11:00 PM - 12:00 AM	57.3	77.5	56.0
12:00 AM - 01:00 AM	57.8	72.8	56.3
01:00 AM - 02:00 AM	58.4	78.9	57.1
02:00 AM - 03:00 AM	57.5	75.1	56.6
03:00 AM - 04:00 AM	57.7	71.8	56.8
04:00 AM - 05:00 AM	59.0	73.4	58.0
05:00 AM - 06:00 AM	59.7	80.1	57.7
06:00 AM - 07:00 AM	60.2	76.1	58.4
07:00 AM - 08:00 AM	60.9	74.5	58.8
08:00 AM - 09:00 AM	60.4	78.6	58.2
Leq Average 24 hrs. (dB(A))	59.2		
Lmax (dB(A))		87.1	
L90 (dB(A))			57.1
Ldn (dB(A))	65.1		
Standard (dB(A))	70	115	
Reference Method : ISO1996-1 and 1996-2			
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป			
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ			
โรงงาน พ.ศ. 2548			

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-SCGCH-2019-343

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22124958

Date Received : Nov 18, 2022

Date Reported : Nov 24, 2022

Report Number: 2500394-1C3

Page 1 of 1

Sample Number 22124958-3
Parameter Noise (Leq 24 hrs.)
Location อาคารสำนักงานของกลุ่มโรงงาน TPE Site#1 (GPS 47P 0731763, 1404874)
Measurement Date Nov 11 - Nov 12, 2022
Measurement by Satcha Phetsawaeng
Sound Level meter Serial No. 1173611

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	60.4	88.4	57.6
10:00 AM - 11:00 AM	60.3	86.7	57.0
11:00 AM - 12:00 PM	59.3	79.9	56.9
12:00 PM - 01:00 PM	59.4	80.3	56.4
01:00 PM - 02:00 PM	59.3	76.9	56.3
02:00 PM - 03:00 PM	59.1	79.2	56.0
03:00 PM - 04:00 PM	58.8	72.3	56.0
04:00 PM - 05:00 PM	58.2	77.6	55.9
05:00 PM - 06:00 PM	58.2	74.6	55.2
06:00 PM - 07:00 PM	57.5	78.0	54.4
07:00 PM - 08:00 PM	57.9	81.2	54.5
08:00 PM - 09:00 PM	57.2	86.8	54.4
09:00 PM - 10:00 PM	58.2	89.5	55.5
10:00 PM - 11:00 PM	57.1	75.4	55.4
11:00 PM - 12:00 AM	56.4	73.6	55.0
12:00 AM - 01:00 AM	56.7	80.2	55.1
01:00 AM - 02:00 AM	56.2	80.0	54.9
02:00 AM - 03:00 AM	56.2	72.4	55.0
03:00 AM - 04:00 AM	56.6	68.0	55.7
04:00 AM - 05:00 AM	56.4	72.7	55.2
05:00 AM - 06:00 AM	57.7	73.2	55.4
06:00 AM - 07:00 AM	59.3	77.7	56.7
07:00 AM - 08:00 AM	59.1	74.4	56.2
08:00 AM - 09:00 AM	58.4	73.8	56.3

Leq Average 24 hrs. (dB(A)) 58.3
Lmax (dB(A)) 89.5
L90 (dB(A)) 55.5
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 และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

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-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location : PP1

Lot ID: 22124958

Date Received : Nov 18, 2022
Date Reported : Nov 24, 2022
Report Number: 2500395-1C3

Page 1 of 1

Sample Number 22124958-4
Parameter Noise (Leq 24 hrs.)
Location อาคารสำนักงานของกลุ่มโรงงาน TPE Site#1 (GPS 47P 0731763, 1404874)
Measurement Date Nov 12 - Nov 13, 2022
Measurement by Satcha Phetsawaeng
Sound Level meter Serial No. 1173611

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	59.4	74.2	57.9
10:00 AM - 11:00 AM	59.2	70.1	57.8
11:00 AM - 12:00 PM	59.5	78.7	57.7
12:00 PM - 01:00 PM	58.9	73.9	57.2
01:00 PM - 02:00 PM	57.5	73.3	55.2
02:00 PM - 03:00 PM	58.1	72.9	56.2
03:00 PM - 04:00 PM	58.3	74.8	56.5
04:00 PM - 05:00 PM	58.7	73.8	56.9
05:00 PM - 06:00 PM	58.6	76.7	55.8
06:00 PM - 07:00 PM	57.1	70.7	55.3
07:00 PM - 08:00 PM	56.4	70.2	54.9
08:00 PM - 09:00 PM	56.3	70.6	55.2
09:00 PM - 10:00 PM	56.5	70.7	55.5
10:00 PM - 11:00 PM	55.6	68.9	54.5
11:00 PM - 12:00 AM	56.1	69.3	55.2
12:00 AM - 01:00 AM	56.8	80.5	55.7
01:00 AM - 02:00 AM	56.7	75.9	55.5
02:00 AM - 03:00 AM	56.8	79.0	55.2
03:00 AM - 04:00 AM	56.4	72.1	55.1
04:00 AM - 05:00 AM	56.3	69.4	55.1
05:00 AM - 06:00 AM	57.4	82.7	55.2
06:00 AM - 07:00 AM	61.8	93.4	56.6
07:00 AM - 08:00 AM	59.2	80.2	56.0
08:00 AM - 09:00 AM	59.3	90.9	54.9

Leq Average 24 hrs. (dB(A)) 58.1
Lmax (dB(A)) 93.4
L90 (dB(A)) 55.5
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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Life Sciences

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TESTING
No.0042

Lot ID: 22124958

Date Received : Nov 18, 2022

Date Reported : Nov 24, 2022

Report Number: 2500398-1C3

Project Location : PP1

Page 1 of 1

Sound Level meter Serial No. 11(3611

Le) Average 24 hrs. μBqAan	5(.6		
Lmax μBqAan		84.(
L90 μBqAan			55.0
Ldn μBqAan	63.3		
Standard μBqAan	(0	115	

Standard : 1. ปะสงค์รณเงสงโงคัสซแวด้าแหบษคต จมบทที่ 15 พท.ศ. 2540เกเลาขถหี ดโคดสูกั สดบปเยษนดยทลไป
2. ปะสงค์รณเงสงโงคัสซแวด้าแหบษคต จมบทที่ 16 พท.ศ. 2540เกเลาขถหี ดโคดสูกั สดบปเยษนดยทลไป

Thanita Kulsuriwong
Scientist 4a

Snapt S.

Supot Salamteh
Section Head

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

ภาคผนวก ค-4

คุณภาพอากาศในสถานประกอบการ



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 : PP1

Lot ID: 2274991

Date Received : Sep 13, 2022
Date Reported : Sep 23, 2022
Report Number : 2347643-1

Page 1 of 4

Sample Number 2274991-1
Sampled Date Sep 12, 2022
Sample Description Air Quality
Location หน่วยโพลีเอทิลีน
Date Analysis Commenced Sep 14, 2022
Condition of Sample Drawn into two 10-L air sampling bags and one sorbent tube, refrigerated
Barometric Pressure 757 mmHg
Atmospheric Temperature 29.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Ethylene	03:00 PM - 05:00 PM	ppm	-	1.0	<1.0	200	Based on ASTM, D 2712-91	ACGIH	Bangkok
n-Hexane	03:00 PM - 05:00 PM	ppm	-	0.03	<0.03	500	NIOSH (1994), 1500	MOL	Bangkok
Propylene	03:00 PM - 05:00 PM	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 (2020).

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 : Prasanmit Kueanpet

Remark :

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

Approved by

Saranya C.

Saranya Chalermtamrong
Scientist (4)

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



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 : PP1

Lot ID: 2274991

Date Received : Sep 13, 2022
Date Reported : Sep 23, 2022
Report Number : 2347643-1

Page 2 of 4

Sample Number 2274991-2
Sampled Date Sep 12, 2022
Sample Description Air Quality
Location หน่วยเตรียมตัวเร่งปฏิกิริยา
Date Analysis Commenced Sep 14, 2022
Condition of Sample Drawn into one sorbent tube, refrigerated
Barometric Pressure 757 mmHg
Atmospheric Temperature 29.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
n-Hexane	03:10 PM - 05:10 PM	ppm	-	0.03	0.17	500	NIOSH (1994), 1500	MOL	Bangkok

Guideline :

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

Sampled By : Prasanmit Kueanpet

Remark :

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

Approved by

Saranya C.

Saranya Chalermthamrong
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 :
Project Name : Environmental Monitoring
Project Location : PP1

Lot ID: 2274991

Date Received : Sep 13, 2022
Date Reported : Sep 23, 2022
Report Number : 2347643-1

Page 3 of 4

Sample Number 2274991-3
Sampled Date Sep 12, 2022
Sample Description Air Quality
Location หน่วยบรรจุผลิตภัณฑ์
Date Analysis Commenced Sep 14, 2022
Condition of Sample Drawn into one filter paper placed in plastic cassette
Barometric Pressure 757 mmHg
Atmospheric Temperature 29.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Total Dust	03:30 PM - 05:30 PM	mg/m3	-	0.15	<0.15	15	Based on NIOSH (1994), 0500	OSHA	Rayong

Guideline :

OSHA : Occupational Safety and Health Administration

Sampled By : Prasanmit Kueanpet

Remark :

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

Approved by

Saranya C.

Saranya Chalermthamrong
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 :
Project Name : Environmental Monitoring
Project Location : PP1

Lot ID: 2274991

Date Received : Sep 13, 2022
Date Reported : Sep 23, 2022
Report Number : 2347643-1

Page 4 of 4

Sample Number 2274991-4
Sampled Date Sep 12, 2022
Sample Description Air Quality
Location Extruder (หน่วยดัดเม็ด)
Date Analysis Commenced Sep 14, 2022
Condition of Sample Drawn into two 10-L air sampling bags and one sorbent tube, refrigerated
Barometric Pressure 757 mmHg
Atmospheric Temperature 29.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Ethylene	02:50 PM - 04:50 PM	ppm	-	1.0	<1.0	200	Based on ASTM, D 2712-91	ACGIH	Bangkok
n-Hexane	02:50 PM - 04:50 PM	ppm	-	0.03	<0.03	500	NIOSH (1994), 1500	MOL	Bangkok
Propylene	02:50 PM - 04:50 PM	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 : Prasanmit Kueanpet

Remark :

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

Approved by

Saranya C.

Saranya Chalermtamrong
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 :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125382

Date Received : Nov 14, 2022

Date Reported : Nov 25, 2022

Report Number : 2461499-1

Page 1 of 4

Sample Number	22125382-1
Sampled Date	Nov 11, 2022
Sample Description	Air Quality
Location	หน่วยโพลีเอทิลีน
Date Analysis Commenced	Nov 15, 2022
Condition of Sample	Drawn into two 10-L air sampling bags and one sorbent tube, refrigerated
Barometric Pressure	760 mmHg
Atmospheric Temperature	32.0 °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 2712-91	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 : Saknarin Jaraskay

Remark :

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

Approved by

Saranya C.

Saranya Chalermthamrong
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 :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125382

Date Received : Nov 14, 2022

Date Reported : Nov 25, 2022

Report Number : 2461499-1

Page 2 of 4

Sample Number 22125382-2
Sampled Date Nov 11, 2022
Sample Description Air Quality
Location หน่วยเตรียมตัวเร่งปฏิกิริยา
Date Analysis Commenced Nov 15, 2022
Condition of Sample Drawn into one sorbent tube, refrigerated
Barometric Pressure 760 mmHg
Atmospheric Temperature 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
n-Hexane	09:00 AM - 11:00 AM	ppm	-	0.03	0.17	500	NIOSH (1994), 1500	MOL	Bangkok

Guideline :

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

Sampled By : Saknarin Jaraskay

Remark :

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

Approved by

Saranya C.

Saranya Chalermthamrong
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 :
Project Name : Environmental Monitoring
Project Location : PP1

Lot ID: 22125382

Date Received : Nov 14, 2022

Date Reported : Nov 25, 2022

Report Number : 2461499-1

Page 3 of 4

Sample Number 22125382-3
Sampled Date Nov 11, 2022
Sample Description Air Quality
Location หน่วยบรรจุผลิตภัณฑ์
Date Analysis Commenced Nov 15, 2022
Condition of Sample Drawn into one filter paper placed in plastic cassette
Barometric Pressure 760 mmHg
Atmospheric Temperature 32.0 °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 : Saknarin Jaraskay

Remark :

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

Approved by

Saranya C.

Saranya Chalermthamrong
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 :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125382

Date Received : Nov 14, 2022

Date Reported : Nov 25, 2022

Report Number : 2461499-1

Page 4 of 4

Sample Number 22125382-4
Sampled Date Nov 11, 2022
Sample Description Air Quality
Location Extruder (หน่วยดัดเม็ด)
Date Analysis Commenced Nov 15, 2022
Condition of Sample Drawn into two 10-L air sampling bags and one sorbent tube, refrigerated
Barometric Pressure 760 mmHg
Atmospheric Temperature 32.0 °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 2712-91	ACGIH	Bangkok
n-Hexane	09:00 AM - 11:00 AM	ppm	-	0.03	0.11	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 : Saknarin Jaraskay

Remark :

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

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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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 :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 2274995

Date Received : Sep 13, 2022

Date Reported : Sep 17, 2022

Report Number: 2437288-1

Page 1 of 1

Sample Number 2274995-1
Parameter Noise (Leq 12 hrs.)
Location หน่วยโพลีเอทิลีน
Measurement Date Sep 12, 2022
Measurement by Prasanmit Kueanpet

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:34 AM - 10:34 AM	80.6	88.9	79.4
10:34 AM - 11:34 AM	80.7	91.4	79.6
11:34 AM - 12:34 PM	80.8	85.0	79.6
12:34 PM - 01:34 PM	82.4	88.4	80.1
01:34 PM - 02:34 PM	82.4	86.2	81.1
02:34 PM - 03:34 PM	82.3	87.6	81.3
03:34 PM - 04:34 PM	82.1	90.6	80.8
04:34 PM - 05:34 PM	82.6	85.6	81.4
05:34 PM - 06:34 PM	82.5	85.6	81.2
06:34 PM - 07:34 PM	82.4	85.5	81.1
07:34 PM - 08:34 PM	80.1	83.2	78.8
08:34 PM - 09:34 PM	81.3	84.4	80.0

Leq Average 12 hrs. (dB(A))

81.8

Lmax (dB(A))

91.4

Standard (dB(A))

87

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
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 :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 2274995

Date Received : Sep 13, 2022

Date Reported : Sep 17, 2022

Report number: 243728N-1

Page 1 of 1

Sample Number 2274NN5-2
Parameter noise (Leq 12 hrs.)
Location EKtruder (หน่วยตัดเม็ด)
Measurement Date Sep 12, 2022
Measurement by Prasarnmit Bueanpet

Time	Leq (dx(A))	LmaK (dx(A))	LND (dx(A))
08:15 AM - 10:15 AM	7N3	84.4	78.8
10:15 AM - 11:15 AM	80.4	81.3	80.2
11:15 AM - 12:15 PM	7N7	81.0	7N2
12:15 PM - 01:15 PM	81.6	83.8	7N1
01:15 PM - 02:15 PM	80.2	82.7	7N5
02:15 PM - 03:15 PM	7N5	80.4	7N1
03:15 PM - 04:15 PM	78.3	83.6	77.N
04:15 PM - 05:15 PM	78.8	88.N	78.1
05:15 PM - 06:15 PM	78.3	7N8	78.0
06:15 PM - 07:15 PM	78.8	80.3	78.5
07:15 PM - 08:15 PM	7N.N	81.4	7N.6
08:15 PM - 0N:15 PM	7N.1	80.6	78.8
Leq Average 12 hrs. (dx(A))	7N.6		
LmaK (dx(A))		88.N	
Standard (dx(A))	87	140	
Reference Method : ISO1NN6-1 and 1NN6-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖			

Technical Management

Thanita K.

Thanita Bulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
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 :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 2274995

Date Received : Sep 13, 2022

Date Reported : Sep 17, 2022

Report Number: 2437290-1

Page 1 of 1

Sample Number 2274995-3
Parameter Noise (Leq 12 hrs.)
Location Compressor (ท่อขนส่ง Vent Gas และ Nitrogen)
Measurement Date Sep 12, 2022
Measurement by Prasanmit Kueanpet

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:01 AM - 10:01 AM	77.4	84.8	74.7
10:01 AM - 11:01 AM	82.0	84.8	81.3
11:01 AM - 12:01 PM	82.2	87.0	79.5
12:01 PM - 01:01 PM	81.8	88.2	78.1
01:01 PM - 02:01 PM	78.4	88.1	76.3
02:01 PM - 03:01 PM	80.2	84.7	77.0
03:01 PM - 04:01 PM	75.5	84.0	74.3
04:01 PM - 05:01 PM	75.3	80.4	74.4
05:01 PM - 06:01 PM	76.0	92.3	75.2
06:01 PM - 07:01 PM	75.6	84.1	74.4
07:01 PM - 08:01 PM	77.0	86.7	74.9
08:01 PM - 09:01 PM	75.2	91.5	74.4
Leq Average 12 hrs. (dB(A))	78.9		
Lmax (dB(A))		92.3	
Standard (dB(A))	87	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖			

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
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 :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 2274999

Date Received : Sep 13, 2022

Date Reported : Sep 19, 2022

Report Number : 2438055-1

Page 1 of 1

Sample Number 2274999-1
Parameter Octave Band
Location หน่วยโพลีเอทิลีน
Measurement Date Sep 12, 2022
Measurement By Prasanmit Kueanpet

Time	Result (dB(A))											
	Leq	16 Hz	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	16 kHz
09:34 AM - 10:34 AM	80.6	27.4	43.5	53.6	61.9	67.7	74.7	77.1	72.6	69.1	61.7	51.1
10:34 AM - 11:34 AM	80.7	32.6	50.1	59.0	64.2	68.0	74.5	76.9	72.6	69.6	61.7	48.2
11:34 AM - 12:34 PM	80.8	33.6	51.6	59.6	64.1	68.1	74.7	77.2	72.3	69.5	61.6	48.2
12:34 PM - 01:34 PM	82.4	32.4	50.1	57.6	63.9	68.7	76.0	78.9	74.9	71.2	62.0	49.9
01:34 PM - 02:34 PM	82.4	31.5	48.1	55.8	62.9	68.3	75.8	79.7	74.0	68.8	59.8	46.9
02:34 PM - 03:34 PM	82.3	34.1	52.4	59.6	64.2	68.6	75.6	79.4	74.2	69.6	60.8	48.2
03:34 PM - 04:34 PM	82.1	26.2	41.7	52.7	62.1	68.2	75.6	78.9	74.7	70.1	61.2	48.6
04:34 PM - 05:34 PM	82.6	24.3	39.9	51.6	61.6	67.5	75.3	79.5	76.5	69.5	60.2	47.3
05:34 PM - 06:34 PM	82.5	24.3	39.6	51.3	61.6	67.1	74.8	79.4	76.4	69.1	59.9	47.3
06:34 PM - 07:34 PM	82.4	24.2	39.5	51.2	61.5	67.0	74.7	79.3	76.3	69.0	59.8	47.2
07:34 PM - 08:34 PM	80.1	21.9	37.2	48.9	59.2	64.7	72.4	77.0	74.0	66.7	57.5	44.9
08:34 PM - 09:34 PM	81.3	23.1	38.4	50.1	60.4	65.9	73.6	78.2	75.2	67.9	58.7	46.1
Average	81.8	30.0	47.4	55.8	62.6	67.6	74.9	78.6	74.7	69.3	60.6	48.1

Reference Method : ANSI Standard S1.6-1984

Technical Management

Saranya C.

Saranya Chalermthamrong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
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 :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 2274999

Date Received : Sep 13, 2022

Date Reported : Sep 19, 2022

Report number : 243805N-1

Page 1 of 1

Sample Number 2204999-2
Parameter Bctave Kand
Location Eqtuder หน่วยตัดเม็ดH
Measurement Date Sep 12, 2022
Measurement By Prasanmit zueanpet

Time	Lek	Result 6dK6AH										
		1N ()	31.5 ()	N3 ()	125 ()	250 ()	500 ()	1 w ()	2 w ()	4 w ()	8 w ()	1N w ()
09:15 AM - 10:15 AM	09.3	20.1	44.2	54.N	N3.4	N8.4	03.5	04.N	02.3	N8.1	N1.9	48.9
10:15 AM - 11:15 AM	80.4	31.8	49.8	N1.0	NN.N	N9.8	03.9	05.3	03.5	00.4	N4.0	49.4
11:15 AM - 12:15 PM	09.0	32.4	51.2	N1.4	NN.1	N9.0	03.4	04.9	02.2	N9.2	N2.0	48.9
12:15 PM - 01:15 PM	81.N	31.2	49.4	59.5	N5.2	N9.4	05.0	0N.3	05.1	03.1	N5.0	54.1
01:15 PM - 02:15 PM	80.2	30.5	40.0	50.0	N3.9	N8.8	04.2	05.0	03.2	N9.2	N2.1	48.5
02:15 PM - 03:15 PM	09.5	32.1	51.1	N0.8	N5.1	N8.N	03.8	04.3	01.8	N9.4	N3.8	50.0
03:15 PM - 04:15 PM	08.3	2N.1	42.4	51.3	N2.1	N0.8	03.0	03.5	00.4	N0.3	N1.2	48.0
04:15 PM - 05:15 PM	08.8	25.5	42.1	51.4	N3.3	N8.9	03.3	04.3	01.0	NN.9	N0.1	40.9
05:15 PM - 0N:15 PM	08.3	25.3	41.9	51.1	N2.0	N0.1	02.N	04.1	00.N	N0.0	N0.9	48.N
0N:15 PM - 00:15 PM	08.8	25.8	42.4	51.N	N2.5	N0.N	03.1	04.N	01.1	N0.5	N1.4	49.1
00:15 PM - 08:15 PM	09.9	2N.9	43.5	52.0	N3.N	N8.0	04.2	05.0	02.2	N8.N	N2.5	50.2
08:15 PM - 09:15 PM	09.1	2N.1	42.0	51.9	N2.8	N0.9	03.4	04.9	01.4	N0.8	N1.0	49.4
Average	09.N	29.3	40.2	50.3	N4.1	N8.N	03.0	04.9	02.3	N9.1	N2.N	49.8

Reference Method : AbSI Standard S1.N-1984

Technical Management

Saranya C.

Saranya Chalerthamrong
Scientist 64H

Approved by

Supot S.

Supot Salamteh
Section (ead

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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 : PP1

Lot ID: 2274999

Date Received : Sep 13, 2022

Date Reported : Sep 19, 2022

Report Number : 2438057-1

Page 1 of 1

Sample Number 2274999-3
Parameter Octave Band
Location Compressor (ท่อขนส่ง Vent Gas และ Nitrogen)
Measurement Date Sep 12, 2022
Measurement By Prasanmit Kueanpet

Time	Result (dB(A))											
	Leq	16 Hz	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	16 kHz
09:01 AM - 10:01 AM	77.4	26.0	44.4	54.3	58.9	65.0	70.6	71.5	72.7	67.6	60.3	47.6
10:01 AM - 11:01 AM	82.0	33.0	53.0	59.4	68.6	70.3	71.3	74.6	77.4	74.7	71.3	60.1
11:01 AM - 12:01 PM	82.2	36.4	57.2	62.2	70.1	71.1	72.0	75.0	75.9	75.4	72.5	61.5
12:01 PM - 01:01 PM	81.8	35.4	56.0	61.2	68.5	70.0	72.6	73.4	77.1	74.6	70.5	59.2
01:01 PM - 02:01 PM	78.4	34.1	53.7	58.3	64.7	66.7	70.0	71.4	73.1	70.8	65.5	53.5
02:01 PM - 03:01 PM	80.2	36.2	57.9	62.0	68.0	69.6	71.8	71.3	74.4	73.3	69.3	58.9
03:01 PM - 04:01 PM	75.5	25.5	43.1	51.5	56.6	66.5	68.1	70.8	68.5	65.5	59.9	48.9
04:01 PM - 05:01 PM	75.3	21.9	37.6	48.4	53.7	65.5	68.1	71.1	68.5	64.1	57.6	47.2
05:01 PM - 06:01 PM	76.0	21.9	39.8	49.6	54.4	65.7	68.8	72.6	68.8	63.7	56.8	44.0
06:01 PM - 07:01 PM	75.6	25.6	43.2	51.6	56.7	66.6	68.2	70.9	68.6	65.6	60.0	49.0
07:01 PM - 08:01 PM	77.0	32.7	52.3	56.9	63.3	65.3	68.6	70.0	71.7	69.4	64.1	52.1
08:01 PM - 09:01 PM	75.2	21.1	39.0	48.8	53.6	64.9	68.0	71.8	68.0	62.9	56.0	43.2
Average	78.9	32.2	52.7	57.9	65.1	67.9	70.2	72.3	73.4	71.1	67.1	56.0

Reference Method : ANSI Standard S1.6-1984

Technical Management

Saranya C.

Saranya Chalermthamrong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
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 :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 2275003

Date Received : Sep 13, 2022

Date Reported : Sep 15, 2022

Report Number : 2347668-1

Page 1 of 1

Sample Number 2275003-1
Sampled Date Sep 12, 2022
Sample Description Noise Dose
Location พนักงานบริเวณ CCR
Personal Sampling คุณเป็ดพงษ์ สุริยา
Date Analysis Commenced Sep 14, 2022

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	08:00 AM - 08:00 PM	%	-	-	1.2	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	08:00 AM - 08:00 PM	%	-	1	1.2	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	08:00 AM - 08:00 PM	dB(A)	-	-	63.8	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:00 AM - 08:00 PM	dB(A)	-	-	65.6	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Norranon Tathongkham

Remark :

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

Approved by

Wichan Choonharat
Assistant 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 : PP1

Lot ID: 22125396

Date Received : Nov 14, 2022

Date Reported : Nov 18, 2022

Report Number: 2492984-1

Page 1 of 1

Sample Number 22125396-1
Parameter Noise (Leq 12 hrs.)
Location หน่วยโพลีเอทิลีน
Measurement Date Nov 11, 2022
Measurement by Saknarin Jaraskay

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:20 AM - 10:20 AM	83.7	87.8	81.9
10:20 AM - 11:20 AM	83.7	88.1	81.9
11:20 AM - 12:20 PM	83.8	88.1	82.0
12:20 PM - 01:20 PM	83.6	88.1	81.9
01:20 PM - 02:20 PM	83.4	88.0	81.9
02:20 PM - 03:20 PM	83.5	88.0	82.1
03:20 PM - 04:20 PM	83.8	88.5	82.2
04:20 PM - 05:20 PM	83.8	87.7	82.4
05:20 PM - 06:20 PM	83.8	87.7	82.3
06:20 PM - 07:20 PM	83.5	88.2	81.9
07:20 PM - 08:20 PM	83.2	87.3	81.4
08:20 PM - 09:20 PM	83.5	88.1	82.0
Leq Average 12 hrs. (dB(A))	83.6		
Lmax (dB(A))		88.5	
Standard (dB(A))	87	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖			

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
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 :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125396

Date Received : Nov 14, 2022

Date Reported : Nov 18, 2022

Report Number: 2492985-1

Page 1 of 1

Sample Number 22125396-2
Parameter Noise (Leq 12 hrs.)
Location EStruder (หน่วยตัดเม็ด)
Measurement Date Nov 11, 2022
Measurement by kaJnarin BarasJay

Time	Leq (dx(A))	LmaS (dx(A))	L90 (dx(A))
09:04 AM - 10:04 AM	84.2	89.2	82.9
10:04 AM - 11:04 AM	84.1	91.9	82.6
11:04 AM - 12:04 PM	83.1	88.1	82.3
12:04 PM - 01:04 PM	83.3	85.2	82.1
01:04 PM - 02:04 PM	83.7	85.3	82.3
02:04 PM - 03:04 PM	83.3	86.0	82.1
03:04 PM - 04:04 PM	82.6	84.1	81.9
04:04 PM - 05:04 PM	83.2	84.1	82.2
05:04 PM - 06:04 PM	82.7	88.0	82.0
06:04 PM - 07:04 PM	83.2	84.7	82.5
07:04 PM - 08:04 PM	82.9	87.9	81.6
08:04 PM - 09:04 PM	83.1	84.7	81.7

Leq Average 12 hrs. (dx(A))

83.3

LmaS (dx(A))

91.9

ktandard (dx(A))

87

140

Reference Method : IkO1996-1 and 1996-2

ktandard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖

Technical Management

Thanita K.

Thanita Kulsuriwong
scientist (4)

Approved by

Supt S.

kupot kalamteh
kection 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 :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125396

Date Received : Nov 14, 2022

Date Reported : Nov 18, 2022

Report Number: 2492986-1

Page 1 of 1

Sample Number 22125396-3
Parameter Noise (Leq 12 hrs.)
Location Compressor (ท่อขนส่ง Vent Gas และ Nitrogen)
Measurement Date Nov 11, 2022
Measurement by Saknarin Jaraskay

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:06 AM - 10:06 AM	75.6	84.1	74.8
10:06 AM - 11:06 AM	75.0	76.2	74.6
11:06 AM - 12:06 PM	74.8	75.8	74.4
12:06 PM - 01:06 PM	74.4	75.4	74.1
01:06 PM - 02:06 PM	74.7	75.8	74.3
02:06 PM - 03:06 PM	74.8	75.7	74.5
03:06 PM - 04:06 PM	74.7	76.2	74.4
04:06 PM - 05:06 PM	75.1	75.8	74.8
05:06 PM - 06:06 PM	75.4	76.2	75.1
06:06 PM - 07:06 PM	75.6	86.0	65.1
07:06 PM - 08:06 PM	75.1	76.6	74.8
08:06 PM - 09:06 PM	75.3	83.8	74.5

Leq Average 12 hrs. (dB(A))

75.1

Lmax (dB(A))

86.0

Standard (dB(A))

87

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
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 :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125397

Date Received : Nov 14, 2022

Date Reported : Nov 17, 2022

Report Number : 2495521-1

Page 1 of 1

Sample Number 22125397-1
Parameter Octave Band
Location หน่วยโพลีเอทิลีน
Measurement Date Nov 11, 2022
Measurement By Saknarin Jaraskay

Time	Result (dB(A))											
	Leq	16 Hz	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	16 kHz
09:20 AM - 10:20 AM	83.7	26.7	41.9	51.1	60.5	69.2	76.3	81.0	76.5	70.5	61.9	49.5
10:20 AM - 11:20 AM	83.7	26.7	42.0	50.9	60.3	69.1	76.2	81.2	76.3	70.1	61.9	49.3
11:20 AM - 12:20 PM	83.8	26.6	42.1	50.7	60.4	68.9	75.9	81.4	76.5	70.1	62.0	49.3
12:20 PM - 01:20 PM	83.6	26.9	42.1	51.0	60.5	68.4	75.9	81.0	76.3	70.6	61.8	49.3
01:20 PM - 02:20 PM	83.4	26.8	42.1	51.1	60.4	68.5	75.7	80.8	76.2	70.2	61.7	49.1
02:20 PM - 03:20 PM	83.5	26.7	41.9	51.2	60.6	68.8	75.6	80.8	76.3	70.4	61.9	49.4
03:20 PM - 04:20 PM	83.8	26.7	42.0	51.3	61.2	68.9	75.9	81.2	76.8	70.5	61.9	49.7
04:20 PM - 05:20 PM	83.8	26.9	42.1	51.6	61.6	69.0	76.1	81.2	76.9	70.1	61.9	49.8
05:20 PM - 06:20 PM	83.8	27.0	42.1	51.5	61.4	69.3	76.1	81.1	77.0	70.2	61.9	49.7
06:20 PM - 07:20 PM	83.5	26.4	41.7	51.0	60.9	68.6	75.6	80.9	76.5	70.2	61.6	49.4
07:20 PM - 08:20 PM	83.2	26.2	41.4	50.6	60.0	68.7	75.8	80.5	76.0	70.0	61.4	49.0
08:20 PM - 09:20 PM	83.5	26.9	42.2	51.2	60.5	68.6	75.8	80.9	76.3	70.3	61.8	49.2
Average	83.6	26.7	42.0	51.1	60.7	68.8	75.9	81.0	76.5	70.3	61.8	49.4

Reference Method : ANSI Standard S1.6-1984

Technical Management

Saranya C.

Saranya Chalermthamrong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
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 :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125397

Date Received : Nov 14, 2022

Date Reported : Nov 17, 2022

Report Number : 2495522-1

Page 1 of 1

Sample Number 22125397-2
Parameter Octave Band
Location EStruder หน่วยตัดเม็ด
Measurement Date Nov 11, 2022
Measurement By qa6narin Hras6ay

Time	Lez	Result kdBkAJJ										
		18 ()	31.5 ()	83 ()	125 ()	250 ()	500 ()	1 6 ()	2 6 ()	4 6 ()	w6 ()	18 6 ()
09:04 AM - 10:04 AM	w4.2	32.8	41.1	54.1	82.0	73.1	78.2	w0.2	77.5	74.w	89.4	57.0
10:04 AM - 11:04 AM	w4.1	31.9	42.0	54.w	82.4	73.1	78.0	79.9	77.4	75.0	70.1	5w.9
11:04 AM - 12:04 PM	w8.1	31.2	41.2	53.5	82.1	72.8	75.1	7w.5	78.8	74.1	8w.7	58.0
12:04 PM - 01:04 PM	w8.3	32.1	40.8	53.1	82.3	73.0	75.3	79.4	78.0	73.w	8w.4	55.9
01:04 PM - 02:04 PM	w8.7	32.w	40.8	53.8	82.1	73.0	78.0	w0.1	75.9	73.9	8w.8	58.0
02:04 PM - 03:04 PM	w8.3	33.3	40.8	53.5	81.w	72.5	75.8	79.3	75.7	74.0	89.3	57.2
03:04 PM - 04:04 PM	w2.8	33.3	40.4	53.1	81.4	72.2	74.9	7w.3	75.5	73.5	8w.7	58.w
04:04 PM - 05:04 PM	w8.2	34.0	40.7	53.2	81.9	73.5	78.1	7w.7	75.w	73.5	8w.9	58.9
05:04 PM - 08:04 PM	w2.7	34.8	41.0	53.2	81.8	72.9	75.2	7w.0	75.7	73.5	8w.w	58.8
08:04 PM - 07:04 PM	w8.2	33.9	41.0	53.7	82.0	72.w	75.5	7w.9	78.1	74.1	89.3	57.4
07:04 PM - 0w.04 PM	w2.9	31.3	39.w	52.w	80.7	71.w	74.9	7w.9	78.2	73.5	8w.1	55.7
0w.04 PM - 09:04 PM	w8.1	32.2	40.0	53.0	81.5	72.4	75.4	79.5	75.3	73.3	8w.0	55.4
Average	w8.3	32.9	40.w	53.5	81.w	72.w	75.5	79.2	78.2	73.9	8w.9	58.w

Reference Method : ANqI qtandard q1.8-19w4

Technical Management

Saranya C.

qaranya Chalermthamrong
qcientist k4J

Approved by

Supt S.

qupot qalamteh
qection (ead

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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 : PP1

Lot ID: 22125397

Date Received : Nov 14, 2022

Date Reported : Nov 17, 2022

Report Number : 2495523-1

Page 1 of 1

Sample Number 22125397-3
Parameter Octave Band
Location Compressor (ท่อขนส่ง Vent Gas และ Nitrogen)
Measurement Date Nov 11, 2022
Measurement By Saknarin Jaraskay

Time	Result (dB(A))											
	Leq	16 Hz	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	16 kHz
09:06 AM - 10:06 AM	75.6	27.6	44.4	52.7	58.8	61.3	65.4	69.9	71.0	68.2	60.8	43.1
10:06 AM - 11:06 AM	75.0	27.8	44.6	52.6	58.8	60.9	64.1	69.4	70.5	67.7	60.2	41.6
11:06 AM - 12:06 PM	74.8	27.8	44.6	52.5	58.6	61.0	64.0	69.4	70.3	67.3	59.6	41.1
12:06 PM - 01:06 PM	74.4	27.6	44.0	52.2	58.2	60.3	64.0	69.0	69.9	66.8	58.9	39.7
01:06 PM - 02:06 PM	74.7	27.3	43.7	52.4	58.8	59.8	64.7	69.4	70.1	66.8	59.1	40.2
02:06 PM - 03:06 PM	74.8	26.5	43.1	52.5	59.0	59.7	65.1	69.6	70.2	66.8	59.6	41.7
03:06 PM - 04:06 PM	74.7	26.4	43.1	52.5	58.7	59.5	64.9	69.3	70.2	66.8	59.3	41.7
04:06 PM - 05:06 PM	75.1	26.8	43.5	52.6	59.1	59.6	65.0	69.7	70.5	67.4	59.9	42.3
05:06 PM - 06:06 PM	75.4	27.0	43.7	53.1	59.2	59.7	65.2	69.8	70.8	68.0	60.8	42.7
06:06 PM - 07:06 PM	75.6	37.9	46.5	54.7	59.6	62.5	66.6	70.2	70.3	67.6	61.1	46.9
07:06 PM - 08:06 PM	75.1	26.8	43.5	52.9	59.1	59.9	65.3	69.7	70.6	67.2	59.7	42.1
08:06 PM - 09:06 PM	75.3	27.3	44.1	52.4	58.5	61.0	65.1	69.6	70.7	67.9	60.5	42.8
Average	75.1	30.0	44.2	52.8	58.9	60.5	65.0	69.6	70.4	67.4	60.0	42.6

Reference Method : ANSI Standard S1.6-1984

Technical Management

Saranya C.

Saranya Chalermthamrong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
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 :
Project Name : Environmental Monitoring
Project Location : PP1

Lot ID: 22125400

Date Received : Nov 14, 2022
Date Reported : Nov 16, 2022
Report Number : 2461512-1

Page 1 of 1

Sample Number 22125400-1
Sampled Date Nov 11, 2022
Sample Description Noise Dose
Location พนักงานบริเวณ CCR
Personal Sampling คุณเป็ดพงษ์ สุริยา
Date Analysis Commenced Nov 15, 2022

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	08:00 AM - 08:00 PM	%	-	-	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	08:00 AM - 08:00 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	08:00 AM - 08:00 PM	dB(A)	-	-	61.9	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:00 AM - 08:00 PM	dB(A)	-	-	63.7	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Natthapon Jiengwareewong

Remark :

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

Approved by

Wichan Choonharat
Assistant Manager

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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 :

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 22125407

Date Received : Nov 14, 2022

Date Reported : Nov 16, 2022

Report Number: 2461516-1

Page 1 of 2

Sample Number 22125407-1
Parameter Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date Nov 11, 2022
Measurement by Natthapon Jiengwareewong
Location ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
Extruder (หน่วยตัดเม็ด)	120	29.0	27.2	33.1	33.0
Average (WBGT)		29.0			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

Technical Management

Supot Salamteh
Section Head

Approved by

Wichan Choonharat
Assistant 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 : PP1

Lot ID: 22125407

Date Received : Nov 14, 2022

Date Reported : Nov 16, 2022

Report Number: 2461516-1

Page 2 of 2

Sample Number 22125407-2
Parameter Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date Nov 11, 2022
Measurement by Natthapon Jiengwareewong
Location ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
Polymerization Unit	120	28.6	26.8	32.7	32.6
Average (WBGT)		28.6			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

Technical Management

Supot Salamteh
Section Head

Approved by

Wichan Choonharat
Assistant Manager

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