

ภาคผนวก ค

ใบรับรองผลการตรวจวิเคราะห์

ภาคผนวก ค-1

คุณภาพอากาศในบรรยากาศ



Analysis / Test Report

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

Lot ID: 2444755
Date Received : May 27, 2024
Date Reported : Jun 06, 2024
Report Number : 2971516-1

Page 1 of 21

Sample Number : 2444755-1
Sampled Date : May 13, 2024
Sample Description : Air Quality
Location : อาคารสำนักงานของกลุ่มโรงงาน TPE (Site # 1) (GPS 47P 0731745, 1404883)
Date Analysis Commenced : May 28, 2024
Condition of Sample : Drawn into one 25-L air sampling bag and two sorbent tubes, refrigerated
Barometric Pressure : 756 mmHg
Atmospheric Temperature : 29.6 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	13/05/24 - 14/05/24	ppm	-	0.10	<0.10	NIOSH (2003), 1500	Bangkok
Propylene	13/05/24 - 14/05/24	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Anuwet Tema

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

Lot ID: 2444755
Date Received : May 27, 2024
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Report Number : 2971516-1

Page 2 of 21

Sample Number : 2444755-2
Sampled Date : May 14, 2024
Sample Description : Air Quality
Location : อาคารสำนักงานของกลุ่มโรงงาน TPE (Site # 1) (GPS 47P 0731745, 1404883)
Date Analysis Commenced : May 28, 2024
Condition of Sample : Drawn into one 25-L air sampling bag and two sorbent tubes, refrigerated
Barometric Pressure : 756 mmHg
Atmospheric Temperature : 29.4 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	14/05/24 - 15/05/24	ppm	-	0.10	<0.10	NIOSH (2003), 1500	Bangkok
Propylene	14/05/24 - 15/05/24	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Anuwet Tema

Remark :

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Analysis / Test Report

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Thailand 21150

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location :

Lot ID: 2444755

Date Received : May 27, 2024

Date Reported : Jun 06, 2024

Report Number : 2971516-1

Page 3 of 21

Sample Number 2444755-3
Sampled Date May 15, 2024
Sample Description Air Quality
Location อาคารสำนักงานของกลุ่มโรงงาน TPE (Site # 1) (GPS 47P 0731745, 1404883)
Date Analysis Commenced May 28, 2024
Condition of Sample Drawn into one 25-L air sampling bag and two sorbent tubes, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 30.1 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	15/05/24 - 16/05/24	ppm	-	0.10	<0.10	NIOSH (2003), 1500	Bangkok
Propylene	15/05/24 - 16/05/24	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Anuwet Tema

Remark :

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Analysis / Test Report

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Thailand 21150

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location :

Lot ID: 2444755

Date Received : May 27, 2024

Date Reported : Jun 06, 2024

Report Number : 2971516-1

Page 4 of 21

Sample Number 2444755-4
Sampled Date May 16, 2024
Sample Description Air Quality
Location อาคารสำนักงานของกลุ่มโรงงาน TPE (Site # 1) (GPS 47P 0731745, 1404883)
Date Analysis Commenced May 28, 2024
Condition of Sample Drawn into one 25-L air sampling bag and two sorbent tubes, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 29.6 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	16/05/24 - 17/05/24	ppm	-	0.10	<0.10	NIOSH (2003), 1500	Bangkok
Propylene	16/05/24 - 17/05/24	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Anuwet Tema

Remark :

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Thailand 21150

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location :

Lot ID: 2444755

Date Received : May 27, 2024

Date Reported : Jun 06, 2024

Report Number : 2971516-1

Page 5 of 21

Sample Number 2444755-5
Sampled Date May 17, 2024
Sample Description Air Quality
Location อาคารสำนักงานของกลุ่มโรงงาน TPE (Site # 1) (GPS 47P 0731745, 1404883)
Date Analysis Commenced May 28, 2024
Condition of Sample Drawn into one 25-L air sampling bag and two sorbent tubes, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 29.7 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	17/05/24 - 18/05/24	ppm	-	0.10	<0.10	NIOSH (2003), 1500	Bangkok
Propylene	17/05/24 - 18/05/24	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Anuwet Tema

Remark :

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P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location :

Lot ID: 2444755

Date Received : May 27, 2024

Date Reported : Jun 06, 2024

Report Number : 2971516-1

Page 6 of 21

Sample Number 2444755-6
Sampled Date May 18, 2024
Sample Description Air Quality
Location อาคารสำนักงานของกลุ่มโรงงาน TPE (Site # 1) (GPS 47P 0731745, 1404883)
Date Analysis Commenced May 28, 2024
Condition of Sample Drawn into one 25-L air sampling bag and two sorbent tubes, 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	18/05/24 - 19/05/24	ppm	-	0.10	<0.10	NIOSH (2003), 1500	Bangkok
Propylene	18/05/24 - 19/05/24	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Anuwet Tema

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Analysis / Test Report

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Thailand 21150

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location :

Lot ID: 2444755

Date Received : May 27, 2024

Date Reported : Jun 06, 2024

Report Number : 2971516-1

Page 7 of 21

Sample Number 2444755-7
Sampled Date May 19, 2024
Sample Description Air Quality
Location อาคารสำนักงานของศูนย์โรงงาน TPE (Site # 1) (GPS 47P 0731745, 1404883)
Date Analysis Commenced May 28, 2024
Condition of Sample Drawn into one 25-L air sampling bag and two sorbent tubes, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 29.5 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	19/05/24 - 20/05/24	ppm	-	0.10	<0.10	NIOSH (2003), 1500	Bangkok
Propylene	19/05/24 - 20/05/24	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Anuwet Tema

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Thailand 21150

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location :

Lot ID: 2444755

Date Received : May 27, 2024

Date Reported : Jun 06, 2024

Report Number : 2971516-1

Page 8 of 21

Sample Number 2444755-8
Sampled Date May 13, 2024
Sample Description Air Quality
Location โรงเรียนบ้านนาตาพุด (โรงเรียนราษฎร์ราษฎร์) (GPS 47P 0735343, 1406686)
Date Analysis Commenced May 28, 2024
Condition of Sample Drawn into one 25-L air sampling bag and two sorbent tubes, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 29.6 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	13/05/24 - 14/05/24	ppm	-	0.10	<0.10	NIOSH (2003), 1500	Bangkok
Propylene	13/05/24 - 14/05/24	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Anuwet Tema

Remark :

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location :

Lot ID: 2444755

Date Received : May 27, 2024

Date Reported : Jun 06, 2024

Report Number : 2971516-1

Page 9 of 21

Sample Number 2444755-9
Sampled Date May 14, 2024
Sample Description Air Quality
Location โรงเรียนบ้านนาตาทุต (โศภนราษฎร์รังสรรค์) (GPS 47P 0735343, 1406686)
Date Analysis Commenced May 28, 2024
Condition of Sample Drawn into one 25-L air sampling bag and two sorbent tubes, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 29.4 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	14/05/24 - 15/05/24	ppm	-	0.10	<0.10	NIOSH (2003), 1500	Bangkok
Propylene	14/05/24 - 15/05/24	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Anuwet Tema

Remark :

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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Thailand 21150

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location :

Lot ID: 2444755

Date Received : May 27, 2024

Date Reported : Jun 06, 2024

Report Number : 2971516-1

Page 10 of 21

Sample Number 2444755-10
Sampled Date May 15, 2024
Sample Description Air Quality
Location โรงเรียนบ้านนาตาทุต (โศภนราษฎร์รังสรรค์) (GPS 47P 0735343, 1406686)
Date Analysis Commenced May 28, 2024
Condition of Sample Drawn into one 25-L air sampling bag and two sorbent tubes, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 30.1 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	15/05/24 - 16/05/24	ppm	-	0.10	<0.10	NIOSH (2003), 1500	Bangkok
Propylene	15/05/24 - 16/05/24	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Anuwet Tema

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Analysis / Test Report

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Thailand 21150

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location :

Lot ID: 2444755

Date Received : May 27, 2024

Date Reported : Jun 06, 2024

Report Number : 2971516-1

Page 11 of 21

Sample Number 2444755-11
Sampled Date May 16, 2024
Sample Description Air Quality
Location โรงเรียนบ้านนาตาพุด (โกลนราษฎร์บูรณะ) (GPS 47P 0735343, 1406686)
Date Analysis Commenced May 28, 2024
Condition of Sample Drawn into one 25-L air sampling bag and two sorbent tubes, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 29.6 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	16/05/24 - 17/05/24	ppm	-	0.10	<0.10	NIOSH (2003), 1500	Bangkok
Propylene	16/05/24 - 17/05/24	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Anuwet Tema

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P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location :

Lot ID: 2444755

Date Received : May 27, 2024

Date Reported : Jun 06, 2024

Report Number : 2971516-1

Page 12 of 21

Sample Number 2444755-12
Sampled Date May 17, 2024
Sample Description Air Quality
Location โรงเรียนบ้านนาตาพุด (โกลนราษฎร์บูรณะ) (GPS 47P 0735343, 1406686)
Date Analysis Commenced May 28, 2024
Condition of Sample Drawn into one 25-L air sampling bag and two sorbent tubes, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 29.7 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	17/05/24 - 18/05/24	ppm	-	0.10	<0.10	NIOSH (2003), 1500	Bangkok
Propylene	17/05/24 - 18/05/24	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Anuwet Tema

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P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location :

Lot ID: 2444755

Date Received : May 27, 2024

Date Reported : Jun 06, 2024

Report Number : 2971516-1

Page 13 of 21

Sample Number 2444755-13
Sampled Date May 18, 2024
Sample Description Air Quality
Location โรงเรียนบ้านนาตาพุด (โศภณราษฎร์รังสรรค์) (GPS 47P 0735343, 1406686)
Date Analysis Commenced May 28, 2024
Condition of Sample Drawn into one 25-L air sampling bag and two sorbent tubes, 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	18/05/24 - 19/05/24	ppm	-	0.10	<0.10	NIOSH (2003), 1500	Bangkok
Propylene	18/05/24 - 19/05/24	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Anuwet Tema

Remark :

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

Approved by

Saranya C.

Saranya Chalerthamrong
Scientist (4)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location :

Lot ID: 2444755

Date Received : May 27, 2024

Date Reported : Jun 06, 2024

Report Number : 2971516-1

Page 14 of 21

Sample Number 2444755-14
Sampled Date May 19, 2024
Sample Description Air Quality
Location โรงเรียนบ้านนาตาพุด (โศภณราษฎร์รังสรรค์) (GPS 47P 0735343, 1406686)
Date Analysis Commenced May 28, 2024
Condition of Sample Drawn into one 25-L air sampling bag and two sorbent tubes, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 29.5 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	19/05/24 - 20/05/24	ppm	-	0.10	<0.10	NIOSH (2003), 1500	Bangkok
Propylene	19/05/24 - 20/05/24	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Anuwet Tema

Remark :

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

Approved by

Saranya C.

Saranya Chalerthamrong
Scientist (4)

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Analysis / Test Report

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Thailand 21150

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location :

Lot ID: 2444755

Date Received : May 27, 2024

Date Reported : Jun 06, 2024

Report Number : 2971516-1

Page 15 of 21

Sample Number 2444755-15
Sampled Date May 13, 2024
Sample Description Air Quality
Location โรงเรียนบ้านหนองพูน (GPS 47P 0729825, 1403308)
Date Analysis Commenced May 28, 2024
Condition of Sample Drawn into one 25-L air sampling bag and two sorbent tubes, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 29.6 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	13/05/24 - 14/05/24	ppm	-	0.10	<0.10	NIOSH (2003), 1500	Bangkok
Propylene	13/05/24 - 14/05/24	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Anuwet Tema

Remark :

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

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Thailand 21150

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location :

Lot ID: 2444755

Date Received : May 27, 2024

Date Reported : Jun 06, 2024

Report Number : 2971516-1

Page 16 of 21

Sample Number 2444755-16
Sampled Date May 14, 2024
Sample Description Air Quality
Location โรงเรียนบ้านหนองพูน (GPS 47P 0729825, 1403308)
Date Analysis Commenced May 28, 2024
Condition of Sample Drawn into one 25-L air sampling bag and two sorbent tubes, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 29.4 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	14/05/24 - 15/05/24	ppm	-	0.10	<0.10	NIOSH (2003), 1500	Bangkok
Propylene	14/05/24 - 15/05/24	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Anuwet Tema

Remark :

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

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

Lot ID: 2444755
Date Received : May 27, 2024
Date Reported : Jun 06, 2024
Report Number : 2971516-1

Page 17 of 21

Sample Number 2444755-17
Sampled Date May 15, 2024
Sample Description Air Quality
Location โรงเรียนบ้านหนองพิน (GPS 47P 0729825, 1403308)
Date Analysis Commenced May 28, 2024
Condition of Sample Drawn into one 25-L air sampling bag and two sorbent tubes, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 30.1 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	15/05/24 - 16/05/24	ppm	-	0.10	<0.10	NIOSH (2003), 1500	Bangkok
Propylene	15/05/24 - 16/05/24	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Anuwet Tema

Remark :

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Scientist (4)

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

Lot ID: 2444755
Date Received : May 27, 2024
Date Reported : Jun 06, 2024
Report Number : 2971516-1

Page 18 of 21

Sample Number 2444755-18
Sampled Date May 16, 2024
Sample Description Air Quality
Location โรงเรียนบ้านหนองพิน (GPS 47P 0729825, 1403308)
Date Analysis Commenced May 28, 2024
Condition of Sample Drawn into one 25-L air sampling bag and two sorbent tubes, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 29.6 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	16/05/24 - 17/05/24	ppm	-	0.10	<0.10	NIOSH (2003), 1500	Bangkok
Propylene	16/05/24 - 17/05/24	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Anuwet Tema

Remark :

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P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location :

Lot ID: 2444755

Date Received : May 27, 2024

Date Reported : Jun 06, 2024

Report Number : 2971516-1

Page 19 of 21

Sample Number 2444755-19
Sampled Date May 17, 2024
Sample Description Air Quality
Location โรงเรียนบ้านหนองพัน (GPS 47P 0729825, 1403308)
Date Analysis Commenced May 28, 2024
Condition of Sample Drawn into one 25-L air sampling bag and two sorbent tubes, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 29.7 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	17/05/24 - 18/05/24	ppm	-	0.10	<0.10	NIOSH (2003), 1500	Bangkok
Propylene	17/05/24 - 18/05/24	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Anuwet Tema

Remark :

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P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location :

Lot ID: 2444755

Date Received : May 27, 2024

Date Reported : Jun 06, 2024

Report Number : 2971516-1

Page 20 of 21

Sample Number 2444755-20
Sampled Date May 18, 2024
Sample Description Air Quality
Location โรงเรียนบ้านหนองพัน (GPS 47P 0729825, 1403308)
Date Analysis Commenced May 28, 2024
Condition of Sample Drawn into one 25-L air sampling bag and two sorbent tubes, 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	18/05/24 - 19/05/24	ppm	-	0.10	<0.10	NIOSH (2003), 1500	Bangkok
Propylene	18/05/24 - 19/05/24	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Anuwet Tema

Remark :

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Analysis / Test Report

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

Lot ID: 2444755
Date Received : May 27, 2024
Date Reported : Jun 06, 2024
Report Number : 2971516-1

Page 21 of 21

Sample Number 2444755-21
Sampled Date May 19, 2024
Sample Description Air Quality
Location โรงเรือนบ้านหนองพุ่ม (GPS 47P 0729825, 1403308)
Date Analysis Commenced May 28, 2024
Condition of Sample Drawn into one 25-L air sampling bag and two sorbent tubes, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 29.5 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Hexane	19/05/24 - 20/05/24	ppm	-	0.10	<0.10	NIOSH (2003), 1500	Bangkok
Propylene	19/05/24 - 20/05/24	ppm	-	1.0	<1.0	Based on ASTM, D2712-18	Bangkok

Sampled By : Anuwet Tema

Remark :

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Analysis / Test Report

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

Lot ID: 2444783
Date Received : May 31, 2024
Date Reported : Jun 04, 2024
Report Number : 2971591-1

Page 1 of 2

Sample Number 2444783-1 to 7
Parameter Wind Speed / Wind Direction
Location อาคารสำนักงานของกลุ่มโรงงาน TPE Site#1 (GPS 47P 0731747, 1404885)
Sampling Date May 13 - May 20, 2024
Sampling by Anuwet Tema

Time	May 13 - May 14, 2024			May 14 - May 15, 2024			May 15 - May 16, 2024			May 16 - May 17, 2024			May 17 - May 18, 2024			May 18 - May 19, 2024			May 19 - May 20, 2024		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
10:00 AM - 11:00 AM	1.0	196.0	SSW	1.3	257.0	WSW	0.6	184.0	S	0.0	-	-	1.8	66.0	ENE	2.6	177.0	S	2.5	155.0	SSE
11:00 AM - 12:00 PM	0.2	-	-	0.8	155.0	SSE	1.2	214.0	SW	1.5	96.0	E	1.4	48.0	NE	1.7	219.0	SW	2.1	190.0	S
12:00 PM - 01:00 PM	0.8	181.0	S	0.3	189.0	S	0.7	55.0	NE	0.0	-	-	1.8	75.0	ENE	2.1	151.0	SSE	2.8	159.0	SSE
01:00 PM - 02:00 PM	0.3	198.0	SSW	0.5	265.0	W	0.4	161.0	SSE	0.3	175.0	S	0.9	32.0	NNE	1.4	94.0	E	0.9	178.0	S
02:00 PM - 03:00 PM	0.4	181.0	S	0.8	213.0	SSW	0.9	164.0	SSE	0.7	194.0	SSW	0.6	37.0	NE	0.8	286.0	WNW	1.0	177.0	S
03:00 PM - 04:00 PM	0.8	238.0	WSW	0.6	162.0	SSE	0.6	198.0	SSW	0.0	-	-	0.7	47.0	NE	1.7	106.0	ESE	1.1	115.0	ESE
04:00 PM - 05:00 PM	0.5	212.0	SSW	0.6	214.0	SW	0.6	187.0	S	0.3	184.0	S	1.0	62.0	ENE	1.3	199.0	SSW	0.9	255.0	WSW
05:00 PM - 06:00 PM	0.7	209.0	SSW	0.7	160.0	SSE	0.5	152.0	SSE	0.3	187.0	S	1.7	359.0	N	1.1	216.0	SW	0.8	213.0	SSW
06:00 PM - 07:00 PM	1.1	193.0	SSW	1.5	254.0	WSW	1.3	222.0	SW	0.8	194.0	SSW	0.9	351.0	N	1.0	123.0	ESE	1.3	198.0	SSW
07:00 PM - 08:00 PM	0.3	192.0	SSW	1.1	338.0	NNW	0.4	204.0	SSW	0.8	232.0	SW	0.8	270.0	W	0.9	173.0	S	0.9	272.0	W
08:00 PM - 09:00 PM	0.4	204.0	SSW	1.5	186.0	S	0.3	207.0	SSW	0.5	196.0	SSW	0.6	270.0	W	0.8	106.0	ESE	0.6	167.0	SSE
09:00 PM - 10:00 PM	1.2	191.0	S	0.5	206.0	SSW	0.0	-	-	1.1	194.0	SSW	2.5	260.0	W	1.5	119.0	ESE	0.9	195.0	SSW
10:00 PM - 11:00 PM	0.5	197.0	SSW	1.4	170.0	S	0.0	-	-	0.2	-	-	1.1	265.0	W	1.1	32.0	NNE	1.1	183.0	S
11:00 PM - 12:00 AM	0.6	274.0	W	1.7	207.0	SSW	0.0	-	-	0.0	-	-	0.9	303.0	WNW	1.3	45.0	NE	1.5	179.0	S
12:00 AM - 01:00 AM	0.5	241.0	WSW	1.2	215.0	SW	0.3	165.0	SSE	0.4	175.0	S	1.3	28.0	NNE	0.8	74.0	ENE	0.7	175.0	S
01:00 AM - 02:00 AM	0.6	213.0	SSW	0.7	288.0	WNW	0.7	213.0	SSW	0.2	-	-	0.7	152.0	SSE	1.1	101.0	E	1.3	171.0	S
02:00 AM - 03:00 AM	0.8	202.0	SSW	0.6	177.0	S	0.6	176.0	S	0.8	129.0	SE	0.9	95.0	E	1.7	124.0	SE	0.9	153.2	SSE
03:00 AM - 04:00 AM	0.6	194.0	SSW	1.0	179.0	S	0.8	156.0	SSE	0.5	177.0	S	0.8	171.0	S	1.9	104.0	ESE	1.7	149.2	SSE
04:00 AM - 05:00 AM	0.6	235.0	SW	1.0	188.0	S	0.8	165.0	SSE	0.6	136.0	SE	0.9	171.0	S	2.1	136.0	SE	1.8	151.0	SSE
05:00 AM - 06:00 AM	0.6	183.0	S	0.7	151.0	SSE	0.5	57.0	ENE	0.6	143.0	SE	0.9	155.0	SSE	1.9	142.0	SE	0.9	149.9	SSE
06:00 AM - 07:00 AM	2.6	222.0	SW	1.8	274.0	W	0.8	236.0	SW	0.0	-	-	1.7	197.0	SSW	1.0	136.0	SE	2.7	128.5	SE
07:00 AM - 08:00 AM	1.5	205.0	SSW	0.3	166.0	SSE	0.6	192.0	SSW	0.9	104.0	ESE	1.6	170.0	S	1.5	183.0	S	2.9	148.8	SSE
08:00 AM - 09:00 AM	1.0	185.0	S	0.7	186.0	S	0.3	172.0	S	1.0	116.0	ESE	1.0	198.0	SSW	1.0	105.0	ESE	1.7	158.0	SSE
09:00 AM - 10:00 AM	1.1	155.0	SSE	0.2	-	-	0.6	168.0	SSE	0.0	-	-	1.9	173.0	S	1.1	150.0	SSE	1.5	68.0	ENE

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayu Jitranont

Sarayu Jitranont
Assistant General Manager

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Analysis / Test Report

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

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location :

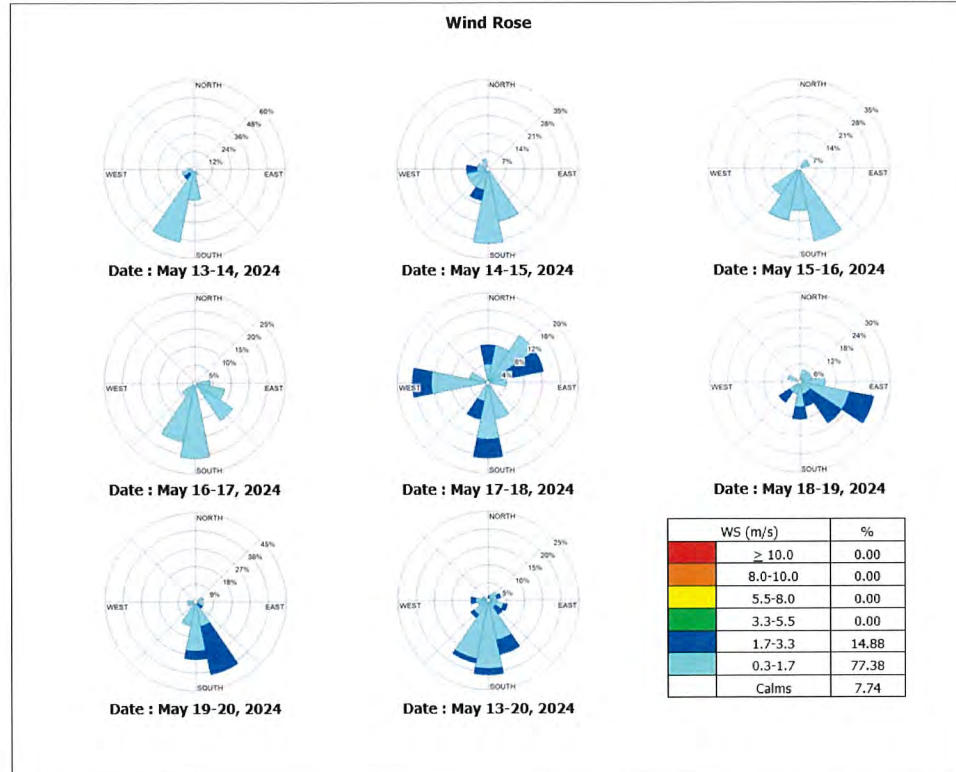
Lot ID: 2444783

Date Received : May 31, 2024

Date Reported : Jun 04, 2024

Report Number : 2971591-1

Page 2 of 2



Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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21150

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : TPE Site 1

Lot ID: 2444759

Date Received : May 31, 2024

Date Reported : Jun 04, 2024

Report Number : 2971512-1

Page 1 of 2

Sample Number

2444759-1 to 7

Parameter

Wind Speed / Wind Direction

Location

โรงเรียนนานาชาติตากฟ้า (ใกล้ถนนสุขุมวิท) (GPS 47P 0735343, 1406686)

Sampling Date

May 13 - May 20, 2024

Sampling by

Anuwet Tema

Time	May 13 - May 14, 2024			May 14 - May 15, 2024			May 15 - May 16, 2024			May 16 - May 17, 2024			May 17 - May 18, 2024			May 18 - May 19, 2024			May 19 - May 20, 2024		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
12:00 PM - 01:00 PM	3.0	226.0	SW	1.3	243.0	WSW	1.7	190.0	S	0.0	-	-	0.7	235.0	SW	1.6	274.0	W	2.8	260.0	W
01:00 PM - 02:00 PM	2.1	215.0	SW	1.7	208.0	SSW	0.5	265.0	W	1.0	347.0	NNW	0.8	259.0	W	0.6	307.0	NW	0.8	279.0	W
02:00 PM - 03:00 PM	1.5	186.0	S	1.0	161.0	SSE	1.2	317.0	NW	0.3	351.0	N	1.0	102.0	ESE	0.5	182.0	S	2.8	209.0	SSW
03:00 PM - 04:00 PM	0.0	-	-	0.0	-	0.8	27.0	NNE	1.0	350.0	N	1.0	159.0	SSE	0.5	198.0	SSW	1.1	355.0	N	
04:00 PM - 05:00 PM	0.6	34.0	NE	1.1	237.0	WSW	0.2	-	-	0.6	20.0	NNE	0.5	181.0	S	1.6	297.0	WNW	0.8	279.0	W
05:00 PM - 06:00 PM	1.6	14.0	NNE	0.0	-	0.4	259.0	W	0.5	19.0	NNE	0.4	166.0	SSE	1.2	165.0	SSE	0.2	-	-	
06:00 PM - 07:00 PM	1.1	5.0	N	0.5	39.0	NE	0.0	-	-	0.0	-	-	0.4	109.0	ESE	0.8	178.0	S	1.1	215.0	SW
07:00 PM - 08:00 PM	0.8	20.0	NNE	1.4	357.0	N	0.0	-	-	0.2	-	-	0.0	-	-	1.9	107.0	ESE	3.5	185.0	S
08:00 PM - 09:00 PM	1.3	33.0	NNE	1.7	3.0	N	0.2	-	-	1.2	30.0	NNE	0.0	-	-	0.4	229.0	SW	2.8	250.0	WSW
09:00 PM - 10:00 PM	1.1	27.0	NNE	1.6	357.0	N	0.6	29.0	NNE	0.9	30.0	NNE	0.0	-	-	0.9	261.0	W	0.6	208.0	SSW
10:00 PM - 11:00 PM	0.3	342.0	NNW	1.0	25.0	NNE	0.2	-	-	0.6	20.0	NNE	0.0	-	-	1.8	217.0	SW	0.5	204.0	SSW
11:00 PM - 12:00 AM	0.5	33.0	NNE	1.0	27.0	NNE	0.7	104.0	ESE	1.2	18.0	NNE	0.0	-	-	1.1	131.0	SE	0.1	-	-
12:00 AM - 01:00 AM	0.9	15.0	NNE	1.5	70.0	ENE	0.8	24.0	NNE	1.1	203.0	SSW	0.0	-	-	1.2	168.0	SSE	0.2	-	-
01:00 AM - 02:00 AM	0.0	-	-	0.9	71.0	ENE	1.1	25.0	NNE	1.6	178.0	S	0.0	-	-	1.7	211.0	SSW	0.6	151.0	SSE
02:00 AM - 03:00 AM	1.2	32.0	NNE	0.7	83.0	E	0.6	55.0	NE	0.6	32.0	NNE	0.7	27.0	NNE	1.3	209.0	SSW	1.0	187.0	S
03:00 AM - 04:00 AM	0.5	11.0	N	1.0	89.0	E	1.5	20.0	NNE	0.8	28.0	NNE	0.0	-	-	0.0	-	-	0.6	82.0	E
04:00 AM - 05:00 AM	0.4	350.0	N	0.1	-	2.0	20.0	NNE	1.4	23.0	NNE	0.0	-	-	0.1	-	-	1.1	190.0	S	
05:00 AM - 06:00 AM	0.3	355.0	N	0.0	-	0.0	-	1.2	65.0	ENE	0.0	-	0.0	-	0.0	-	-	0.9	188.0	S	
06:00 AM - 07:00 AM	1.5	43.0	NE	0.6	201.0	SSW	1.0	12.0	NNE	0.1	-	-	0.0	-	-	0.0	-	-	0.4	82.0	E
07:00 AM - 08:00 AM	0.5	17.0	NNE	0.0	-	0.5	52.0	NE	0.0	-	-	0.2	-	-	0.5	204.0	SSW	0.3	261.0	W	
08:00 AM - 09:00 AM	1.3	57.0	ENE	0.9	241.0	WSW	1.3	206.0	SSW	0.9	223.0	SW	1.0	290.0	WNW	0.9	235.0	SW	0.5	246.0	WSW
09:00 AM - 10:00 AM	0.4	31.0	NNE	0.0	-	0.9	147.0	SSE	0.0	-	-	1.5	217.0	SW	0.0	-	-	2.4	222.0	SW	
10:00 AM - 11:00 AM	0.0	-	-	1.1	284.0	WNW	1.9	97.0	E	0.8	300.0	WNW	1.6	215.0	SW	0.1	-	-	1.5	228.0	SW
11:00 AM - 12:00 PM	1.7	238.0	WSW	1.3	219.0	SW	1.1	290.0	WNW	1.1	228.0	SW	0.6	275.0	W	1.7	200.0	SSW	1.0	242.0	WSW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jittranan
Assistant General Manager

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Approved by

Sarayuth Jittranan
Assistant General Manager

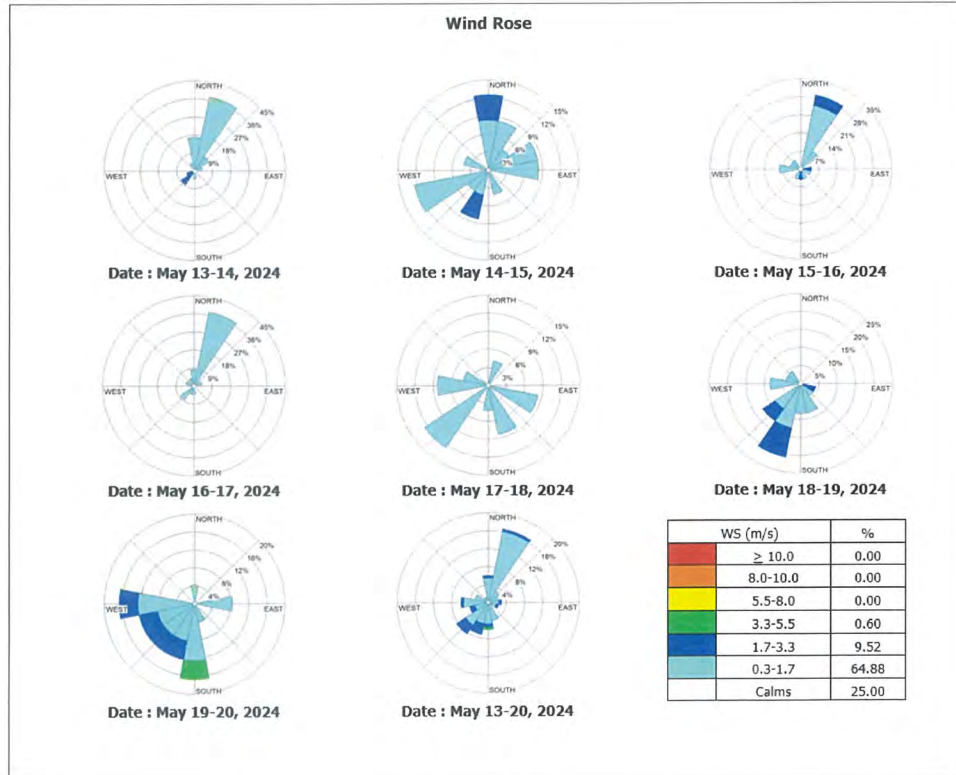


Analysis / Test Report

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

Lot ID: 2444759
Date Received : May 31, 2024
Date Reported : Jun 04, 2024
Report Number : 2971512-1

Page 2 of 2



Analysis / Test Report

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

Lot ID: 2444821
Date Received : May 31, 2024
Date Reported : Jun 04, 2024
Report Number : 2971717-1

Page 1 of 2

Sample Number : 2444821-1 to 7
Parameter : Wind Speed / Wind Direction
Location : โรงเรือนนำหนอนฟาร์ม ทิศทางลมตะวันตกเฉียงใต้ (GPS 47P 0729825, 1403308)
Sampling Date : May 13 - May 20, 2024
Sampling by : Anuwet Tema

Time	May 13 - May 14, 2024			May 14 - May 15, 2024			May 15 - May 16, 2024			May 16 - May 17, 2024			May 17 - May 18, 2024			May 18 - May 19, 2024			May 19 - May 20, 2024		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
11:00 AM - 12:00 PM	0.7	183.0	S	0.9	132.0	SE	1.1	134.0	SE	1.2	132.0	SE	0.6	112.0	ESE	1.1	117.0	ESE	1.6	127.0	SE
12:00 PM - 01:00 PM	0.7	121.0	ESE	0.6	132.0	SE	2.0	52.0	NE	0.2	-	-	2.0	151.0	SSE	1.0	74.0	ENE	1.1	120.0	ESE
01:00 PM - 02:00 PM	0.8	169.0	S	0.6	137.0	SE	0.8	224.0	SW	0.4	0.0	N	1.3	162.0	SSE	0.5	142.0	SE	1.2	122.0	ESE
02:00 PM - 03:00 PM	0.9	161.0	SSE	0.8	74.0	ENE	0.2	-	-	0.1	-	-	1.3	181.0	S	1.6	278.0	W	0.9	135.0	SE
03:00 PM - 04:00 PM	0.8	69.0	ENE	0.6	111.0	ESE	0.7	125.0	SE	0.0	-	-	0.4	155.0	SSE	0.5	269.0	W	3.0	89.0	E
04:00 PM - 05:00 PM	1.8	77.0	ENE	0.4	78.0	ENE	1.1	203.0	SSW	0.0	-	-	0.5	133.0	SE	0.1	-	-	1.2	75.0	ENE
05:00 PM - 06:00 PM	0.9	177.0	S	0.4	105.0	ESE	1.1	189.0	S	0.0	-	-	0.2	-	-	0.8	197.0	SSW	0.8	71.0	ENE
06:00 PM - 07:00 PM	2.8	163.0	SSE	0.5	112.0	ESE	2.7	179.0	S	0.0	-	-	0.0	-	-	0.8	152.0	SSE	1.9	11.0	N
07:00 PM - 08:00 PM	1.6	47.0	NE	1.2	51.0	NE	1.8	199.0	SSW	0.0	-	-	0.0	-	-	2.5	188.0	S	1.3	201.0	SSW
08:00 PM - 09:00 PM	1.4	167.0	SSE	0.5	43.0	NE	0.9	183.0	S	0.2	-	-	0.9	134.0	SE	2.1	187.0	S	0.5	261.0	W
09:00 PM - 10:00 PM	1.6	3.0	N	1.0	26.0	NNE	1.0	330.0	NNW	0.4	125.0	SE	0.8	181.0	S	1.6	160.0	SSE	0.2	-	-
10:00 PM - 11:00 PM	2.9	134.0	SE	1.2	188.0	S	0.7	321.0	NW	0.7	171.0	S	1.1	179.0	S	2.0	138.0	SE	1.0	108.0	ESE
11:00 PM - 12:00 AM	1.0	148.0	SSE	1.1	181.0	S	0.4	335.0	NNW	2.5	171.0	S	2.1	188.0	S	2.4	182.0	S	0.0	-	-
12:00 AM - 01:00 AM	0.7	29.0	NNE	0.8	196.0	SSW	1.2	164.0	SSE	0.5	148.0	SSE	1.7	150.0	SSE	1.7	181.0	S	0.3	211.0	SSW
01:00 AM - 02:00 AM	0.5	15.0	NNE	0.7	187.0	S	1.1	180.0	S	0.0	-	-	1.9	189.0	S	0.5	79.0	E	0.0	-	-
02:00 AM - 03:00 AM	0.7	141.0	SE	2.2	191.0	S	0.3	331.0	NNW	0.7	120.0	ESE	0.9	149.0	SSE	0.0	-	-	0.2	-	-
03:00 AM - 04:00 AM	0.6	158.0	SSE	2.0	185.0	S	2.2	154.0	SSE	0.0	-	-	0.6	186.0	S	1.0	122.0	ESE	0.0	-	-
04:00 AM - 05:00 AM	0.8	164.0	SSE	0.4	122.0	ESE	0.4	120.0	ESE	0.9	193.0	SSW	0.0	-	-	0.9	143.0	SE	0.0	-	-
05:00 AM - 06:00 AM	1.0	136.0	SE	0.0	-	-	0.2	-	-	0.2	-	-	0.0	-	-	0.7	63.0	ENE	0.0	-	-
06:00 AM - 07:00 AM	0.8	156.0	SSE	0.3	95.0	E	0.4	85.0	E	0.3	185.0	S	0.5	166.0	SSE	0.4	90.0	E	0.2	-	-
07:00 AM - 08:00 AM	0.9	105.0	ESE	0.2	-	-	0.1	-	-	1.5	184.0	S	0.6	134.0	SE	2.3	115.0	ESE	0.6	153.0	SSE
08:00 AM - 09:00 AM	0.8	120.0	ESE	0.3	98.0	E	0.9	179.0	S	0.0	-	-	1.4	157.0	SSE	1.2	151.0	SSE	0.7	142.0	SE
09:00 AM - 10:00 AM	0.4	131.0	SE	0.6	152.0	SSE	1.0	119.0	ESE	1.8	173.0	S	0.6	148.0	SSE	2.1	151.0	SSE	0.9	135.0	SE
10:00 AM - 11:00 AM	0.5	148.0	SSE	1.3	136.0	SE	0.4	128.0	SE	2.8	128.0	SE	1.6	119.0	ESE	1.2	230.0	SW	1.1	158.0	SSE

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Sarayuth Jitranont
Assistant General Manager

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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 : PMM-23-11

Project Name : Environmental Monitoring

Project Location : TPE Site 1

Lot ID: 2444821

Date Received : May 31, 2024

Date Reported : Jun 04, 2024

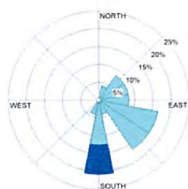
Report Number : 2971717-1

Page 2 of 2

Wind Rose



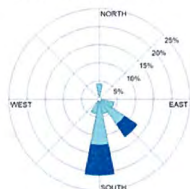
Date : May 13-14, 2024



Date : May 14-15, 2024



Date : May 15-16, 2024



Date : May 16-17, 2024



Date : May 17-18, 2024



Date : May 18-19, 2024



Date : May 19-20, 2024



Date : May 13-20, 2024

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.00
1.7-3.3	14.88
0.3-1.7	66.07
Calms	19.05

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Sarayuth Jittrantong
Assistant General Manager

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ภาคผนวก ค-2

คุณภาพน้ำทิ้ง



Analysis / Test Report

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

P/O :
Project Name : Environmental Monitoring
Project Location : TPE Site 1



TESTING
No.0042

Lot ID: 244149
Date Received : Jan 12, 2024
Date Reported : Jan 19, 2024
Report Number : 2883713-1

Page 1 of 2

Sample Number	244149-1						
Sampled Date	Jan 12, 2024 9:45 AM						
Sample Description	Wastewater						
Location	PP1 : หลังอาคาร API Separator						
Date Analysis Commenced	Jan 12, 2024						
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	6	≤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	5	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.0	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	166	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor

ทะเบียนเลขที่ 2-323-จ-9445

Approved by

D. Chumon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ 2-323-ก-9442

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.
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S:\Reports\AIL_GL.rpt (1:25PM)



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 : TPE Site 1



TESTING
No.0042

Lot ID: 244149
Date Received : Jan 12, 2024
Date Reported : Jan 19, 2024
Report Number : 2883713-1

Page 2 of 2

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ 2-323-จ-9476 , Thanasoun Namakunna ทะเบียนเลขที่ 2-204-จ-8592

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. Banongkit

Narumon Banchongkit
Supervisor

ทะเบียนเลขที่ 2-323-จ-9445

Approved by

D. Chumon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ 2-323-ก-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 : TPE Site 1

Lot ID: 244149

Date Received : Jan 12, 2024

Date Reported : Jan 19, 2024

Report Number : 2883713-2

Page 1 of 1

Sample Number	244149-1						
Sampled Date	Jan 12, 2024 9:45 AM						
Sample Description	Wastewater						
Location	PP1 : ปล่องควัน API Separator						
Date Analysis Commenced	Jan 12, 2024						
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	42	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	-	-	0.005	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
Total Organic Carbon	mg/L	0.01	0.1	3.48	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

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

Sampling By : Paramet Sattayakun , Thanasoun Namakunna

Remark :

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

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Approved by

Siriluk P.

Siriluk Puengpang
Section Head

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Analysis / Test Report

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

P/O :

Project Name : Environmental Monitoring

Project Location : TPE Site 1



TESTING

No.0042

Lot ID: 2411566

Date Received : Feb 02, 2024

Date Reported : Feb 09, 2024

Report Number : 2897852-1

Page 1 of 2

Sample Number	2411566-1						
Sampled Date	Feb 02, 2024 10:11 AM						
Sample Description	Wastewater						
Location	PP1 : ปล่องควัน API Separator						
Date Analysis Commenced	Feb 02, 2024						
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	13	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	12	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	32.8	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	676	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

N. Banongkit

Narumon Banchongkit

Supervisor

เบอร์โทรเลขที่ ๖-323-๙-9445

Approved by

D. Changchon

Dej Changchon

Senior Manager

เบอร์โทรเลขที่ ๖-323-๙-9442

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

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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 : TPE Site 1

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 ทะเบียนเลขที่ ๖-323-๖-9457 , Kardbundit Kitisupavanit ทะเบียนเลขที่ ๖-204-๖-0001

Remark :

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



TESTING

No.0042

Lot ID: 2411566

Date Received : Feb 02, 2024

Date Reported : Feb 09, 2024

Report Number : 2897852-1

Page 2 of 2



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 : TPE Site 1

Lot ID: 2411566

Date Received : Feb 02, 2024

Date Reported : Feb 10, 2024

Report Number : 2897852-2

Page 1 of 1

Sample Number	2411566-1						
Sampled Date	Feb 02, 2024 10:11 AM						
Sample Description	Wastewater						
Location	PP1 : พลังงาน API Separator						
Date Analysis Commenced	Feb 02, 2024						
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	189	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Flow rate	m3/s	~	~	0.007	No Standard	Flow meter	Rayong
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
Total Organic Carbon	mg/L	0.01	0.1	10.8	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

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

Sampling By : Wanlop Hunchainaow , Kardbundit Kitisupavanit

Remark :

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

Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor

ทะเบียนเลขที่ ๖-323-๖-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ ๖-323-๖-9442

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Approved by

Suwimon C.

Suwimon Chairuangwut
Scientist (3)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : TPE Site 1



TESTING

No.0042

Lot ID: 2417413

Date Received : Mar 04, 2024

Date Reported : Mar 12, 2024

Report Number : 2910818-1

Page 1 of 2

Sample Number	2417413-1
Sampled Date	Mar 04, 2024 10:00 AM
Sample Description	Wastewater
Location	PP1 : หลักรับน้ำ API Separator
Date Analysis Commenced	Mar 04, 2024
Condition of Sample	Contained in one amber glass bottle, four glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	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	15	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	13	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.8	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	388	≤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	6	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

N. Banphit

Narumon Banchongkit
Supervisor

เบอร์โทร 323-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

เบอร์โทร 323-9442

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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Thailand 21150

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : TPE Site 1



TESTING

No.0042

Lot ID: 2417413

Date Received : Mar 04, 2024

Date Reported : Mar 12, 2024

Report Number : 2910818-1

Page 2 of 2

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Paramet Sattayakun เบอร์โทร 323-9476 , Panupong Manit เบอร์โทร 204-9-0109

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.
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Technical Management

N. Banphit

Narumon Banchongkit
Supervisor

เบอร์โทร 323-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

เบอร์โทร 323-9442

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Analysis / Test Report

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

Lot ID: 2417413
Date Received : Mar 04, 2024
Date Reported : Mar 12, 2024
Report Number : 2910818-2

Page 1 of 1

Sample Number	2417413-1						
Sampled Date	Mar 04, 2024 10:00 AM						
Sample Description	Wastewater						
Location	PP1 : พลังงาน API Separator						
Date Analysis Commenced	Mar 04, 2024						
Condition of Sample	Contained in one amber glass bottle, four glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	91	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Flow rate	m3/s	-	-	0.007	No Standard	Flow meter	Rayong
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 : Paramet Sattayakun , Panupong Manit

Remark :

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Approved by

Siriluk P.

Siriluk Bunnak
Section Head

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Analysis / Test Report

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



TESTING

No.0042

Lot ID: 2430832
Date Received : Apr 05, 2024
Date Reported : Apr 27, 2024
Report Number : 2976429-1

Page 1 of 2

Sample Number	2430832-1						
Sampled Date	Apr 05, 2024 10:10 AM						
Sample Description	Wastewater						
Location	PP1 : พลังงาน API Separator						
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
COD	mg/L	1.5	25	60	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	10	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	8	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.6	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	476	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	11	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

Note : This Analysis test report is reissued to supersede report No.2940571-1, Date Reported : Apr 13, 2024 due to revise analytical information.

Technical Management

N. Banongkit

Narumon Banongkit
Supervisor

ทะเบียนเลขที่ 7-323-ก-9445

Approved by

Dej Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ 7-323-ก-9442

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : TPE Site 1



TESTING

No.0042

Lot ID: 2430832

Date Received : Apr 05, 2024

Date Reported : Apr 27, 2024

Report Number : 2976429-1

Page 2 of 2

Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ๖-323-๙-9476 , Kardbundit Kitipavanit ทะเบียนเลขที่ ๖-204-๙-0001

Remark :

- LOD : Limit of Detection

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

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

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



Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : TPE Site 1

Lot ID: 2430832

Date Received : Apr 05, 2024

Date Reported : Apr 27, 2024

Report Number : 2976429-2

Page 1 of 1

Sample Number	2430832-1						
Sampled Date	Apr 05, 2024 10:10 AM						
Sample Description	Wastewater						
Location	PP1 : หลัังผ่าน API Separator						
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	126	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Flow rate	m3/s	-	-	0.007	No Standard	Flow meter	Rayong
n-Hexane	mg/L	-	0.001	0.002	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).

Note : This Analysis test report is reissued to supersede report No.2940571-2, Date Reported : Apr 13, 2024 due to revise analytical information.

Sampling By : Paramet Sattayakun , Kardbundit Kitipavanit

Remark :

- LOD : Limit of Detection

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

Technical Management

N. Banphit

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ ๖-323-๙-9445

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ๖-323-๙-9442

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Approved by

N. Banphit

Narumon Banchongkit

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

Sample Number 2442717-1
Sampled Date Apr 19, 2024 2:10 PM
Sample Description Wastewater
Location PP1 : ฟองน้ำ API Separator
Date Analysis Commenced Apr 20, 2024
Condition of Sample Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong

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

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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TESTING
No.0042

Lot ID: 2442717

Date Received : Apr 19, 2024

Date Reported : Apr 25, 2024

Report Number : 2967742-1

Page 1 of 1



Analysis / Test Report

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

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : TPE Site 1

Sample Number 2444768-1
Sampled Date May 16, 2024 1:54 PM
Sample Description Wastewater
Location PP1 : ฟองน้ำ API Separator
Date Analysis Commenced May 16, 2024
Condition of Sample Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	30	≤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	25	≤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	24	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.5	≤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	852	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Page 1 of 2

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Approved by

N. Banongkit

Narumon Banongkit
Supervisor

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Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)

ทะเบียนเลขที่ 7-323-ก-9449

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ 7-323-ก-9442

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : TPE Site 1



TESTING

No.0042

Lot ID: 2444768

Date Received : May 16, 2024

Date Reported : May 25, 2024

Report Number : 2971549-1

Page 2 of 2

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

Sampling By : Surawit Narapong ทะเบียนเลขที่ ร-323-จ-0011 , Thanasoun Namakunna ทะเบียนเลขที่ ร-204-จ-0101

Remark :

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



Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : TPE Site 1

Lot ID: 2444768

Date Received : May 16, 2024

Date Reported : May 25, 2024

Report Number : 2971549-2

Page 1 of 1

Sample Number	2444768-1
Sampled Date	May 16, 2024 1:54 PM
Sample Description	Wastewater
Location	PP1 : หลักรับ API Separator
Date Analysis Commenced	May 16, 2024
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	206	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	-	-	0.008	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 By : Surawit Narapong , Thanasoun Namakunna

Remark :

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

Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)

ทะเบียนเลขที่ ร-323-จ-9449

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ ร-323-จ-9442

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : TPE Site 1



TESTING
No.0042

Lot ID: 2460089

Date Received : Jun 07, 2024

Date Reported : Jun 14, 2024

Report Number : 3004553-1

Page 1 of 2

Sample Number	2460089-1
Sampled Date	Jun 07, 2024 10:10 AM
Sample Description	Wastewater
Location	PP1 : ทดสอบ API Separator
Date Analysis Commenced	Jun 07, 2024
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	36	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	20	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	17	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	5	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	34.1	≤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	612	≤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	6	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)

ทะเบียนเลขที่ ๖-323-๙-9449

Approved by

D. Chumon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ ๖-323-๙-9442

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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Thailand 21150

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : TPE Site 1



TESTING
No.0042

Lot ID: 2460089

Date Received : Jun 07, 2024

Date Reported : Jun 14, 2024

Report Number : 3004553-1

Page 2 of 2

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Paramet Sattayakun ทะเบียนเลขที่ ๖-323-๙-9476 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ๖-204-๙-0002

Remark :

- LOD : Limit of Detection
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Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)

ทะเบียนเลขที่ ๖-323-๙-9449

Approved by

D. Chumon

Dej Changchon
Senior Manager

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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Thailand 21150

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : TPE Site 1

Lot ID: 2460089

Date Received : Jun 07, 2024

Date Reported : Jun 15, 2024

Report Number : 3004553-2

Page 1 of 1

Sample Number	2460089-1						
Sampled Date	Jun 07, 2024 10:10 AM						
Sample Description	Wastewater						
Location	PP1 : ปล่องควัน API Separator						
Date Analysis Commenced	Jun 07, 2024						
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	147	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Flow rate	m3/s	-	-	0.007	No Standard	Flow meter	Rayong
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 : Paramet Sattayakun , Pattarapol Sawangjaitam

Remark :

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Suwimon Chairuangwut
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Analysis / Test Report

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Thailand 21150

P/O : PMM-SCGCH-2019-343

Project Name : Environmental Monitoring

Project Location : PP1_S1



TESTING

No.0042

Lot ID: 244073

Date Received : Jan 12, 2024

Date Reported : Jan 24, 2024

Report Number : 2883671-1 C3

Page 1 of 2

Sample Number	244073-1						
Sampling Date	Jan 12, 2024 11:00 AM						
Sample Description	Wastewater						
Location	โรงงานน้ำตาล						
Date Analysis Commenced	Jan 12, 2024						
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	2.3	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	33	≤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	14	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	13	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.4	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	708	≤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	6	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

N. Banphit

Narumon Banchongkit
Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

Approved by

D. Changchon

Dej Changchon
Manager

ทะเบียนเลขที่ ว-225-จ-5283

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Analysis / Test Report

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



TESTING
No.0042

Lot ID: 244073
Date Received : Jan 12, 2024
Date Reported : Jan 24, 2024
Report Number : 2883671-1 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 : Paramet Sattayakun , 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.



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: 244073
Date Received : Jan 12, 2024
Date Reported : Apr 11, 2024
Report Number : 2883671-2 C3

Page 1 of 1

Sample Number	244073-1						
Sampled Date	Jan 12, 2024 11:00 AM						
Sample Description	Wastewater						
Location	บางปะกง						
Date Analysis Commenced	Jan 12, 2024						
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	140	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	-	-	0.013	No Standard	Flow meter	Rayong
n-Hexane	mg/L	-	0.001	0.05	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).
Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :

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

Technical Management

N. Banphit

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ 7-323-ก-9445

Approved by

D. Changchon

Dej Changchon
Manager
ทะเบียนเลขที่ 7-225-ก-5283

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Approved by

Siriluk P.

Siriluk Bunnak
Section Head

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Analysis / Test Report

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Thailand 21150
P/O : PMM-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location : PP1_S1



TESTING
No.0042
Lot ID: 247074
Date Received : Feb 02, 2024
Date Reported : Feb 13, 2024
Report Number : 2889766-1 C3

Page 1 of 2

Sample Number	247074-1						
Sampling Date	Feb 02, 2024 10:58 AM						
Sample Description	Wastewater						
Location	ทางระบายน้ำรวม						
Date Analysis Commenced	Feb 02, 2024						
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	2.1	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	32	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	14	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	13	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	34.1	≤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	776	≤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	26	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

N. Banchookit

Narumon Banchookit
Supervisor
ทะเบียนเลขที่ ร-323-จ-9445

Approved by

D. Changchon

Dej Changchon
Manager
ทะเบียนเลขที่ ร-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



TESTING
No.0042
Lot ID: 247074
Date Received : Feb 02, 2024
Date Reported : Feb 13, 2024
Report Number : 2889766-1 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 , Kardsundit Kitisupavanit

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. Banchookit

Narumon Banchookit
Supervisor
ทะเบียนเลขที่ ร-323-จ-9445

Approved by

D. Changchon

Dej Changchon
Manager
ทะเบียนเลขที่ ร-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: 247074

Date Received : Feb 02, 2024

Date Reported : Apr 11, 2024

Report Number : 2889766-2 C3

Page 1 of 1

Sample Number	247074-1						
Sampled Date	Feb 02, 2024 10:58 AM						
Sample Description	Wastewater						
Location	โรงงานน้ำรวม						
Date Analysis Commenced	Feb 02, 2024						
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	216	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	-	-	0.020	No Standard	Flow meter	Rayong
n-Hexane	mg/L	-	0.001	1.499	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).

Sampled By : Wanlop Hunchainao , Kardbundit Kitisupavanit

Remark :

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

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Approved by

N. Banongkit

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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: 2417334

Date Received : Mar 04, 2024

Date Reported : Mar 19, 2024

Report Number : 2910655-1 C3

Page 1 of 2

Sample Number	2417334-1						
Sampling Date	Mar 04, 2024 11:25 AM						
Sample Description	Wastewater						
Location	โรงงานน้ำรวม						
Date Analysis Commenced	Mar 04, 2024						
Condition of Sample	Contained in one amber glass bottle, four glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Physical Property	Yellow, some odour, solid and turbid						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	26	≤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	14	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	12	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.8	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	400	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Technical Management

N. Banongkit

Narumon Banhongkit
Supervisor
ทะเบียนเลขที่ ๖-323-๖-9445

Approved by

D. Changchon

Dej Changchon
Manager
ทะเบียนเลขที่ ๖-225-๖-5283

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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: 2417334

Date Received : Mar 04, 2024

Date Reported : Mar 19, 2024

Report Number : 2910655-1 C3

TESTING
No.0042



Page 2 of 2

Sample Number	2417334-1						
Sampling Date	Mar 04, 2024 11:25 AM						
Sample Description	Wastewater						
Location	โรงงานน้ำตาล						
Date Analysis Commenced	Mar 04, 2024						
Condition of Sample	Contained in one amber glass bottle, four glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Physical Property	Yellow, some odour, solid and turbid						

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

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

Sampled By : Paramet Sattayakun , Panupong Manit

Remark :

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- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor
เบอร์โทรศัพท์ ๖-323-๖-9445

Approved by

D. Changchon

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-SCGCH-2019-343

Project Name : Environmental Monitoring

Project Location: PP1_S1

Lot ID: 2417334

Date Received : Mar 04, 2024

Date Reported : Apr 11, 2024

Report Number : 2910655-2 C3

Page 1 of 1

Sample Number	2417334-1						
Sampled Date	Mar 04, 2024 11:25 AM						
Sample Description	Wastewater						
Location	โรงงานน้ำตาล						
Date Analysis Commenced	Mar 04, 2024						
Condition of Sample	Contained in one amber glass bottle, four glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Physical Property	Yellow, some odour, solid and turbid						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	118	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	-	-	0.019	No Standard	Flow meter	Rayong
n-Hexane	mg/L	-	0.001	0.54	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).

Sampled By : Paramet Sattayakun , Panupong Manit

Remark :

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Approved by

Siriluk P.

Siriluk Bunnak
Section Head

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Analysis / Test Report

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Thailand 21150
P/O : PMM-SCGCH-2019-343
Project Name : Environmental Monitoring
Project Location : PP1_S1

Lot ID: 2429701

TESTING
No.0042
Date Received : Apr 05, 2024
Date Reported : Apr 13, 2024
Report Number : 2937956-1 C3

Page 1 of 2							
Sample Number	2429701-1						
Sampling Date	Apr 05, 2024 11:01 AM						
Sample Description	Wastewater						
Location	โรงงานน้ำร้อน						
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	4.7	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	37	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	10	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	9	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	34.2	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	636	≤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	20	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ 7-323-จ-9445

Approved by

D. Chumou

Dej Changchou
Manager
ทะเบียนเลขที่ 7-225-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: 2429701

TESTING
No.0042
Date Received : Apr 05, 2024
Date Reported : Apr 13, 2024
Report Number : 2937956-1 C3

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 , Kardbundi Kitsupavanit

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. Banongkit

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ 7-323-จ-9445

Approved by

D. Chumou

Dej Changchou
Manager
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Analysis / Test Report

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Thailand 21150

P/O : PMM-SCGCH-2019-343

Project Name : Environmental Monitoring

Project Location: PP1_S1

Lot ID: 2429701

Date Received : Apr 05, 2024

Date Reported : Apr 26, 2024

Report Number : 2937956-2 C3

Page 1 of 1

Sample Number	2429701-1						
Sampled Date	Apr 05, 2024 11:01 AM						
Sample Description	Wastewater						
Location	โรงงานน้ำครว						
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	180	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Flow rate	m3/s	-	-	0.021	No Standard	Flow meter	Rayong
n-Hexane	mg/L	-	0.001	0.49	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).

Sampled By : Paramet Sattayakun , Kardbundit Kitisupavanit

Remark :

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

Approved by

N. Banchongkit

Narumon Banchongkit
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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: 2444080

Date Received : May 16, 2024

Date Reported : May 27, 2024

Report Number : 2969777-1 C3

Page 1 of 2

Sample Number	2444080-1						
Sampling Date	May 16, 2024 2:40 PM						
Sample Description	Wastewater						
Location	โรงงานน้ำครว						
Date Analysis Commenced	May 16, 2024						
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	3.8	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	36	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	11	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	11	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.3	≤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	644	≤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	29	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)

เบอร์โทรศัพท์ ๖-323-๙-9449

Approved by

D. Changchon

Dej Changchon
Manager

เบอร์โทรศัพท์ ๖-225-๙-5283

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-SCGCH-2019-343

Project Name : Environmental Monitoring

Project Location : PP1_S1

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

Sampling By : Surawit Narapong , 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.



TESTING
No.0042

Lot ID: 2444080

Date Received : May 16, 2024

Date Reported : May 27, 2024

Report Number : 2969777-1 C3

Page 2 of 2



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: 2444080

Date Received : May 16, 2024

Date Reported : May 27, 2024

Report Number : 2969777-2 C3

Page 1 of 1

Sample Number	2444080-1						
Sampling Date	May 16, 2024 2:40 PM						
Sample Description	Wastewater						
Location	โรงงานน้ำร้อน						
Date Analysis Commenced	May 16, 2024						
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	179	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Flow rate	m3/s	-	-	0.021	No Standard	Flow meter	Rayong
n-Hexane	mg/L	-	0.001	0.03	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 : Surawit Narapong , Thanasoun Namakunna

Remark :

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

Technical Management

Chontichak

Chonticha Subongkoch

Scientist (3)

โทรศัพท์ 0-323-0-9449

Approved by

Dej Changchon

Manager

โทรศัพท์ 0-225-0-5283

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Chontichak

Chonticha Subongkoch

Scientist (3)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-SCGCH-2019-343

Project Name : Environmental Monitoring

Project Location: PP1_S1



TESTING
No.0042
Lot ID: 2460079

Date Received : Jun 07, 2024

Date Reported : Jun 15, 2024

Report Number : 3004543-1 C3

Page 1 of 2

Sample Number	2460079-1
Sampled Date	Jun 07, 2024 11:30 AM
Sample Description	Wastewater
Location	โรงงานน้ำกรวด
Date Analysis Commenced	Jun 07, 2024
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	31	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	13	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	11	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	38.6	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	428	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)
ทะเบียนเลขที่ ร-323-จ-9449

Approved by

D. Chumon

Dej Changchon
Senior Manager
ทะเบียนเลขที่ ร-323-จ-9442

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.
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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-SCGCH-2019-343

Project Name : Environmental Monitoring

Project Location: PP1_S1



TESTING
No.0042
Lot ID: 2460079

Date Received : Jun 07, 2024

Date Reported : Jun 15, 2024

Report Number : 3004543-1 C3

Page 2 of 2

Sample Number	2460079-1
Sampled Date	Jun 07, 2024 11:30 AM
Sample Description	Wastewater
Location	โรงงานน้ำกรวด
Date Analysis Commenced	Jun 07, 2024
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	11	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

Sampled By : Paramet Sattayakun ทะเบียนเลขที่ ร-323-จ-9476 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ร-204-จ-0002

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

Chontichak

Chonticha Subongkoch
Scientist (3)
ทะเบียนเลขที่ ร-323-จ-9449

Approved by

D. Chumon

Dej Changchon
Senior Manager
ทะเบียนเลขที่ ร-323-จ-9442

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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

Thailand 21150

P/O : PMM-SCGCH-2019-343

Project Name : Environmental Monitoring

Project Location: PP1_S1

Lot ID: 2460079

Date Received : Jun 07, 2024

Date Reported : Jun 15, 2024

Report Number : 3004543-2 C3

Page 1 of 1

Sample Number	2460079-1
Sampled Date	Jun 07, 2024 11:30 AM
Sample Description	Wastewater
Location	โรงงานน้ำตาล
Date Analysis Commenced	Jun 07, 2024
Condition of Sample	Contained in four glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Chloride as Cl	mg/L	0.5	1	118	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Flow rate	m ³ /s	-	-	0.016	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).

Sampled By : Paramet Sattayakun , Pattarapol Sawangjaitam

Remark :

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

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

Approved by

Suwimon C.
Suwimon Chairuangwut
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ภาคผนวก ค-3

ระดับเสียงทั่วไป



Analysis / Test Report



TESTING
No.0042

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : TPE Site 1

Lot ID: 2444056

Date Received : May 29, 2024

Date Reported : Jun 01, 2024

Report Number: 3010685-1

Page 1 of 1

Sample Number 2444056-1
Parameter Noise (Leq 24 hrs.)
Location อาคารสำนักงานของกลุ่มโรงงาน TPE Site#1 (GPS 47P 0731760, 1404872)
Measurement Date May 13 - May 14, 2024
Measurement by Anuwet Tema
Sound Level meter Serial No. 233183

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	61.0	89.3	58.8
11:00 AM - 12:00 PM	60.7	82.1	58.2
12:00 PM - 01:00 PM	60.7	83.4	58.4
01:00 PM - 02:00 PM	60.5	76.3	58.4
02:00 PM - 03:00 PM	60.6	81.1	58.6
03:00 PM - 04:00 PM	61.7	77.3	59.7
04:00 PM - 05:00 PM	62.8	74.9	61.3
05:00 PM - 06:00 PM	62.0	79.9	60.1
06:00 PM - 07:00 PM	61.9	81.8	60.3
07:00 PM - 08:00 PM	61.5	70.9	59.5
08:00 PM - 09:00 PM	60.7	70.5	58.5
09:00 PM - 10:00 PM	61.2	77.2	59.2
10:00 PM - 11:00 PM	62.3	76.5	60.9
11:00 PM - 12:00 AM	61.4	74.1	59.7
12:00 AM - 01:00 AM	61.0	73.8	58.9
01:00 AM - 02:00 AM	61.3	83.3	59.0
02:00 AM - 03:00 AM	60.7	71.5	58.8
03:00 AM - 04:00 AM	60.8	68.8	59.2
04:00 AM - 05:00 AM	61.5	77.5	59.7
05:00 AM - 06:00 AM	63.0	85.0	60.9
06:00 AM - 07:00 AM	62.1	87.1	60.2
07:00 AM - 08:00 AM	62.0	78.4	59.8
08:00 AM - 09:00 AM	61.6	81.1	59.3
09:00 AM - 10:00 AM	61.3	81.1	59.0

Leq Average 24 hrs. (dB(A)) 61.5
Lmax (dB(A)) 89.3
L90 (dB(A)) 59.2
Ldn (dB(A)) 68.0
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : TPE Site 1

Lot ID: 2444056

Date Received : May 29, 2024

Date Reported : Jun 01, 2024

Report Number: 3010686-1

Page 1 of 1

Sample Number 2444056-2
Parameter Noise (Leq 24 hrs.)
Location อาคารสำนักงานของกลุ่มโรงงาน TPE Site#1 (GPS 47P 0731760, 1404872)
Measurement Date May 14 - May 15, 2024
Measurement by Anuwet Tema
Sound Level meter Serial No. 233183

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	61.0	82.3	58.9
11:00 AM - 12:00 PM	60.6	75.7	58.4
12:00 PM - 01:00 PM	60.8	75.7	58.6
01:00 PM - 02:00 PM	61.6	75.9	60.0
02:00 PM - 03:00 PM	60.9	81.0	58.3
03:00 PM - 04:00 PM	60.6	82.8	58.4
04:00 PM - 05:00 PM	60.6	81.8	57.9
05:00 PM - 06:00 PM	61.0	80.9	58.1
06:00 PM - 07:00 PM	61.0	80.4	58.6
07:00 PM - 08:00 PM	60.8	85.9	57.9
08:00 PM - 09:00 PM	61.2	81.8	58.4
09:00 PM - 10:00 PM	60.9	84.1	58.4
10:00 PM - 11:00 PM	60.2	77.2	57.7
11:00 PM - 12:00 AM	61.2	70.8	59.3
12:00 AM - 01:00 AM	59.9	70.4	57.7
01:00 AM - 02:00 AM	60.2	70.1	57.9
02:00 AM - 03:00 AM	59.8	75.6	57.5
03:00 AM - 04:00 AM	60.1	73.6	58.2
04:00 AM - 05:00 AM	60.3	75.3	57.7
05:00 AM - 06:00 AM	61.0	77.8	58.4
06:00 AM - 07:00 AM	61.2	81.5	58.6
07:00 AM - 08:00 AM	61.3	77.3	59.0
08:00 AM - 09:00 AM	61.9	82.4	59.1
09:00 AM - 10:00 AM	62.1	81.3	59.7

Leq Average 24 hrs. (dB(A)) 60.9
Lmax (dB(A)) 85.9
L90 (dB(A)) 58.4
Ldn (dB(A)) 67.0
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : TPE Site 1

Lot ID: 2444056

Date Received : May 29, 2024

Date Reported : Jun 01, 2024

Report Number: 3010687-1

Page 1 of 1

Sample Number 2444056-3
Parameter Noise (Leq 24 hrs.)
Location อาคารสำนักงานของกลุ่มโรงงาน TPE Site#1 (GPS 47P 0731760, 1404872)
Measurement Date May 15 - May 16, 2024
Measurement by Anuwet Tema
Sound Level meter Serial No. 233183

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	60.9	79.3	58.3
11:00 AM - 12:00 PM	65.8	87.3	57.3
12:00 PM - 01:00 PM	59.7	77.5	57.5
01:00 PM - 02:00 PM	59.6	79.0	57.2
02:00 PM - 03:00 PM	60.2	78.6	57.9
03:00 PM - 04:00 PM	60.6	79.0	58.3
04:00 PM - 05:00 PM	61.4	80.3	59.6
05:00 PM - 06:00 PM	61.5	83.2	59.1
06:00 PM - 07:00 PM	61.0	80.5	58.8
07:00 PM - 08:00 PM	60.4	84.7	57.9
08:00 PM - 09:00 PM	62.1	83.0	59.6
09:00 PM - 10:00 PM	60.7	77.1	59.2
10:00 PM - 11:00 PM	61.6	78.1	60.0
11:00 PM - 12:00 AM	60.9	77.1	59.4
12:00 AM - 01:00 AM	61.2	88.2	59.3
01:00 AM - 02:00 AM	61.0	85.9	58.7
02:00 AM - 03:00 AM	60.5	76.5	59.1
03:00 AM - 04:00 AM	60.2	87.3	58.4
04:00 AM - 05:00 AM	60.2	73.7	58.9
05:00 AM - 06:00 AM	61.0	74.3	59.2
06:00 AM - 07:00 AM	61.4	86.7	59.5
07:00 AM - 08:00 AM	61.5	78.9	59.1
08:00 AM - 09:00 AM	60.8	77.9	58.6
09:00 AM - 10:00 AM	61.3	82.8	58.8

Leq Average 24 hrs. (dB(A))

61.3

Lmax (dB(A))

88.2

L90 (dB(A))

58.8

Ldn (dB(A))

67.4

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head



Analysis / Test Report



TESTING
No.0042

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : TPE Site 1

Lot ID: 2444056

Date Received : May 29, 2024

Date Reported : Jun 01, 2024

Report Number: 3010688-1

Page 1 of 1

Sample Number 2444056-4
Parameter Noise (Leq 24 hrs.)
Location อาคารสำนักงานของกลุ่มโรงงาน TPE Site#1 (GPS 47P 0731760, 1404872)
Measurement Date May 16 - May 17, 2024
Measurement by Anuwet Tema
Sound Level meter Serial No. 233183

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	60.1	74.9	58.3
11:00 AM - 12:00 PM	60.2	72.4	58.4
12:00 PM - 01:00 PM	60.5	81.2	58.5
01:00 PM - 02:00 PM	63.7	80.1	62.5
02:00 PM - 03:00 PM	63.2	79.2	62.0
03:00 PM - 04:00 PM	63.6	78.8	62.4
04:00 PM - 05:00 PM	62.6	79.1	60.5
05:00 PM - 06:00 PM	61.4	79.7	59.1
06:00 PM - 07:00 PM	60.5	73.6	58.3
07:00 PM - 08:00 PM	60.2	83.3	58.2
08:00 PM - 09:00 PM	59.4	70.9	57.7
09:00 PM - 10:00 PM	60.1	69.2	58.6
10:00 PM - 11:00 PM	60.8	76.2	58.9
11:00 PM - 12:00 AM	62.1	70.2	60.6
12:00 AM - 01:00 AM	65.1	82.8	59.6
01:00 AM - 02:00 AM	60.0	74.3	58.3
02:00 AM - 03:00 AM	59.5	74.1	57.6
03:00 AM - 04:00 AM	59.8	68.0	58.7
04:00 AM - 05:00 AM	60.0	73.3	58.1
05:00 AM - 06:00 AM	61.6	82.9	59.7
06:00 AM - 07:00 AM	62.3	86.3	59.6
07:00 AM - 08:00 AM	61.5	74.8	59.3
08:00 AM - 09:00 AM	61.0	82.2	58.6
09:00 AM - 10:00 AM	60.9	81.2	57.8

Leq Average 24 hrs. (dB(A))

61.5

Lmax (dB(A))

86.3

L90 (dB(A))

58.6

Ldn (dB(A))

68.0

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

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Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : TPE Site 1

Lot ID: 2444056

Date Received : May 29, 2024

Date Reported : Jun 01, 2024

Report Number: 3010689-1

Page 1 of 1

Sample Number 2444056-5
Parameter Noise (Leq 24 hrs.)
Location อาคารสำนักงานของกลุ่มโรงงาน TPE Site#1 (GPS 47P 0731760, 1404872)
Measurement Date May 17 - May 18, 2024
Measurement by Anuwet Tema
Sound Level meter Serial No. 233183

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	59.7	79.1	57.1
11:00 AM - 12:00 PM	59.6	92.6	57.1
12:00 PM - 01:00 PM	59.9	81.0	57.2
01:00 PM - 02:00 PM	59.7	88.1	57.2
02:00 PM - 03:00 PM	60.7	84.6	58.3
03:00 PM - 04:00 PM	60.7	83.0	58.5
04:00 PM - 05:00 PM	60.7	77.9	58.6
05:00 PM - 06:00 PM	60.7	80.5	58.0
06:00 PM - 07:00 PM	60.2	76.2	58.2
07:00 PM - 08:00 PM	61.0	77.0	57.7
08:00 PM - 09:00 PM	60.2	72.7	58.3
09:00 PM - 10:00 PM	60.0	76.7	58.1
10:00 PM - 11:00 PM	60.4	78.4	58.8
11:00 PM - 12:00 AM	60.0	78.6	58.2
12:00 AM - 01:00 AM	59.8	69.9	58.5
01:00 AM - 02:00 AM	60.1	79.6	58.3
02:00 AM - 03:00 AM	59.8	78.5	58.1
03:00 AM - 04:00 AM	59.6	70.4	57.9
04:00 AM - 05:00 AM	60.7	76.5	58.7
05:00 AM - 06:00 AM	60.9	75.9	59.4
06:00 AM - 07:00 AM	60.8	75.3	58.8
07:00 AM - 08:00 AM	61.7	74.8	58.9
08:00 AM - 09:00 AM	61.8	82.7	59.1
09:00 AM - 10:00 AM	60.7	76.2	59.1

Leq Average 24 hrs. (dB(A)) 60.4
Lmax (dB(A)) 92.6
L90 (dB(A)) 58.3
Ldn (dB(A)) 66.7
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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S:\Reports_Air Noise.rpt (1:20PM)

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Analysis / Test Report



TESTING
No.0042

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : TPE Site 1

Lot ID: 2444056

Date Received : May 29, 2024

Date Reported : Jun 01, 2024

Report Number: 3010690-1

Page 1 of 1

Sample Number 2444056-6
Parameter Noise (Leq 24 hrs.)
Location อาคารสำนักงานของกลุ่มโรงงาน TPE Site#1 (GPS 47P 0731760, 1404872)
Measurement Date May 18 - May 19, 2024
Measurement by Anuwet Tema
Sound Level meter Serial No. 233183

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	60.3	77.4	58.3
11:00 AM - 12:00 PM	59.8	73.8	57.9
12:00 PM - 01:00 PM	60.4	78.1	57.1
01:00 PM - 02:00 PM	61.6	71.2	60.1
02:00 PM - 03:00 PM	60.3	77.0	57.6
03:00 PM - 04:00 PM	59.9	71.3	58.1
04:00 PM - 05:00 PM	60.1	72.3	58.0
05:00 PM - 06:00 PM	60.0	73.0	58.3
06:00 PM - 07:00 PM	59.8	72.8	58.1
07:00 PM - 08:00 PM	59.9	71.9	58.2
08:00 PM - 09:00 PM	59.8	72.9	58.3
09:00 PM - 10:00 PM	59.8	73.0	58.4
10:00 PM - 11:00 PM	60.1	73.5	58.8
11:00 PM - 12:00 AM	60.8	69.0	58.7
12:00 AM - 01:00 AM	60.4	68.9	57.7
01:00 AM - 02:00 AM	58.7	71.5	56.8
02:00 AM - 03:00 AM	58.9	70.5	57.3
03:00 AM - 04:00 AM	58.6	69.8	56.6
04:00 AM - 05:00 AM	58.9	71.4	57.1
05:00 AM - 06:00 AM	59.8	76.2	57.7
06:00 AM - 07:00 AM	60.9	80.2	58.3
07:00 AM - 08:00 AM	60.5	79.9	57.8
08:00 AM - 09:00 AM	60.1	76.5	57.6
09:00 AM - 10:00 AM	60.5	81.9	57.5

Leq Average 24 hrs. (dB(A)) 60.1
Lmax (dB(A)) 81.9
L90 (dB(A)) 57.9
Ldn (dB(A)) 66.2
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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S:\Reports_Air Noise.rpt (1:20PM)



Analysis / Test Report

TESTING
No.0042

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : TPE Site 1

Lot ID: 2444056

Date Received : May 29, 2024

Date Reported : Jun 01, 2024

Report Number: 3010691-1

Page 1 of 1

Sample Number 2444056-7
Parameter Noise (Leq 24 hrs.)
Location อาคารสำนักงานของกลุ่มโรงงาน TPE Site#1 (GPS 47P 0731760, 1404872)
Measurement Date May 19 - May 20, 2024
Measurement by Anuwet Tema
Sound Level meter Serial No. 233183

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	59.7	86.2	56.9
11:00 AM - 12:00 PM	59.9	81.1	56.7
12:00 PM - 01:00 PM	59.5	83.0	57.0
01:00 PM - 02:00 PM	59.7	85.6	56.8
02:00 PM - 03:00 PM	60.7	82.4	57.1
03:00 PM - 04:00 PM	60.0	70.5	58.1
04:00 PM - 05:00 PM	59.9	78.5	57.5
05:00 PM - 06:00 PM	59.9	84.5	57.5
06:00 PM - 07:00 PM	59.2	77.7	56.6
07:00 PM - 08:00 PM	59.6	85.1	57.2
08:00 PM - 09:00 PM	59.2	80.1	56.6
09:00 PM - 10:00 PM	59.1	75.2	57.0
10:00 PM - 11:00 PM	59.2	76.1	56.7
11:00 PM - 12:00 AM	59.3	75.5	57.1
12:00 AM - 01:00 AM	59.3	84.4	56.7
01:00 AM - 02:00 AM	59.8	71.5	58.0
02:00 AM - 03:00 AM	59.6	69.0	57.9
03:00 AM - 04:00 AM	59.7	68.9	58.4
04:00 AM - 05:00 AM	60.3	76.6	57.8
05:00 AM - 06:00 AM	61.6	77.0	59.7
06:00 AM - 07:00 AM	61.2	75.7	59.3
07:00 AM - 08:00 AM	61.2	83.9	58.1
08:00 AM - 09:00 AM	60.9	82.9	58.3
09:00 AM - 10:00 AM	60.0	74.0	57.9

Leq Average 24 hrs. (dB(A))

60.0

Lmax (dB(A))

86.2

L90 (dB(A))

57.2

Ldn (dB(A))

66.5

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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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 : PMM-23-11
Project Name : Environmental Monitoring
Project Location : PP1

Lot ID: 2411070
Date Received : Feb 02, 2024
Date Reported : Feb 13, 2024
Report Number : 2897143-1

Page 1 of 4

Sample Number	2411070-1								
Sampled Date	Feb 01, 2024								
Sample Description	Air Quality								
Location	หน่วยผลิตโพลีเอทิลีน								
Date Analysis Commenced	Feb 03, 2024								
Condition of Sample	Drawn into one 10-L air sampling bag, 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	09:30 AM - 11:30 AM	ppm	-	1.0	<1.0	200	Based on ASTM, D 2712-18	ACGIH	Bangkok
n-Hexane	09:30 AM - 11:30 AM	ppm	-	0.03	<0.03	500	NIOSH (2003), 1500	MOL	Bangkok
Propylene	09:30 AM - 11:30 AM	ppm	-	1.0	<1.0	500	Based on ASTM, D 2712-91	ACGIH	Bangkok

Guideline :
ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2023).
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)

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

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location : PP1

Lot ID: 2444762
Date Received : May 10, 2024
Date Reported : May 23, 2024
Report Number : 2971520-1

Page 1 of 4

Sample Number	2444762-1								
Sampled Date	May 09, 2024								
Sample Description	Air Quality								
Location	หน่วยผลิตโพลีเอทิลีน								
Date Analysis Commenced	May 11, 2024								
Barometric Pressure	754 mmHg								
Atmospheric Temperature	33.0 °C								
Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Ethylene	09:30 AM - 11:30 AM	ppm	-	1.0	<1.0	200	Based on ASTM, D 2712-18	ACGIH	Bangkok
n-Hexane	09:30 AM - 11:30 AM	ppm	-	0.03	<0.03	500	NIOSH (2003), 1500	MOL	Bangkok
Propylene	09:30 AM - 11:30 AM	ppm	-	1.0	<1.0	500	Based on ASTM, D 2712-91	ACGIH	Bangkok

Guideline :
ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2023).
MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)
Sampled By : Norranon Tathongkham

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

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 2411070

Date Received : Feb 02, 2024

Date Reported : Feb 13, 2024

Report Number : 2897143-1

Page 2 of 4

Sample Number 2411070-2
Sampled Date Feb 01, 2024
Sample Description Air Quality
Location หน่วยเตรียมตัวเร่งปฏิกิริยา
Date Analysis Commenced Feb 05, 2024
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	09:30 AM - 11:30 AM	ppm	-	0.03	<0.03	500	NIOSH (2003), 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 : Prasarnmit 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 : PMM-23-11

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 2444762

Date Received : May 10, 2024

Date Reported : May 23, 2024

Report Number : 2971520-1

Page 2 of 4

Sample Number 2444762-2
Sampled Date May 09, 2024
Sample Description Air Quality
Location หน่วยเตรียมตัวเร่งปฏิกิริยา
Date Analysis Commenced May 11, 2024
Barometric Pressure 754 mmHg
Atmospheric Temperature 33.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
n-Hexane	09:45 AM - 11:45 AM	ppm	-	0.03	0.18	500	NIOSH (2003), 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 : Norranon Tathongkham

Remark :

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

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location : PP1

Lot ID: 2411070
Date Received : Feb 02, 2024
Date Reported : Feb 13, 2024
Report Number : 2897143-1

Page 3 of 4

Sample Number 2411070-3
Sampled Date Feb 01, 2024
Sample Description Air Quality
Location หน่วยบรรจุมลพิษ
Date Analysis Commenced Feb 05, 2024
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	09:30 AM - 11:30 AM	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 Chalerthamrong
Scientist (4)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.
10, Map Ta Phut Industrial Estate I-1 Road, Map Ta Phut, Muang District, Rayong
Thailand 21150
P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location : PP1

Lot ID: 2444762
Date Received : May 10, 2024
Date Reported : May 23, 2024
Report Number : 2971520-1

Page 3 of 4

Sample Number 2444762-3
Sampled Date May 09, 2024
Sample Description Air Quality
Location หน่วยบรรจุมลพิษ
Date Analysis Commenced May 11, 2024
Barometric Pressure 754 mmHg
Atmospheric Temperature 33.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Total Dust	10:00 AM - 12:00 PM	mg/m3	-	0.15	<0.15	15	Based on NIOSH (1994), 0500	OSHA	Rayong

Guideline :

OSHA : Occupational Safety and Health Administration

Sampled By : Norranon Tathongkham

Remark :

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

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 2411070

Date Received : Feb 02, 2024

Date Reported : Feb 13, 2024

Report Number : 2897143-1

Page 4 of 4

Sample Number	2411070-4
Sampled Date	Feb 01, 2024
Sample Description	Air Quality
Location	Extruder (หน่วยฉีดเนื้อ)
Date Analysis Commenced	Feb 03, 2024
Condition of Sample	Drawn into one 10-L air sampling bag 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	09:30 AM - 11:30 AM	ppm	-	1.0	<1.0	200	Based on ASTM, D 2712-18	ACGIH	Bangkok
n-Hexane	09:30 AM - 11:30 AM	ppm	-	0.03	<0.03	500	NIOSH (2003), 1500	MOL	Bangkok
Propylene	09:30 AM - 11:30 AM	ppm	-	1.0	<1.0	500	Based on ASTM, D 2712-91	ACGIH	Bangkok

Guideline :

ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2023).

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 : PMM-23-11

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 2444762

Date Received : May 10, 2024

Date Reported : May 23, 2024

Report Number : 2971520-1

Page 4 of 4

Sample Number	2444762-4
Sampled Date	May 09, 2024
Sample Description	Air Quality
Location	Extruder (หน่วยฉีดเนื้อ)
Date Analysis Commenced	May 11, 2024
Barometric Pressure	754 mmHg
Atmospheric Temperature	33.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Ethylene	10:10 AM - 12:10 PM	ppm	-	1.0	<1.0	200	Based on ASTM, D 2712-18	ACGIH	Bangkok
n-Hexane	10:10 AM - 12:10 PM	ppm	-	0.03	<0.03	500	NIOSH (2003), 1500	MOL	Bangkok
Propylene	10:10 AM - 12:10 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 (2023).

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

Sampled By : Norranon Tathongkham

Remark :

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

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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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: 2411071

Date Received : Feb 02, 2024

Date Reported : Feb 07, 2024

Report Number: 2904931-1

Page 1 of 1

Sample Number 2411071-1
Parameter Noise (Leq 12 hrs.)
Location หน่วยโพลีเอไธซีน
Measurement Date Feb 01, 2024
Measurement by Prasanmit Kueanpet

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	83.1	94.2	81.7
11:00 AM - 12:00 PM	82.3	84.2	81.6
12:00 PM - 01:00 PM	82.4	84.2	81.6
01:00 PM - 02:00 PM	82.2	84.2	81.5
02:00 PM - 03:00 PM	82.3	90.5	81.3
03:00 PM - 04:00 PM	82.1	83.9	81.4
04:00 PM - 05:00 PM	82.2	83.8	81.5
05:00 PM - 06:00 PM	82.3	84.0	81.5
06:00 PM - 07:00 PM	82.3	84.3	81.4
07:00 PM - 08:00 PM	82.4	84.0	81.7
08:00 PM - 09:00 PM	81.9	83.9	81.2
09:00 PM - 10:00 PM	82.7	84.4	81.9

Leq Average 12 hrs. (dB(A))

82.4

Lmax (dB(A))

94.2

Standard (dB(A))

87

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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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 : PMM-23-11

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 2444763

Date Received : May 10, 2024

Date Reported : May 15, 2024

Report Number: 2991659-1

Page 1 of 1

Sample Number 2444763-1
Parameter Noise (Leq 12 hrs.)
Location หน่วยโพลีเอไธซีน
Measurement Date May 09, 2024
Measurement by Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	76.3	84.6	70.9
10:00 AM - 11:00 AM	79.3	81.0	78.8
11:00 AM - 12:00 PM	79.2	80.7	78.7
12:00 PM - 01:00 PM	79.0	81.3	78.6
01:00 PM - 02:00 PM	79.1	80.9	78.7
02:00 PM - 03:00 PM	79.2	80.8	78.8
03:00 PM - 04:00 PM	79.1	80.4	78.6
04:00 PM - 05:00 PM	79.2	80.4	78.8
05:00 PM - 06:00 PM	79.2	82.9	78.7
06:00 PM - 07:00 PM	79.4	81.1	79.0
07:00 PM - 08:00 PM	79.9	81.0	79.6
08:00 PM - 09:00 PM	81.0	87.5	77.8

Leq Average 12 hrs. (dB(A))

79.3

Lmax (dB(A))

87.5

Standard (dB(A))

87

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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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: 2411071

Date Received : Feb 02, 2024

Date Reported : Feb 07, 2024

Report Number: 2904932-1

Page 1 of 1

Sample Number 2411071-2
Parameter Noise (Leq 12 hrs.)
Location Extruder (หน่วยคัดเม็ด)
Measurement Date Feb 01, 2024
Measurement by Prasarnmit Kueanpet

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:37 AM - 10:37 AM	82.9	88.3	82.1
10:37 AM - 11:37 AM	81.9	88.0	80.9
11:37 AM - 12:37 PM	81.5	84.3	80.8
12:37 PM - 01:37 PM	81.7	83.1	81.1
01:37 PM - 02:37 PM	81.7	85.9	81.1
02:37 PM - 03:37 PM	81.8	88.2	81.1
03:37 PM - 04:37 PM	81.5	83.8	80.9
04:37 PM - 05:37 PM	82.0	84.0	81.1
05:37 PM - 06:37 PM	81.6	82.9	80.9
06:37 PM - 07:37 PM	81.8	84.6	81.1
07:37 PM - 08:37 PM	81.3	85.5	80.7
08:37 PM - 09:37 PM	81.9	84.2	81.3

Leq Average 12 hrs. (dB(A))

81.8

Lmax (dB(A))

88.3

Standard (dB(A))

87

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานคุ้มครองความปลอดภัย
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Supot Salamteh
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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 2444763

Date Received : May 10, 2024

Date Reported : May 15, 2024

Report Number: 2991660-1

Page 1 of 1

Sample Number 2444763-2
Parameter Noise (Leq 12 hrs.)
Location Extruder (หน่วยคัดเม็ด)
Measurement Date May 09, 2024
Measurement by Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	81.5	99.6	79.2
10:00 AM - 11:00 AM	80.4	88.7	79.5
11:00 AM - 12:00 PM	79.9	81.5	79.3
12:00 PM - 01:00 PM	79.7	84.4	79.1
01:00 PM - 02:00 PM	79.8	83.7	79.1
02:00 PM - 03:00 PM	79.9	82.0	79.2
03:00 PM - 04:00 PM	80.0	82.1	79.2
04:00 PM - 05:00 PM	79.9	81.8	79.2
05:00 PM - 06:00 PM	80.0	81.7	79.3
06:00 PM - 07:00 PM	80.0	81.7	79.3
07:00 PM - 08:00 PM	80.1	81.7	79.6
08:00 PM - 09:00 PM	80.0	81.5	79.5

Leq Average 12 hrs. (dB(A))

80.1

Lmax (dB(A))

99.6

Standard (dB(A))

87

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานคุ้มครองความปลอดภัย
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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: 2411071

Date Received : Feb 02, 2024

Date Reported : Feb 07, 2024

Report Number: 2904933-1

Page 1 of 1

Sample Number 2411071-3
Parameter Noise (Leq 12 hrs.)
Location Compressor (พ่นพ่น Vent Gas และ Nitrogen)
Measurement Date Feb 01, 2024
Measurement by Prasanmit Kueanpet

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:47 AM - 11:47 AM	75.5	79.4	75.2
11:47 AM - 12:47 PM	75.4	76.5	75.1
12:47 PM - 01:47 PM	75.6	77.0	75.3
01:47 PM - 02:47 PM	75.7	76.7	75.4
02:47 PM - 03:47 PM	75.5	77.7	75.0
03:47 PM - 04:47 PM	75.3	78.4	74.9
04:47 PM - 05:47 PM	75.4	76.5	75.0
05:47 PM - 06:47 PM	75.5	76.9	75.2
06:47 PM - 07:47 PM	75.5	76.8	75.2
07:17 PM - 08:17 PM	75.3	76.7	75.0
08:47 PM - 09:47 PM	75.7	76.8	75.3
09:47 PM - 10:47 PM	75.3	77.5	74.8
Leq Average 12 hrs. (dB(A))	75.5		
Lmax (dB(A))		79.4	
Standard (dB(A))	87	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖			

Technical Management

Thanita K.

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Analysis / Test Report

Client : Thai Polyethylene Co., Ltd.

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

P/O : PMM-23-11

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 2444763

Date Received : May 10, 2024

Date Reported : May 15, 2024

Report Number: 2991661-1

Page 1 of 1

Sample Number 2444763-3
Parameter Noise (Leq 12 hrs.)
Location Compressor (พ่นพ่น Vent Gas และ Nitrogen)
Measurement Date May 09, 2024
Measurement by Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	80.4	103.2	78.9
10:00 AM - 11:00 AM	79.2	82.5	78.9
11:00 AM - 12:00 PM	80.2	82.3	79.0
12:00 PM - 01:00 PM	80.4	86.4	79.9
01:00 PM - 02:00 PM	80.3	86.4	79.7
02:00 PM - 03:00 PM	80.0	82.0	79.6
03:00 PM - 04:00 PM	80.6	82.4	80.1
04:00 PM - 05:00 PM	80.5	82.2	80.0
05:00 PM - 06:00 PM	80.5	83.9	79.9
06:00 PM - 07:00 PM	80.7	84.8	80.1
07:00 PM - 08:00 PM	80.9	83.4	80.3
08:00 PM - 09:00 PM	81.9	85.1	81.5
Leq Average 12 hrs. (dB(A))	80.5		
Lmax (dB(A))		103.2	
Standard (dB(A))	87	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖			

Technical Management

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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: 2411072

Date Received : Feb 02, 2024

Date Reported : Feb 08, 2024

Report Number : 2906211-1

Page 1 of 1

Sample Number 2411072-1
Parameter Octave Band_12 hrs.
Location หน่วยโพลีเอทิลีน
Measurement Date Feb 01, 2024
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
10:00 AM - 11:00 AM	83.1	27.7	42.7	52.3	61.6	69.7	76.6	78.7	76.2	74.7	65.3	46.5
11:00 AM - 12:00 PM	82.3	27.2	42.1	51.4	60.6	69.0	75.4	77.9	75.7	74.3	64.6	45.5
12:00 PM - 01:00 PM	82.4	27.2	42.0	51.2	60.6	68.8	75.3	78.1	75.5	74.2	64.7	45.4
01:00 PM - 02:00 PM	82.2	26.9	41.9	51.1	60.5	68.7	75.1	78.0	75.4	74.1	64.8	45.5
02:00 PM - 03:00 PM	82.3	26.8	41.7	51.1	60.4	68.8	74.9	77.8	75.7	74.5	65.5	46.1
03:00 PM - 04:00 PM	82.1	26.7	41.8	51.3	60.5	68.7	75.1	77.8	75.4	74.0	64.7	45.4
04:00 PM - 05:00 PM	82.2	26.9	41.7	51.4	60.6	68.8	75.3	77.9	75.5	74.1	64.7	45.4
05:00 PM - 06:00 PM	82.3	27.2	42.1	51.4	60.7	68.7	75.3	77.8	75.7	74.2	64.7	45.6
06:00 PM - 07:00 PM	82.3	27.3	42.3	51.6	61.0	68.9	75.5	77.7	75.9	74.0	64.6	45.7
07:00 PM - 08:00 PM	82.4	27.1	41.9	51.6	60.8	69.0	75.5	78.1	75.7	74.3	64.9	45.6
08:00 PM - 09:00 PM	81.9	26.6	41.6	50.8	60.2	68.4	74.8	77.7	75.1	73.8	64.5	45.2
09:00 PM - 10:00 PM	82.7	27.6	42.5	51.8	61.1	69.1	75.7	78.2	76.1	74.6	65.1	46.0
Average	82.4	27.1	42.0	51.4	60.7	68.9	75.4	78.0	75.7	74.2	64.9	45.7

Reference Method : ANSI Standard S1.6-1984

Technical Management

Saranya C.
Saranya Chalermtamrong
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 : PMM-23-11

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 2444764

Date Received : May 10, 2024

Date Reported : May 16, 2024

Report Number : 2993540-1

Page 1 of 1

Sample Number 2444764-1
Parameter Octave Band_12 hrs.
Location หน่วยโพลีเอทิลีน
Measurement Date May 09, 2024
Measurement By Norranon Tathongkham

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
09:00 AM - 10:00 AM	76.3	21.7	39.4	46.1	58.1	65.1	70.3	73.4	66.9	60.4	53.2	40.9
10:00 AM - 11:00 AM	79.3	21.4	37.6	44.9	57.9	62.8	72.2	76.9	71.6	62.1	53.0	40.5
11:00 AM - 12:00 PM	79.2	21.0	37.7	44.2	57.7	62.4	73.0	76.5	71.7	62.3	53.1	40.5
12:00 PM - 01:00 PM	79.0	20.7	37.4	44.4	57.4	62.3	72.6	75.6	73.4	62.6	53.3	40.5
01:00 PM - 02:00 PM	79.1	21.7	38.0	45.0	57.6	62.6	72.7	75.6	73.5	62.6	53.3	40.5
02:00 PM - 03:00 PM	79.2	21.1	38.2	45.2	58.2	62.4	73.2	75.7	73.0	62.4	53.4	40.8
03:00 PM - 04:00 PM	79.1	21.5	38.1	45.0	58.2	62.5	73.0	76.0	72.4	62.7	53.5	40.8
04:00 PM - 05:00 PM	79.2	21.5	38.0	44.7	58.2	62.9	74.0	75.7	72.2	63.1	53.7	40.8
05:00 PM - 06:00 PM	79.2	22.4	38.5	45.2	58.3	62.7	74.3	75.6	71.5	63.3	53.8	40.8
06:00 PM - 07:00 PM	79.4	23.4	38.7	45.4	58.5	61.5	75.0	76.0	71.0	63.0	53.1	40.8
07:00 PM - 08:00 PM	79.9	23.8	38.8	45.7	58.8	58.7	75.7	76.7	70.6	62.9	53.6	41.2
08:00 PM - 09:00 PM	81.0	23.4	38.9	46.0	58.4	62.6	75.9	78.2	71.9	62.8	54.0	41.3
Average	79.3	22.1	38.3	45.2	58.1	62.6	73.8	76.1	71.9	62.6	53.4	40.8

Reference Method : ANSI Standard S1.6-1984

Technical Management

Supot S.
Tanyatorn Mongkonjirawut
Supervisor

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: 2411072

Date Received : Feb 02, 2024

Date Reported : Feb 08, 2024

Report Number : 2906212-1

Sample Number 2411072-2
Parameter Octave Band_12 hrs.
Location Extruder (หน่วยคัดเม็ด)
Measurement Date Feb 01, 2024
Measurement By Prasanmit Kueanpet

Page 1 of 1

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
09:37 AM - 10:37 AM	82.9	26.8	43.2	52.4	64.2	70.0	76.2	78.6	76.1	73.7	64.1	42.3
10:37 AM - 11:37 AM	81.9	26.6	42.5	52.0	64.0	68.8	75.2	77.4	75.5	73.0	63.8	41.9
11:37 AM - 12:37 PM	81.5	26.6	42.2	51.8	64.1	68.6	74.7	76.8	75.6	72.3	63.0	41.1
12:37 PM - 01:37 PM	81.7	27.6	42.6	51.9	64.2	69.0	74.8	76.9	75.6	72.9	63.8	41.5
01:37 PM - 02:37 PM	81.7	28.1	42.9	52.1	64.3	69.0	75.1	77.1	75.3	72.9	63.7	41.3
02:37 PM - 03:37 PM	81.8	28.6	43.1	52.2	64.2	69.3	75.5	77.1	75.3	72.6	63.8	41.6
03:37 PM - 04:37 PM	81.5	27.3	42.4	51.7	63.7	69.0	75.0	76.8	75.0	72.3	62.8	41.0
04:37 PM - 05:37 PM	82.0	27.0	42.7	52.2	63.6	69.2	75.8	77.5	75.1	72.5	63.3	41.3
05:37 PM - 06:37 PM	81.6	26.6	42.2	51.7	63.2	69.1	75.1	76.9	75.1	72.4	63.2	41.2
06:37 PM - 07:37 PM	81.8	26.9	42.5	52.1	64.4	68.9	75.0	77.1	75.9	72.6	63.3	41.4
07:37 PM - 08:37 PM	81.3	27.7	42.5	51.7	63.9	68.6	74.7	76.7	74.9	72.5	63.3	40.9
08:37 PM - 09:37 PM	81.9	27.7	42.8	52.1	64.1	69.4	75.4	77.2	75.4	72.7	63.2	41.4
Average	81.8	27.3	42.6	52.0	64.0	69.1	75.2	77.2	75.4	72.7	63.5	41.4

Reference Method : ANSI Standard S1.6-1984

Technical Management

Saranya C.

Saranya Chalerthamrong
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 : PMM-23-11

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 2444764

Date Received : May 10, 2024

Date Reported : May 16, 2024

Report Number : 2993541-1

Sample Number 2444764-2
Parameter Octave Band_12 hrs.
Location Extruder (หน่วยคัดเม็ด)
Measurement Date May 09, 2024
Measurement By Norranon Tathongkham

Page 1 of 1

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
09:00 AM - 10:00 AM	81.5	24.1	39.9	50.0	59.9	68.3	73.9	76.5	75.6	73.5	66.8	52.8
10:00 AM - 11:00 AM	80.4	24.0	39.3	49.8	59.9	68.3	73.5	75.8	73.6	71.8	65.1	51.1
11:00 AM - 12:00 PM	79.9	24.1	39.2	49.5	59.6	68.2	73.2	75.4	72.7	70.9	64.5	50.3
12:00 PM - 01:00 PM	79.7	23.7	39.2	49.5	59.6	68.0	73.0	75.1	72.7	70.9	64.6	50.5
01:00 PM - 02:00 PM	79.8	24.1	39.4	49.7	59.6	68.1	72.9	75.4	72.7	70.8	64.6	50.5
02:00 PM - 03:00 PM	79.9	24.2	39.5	49.7	60.0	68.1	73.3	75.4	72.8	70.9	64.7	50.7
03:00 PM - 04:00 PM	80.0	24.0	39.4	49.8	60.0	68.2	73.4	75.4	73.1	71.0	64.7	50.7
04:00 PM - 05:00 PM	79.9	23.9	39.5	50.0	60.2	68.1	73.7	75.2	72.9	71.0	64.6	50.7
05:00 PM - 06:00 PM	80.0	24.0	39.7	50.1	60.0	68.2	73.8	75.2	73.1	71.0	64.6	50.8
06:00 PM - 07:00 PM	80.0	24.0	39.7	50.1	60.0	68.3	73.6	75.2	73.1	70.8	64.5	50.7
07:00 PM - 08:00 PM	80.1	24.6	40.3	50.2	60.7	68.8	73.7	75.2	73.4	71.2	64.6	51.0
08:00 PM - 09:00 PM	80.0	24.4	40.2	50.2	60.5	68.6	73.5	75.2	73.2	71.0	64.5	50.7
Average	80.1	24.1	39.6	49.9	60.0	68.3	73.5	75.4	73.3	71.3	64.9	50.9

Reference Method : ANSI Standard S1.6-1984

Technical Management

Dimm

Tanyatorn Mongkonjirawut
Supervisor

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: 2411072

Date Received : Feb 02, 2024

Date Reported : Feb 08, 2024

Report Number : 2906213-1

Page 1 of 1

Sample Number 2411072-3
Parameter Octave Band_12 hrs.
Location Compressor (ปั๊มดูด Vent Gas ว่าง Nitrogen)
Measurement Date Feb 01, 2024
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
10:47 AM - 11:47 AM	75.5	27.5	44.0	49.9	59.2	60.4	62.3	68.4	70.5	70.1	65.3	43.6
11:47 AM - 12:47 PM	75.4	27.6	44.1	49.5	59.1	60.3	62.1	68.3	70.5	69.9	64.9	43.5
12:47 PM - 01:47 PM	75.6	27.6	44.1	49.6	59.1	60.5	62.4	68.3	70.5	70.5	65.6	43.8
01:47 PM - 02:47 PM	75.7	27.7	44.2	49.9	59.0	60.4	62.6	68.3	70.6	70.5	66.1	43.6
02:47 PM - 03:47 PM	75.5	27.5	44.2	49.9	59.1	60.3	62.4	68.4	70.6	69.8	65.4	43.2
03:47 PM - 04:47 PM	75.3	27.6	44.3	49.8	59.2	60.2	62.4	68.5	70.5	69.9	63.6	43.1
04:47 PM - 05:47 PM	75.4	27.5	44.3	50.0	59.1	60.3	62.4	68.3	70.5	70.0	64.8	43.2
05:47 PM - 06:47 PM	75.5	27.5	44.3	50.0	59.0	60.1	62.5	68.4	70.6	70.0	65.2	43.5
06:47 PM - 07:47 PM	75.5	27.4	44.2	49.8	59.0	60.1	62.5	68.3	70.7	70.1	64.8	43.5
07:17 PM - 08:17 PM	75.3	27.3	44.1	49.8	58.8	59.9	62.3	68.2	70.4	69.8	65.0	43.3
08:47 PM - 09:47 PM	75.7	27.8	44.6	50.3	59.4	60.6	62.7	68.6	70.8	70.3	65.1	43.5
09:47 PM - 10:47 PM	75.3	27.3	44.0	49.7	58.9	60.1	62.2	68.2	70.4	69.6	65.2	43.0
Average	75.5	27.5	44.2	49.9	59.1	60.3	62.4	68.4	70.6	70.1	65.1	43.4

Reference Method : ANSI Standard S1.6-1984

Technical Management

Saranya C.
Saranya Chalemthamrong
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 : PMM-23-11

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 2444764

Date Received : May 10, 2024

Date Reported : May 16, 2024

Report Number : 2993542-1

Page 1 of 1

Sample Number 2444764-3
Parameter Octave Band_12 hrs.
Location Compressor (ปั๊มดูด Vent Gas ว่าง Nitrogen)
Measurement Date May 09, 2024
Measurement By Norranon Tathongkham

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
09:00 AM - 10:00 AM	80.4	30.6	40.8	53.5	61.9	69.7	72.4	75.8	74.2	70.6	66.2	54.9
10:00 AM - 11:00 AM	79.2	32.2	41.8	53.2	59.2	69.0	70.9	74.4	73.1	70.0	66.0	54.9
11:00 AM - 12:00 PM	80.2	32.3	40.2	53.3	61.4	70.0	72.8	76.0	72.9	70.0	65.9	54.4
12:00 PM - 01:00 PM	80.4	29.2	40.3	53.5	62.2	70.6	73.0	76.5	72.4	69.8	65.5	54.0
01:00 PM - 02:00 PM	80.3	28.0	40.3	53.7	62.2	71.1	73.1	76.4	72.1	69.5	65.1	53.5
02:00 PM - 03:00 PM	80.0	28.5	39.9	53.4	62.1	70.1	72.7	76.3	71.9	69.3	64.9	53.5
03:00 PM - 04:00 PM	80.6	29.0	40.1	53.7	61.7	71.2	73.4	76.9	72.2	69.5	65.0	53.5
04:00 PM - 05:00 PM	80.5	28.7	39.8	53.6	61.6	71.0	73.2	76.7	72.3	69.6	65.2	53.6
05:00 PM - 06:00 PM	80.5	27.9	39.9	53.4	61.8	71.1	73.1	76.6	72.8	69.6	65.1	53.5
06:00 PM - 07:00 PM	80.7	27.4	40.0	53.5	61.7	71.1	73.6	76.6	73.5	69.7	65.1	53.5
07:00 PM - 08:00 PM	80.9	27.6	40.2	53.8	62.4	69.7	74.3	76.6	74.2	69.8	65.1	53.7
08:00 PM - 09:00 PM	81.9	27.6	40.9	54.4	62.1	68.8	75.6	78.0	75.2	70.0	65.3	53.8
Average	80.5	29.4	40.4	53.6	61.8	70.4	73.3	76.5	73.2	69.8	65.4	53.9

Reference Method : ANSI Standard S1.6-1984

Technical Management

Supot S.
Tanyatorn Mongkonjirawat
Supervisor

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: 2411073

Date Received : Feb 02, 2024
Date Reported : Feb 07, 2024
Report Number : 2897116-1

Page 1 of 1

Sample Number	2411073-1								
Sampled Date	Feb 01, 2024								
Sample Description	Noise Dose (12 hrs.)								
Location	พนักงานบริเวณ CCR								
Personal Sampling	คุณชัชวาลย์ ศรีคำมี								
Date Analysis Commenced	Feb 06, 2024								
Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	08:00 AM - 08:00 PM	%	-	-	20.4	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong
Noise Dose (8 hrs.)	08:00 AM - 08:00 PM	%	-	-	19.0	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong
TWA (12 hrs.) (Calculated from Lavg)	08:00 AM - 08:00 PM	dB(A)	-	-	76.1	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong
TWA (8 hrs.)	08:00 AM - 08:00 PM	dB(A)	-	-	77.8	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong

Guideline :

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

Sampled By : Norranon Tathongkham

Remark :

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

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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 : PMM-23-11
Project Name : Environmental Monitoring
Project Location : PP1

Lot ID: 2444765

Date Received : May 10, 2024
Date Reported : May 14, 2024
Report Number : 2971530-1

Page 1 of 1

Sample Number	2444765-1									
Sampled Date	May 09, 2024									
Sample Description	Noise Dose (12 hrs.)									
Location	พนักงานบริเวณ CCR									
Personal Sampling	คุณจิระยุทธ นามวงษา									
Date Analysis Commenced	May 13, 2024									
Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location	
Air Testing										
Noise Dose (12 hrs.) (Calculated from Lavg)	07:30 AM - 07:30 PM	%	-	1	12.0	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong	
Noise Dose (8 hrs.)	07:30 AM - 07:30 PM	%	-	1	11.2	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong	
TWA (12 hrs.) (Calculated from Lavg)	07:30 AM - 07:30 PM	dB(A)	-	-	73.8	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong	
TWA (8 hrs.)	07:30 AM - 07:30 PM	dB(A)	-	-	75.5	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong	

Guideline :

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

Sampled By : Norranon Tathongkham

Remark :

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

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Supot Salamteh
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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: 2411074

Date Received : Feb 02, 2024

Date Reported : Feb 07, 2024

Report Number: 2897113-1

Page 1 of 2

Sample Number 2411074-1
Parameter Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date Feb 01, 2024
Measurement by Norranon Tathongkham
Location ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
Extruder (หน่วยตัดเม็ด)	120	28.4	26.5	32.9	32.7
Average (WBGT)		28.4			
Guideline WBGT (°C)		34.0			

Reference Method :

Guideline:

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

Technical Management

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 : PMM-23-11

Project Name : Environmental Monitoring

Project Location : PP1

Lot ID: 2444767

Date Received : May 10, 2024

Date Reported : May 15, 2024

Report Number: 2971534-1

Page 1 of 2

Sample Number 2444767-1
Parameter Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date May 09, 2024
Measurement by Norranon Tathongkham
Location ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
Extruder (หน่วยตัดเม็ด)	120	29.2	27.2	33.8	33.6
Average (WBGT)		29.2			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

Technical Management

Supot Salamteh
Section Head

Approved by

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S:\Reports\Air Heat rpt (9:58AM)



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: 2411074
Date Received : Feb 02, 2024
Date Reported : Feb 07, 2024
Report Number: 2897113-1

Page 2 of 2

Sample Number 2411074-2
Parameter Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date Feb 01, 2024
Measurement by Norranon Tathongkham
Location ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
Polymerization Unit	120	28.5	26.9	32.2	31.9
Average (WBGT)		28.5			
Guideline WBGT (°C)		34.0			

Reference Method :

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

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Analysis / Test Report

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

P/O : PMM-23-11
Project Name : Environmental Monitoring
Project Location : PP1

Lot ID: 2444767
Date Received : May 10, 2024
Date Reported : May 15, 2024
Report Number: 2971534-1

Page 2 of 2

Sample Number 2444767-2
Parameter Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date May 09, 2024
Measurement by Norranon Tathongkham
Location ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
Polymerization Unit	120	30.1	28.5	33.7	33.5
Average (WBGT)		30.1			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

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