

ภาคผนวก ค

ผลการตรวจวัดคุณภาพสิ่งแวดล้อม

ภาคผนวก ค-1

คุณภาพอากาศในบรรยากาศโดยทั่วไป



Analysis / Test Report

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong,
Amphur Muang Ravana, Ravana Thailand 21150

P/O : 4500134068

Project Name : EIA Monitoring

Project Location :

Lot ID: 2376903

Date Received : Jul 04, 2023

Date Reported : Sep 21, 2023

Report Number : 2702758-1C1

Page 1 of 1

Sample Number 2376903-1
Sampled Date Jul 03, 2023
Sample Description Air Quality (Community)
Location ชุมชนमानชลุด-ซากกลาง (A1)
Date Analysis Commenced Jul 05, 2023
Condition of Sample Drawn into one 6-L Canister and one sorbent tube, refrigerated
Barometric Pressure 754 mmHg
Atmospheric Temperature 30.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Formaldehyde	03/07/23 - 04/07/23	ppm	-	0.10	<0.10	No Standard	Based on NIOSH, 2541	-	Bangkok
Toluene	03/07/23 - 04/07/23	ug/m3	0.60	1.88	134	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

Guideline :

NEB : Notification of National Environment Board, B.E. 2560 (2017)

PCD : Notification of the Pollution Control Department, which was published in the Royal Government Gazette Vol. 126 Special Part 13 D dated January 27, B.E. 2552 (2009).

Sampled By : Nantawat Sarin

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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14806-21/ EMAIL



Analysis / Test Report

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong,
Amphur Muang Ravana, Ravana Thailand 21150

P/O : 4500134068

Project Name : EIA Monitoring

Project Location :

Lot ID: 2389025

Date Received : Aug 22, 2023

Date Reported : Sep 21, 2023

Report Number : 2732344-1C1

Page 1 of 1

Sample Number 2389025-1
Sampled Date Aug 21, 2023
Sample Description Air Quality (Community)
Location ชุมชนมาบจตุต-ซากกกกลาง (A1)
Date Analysis Commenced Aug 23, 2023
Condition of Sample Drawn into one 6-L Canister and one sorbent tube, refrigerated
Barometric Pressure 753 mmHg
Atmospheric Temperature 30.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Formaldehyde	21/08/23 - 22/08/23	ppm	-	0.10	<0.10	No Standard	Based on NIOSH, 2541	-	Bangkok
Toluene	21/08/23 - 22/08/23	ug/m3	0.60	1.88	<1.88	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

Guideline :

NEB : Notification of National Environment Board, B.E. 2560 (2017)

PCD : Notification of the Pollution Control Department, which was published in the Royal Government Gazette Vol. 126 Special Part 13 D dated January 27, B.E. 2552 (2009).

Sampled By : Jittakorn Sriwasa

Remark :

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

Approved by

Orawan R.

Orawan Rakyong
Scientist (3)

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Analysis / Test Report

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong,
Amphur Muang Ravana, Ravana Thailand 21150

P/O : 4500134068

Project Name : EIA Monitoring

Project Location :

Lot ID: 23102723

Date Received : Sep 12, 2023

Date Reported : Sep 21, 2023

Report Number : 2763162-1C1

Page 1 of 1

Sample Number 23102723-1
Sampled Date Sep 11, 2023
Sample Description Air Quality (Community)
Location ชุมชนमानชลุด-ซากกลาง (A1)
Date Analysis Commenced Sep 14, 2023
Condition of Sample Drawn into one 6-L Canister and one sorbent tube, refrigerated
Barometric Pressure 757 mmHg
Atmospheric Temperature 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Formaldehyde	11/09/23 - 12/09/23	ppm	-	0.10	<0.10	No Standard	Based on NIOSH, 2541	-	Bangkok
Toluene	11/09/23 - 12/09/23	ug/m3	0.60	1.88	46.43	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

Guideline :

NEB : Notification of National Environment Board, B.E. 2560 (2017)

PCD : Notification of the Pollution Control Department, which was published in the Royal Government Gazette Vol. 126 Special Part 13 D dated January 27, B.E. 2552 (2009).

Sampled By : Kantaphon Maneesampan

Remark :

- LOD : Limit of Detection
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Approved by

Tanyatorn Mongkonjirawut
Supervisor

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Analysis / Test Report

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong,
Amphur Muang Ravana, Ravana Thailand 21150

P/O : 4500134068

Project Name : EIA Monitoring

Project Location :

Lot ID: 23117240

Date Received : Oct 27, 2023

Date Reported : Nov 06, 2023

Report Number : 2798601-1C1

Page 1 of 1

Sample Number 23117240-1
Sampled Date Oct 26, 2023
Sample Description Air Quality (Community)
Location ชุมชนमानชลุด-ซากกลาง (A1)
Date Analysis Commenced Oct 28, 2023
Condition of Sample Drawn into one 6-L Canister and one sorbent tube, refrigerated
Barometric Pressure 757 mmHg
Atmospheric Temperature 31.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Formaldehyde	26/10/23 - 27/10/23	ppm	-	0.10	<0.10	No Standard	Based on NIOSH, 2541	-	Bangkok
Toluene	26/10/23 - 27/10/23	ug/m3	0.60	1.88	36.94	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

Guideline :

NEB : Notification of National Environment Board, B.E. 2560 (2017)

PCD : Notification of the Pollution Control Department, which was published in the Royal Government Gazette Vol. 126 Special Part 13 D dated January 27, B.E. 2552 (2009).

Sampled By : Saksit Phaisanphisut

Remark :

- LOD : Limit of Detection
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Approved by

Tanyatorn Mongkonjirawut
Supervisor

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Analysis / Test Report

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong,
Amphur Muang Ravana, Ravana Thailand 21150

P/O : 4500134068

Project Name : EIA Monitoring

Project Location :

Lot ID: 23127198

Date Received : Nov 02, 2023

Date Reported : Nov 16, 2023

Report Number : 2821396-1C1

Page 1 of 1

Sample Number 23127198-1
Sampled Date Nov 01, 2023
Sample Description Air Quality (Community)
Location ชุมชนมาบชอุตสาหกรรม (A1)
Date Analysis Commenced Nov 03, 2023
Condition of Sample Extracted into one 6-L Canister and one sorbent tube, refrigerated
Barometric Pressure 758 mmHg
Atmospheric Temperature 28.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Formaldehyde	01/11/23 - 02/11/23	ppm	-	0.10	<0.10	No Standard	Based on NIOSH, 2541	-	Bangkok
Toluene	01/11/23 - 02/11/23	ug/m3	0.60	1.88	9.05	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

Guideline :

NEB : Notification of National Environment Board, B.E. 2560 (2017)

PCD : Notification of the Pollution Control Department, which was published in the Royal Government Gazette Vol. 126 Special Part 13 D dated January 27, B.E. 2552 (2009).

Sampled By : Chatchai Sukpia

Remark :

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

Approved by

Orawan R.

Orawan Rakyong
Scientist (3)

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Analysis / Test Report

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong,
Amphur Muang Ravana, Ravana Thailand 21150

P/O : 4500134068

Project Name : EIA Monitoring

Project Location :

Lot ID: 23134778

Date Received : Dec 08, 2023

Date Reported : Dec 19, 2023

Report Number : 2840227-1C1

Page 1 of 1

Sample Number 23134778-1
Sampled Date Dec 07, 2023
Sample Description Air Quality (Community)
Location ชุมชนมาบชอุตสาหกรรม (A1)
Date Analysis Commenced Dec 09, 2023
Condition of Sample Drawn into one 6-L Canister and one sorbent tube, refrigerated
Barometric Pressure 758 mmHg
Atmospheric Temperature 29.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Formaldehyde	07/12/23 - 08/12/23	ppm	-	0.10	<0.10	No Standard	Based on NIOSH, 2541	-	Bangkok
Toluene	07/12/23 - 08/12/23	ug/m3	0.60	1.88	59.85	No Standard	Based on US EPA Compendium Method, TO-15	-	Rayong

Guideline :

NEB : Notification of National Environment Board, B.E. 2560 (2017)

PCD : Notification of the Pollution Control Department, which was published in the Royal Government Gazette Vol. 126 Special Part 13 D dated January 27, B.E. 2552 (2009).

Sampled By : Adisak Talesoon

Remark :

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

Approved by


Tanyatorn Mongkonjirawut
Supervisor

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ภาคผนวก ค-2

คุณภาพอากาศจากปล่องระบายอากาศ



Analysis / Test Report

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.

11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur
Muang Rayong, Rayong Thailand 21150

P/O : 4500134068

Project Name : EIA Monitoring

Project Location :

Lot ID: 23117111

Date Received : Dec 08, 2023

Date Reported : Dec 15, 2023

Report Number: 2798603-1

Page 1 of 1

Sample Number	23117111-1
Sampled Date	Dec 08, 2023
Sample Description	Emission From Stationary Source
Location	ปล่องของสวนการเตรียมฟอร์มัลดีไฮด์
Date Analysis Commenced	Dec 09, 2023
Condition of Sample	Extracted into one sorbent tube, refrigerated

Stack Description

Ambient Pressure	756	mmHg	Diameter	0.40	m	Oxygen	10.1	%
Ambient Temperature	31.0	°C	Shape	Circle		Carbon Dioxide	9.7	%
Type of Process	Process		Stack Temperature	97.4	°C	Gas Velocity	11.0	m/s
Type of Fuel	-		Moisture	2.72	%	Flow Rate (Actual O2)	3876	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
Formaldehyde	09:30 AM - 09:45 AM	ppm	-	1.00	<1.00	United States Environmental Protection Agency, EPA Method 18	Bangkok

Sampled By : Mongkon Phalathip

Remark :

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

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

Results apply to the sample(s) as submitted, unless the sampling was conducted by
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ภาคผนวก ค-3

ระดับเสียง



Analysis / Test Report

TESTING
No.0042

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150

P/O : 4500134068

Project Name : EIA Monitoring

Project Location :

Lot ID: 23117112

Date Received : Nov 01, 2023

Date Reported : Nov 06, 2023

Report Number: 2827480-1

Page 1 of 1

Sample Number 23117112-1
Parameter Noise (Leq 24 hrs.)
Location ชุมชนมาบชลด-ซากกลาง จุดที่ 1 (N1)
Measurement Date Oct 24 - Oct 25, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 900074

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	51.4	76.7	45.0
12:00 PM - 01:00 PM	49.7	70.2	45.7
01:00 PM - 02:00 PM	51.7	70.9	47.3
02:00 PM - 03:00 PM	56.1	85.8	48.6
03:00 PM - 04:00 PM	50.3	65.4	47.9
04:00 PM - 05:00 PM	47.9	62.2	46.0
05:00 PM - 06:00 PM	50.1	63.1	48.5
06:00 PM - 07:00 PM	49.2	62.0	47.5
07:00 PM - 08:00 PM	49.9	64.9	48.2
08:00 PM - 09:00 PM	49.1	61.8	47.1
09:00 PM - 10:00 PM	48.9	54.7	46.6
10:00 PM - 11:00 PM	48.6	59.7	46.2
11:00 PM - 12:00 AM	46.9	59.4	45.1
12:00 AM - 01:00 AM	48.0	58.9	46.3
01:00 AM - 02:00 AM	49.8	68.6	47.3
02:00 AM - 03:00 AM	51.5	71.7	46.7
03:00 AM - 04:00 AM	56.9	76.5	49.1
04:00 AM - 05:00 AM	58.7	86.4	48.7
05:00 AM - 06:00 AM	52.6	71.1	45.7
06:00 AM - 07:00 AM	54.6	71.9	44.6
07:00 AM - 08:00 AM	50.2	68.4	44.2
08:00 AM - 09:00 AM	52.1	69.7	45.7
09:00 AM - 10:00 AM	53.1	67.3	47.0
10:00 AM - 11:00 AM	51.3	68.2	46.8

Leq Average 24 hrs. (dB(A)) 52.4
Lmax (dB(A)) 86.4
L90 (dB(A)) 46.7
Ldn (dB(A)) 59.8
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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 : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 23117112

Date Received : Nov 01, 2023
Date Reported : Nov 06, 2023
Report Number: 2827481-1

Page 1 of 1

Sample Number 23117112-2
Parameter Noise (Leq 24 hrs.)
Location ชุมชนมาบชลด-ซากกลาง จุดที่ 1 (N1)
Measurement Date Oct 25 - Oct 26, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 900074

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	51.5	70.8	46.4
12:00 PM - 01:00 PM	52.3	74.2	46.1
01:00 PM - 02:00 PM	53.1	74.1	48.0
02:00 PM - 03:00 PM	52.5	66.9	48.9
03:00 PM - 04:00 PM	50.9	62.9	49.2
04:00 PM - 05:00 PM	49.9	72.2	48.1
05:00 PM - 06:00 PM	50.2	60.0	48.7
06:00 PM - 07:00 PM	51.1	72.4	48.9
07:00 PM - 08:00 PM	50.0	66.8	47.7
08:00 PM - 09:00 PM	50.0	67.3	47.6
09:00 PM - 10:00 PM	49.5	53.5	47.4
10:00 PM - 11:00 PM	49.1	58.5	46.6
11:00 PM - 12:00 AM	63.1	74.4	57.0
12:00 AM - 01:00 AM	57.0	70.5	53.1
01:00 AM - 02:00 AM	50.5	68.4	46.7
02:00 AM - 03:00 AM	51.7	70.2	47.3
03:00 AM - 04:00 AM	56.2	73.2	47.2
04:00 AM - 05:00 AM	54.6	70.2	47.8
05:00 AM - 06:00 AM	54.0	71.3	48.0
06:00 AM - 07:00 AM	55.1	70.2	48.2
07:00 AM - 08:00 AM	51.1	68.7	47.7
08:00 AM - 09:00 AM	52.0	73.4	46.2
09:00 AM - 10:00 AM	52.2	66.5	47.3
10:00 AM - 11:00 AM	51.2	72.1	47.1

Leq Average 24 hrs. (dB(A)) 54.1
Lmax (dB(A)) 74.4
L90 (dB(A)) 47.7
Ldn (dB(A)) 62.6
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150

P/O : 4500134068

Project Name : EIA Monitoring

Project Location :

Lot ID: 23117112

Date Received : Nov 01, 2023

Date Reported : Nov 06, 2023

Report Number: 2827482-1

Page 1 of 1

Sample Number 23117112-3
Parameter Noise (Leq 24 hrs.)
Location ชุมชนมาบชลด-ซากกลาง จุดที่ 1 (N1)
Measurement Date Oct 26 - Oct 27, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 900074

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	52.8	74.3	47.4
12:00 PM - 01:00 PM	50.6	70.9	47.1
01:00 PM - 02:00 PM	51.7	73.5	48.2
02:00 PM - 03:00 PM	52.3	68.5	48.6
03:00 PM - 04:00 PM	49.7	66.3	47.5
04:00 PM - 05:00 PM	49.4	65.1	47.3
05:00 PM - 06:00 PM	51.0	66.0	48.5
06:00 PM - 07:00 PM	50.6	63.4	48.4
07:00 PM - 08:00 PM	50.1	64.8	47.7
08:00 PM - 09:00 PM	49.1	72.3	47.4
09:00 PM - 10:00 PM	47.0	56.4	45.5
10:00 PM - 11:00 PM	47.8	60.8	45.9
11:00 PM - 12:00 AM	49.0	58.9	46.6
12:00 AM - 01:00 AM	48.8	60.2	47.2
01:00 AM - 02:00 AM	49.4	64.0	47.8
02:00 AM - 03:00 AM	53.0	72.2	47.3
03:00 AM - 04:00 AM	57.5	78.6	48.0
04:00 AM - 05:00 AM	56.3	78.6	47.0
05:00 AM - 06:00 AM	54.6	81.9	46.8
06:00 AM - 07:00 AM	54.5	72.4	47.1
07:00 AM - 08:00 AM	51.7	71.5	46.6
08:00 AM - 09:00 AM	52.5	73.1	46.7
09:00 AM - 10:00 AM	52.0	69.1	47.6
10:00 AM - 11:00 AM	52.2	70.8	47.6

Leq Average 24 hrs. (dB(A)) 52.2
Lmax (dB(A)) 81.9
L90 (dB(A)) 47.3
Ldn (dB(A)) 59.7
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 23117112

Date Received : Nov 01, 2023
Date Reported : Nov 06, 2023
Report Number: 2827483-1

Page 1 of 1

Sample Number 23117112-4
Parameter Noise (Leq 24 hrs.)
Location ชุมชนมาบชลด-ซากกลาง จุดที่ 1 (N1)
Measurement Date Oct 27 - Oct 28, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 900074

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	50.3	68.2	47.0
12:00 PM - 01:00 PM	52.4	72.8	46.4
01:00 PM - 02:00 PM	52.7	71.9	47.2
02:00 PM - 03:00 PM	51.8	67.0	46.9
03:00 PM - 04:00 PM	50.9	67.2	48.6
04:00 PM - 05:00 PM	49.9	65.9	48.2
05:00 PM - 06:00 PM	49.8	59.0	48.0
06:00 PM - 07:00 PM	48.7	64.3	46.5
07:00 PM - 08:00 PM	49.0	71.7	46.8
08:00 PM - 09:00 PM	47.9	66.7	45.6
09:00 PM - 10:00 PM	47.5	57.1	45.4
10:00 PM - 11:00 PM	49.3	64.9	46.5
11:00 PM - 12:00 AM	46.8	65.1	44.7
12:00 AM - 01:00 AM	47.9	58.1	45.2
01:00 AM - 02:00 AM	49.9	66.0	47.4
02:00 AM - 03:00 AM	49.4	68.7	45.9
03:00 AM - 04:00 AM	55.3	72.3	46.8
04:00 AM - 05:00 AM	54.4	73.0	47.8
05:00 AM - 06:00 AM	52.3	78.1	47.1
06:00 AM - 07:00 AM	49.7	73.4	45.0
07:00 AM - 08:00 AM	53.1	83.7	43.0
08:00 AM - 09:00 AM	60.0	73.1	55.0
09:00 AM - 10:00 AM	53.5	73.4	47.9
10:00 AM - 11:00 AM	48.8	66.2	46.3

Leq Average 24 hrs. (dB(A)) 52.2
Lmax (dB(A)) 83.7
L90 (dB(A)) 46.8
Ldn (dB(A)) 58.0
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150

P/O : 4500134068

Project Name : EIA Monitoring

Project Location :

Lot ID: 23117112

Date Received : Nov 01, 2023

Date Reported : Nov 06, 2023

Report Number: 2827484-1

Page 1 of 1

Sample Number 23117112-5
Parameter Noise (Leq 24 hrs.)
Location ชุมชนมาบชลด-ซากกลาง จุดที่ 1 (N1)
Measurement Date Oct 28 - Oct 29, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 900074

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	51.2	73.4	45.0
12:00 PM - 01:00 PM	48.0	73.2	44.6
01:00 PM - 02:00 PM	50.6	71.0	46.6
02:00 PM - 03:00 PM	53.5	78.1	48.5
03:00 PM - 04:00 PM	54.1	67.7	50.3
04:00 PM - 05:00 PM	53.2	76.4	49.1
05:00 PM - 06:00 PM	51.1	70.1	48.1
06:00 PM - 07:00 PM	50.4	68.5	47.3
07:00 PM - 08:00 PM	49.9	62.3	47.3
08:00 PM - 09:00 PM	49.2	59.8	46.5
09:00 PM - 10:00 PM	50.1	55.6	47.1
10:00 PM - 11:00 PM	50.7	65.6	47.6
11:00 PM - 12:00 AM	50.3	58.0	47.6
12:00 AM - 01:00 AM	50.0	60.8	47.4
01:00 AM - 02:00 AM	50.3	67.8	47.7
02:00 AM - 03:00 AM	51.0	68.0	47.4
03:00 AM - 04:00 AM	56.0	71.3	49.1
04:00 AM - 05:00 AM	54.6	74.9	48.6
05:00 AM - 06:00 AM	55.0	74.3	48.8
06:00 AM - 07:00 AM	52.3	69.1	46.2
07:00 AM - 08:00 AM	51.3	72.5	45.3
08:00 AM - 09:00 AM	51.1	71.7	44.1
09:00 AM - 10:00 AM	50.1	69.1	43.5
10:00 AM - 11:00 AM	49.4	75.8	43.7

Leq Average 24 hrs. (dB(A)) 51.9
Lmax (dB(A)) 78.1
L90 (dB(A)) 47.3
Ldn (dB(A)) 59.1
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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 : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150

P/O : 4500134068

Project Name : EIA Monitoring

Project Location :

Lot ID: 23117112

Date Received : Nov 01, 2023

Date Reported : Nov 06, 2023

Report Number: 2827485-1

Page 1 of 1

Sample Number 23117112-6
Parameter Noise (Leq 24 hrs.)
Location ชุมชนมาบชลด-ซากกลาง จุดที่ 1 (N1)
Measurement Date Oct 29 - Oct 30, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 900074

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	51.6	76.4	45.3
12:00 PM - 01:00 PM	54.6	74.7	43.4
01:00 PM - 02:00 PM	54.6	78.6	44.2
02:00 PM - 03:00 PM	48.1	68.0	44.8
03:00 PM - 04:00 PM	47.2	75.5	44.5
04:00 PM - 05:00 PM	45.9	61.7	44.2
05:00 PM - 06:00 PM	46.4	63.6	44.7
06:00 PM - 07:00 PM	45.9	65.1	44.8
07:00 PM - 08:00 PM	46.9	64.2	45.3
08:00 PM - 09:00 PM	46.3	73.7	44.8
09:00 PM - 10:00 PM	49.1	80.2	45.6
10:00 PM - 11:00 PM	47.1	57.8	46.2
11:00 PM - 12:00 AM	46.5	60.9	45.5
12:00 AM - 01:00 AM	44.7	57.9	44.0
01:00 AM - 02:00 AM	46.8	68.2	44.2
02:00 AM - 03:00 AM	48.7	68.4	43.8
03:00 AM - 04:00 AM	55.8	76.8	46.5
04:00 AM - 05:00 AM	52.9	72.8	46.5
05:00 AM - 06:00 AM	53.2	80.1	42.9
06:00 AM - 07:00 AM	54.8	72.3	44.0
07:00 AM - 08:00 AM	51.1	69.0	42.6
08:00 AM - 09:00 AM	49.3	71.1	42.4
09:00 AM - 10:00 AM	55.8	71.4	44.7
10:00 AM - 11:00 AM	50.6	68.7	44.3

Leq Average 24 hrs. (dB(A)) 51.2
Lmax (dB(A)) 80.2
L90 (dB(A)) 44.5
Ldn (dB(A)) 58.0
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 23117112

Date Received : Nov 01, 2023
Date Reported : Nov 06, 2023
Report Number: 2827486-1

Page 1 of 1

Sample Number 23117112-7
Parameter Noise (Leq 24 hrs.)
Location ชุมชนมาบชลด-ซากกลาง จุดที่ 1 (N1)
Measurement Date Oct 30 - Oct 31, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 900074

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	51.2	68.5	45.7
12:00 PM - 01:00 PM	51.5	73.3	47.0
01:00 PM - 02:00 PM	49.8	66.3	46.6
02:00 PM - 03:00 PM	64.1	73.1	59.0
03:00 PM - 04:00 PM	51.5	67.4	49.3
04:00 PM - 05:00 PM	48.2	68.4	47.1
05:00 PM - 06:00 PM	47.8	67.2	46.4
06:00 PM - 07:00 PM	47.5	66.5	46.7
07:00 PM - 08:00 PM	48.2	60.8	47.2
08:00 PM - 09:00 PM	47.9	65.1	46.4
09:00 PM - 10:00 PM	48.4	63.3	46.6
10:00 PM - 11:00 PM	48.3	76.8	46.8
11:00 PM - 12:00 AM	49.0	62.6	48.0
12:00 AM - 01:00 AM	49.4	64.8	48.3
01:00 AM - 02:00 AM	49.9	67.8	47.8
02:00 AM - 03:00 AM	53.7	72.3	47.9
03:00 AM - 04:00 AM	55.3	79.3	48.6
04:00 AM - 05:00 AM	57.7	74.8	53.2
05:00 AM - 06:00 AM	54.5	76.1	49.3
06:00 AM - 07:00 AM	54.6	77.6	47.4
07:00 AM - 08:00 AM	53.3	78.5	46.8
08:00 AM - 09:00 AM	52.6	73.4	48.2
09:00 AM - 10:00 AM	57.5	74.0	52.7
10:00 AM - 11:00 AM	53.8	75.3	47.1

Leq Average 24 hrs. (dB(A)) 54.5
Lmax (dB(A)) 79.3
L90 (dB(A)) 47.2
Ldn (dB(A)) 60.2
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 23117112

Date Received : Nov 01, 2023
Date Reported : Nov 06, 2023
Report Number: 2827487-1

Page 1 of 1

Sample Number 23117112-8
Parameter Noise (Leq 24 hrs.)
Location ชุมชนมาบชลด-ซากกลาง จุดที่ 2 (N2)
Measurement Date Oct 24 - Oct 25, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 734218

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	52.1	74.4	50.6
01:00 PM - 02:00 PM	51.9	62.7	50.1
02:00 PM - 03:00 PM	52.5	73.9	50.4
03:00 PM - 04:00 PM	54.3	64.8	51.9
04:00 PM - 05:00 PM	53.1	66.8	52.0
05:00 PM - 06:00 PM	53.1	69.3	51.8
06:00 PM - 07:00 PM	52.2	59.5	51.5
07:00 PM - 08:00 PM	51.6	58.8	50.9
08:00 PM - 09:00 PM	51.9	56.4	50.8
09:00 PM - 10:00 PM	50.3	59.0	49.3
10:00 PM - 11:00 PM	51.0	55.0	50.1
11:00 PM - 12:00 AM	51.8	55.0	51.2
12:00 AM - 01:00 AM	51.6	58.1	50.6
01:00 AM - 02:00 AM	51.3	64.8	50.4
02:00 AM - 03:00 AM	52.0	64.6	50.8
03:00 AM - 04:00 AM	52.2	62.8	51.0
04:00 AM - 05:00 AM	51.9	66.4	50.1
05:00 AM - 06:00 AM	50.5	72.5	48.9
06:00 AM - 07:00 AM	49.3	62.2	47.7
07:00 AM - 08:00 AM	48.6	64.4	47.1
08:00 AM - 09:00 AM	54.2	82.4	48.2
09:00 AM - 10:00 AM	50.5	58.3	48.9
10:00 AM - 11:00 AM	51.3	71.2	49.7
11:00 AM - 12:00 PM	52.5	60.9	51.5

Leq Average 24 hrs. (dB(A)) 51.9
Lmax (dB(A)) 82.4
L90 (dB(A)) 50.4
Ldn (dB(A)) 57.9
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150

P/O : 4500134068

Project Name : EIA Monitoring

Project Location :

Lot ID: 23117112

Date Received : Nov 01, 2023

Date Reported : Nov 06, 2023

Report Number: 2827488-1

Page 1 of 1

Sample Number 23117112-9
Parameter Noise (Leq 24 hrs.)
Location ชุมชนมาบชลด-ซากกลาง จุดที่ 2 (N2)
Measurement Date Oct 25 - Oct 26, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 734218

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	53.4	72.0	52.0
01:00 PM - 02:00 PM	53.6	64.9	52.4
02:00 PM - 03:00 PM	53.5	65.8	51.0
03:00 PM - 04:00 PM	53.4	68.4	52.1
04:00 PM - 05:00 PM	52.9	68.7	51.9
05:00 PM - 06:00 PM	53.3	63.0	52.2
06:00 PM - 07:00 PM	52.7	62.3	51.9
07:00 PM - 08:00 PM	52.5	61.9	51.6
08:00 PM - 09:00 PM	52.7	63.4	51.3
09:00 PM - 10:00 PM	51.2	54.2	50.5
10:00 PM - 11:00 PM	51.1	65.8	50.0
11:00 PM - 12:00 AM	57.2	71.0	50.6
12:00 AM - 01:00 AM	51.2	61.9	50.2
01:00 AM - 02:00 AM	52.3	70.8	51.2
02:00 AM - 03:00 AM	52.5	70.7	50.8
03:00 AM - 04:00 AM	52.7	66.0	51.5
04:00 AM - 05:00 AM	52.1	63.6	49.7
05:00 AM - 06:00 AM	54.9	72.0	51.3
06:00 AM - 07:00 AM	52.5	64.4	51.1
07:00 AM - 08:00 AM	52.5	66.5	50.9
08:00 AM - 09:00 AM	51.7	63.7	50.4
09:00 AM - 10:00 AM	52.2	60.8	51.0
10:00 AM - 11:00 AM	53.3	68.9	51.6
11:00 AM - 12:00 PM	53.8	68.9	52.1

Leq Average 24 hrs. (dB(A)) 53.1
Lmax (dB(A)) 72.0
L90 (dB(A)) 51.2
Ldn (dB(A)) 59.7
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150

P/O : 4500134068

Project Name : EIA Monitoring

Project Location :

Lot ID: 23117112

Date Received : Nov 01, 2023

Date Reported : Nov 06, 2023

Report Number: 2827489-1

Page 1 of 1

Sample Number 23117112-10
Parameter Noise (Leq 24 hrs.)
Location ชุมชนมาบชลด-ซากกลาง จุดที่ 2 (N2)
Measurement Date Oct 26 - Oct 27, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 734218

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	53.4	64.0	52.1
01:00 PM - 02:00 PM	53.9	64.1	52.3
02:00 PM - 03:00 PM	54.1	62.9	52.6
03:00 PM - 04:00 PM	54.2	63.8	52.7
04:00 PM - 05:00 PM	54.3	66.8	53.2
05:00 PM - 06:00 PM	54.1	65.7	53.1
06:00 PM - 07:00 PM	53.3	60.4	52.4
07:00 PM - 08:00 PM	53.0	60.6	52.1
08:00 PM - 09:00 PM	53.3	57.2	51.0
09:00 PM - 10:00 PM	52.2	58.5	50.7
10:00 PM - 11:00 PM	51.3	57.3	50.4
11:00 PM - 12:00 AM	52.2	59.4	50.6
12:00 AM - 01:00 AM	53.0	57.6	52.0
01:00 AM - 02:00 AM	52.5	59.4	51.8
02:00 AM - 03:00 AM	52.3	60.0	51.3
03:00 AM - 04:00 AM	52.2	66.6	50.8
04:00 AM - 05:00 AM	51.5	63.0	50.1
05:00 AM - 06:00 AM	52.5	63.5	50.6
06:00 AM - 07:00 AM	51.5	64.6	50.5
07:00 AM - 08:00 AM	52.5	71.4	50.6
08:00 AM - 09:00 AM	52.4	61.9	51.1
09:00 AM - 10:00 AM	52.5	64.2	51.2
10:00 AM - 11:00 AM	52.7	66.5	51.4
11:00 AM - 12:00 PM	52.8	65.2	51.4

Leq Average 24 hrs. (dB(A)) 52.9
Lmax (dB(A)) 71.4
L90 (dB(A)) 51.3
Ldn (dB(A)) 58.7
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 23117112

Date Received : Nov 01, 2023
Date Reported : Nov 06, 2023
Report Number: 2827490-1

Page 1 of 1

Sample Number 23117112-11
Parameter Noise (Leq 24 hrs.)
Location ชุมชนมาบชลด-ซากกลาง จุดที่ 2 (N2)
Measurement Date Oct 27 - Oct 28, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 734218

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	52.4	59.8	51.2
01:00 PM - 02:00 PM	52.8	73.3	51.3
02:00 PM - 03:00 PM	53.8	66.1	52.6
03:00 PM - 04:00 PM	53.3	62.2	52.4
04:00 PM - 05:00 PM	53.7	68.2	52.5
05:00 PM - 06:00 PM	53.3	66.6	51.1
06:00 PM - 07:00 PM	51.6	56.3	50.0
07:00 PM - 08:00 PM	52.4	57.0	51.0
08:00 PM - 09:00 PM	51.6	56.1	50.6
09:00 PM - 10:00 PM	58.6	65.6	50.4
10:00 PM - 11:00 PM	62.2	66.4	50.7
11:00 PM - 12:00 AM	55.7	64.4	50.6
12:00 AM - 01:00 AM	56.2	60.4	51.1
01:00 AM - 02:00 AM	52.0	63.4	51.2
02:00 AM - 03:00 AM	51.3	61.5	50.5
03:00 AM - 04:00 AM	51.9	61.8	51.0
04:00 AM - 05:00 AM	51.9	66.3	50.4
05:00 AM - 06:00 AM	52.7	67.4	51.6
06:00 AM - 07:00 AM	52.1	63.1	50.9
07:00 AM - 08:00 AM	58.2	70.0	51.1
08:00 AM - 09:00 AM	55.1	72.6	52.0
09:00 AM - 10:00 AM	52.5	66.0	51.2
10:00 AM - 11:00 AM	51.5	63.4	50.3
11:00 AM - 12:00 PM	51.6	72.5	50.0

Leq Average 24 hrs. (dB(A)) 54.8
Lmax (dB(A)) 73.3
L90 (dB(A)) 51.0
Ldn (dB(A)) 62.0
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150

P/O : 4500134068

Project Name : EIA Monitoring

Project Location :

Lot ID: 23117112

Date Received : Nov 01, 2023

Date Reported : Nov 06, 2023

Report Number: 2827491-1

Page 1 of 1

Sample Number 23117112-12
Parameter Noise (Leq 24 hrs.)
Location ชุมชนมาบชลด-ซากกลาง จุดที่ 2 (N2)
Measurement Date Oct 28 - Oct 29, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 734218

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	51.3	68.9	49.6
01:00 PM - 02:00 PM	51.5	71.3	49.6
02:00 PM - 03:00 PM	52.5	66.0	51.1
03:00 PM - 04:00 PM	52.1	62.3	51.1
04:00 PM - 05:00 PM	57.7	70.3	51.4
05:00 PM - 06:00 PM	55.5	61.5	51.3
06:00 PM - 07:00 PM	52.7	65.7	49.7
07:00 PM - 08:00 PM	54.5	61.0	50.5
08:00 PM - 09:00 PM	59.2	69.1	51.5
09:00 PM - 10:00 PM	52.4	61.2	50.9
10:00 PM - 11:00 PM	59.1	72.6	51.5
11:00 PM - 12:00 AM	60.4	73.8	52.0
12:00 AM - 01:00 AM	54.6	61.4	51.8
01:00 AM - 02:00 AM	56.3	68.2	51.0
02:00 AM - 03:00 AM	54.5	64.3	51.6
03:00 AM - 04:00 AM	51.9	70.9	50.5
04:00 AM - 05:00 AM	52.0	71.5	50.5
05:00 AM - 06:00 AM	51.5	64.0	50.3
06:00 AM - 07:00 AM	50.8	65.0	49.3
07:00 AM - 08:00 AM	49.5	65.3	48.3
08:00 AM - 09:00 AM	50.3	63.9	48.4
09:00 AM - 10:00 AM	51.0	63.3	49.7
10:00 AM - 11:00 AM	53.1	73.2	49.7
11:00 AM - 12:00 PM	50.6	69.3	48.6

Leq Average 24 hrs. (dB(A)) 54.7
Lmax (dB(A)) 73.8
L90 (dB(A)) 50.5
Ldn (dB(A)) 62.1
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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 : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 23117112

Date Received : Nov 01, 2023
Date Reported : Nov 06, 2023
Report Number: 2827492-1

Page 1 of 1

Sample Number 23117112-13
Parameter Noise (Leq 24 hrs.)
Location ชุมชนมาบชลด-ซากกลาง จุดที่ 2 (N2)
Measurement Date Oct 29 - Oct 30, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 734218

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	50.0	67.6	48.4
01:00 PM - 02:00 PM	50.8	63.8	48.7
02:00 PM - 03:00 PM	52.6	74.2	50.5
03:00 PM - 04:00 PM	61.1	72.0	52.1
04:00 PM - 05:00 PM	55.6	67.8	51.8
05:00 PM - 06:00 PM	57.7	68.8	51.5
06:00 PM - 07:00 PM	57.8	65.7	53.0
07:00 PM - 08:00 PM	60.0	65.1	51.7
08:00 PM - 09:00 PM	54.3	70.5	51.8
09:00 PM - 10:00 PM	54.3	61.5	52.3
10:00 PM - 11:00 PM	55.5	64.5	52.1
11:00 PM - 12:00 AM	56.6	63.2	52.7
12:00 AM - 01:00 AM	60.3	73.0	52.4
01:00 AM - 02:00 AM	57.1	70.7	50.8
02:00 AM - 03:00 AM	53.4	72.6	52.2
03:00 AM - 04:00 AM	52.6	62.9	51.6
04:00 AM - 05:00 AM	51.1	62.6	48.7
05:00 AM - 06:00 AM	49.3	62.5	47.7
06:00 AM - 07:00 AM	50.9	73.2	49.4
07:00 AM - 08:00 AM	50.7	61.5	48.9
08:00 AM - 09:00 AM	51.3	72.7	49.2
09:00 AM - 10:00 AM	53.1	63.6	50.7
10:00 AM - 11:00 AM	51.9	65.6	50.8
11:00 AM - 12:00 PM	51.9	68.1	50.6

Leq Average 24 hrs. (dB(A)) 55.6
Lmax (dB(A)) 74.2
L90 (dB(A)) 50.8
Ldn (dB(A)) 61.9
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 23117112

Date Received : Nov 01, 2023
Date Reported : Nov 06, 2023
Report Number: 2827493-1

Page 1 of 1

Sample Number 23117112-14
Parameter Noise (Leq 24 hrs.)
Location ชุมชนมาบชลด-ซากกลาง จุดที่ 2 (N2)
Measurement Date Oct 30 - Oct 31, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 734218

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	51.0	58.3	50.3
01:00 PM - 02:00 PM	50.4	57.6	49.7
02:00 PM - 03:00 PM	50.7	55.2	49.6
03:00 PM - 04:00 PM	49.1	57.8	48.1
04:00 PM - 05:00 PM	49.8	53.8	48.9
05:00 PM - 06:00 PM	50.6	53.8	50.0
06:00 PM - 07:00 PM	50.4	56.9	49.4
07:00 PM - 08:00 PM	50.1	63.6	49.2
08:00 PM - 09:00 PM	50.8	63.4	49.6
09:00 PM - 10:00 PM	51.0	61.6	49.8
10:00 PM - 11:00 PM	50.7	65.2	48.9
11:00 PM - 12:00 AM	49.3	71.3	47.7
12:00 AM - 01:00 AM	48.1	61.0	46.5
01:00 AM - 02:00 AM	47.4	63.2	45.9
02:00 AM - 03:00 AM	53.0	81.2	47.0
03:00 AM - 04:00 AM	49.3	57.1	47.7
04:00 AM - 05:00 AM	50.1	70.0	48.5
05:00 AM - 06:00 AM	51.3	59.7	50.3
06:00 AM - 07:00 AM	52.2	70.8	50.8
07:00 AM - 08:00 AM	52.4	63.7	51.2
08:00 AM - 09:00 AM	52.3	64.6	49.8
09:00 AM - 10:00 AM	52.2	67.2	50.9
10:00 AM - 11:00 AM	51.7	67.5	50.7
11:00 AM - 12:00 PM	52.1	61.8	51.0

Leq Average 24 hrs. (dB(A)) 50.9
Lmax (dB(A)) 81.2
L90 (dB(A)) 49.6
Ldn (dB(A)) 57.0
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150

P/O : 4500134068

Project Name : EIA Monitoring

Project Location :

Lot ID: 23117112

Date Received : Nov 01, 2023

Date Reported : Nov 06, 2023

Report Number: 2827494-1

Page 1 of 1

Sample Number 23117112-15
Parameter Noise (Leq 24 hrs.)
Location ริมรั้วด้านทิศเหนือของโครงการ (N3)
Measurement Date Oct 24 - Oct 25, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 472127

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	54.4	73.2	51.9
01:00 PM - 02:00 PM	64.9	101.3	52.1
02:00 PM - 03:00 PM	54.8	71.1	52.1
03:00 PM - 04:00 PM	54.1	74.7	52.4
04:00 PM - 05:00 PM	55.8	77.5	52.9
05:00 PM - 06:00 PM	54.5	80.1	53.1
06:00 PM - 07:00 PM	53.5	66.6	52.9
07:00 PM - 08:00 PM	53.4	59.4	52.8
08:00 PM - 09:00 PM	53.4	61.5	52.6
09:00 PM - 10:00 PM	52.6	58.2	52.0
10:00 PM - 11:00 PM	52.9	57.2	52.3
11:00 PM - 12:00 AM	53.5	57.8	53.0
12:00 AM - 01:00 AM	53.5	62.4	52.9
01:00 AM - 02:00 AM	53.5	61.4	52.6
02:00 AM - 03:00 AM	54.0	67.6	53.1
03:00 AM - 04:00 AM	53.7	67.8	52.9
04:00 AM - 05:00 AM	54.0	74.9	52.4
05:00 AM - 06:00 AM	52.6	66.5	51.6
06:00 AM - 07:00 AM	52.0	61.7	51.1
07:00 AM - 08:00 AM	55.3	84.3	50.9
08:00 AM - 09:00 AM	55.6	79.6	51.1
09:00 AM - 10:00 AM	53.1	72.2	51.5
10:00 AM - 11:00 AM	53.9	73.3	51.5
11:00 AM - 12:00 PM	54.3	73.2	52.1

Leq Average 24 hrs. (dB(A)) 55.6
Lmax (dB(A)) 101.3
L90 (dB(A)) 52.3
Ldn (dB(A)) 60.4
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 23117112

Date Received : Nov 01, 2023
Date Reported : Nov 06, 2023
Report Number: 2827495-1

Page 1 of 1

Sample Number 23117112-16
Parameter Noise (Leq 24 hrs.)
Location ริมรั้วด้านทิศเหนือของโครงการ (N3)
Measurement Date Oct 25 - Oct 26, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 472127

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	53.1	68.8	52.1
01:00 PM - 02:00 PM	53.7	75.2	52.2
02:00 PM - 03:00 PM	53.5	72.9	52.3
03:00 PM - 04:00 PM	53.1	69.0	52.4
04:00 PM - 05:00 PM	53.7	58.7	53.0
05:00 PM - 06:00 PM	54.3	64.7	53.4
06:00 PM - 07:00 PM	53.4	65.8	52.5
07:00 PM - 08:00 PM	52.8	61.2	52.3
08:00 PM - 09:00 PM	52.8	64.5	52.3
09:00 PM - 10:00 PM	52.6	59.8	51.9
10:00 PM - 11:00 PM	56.5	73.3	51.8
11:00 PM - 12:00 AM	55.0	69.0	52.1
12:00 AM - 01:00 AM	52.8	62.1	52.2
01:00 AM - 02:00 AM	53.8	63.0	52.8
02:00 AM - 03:00 AM	53.8	65.7	52.7
03:00 AM - 04:00 AM	54.4	71.4	53.3
04:00 AM - 05:00 AM	52.9	68.8	51.2
05:00 AM - 06:00 AM	51.8	67.3	50.9
06:00 AM - 07:00 AM	52.6	72.0	51.1
07:00 AM - 08:00 AM	52.4	65.4	51.0
08:00 AM - 09:00 AM	51.8	68.1	50.5
09:00 AM - 10:00 AM	53.2	72.3	50.8
10:00 AM - 11:00 AM	52.3	70.1	51.2
11:00 AM - 12:00 PM	53.8	73.4	51.3

Leq Average 24 hrs. (dB(A)) 53.5
Lmax (dB(A)) 75.2
L90 (dB(A)) 52.1
Ldn (dB(A)) 60.3
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150

P/O : 4500134068

Project Name : EIA Monitoring

Project Location :

Lot ID: 23117112

Date Received : Nov 01, 2023

Date Reported : Nov 06, 2023

Report Number: 2827496-1

Page 1 of 1

Sample Number 23117112-17
Parameter Noise (Leq 24 hrs.)
Location ริมรั้วด้านทิศเหนือของโครงการ (N3)
Measurement Date Oct 26 - Oct 27, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 472127

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	55.5	77.3	51.2
01:00 PM - 02:00 PM	56.6	82.8	51.5
02:00 PM - 03:00 PM	56.3	76.5	51.7
03:00 PM - 04:00 PM	52.5	69.5	51.7
04:00 PM - 05:00 PM	53.7	72.3	51.8
05:00 PM - 06:00 PM	53.6	71.6	52.0
06:00 PM - 07:00 PM	52.9	68.5	52.2
07:00 PM - 08:00 PM	52.2	56.7	51.8
08:00 PM - 09:00 PM	52.4	59.9	51.9
09:00 PM - 10:00 PM	52.4	60.0	52.0
10:00 PM - 11:00 PM	52.4	57.9	52.0
11:00 PM - 12:00 AM	52.5	59.0	52.1
12:00 AM - 01:00 AM	52.4	53.9	52.0
01:00 AM - 02:00 AM	52.6	59.4	52.2
02:00 AM - 03:00 AM	53.1	65.4	52.5
03:00 AM - 04:00 AM	53.8	72.5	52.8
04:00 AM - 05:00 AM	53.6	69.7	52.3
05:00 AM - 06:00 AM	54.4	72.4	51.0
06:00 AM - 07:00 AM	52.1	69.6	50.6
07:00 AM - 08:00 AM	57.1	78.8	51.1
08:00 AM - 09:00 AM	53.8	76.9	50.5
09:00 AM - 10:00 AM	55.2	86.4	50.5
10:00 AM - 11:00 AM	69.7	86.2	50.9
11:00 AM - 12:00 PM	53.5	70.2	51.1

Leq Average 24 hrs. (dB(A)) 58.0
Lmax (dB(A)) 86.4
L90 (dB(A)) 51.8
Ldn (dB(A)) 61.2
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150

P/O : 4500134068

Project Name : EIA Monitoring

Project Location :

Lot ID: 23117112

Date Received : Nov 01, 2023

Date Reported : Nov 06, 2023

Report Number: 2827497-1

Page 1 of 1

Sample Number 23117112-18
Parameter Noise (Leq 24 hrs.)
Location ริมรั้วด้านทิศเหนือของโครงการ (N3)
Measurement Date Oct 27 - Oct 28, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 472127

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	55.6	87.5	51.0
01:00 PM - 02:00 PM	56.6	83.5	51.2
02:00 PM - 03:00 PM	53.5	74.6	50.7
03:00 PM - 04:00 PM	51.5	68.6	50.8
04:00 PM - 05:00 PM	56.8	85.2	50.6
05:00 PM - 06:00 PM	51.3	63.9	50.7
06:00 PM - 07:00 PM	51.6	62.4	50.9
07:00 PM - 08:00 PM	51.8	63.7	51.2
08:00 PM - 09:00 PM	51.5	63.8	50.9
09:00 PM - 10:00 PM	51.6	67.2	51.0
10:00 PM - 11:00 PM	51.7	63.3	51.1
11:00 PM - 12:00 AM	52.1	74.1	50.8
12:00 AM - 01:00 AM	52.1	63.7	51.0
01:00 AM - 02:00 AM	51.7	62.6	50.9
02:00 AM - 03:00 AM	52.7	72.3	51.2
03:00 AM - 04:00 AM	52.9	68.1	51.7
04:00 AM - 05:00 AM	52.1	68.1	50.4
05:00 AM - 06:00 AM	51.3	71.2	50.4
06:00 AM - 07:00 AM	52.0	72.6	50.3
07:00 AM - 08:00 AM	55.0	74.3	50.4
08:00 AM - 09:00 AM	52.4	70.6	50.5
09:00 AM - 10:00 AM	51.4	70.5	49.9
10:00 AM - 11:00 AM	50.5	65.6	49.7
11:00 AM - 12:00 PM	58.0	86.8	49.8

Leq Average 24 hrs. (dB(A)) 53.4
Lmax (dB(A)) 87.5
L90 (dB(A)) 50.8
Ldn (dB(A)) 58.8
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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 : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150

P/O : 4500134068

Project Name : EIA Monitoring

Project Location :

Lot ID: 23117112

Date Received : Nov 01, 2023

Date Reported : Nov 06, 2023

Report Number: 2827498-1

Page 1 of 1

Sample Number 23117112-19
Parameter Noise (Leq 24 hrs.)
Location ริมรั้วด้านทิศเหนือของโครงการ (N3)
Measurement Date Oct 28 - Oct 29, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 472127

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	50.7	63.9	49.9
01:00 PM - 02:00 PM	52.3	71.2	50.4
02:00 PM - 03:00 PM	52.0	66.4	50.9
03:00 PM - 04:00 PM	52.2	63.0	51.3
04:00 PM - 05:00 PM	52.5	66.6	51.6
05:00 PM - 06:00 PM	52.2	66.8	51.4
06:00 PM - 07:00 PM	52.4	72.7	51.1
07:00 PM - 08:00 PM	51.5	60.9	50.9
08:00 PM - 09:00 PM	52.0	63.4	51.3
09:00 PM - 10:00 PM	52.7	67.2	51.3
10:00 PM - 11:00 PM	52.7	58.6	51.5
11:00 PM - 12:00 AM	51.7	60.1	51.2
12:00 AM - 01:00 AM	52.0	61.8	51.4
01:00 AM - 02:00 AM	52.1	64.8	51.4
02:00 AM - 03:00 AM	52.6	67.6	51.5
03:00 AM - 04:00 AM	53.3	82.5	51.3
04:00 AM - 05:00 AM	56.0	76.4	51.7
05:00 AM - 06:00 AM	53.6	75.1	51.9
06:00 AM - 07:00 AM	56.3	78.3	50.7
07:00 AM - 08:00 AM	53.6	75.8	49.8
08:00 AM - 09:00 AM	55.4	78.1	49.2
09:00 AM - 10:00 AM	50.7	71.7	49.3
10:00 AM - 11:00 AM	58.5	93.4	50.2
11:00 AM - 12:00 PM	55.7	82.3	50.3

Leq Average 24 hrs. (dB(A)) 53.6
Lmax (dB(A)) 93.4
L90 (dB(A)) 51.2
Ldn (dB(A)) 60.1
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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 : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150

P/O : 4500134068

Project Name : EIA Monitoring

Project Location :

Lot ID: 23117112

Date Received : Nov 01, 2023

Date Reported : Nov 06, 2023

Report Number: 2827499-1

Page 1 of 1

Sample Number 23117112-20
Parameter Noise (Leq 24 hrs.)
Location ริมรั้วด้านทิศเหนือของโครงการ (N3)
Measurement Date Oct 29 - Oct 30, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 472127

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	51.8	65.2	50.6
01:00 PM - 02:00 PM	53.3	70.5	51.5
02:00 PM - 03:00 PM	52.0	61.2	51.3
03:00 PM - 04:00 PM	52.4	60.5	51.5
04:00 PM - 05:00 PM	52.2	60.2	51.5
05:00 PM - 06:00 PM	52.6	66.7	52.0
06:00 PM - 07:00 PM	53.1	66.4	52.2
07:00 PM - 08:00 PM	52.7	61.5	52.0
08:00 PM - 09:00 PM	53.5	71.3	52.1
09:00 PM - 10:00 PM	54.5	73.5	52.7
10:00 PM - 11:00 PM	52.7	69.1	52.0
11:00 PM - 12:00 AM	52.1	65.2	51.6
12:00 AM - 01:00 AM	52.7	61.8	52.0
01:00 AM - 02:00 AM	52.3	61.6	51.5
02:00 AM - 03:00 AM	53.2	72.6	52.3
03:00 AM - 04:00 AM	54.3	72.5	52.7
04:00 AM - 05:00 AM	53.3	75.3	50.3
05:00 AM - 06:00 AM	54.3	75.9	50.0
06:00 AM - 07:00 AM	54.6	74.8	50.0
07:00 AM - 08:00 AM	54.2	75.3	50.0
08:00 AM - 09:00 AM	54.5	88.2	49.4
09:00 AM - 10:00 AM	52.2	74.0	49.1
10:00 AM - 11:00 AM	54.2	74.5	49.8
11:00 AM - 12:00 PM	54.5	76.6	50.2

Leq Average 24 hrs. (dB(A)) 53.3
Lmax (dB(A)) 88.2
L90 (dB(A)) 51.5
Ldn (dB(A)) 59.8
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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 : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150

P/O : 4500134068

Project Name : EIA Monitoring

Project Location :

Lot ID: 23117112

Date Received : Nov 01, 2023

Date Reported : Nov 06, 2023

Report Number: 2827500-1

Page 1 of 1

Sample Number 23117112-21
Parameter Noise (Leq 24 hrs.)
Location ริมรั้วด้านทิศเหนือของโครงการ (N3)
Measurement Date Oct 30 - Oct 31, 2023
Measurement by Sitpawit Suwannarat
Sound Level meter Serial No. 472127

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	54.3	73.7	51.3
01:00 PM - 02:00 PM	59.2	73.5	51.1
02:00 PM - 03:00 PM	52.7	74.7	50.9
03:00 PM - 04:00 PM	51.0	63.8	49.9
04:00 PM - 05:00 PM	50.5	70.3	48.8
05:00 PM - 06:00 PM	50.3	59.2	48.6
06:00 PM - 07:00 PM	49.9	64.4	48.4
07:00 PM - 08:00 PM	48.6	58.8	47.8
08:00 PM - 09:00 PM	48.9	65.7	47.7
09:00 PM - 10:00 PM	50.4	58.9	49.2
10:00 PM - 11:00 PM	51.5	61.1	50.5
11:00 PM - 12:00 AM	51.6	61.7	50.4
12:00 AM - 01:00 AM	51.6	63.5	50.2
01:00 AM - 02:00 AM	52.1	66.8	50.7
02:00 AM - 03:00 AM	53.3	79.6	51.3
03:00 AM - 04:00 AM	52.4	67.2	51.2
04:00 AM - 05:00 AM	55.2	74.7	50.0
05:00 AM - 06:00 AM	53.7	77.8	47.7
06:00 AM - 07:00 AM	52.9	80.7	47.2
07:00 AM - 08:00 AM	54.5	76.2	48.0
08:00 AM - 09:00 AM	51.3	73.3	48.3
09:00 AM - 10:00 AM	52.3	73.9	48.0
10:00 AM - 11:00 AM	52.6	72.8	48.0
11:00 AM - 12:00 PM	52.2	73.3	48.0

Leq Average 24 hrs. (dB(A)) 52.9
Lmax (dB(A)) 80.7
L90 (dB(A)) 48.8
Ldn (dB(A)) 59.3
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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ภาคผนวก ค-4

คุณภาพน้ำเสีย



Analysis / Test Report

TESTING
No.0042

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur
Muang Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 2376919

Date Received : Jul 10, 2023
Date Reported : Jul 17, 2023
Report Number : 2702764-1

Page 1 of 1

Sample Number	2376919-1
Sampled Date	Jul 10, 2023 3:45 PM
Sample Description	Wastewater
Location	ถังตรวจสอบคุณภาพน้ำเสีย (ก่อนส่งไปยังระบบบำบัดน้ำเสียของ KGC)
Date Analysis Commenced	Jul 10, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	171	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	6206	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	6.5	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Rayong
Oil & Grease *	mg/L	-	3	14	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	10.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	454	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	37	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Wanlop Hunchainaow ทะเบียนเลขที่ ว-323-จ-9457

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 ว-323-จ-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur
Muang Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 2384744

Date Received : Aug 21, 2023
Date Reported : Aug 28, 2023
Report Number : 2723351-1

Page 1 of 1

Sample Number	2384744-1
Sampled Date	Aug 21, 2023 2:40 PM
Sample Description	Wastewater
Location	ถังตรวจสอบคุณภาพน้ำเสีย (ก่อนส่งไปยังระบบบำบัดน้ำเสียของ KGC)
Date Analysis Commenced	Aug 21, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Rayong
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	7.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :

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Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur
Muang Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 2392318

Date Received : Sep 11, 2023
Date Reported : Sep 18, 2023
Report Number : 2739732-1

Page 1 of 1

Sample Number	2392318-1
Sampled Date	Sep 11, 2023 2:40 PM
Sample Description	Wastewater
Location	ถังตรวจสอบคุณภาพน้ำเสีย (ก่อนส่งไปยังระบบบำบัดน้ำเสียของ KGC)
Date Analysis Commenced	Sep 11, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Rayong
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	8.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur
Muang Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 23111056

Date Received : Oct 09, 2023
Date Reported : Oct 17, 2023
Report Number : 2785697-1

Page 1 of 1

Sample Number	23111056-1
Sampled Date	Oct 09, 2023 2:33 PM
Sample Description	Wastewater
Location	ถังตรวจสอบคุณภาพน้ำเสีย (ก่อนส่งไปยังระบบบำบัดน้ำเสียของ KGC) (V-4051)
Date Analysis Commenced	Oct 09, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	937	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	2031	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde *	mg/L	0.03	0.1	22.9	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Rayong
Oil & Grease *	mg/L	-	3	16	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	6.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	952	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

Remark :

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Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur
Muang Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 23123501

Date Received : Nov 10, 2023

Date Reported : Nov 17, 2023

Report Number : 2814556-1

Page 1 of 1

Sample Number	23123501-1
Sampled Date	Nov 10, 2023 2:15 PM
Sample Description	Wastewater
Location	ถังตรวจสอบคุณภาพน้ำเสีย (ก่อนส่งไปยังระบบบำบัดน้ำเสียของ KGC) (V-4051)
Date Analysis Commenced	Nov 10, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	250	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	20043	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde *	mg/L	0.03	0.1	1835	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Rayong
Oil & Grease *	mg/L	-	3	14	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	8.6	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1588	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	140	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management

N. Banthit

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur
Muang Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 23134779

Date Received : Dec 11, 2023

Date Reported : Dec 18, 2023

Report Number : 2840232-1

Page 1 of 1

Sample Number	23134779-1
Sampled Date	Dec 11, 2023 2:48 PM
Sample Description	Wastewater
Location	ถังตรวจสอบคุณภาพน้ำเสีย (ก่อนส่งไปยังระบบบำบัดน้ำเสียของ KGC) (V-4051)
Date Analysis Commenced	Dec 11, 2023
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	515	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	1479	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Formaldehyde	mg/L	0.03	0.1	0.5	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Rayong
Oil & Grease *	mg/L	-	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 *		-	-	11.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1016	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	31	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005

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Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ค-9442

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ภาคผนวก ค-5

คุณภาพอากาศในสถานประกอบการ



Analysis / Test Report

TESTING
No.0009

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong,
Amphur Muang Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 2388581

Date Received : Nov 28, 2023

Date Reported : Dec 07, 2023

Report Number : 2732345-1

Page 1 of 3

Sample Number 2388581-1
Sampled Date Nov 24, 2023
Sample Description Air Quality
Location ส่วนเตรียมฟอร์มัลดีไฮด์ (กระบวนการผลิตไอโซพรีนอล)
Date Analysis Commenced Nov 29, 2023
Condition of Sample Drawn into two sorbent tubes, refrigerated
Barometric Pressure 757 mmHg
Atmospheric Temperature 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Formaldehyde *	09:00 AM - 05:00 PM	ppm	-	0.1	<0.10	0.75	NIOSH (1994), 2541	MOL	Bangkok
Toluene	09:00 AM - 05:00 PM	ppm	-	0.05	<0.05	200	In - house method : STM 04-032 based on NIOSH Manual of Analytical Methods, 4th ed., NMAM, method 1501, issue 3, 2003 (Include sampling)	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 : Amnat Wongsakhe

Remark :

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

Approved by

Orawan R.

Orawan Rakyong
Scientist (3)

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Analysis / Test Report

TESTING
No.0009

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong,
Amphur Muang Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 2388581

Date Received : Nov 28, 2023

Date Reported : Dec 07, 2023

Report Number : 2732345-1

Page 2 of 3

Sample Number 2388581-2
Sampled Date Nov 24, 2023
Sample Description Air Quality
Location ส่วนเตรียมสารเร่งปฏิกิริยา (กระบวนการผลิตอนุพันธ์)
Date Analysis Commenced Nov 29, 2023
Condition of Sample Drawn into two sorbent tubes, refrigerated
Barometric Pressure 757 mmHg
Atmospheric Temperature 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Formaldehyde *	09:05 AM - 05:05 PM	ppm	-	0.1	<0.10	0.75	NIOSH (1994), 2541	MOL	Bangkok
Toluene	09:05 AM - 05:05 PM	ppm	-	0.05	<0.05	200	In - house method : STM 04-032 based on NIOSH Manual of Analytical Methods, 4th ed., NMAM, method 1501, issue 3, 2003 (Include sampling)	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 : Amnat Wongsakhe

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.

Approved by

Orawan R.

Orawan Rakyong
Scientist (3)

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Analysis / Test Report

TESTING
No.0009

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong,
Amphur Muang Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 2388581

Date Received : Nov 28, 2023

Date Reported : Dec 07, 2023

Report Number : 2732345-1

Page 3 of 3

Sample Number 2388581-3
Sampled Date Nov 24, 2023
Sample Description Air Quality
Location ตั้งเก็บกักโหลอื้น
Date Analysis Commenced Nov 29, 2023
Condition of Sample Drawn into two sorbent tubes, refrigerated
Barometric Pressure 757 mmHg
Atmospheric Temperature 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Formaldehyde *	09:10 AM - 05:10 PM	ppm	-	0.1	<0.10	0.75	NIOSH (1994), 2541	MOL	Bangkok
Toluene	09:10 AM - 05:10 PM	ppm	-	0.05	<0.05	200	In - house method : STM 04-032 based on NIOSH Manual of Analytical Methods, 4th ed., NMAM, method 1501, issue 3, 2003 (Include sampling)	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 : Amnat Wongsakhe

Remark :

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Approved by

Orawan R.

Orawan Rakyong
Scientist (3)

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Analysis / Test Report

TESTING
No.0009

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11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong,
Amphur Muang Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 23127199

Date Received : Dec 08, 2023

Date Reported : Dec 15, 2023

Report Number : 2821401-1

Page 1 of 3

Sample Number 23127199-1
Sampled Date Dec 08, 2023
Sample Description Air Quality
Location ส่วนเตรียมฟอร์มัลดีไฮด์ (กระบวนการผลิตไอโซพรีนอล)
Date Analysis Commenced Dec 09, 2023
Condition of Sample Drawn into two sorbent tubes, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 31.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Formaldehyde *	09:00 AM - 05:00 PM	ppm	-	0.1	<0.10	0.75	NIOSH (1994), 2541	MOL	Bangkok
Toluene	09:00 AM - 05:00 PM	ppm	-	0.05	<0.05	200	In - house method : STM 04-032 based on NIOSH Manual of Analytical Methods, 4th ed., NMAM, method 1501, issue 3, 2003 (Include sampling)	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 : Natthapon Jiengwareewong

Remark :

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

Orawan R.

Orawan Rakyong
Scientist (3)

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Analysis / Test Report

TESTING
No.0009

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong,
Amphur Muang Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 23127199

Date Received : Dec 08, 2023

Date Reported : Dec 15, 2023

Report Number : 2821401-1

Page 2 of 3

Sample Number 23127199-2
Sampled Date Dec 08, 2023
Sample Description Air Quality
Location ส่วนเตรียมสารเร่งปฏิกิริยา (กระบวนการผลิตอนุพันธ์)
Date Analysis Commenced Dec 09, 2023
Condition of Sample Drawn into two sorbent tubes, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 31.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Formaldehyde *	09:00 AM - 05:00 PM	ppm	-	0.1	<0.10	0.75	NIOSH (1994), 2541	MOL	Bangkok
Toluene	09:00 AM - 05:00 PM	ppm	-	0.05	<0.05	200	In - house method : STM 04-032 based on NIOSH Manual of Analytical Methods, 4th ed., NMAM, method 1501, issue 3, 2003 (Include sampling)	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 : Natthapon Jiengwareewong

Remark :

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Approved by

Orawan R.

Orawan Rakyong
Scientist (3)

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Analysis / Test Report

TESTING
No.0009

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
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Amphur Muang Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 23127199

Date Received : Dec 08, 2023

Date Reported : Dec 15, 2023

Report Number : 2821401-1

Page 3 of 3

Sample Number 23127199-3
Sampled Date Dec 08, 2023
Sample Description Air Quality
Location ตั้งเก็บกักโหลลูอิน
Date Analysis Commenced Dec 09, 2023
Condition of Sample Drawn into two sorbent tubes, refrigerated
Barometric Pressure 756 mmHg
Atmospheric Temperature 31.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Formaldehyde *	09:00 AM - 05:00 PM	ppm	-	0.1	<0.10	0.75	NIOSH (1994), 2541	MOL	Bangkok
Toluene	09:00 AM - 05:00 PM	ppm	-	0.05	<0.05	200	In - house method : STM 04-032 based on NIOSH Manual of Analytical Methods, 4th ed., NMAM, method 1501, issue 3, 2003 (Include sampling)	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 : Natthapon Jiengwareewong

Remark :

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Approved by

Orawan R.

Orawan Rakyong
Scientist (3)

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ภาคผนวก ค-6

ระดับเสียงในสถานประกอบการ



Analysis / Test Report

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong,
Amphur Muang Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 2388583

Date Received : Nov 28, 2023

Date Reported : Nov 30, 2023

Report Number : 2732347-1

Page 1 of 3

Sample Number 2388583-1
Sampled Date Nov 24, 2023
Sample Description Noise Dose
Location พนักงานส่วนการผลิต (คนที่ 1)
Personal Sampling คุณณัฐวัตร ปะกะดั่ง
Date Analysis Commenced Nov 29, 2023

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	08:30 AM - 08:30 PM	%	-	-	57.5	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	08:30 AM - 08:30 PM	%	-	1	55.0	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	08:30 AM - 08:30 PM	dB(A)	-	-	80.6	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 08:30 PM	dB(A)	-	-	82.4	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

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

Sampled By : Amnat Wongsakhe

Remark :

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

Approved by

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

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Amphur Muang Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 2388583

Date Received : Nov 28, 2023

Date Reported : Nov 30, 2023

Report Number : 2732347-1

Page 2 of 3

Sample Number 2388583-2
Sampled Date Nov 24, 2023
Sample Description Noise Dose
Location พนักงานส่วนการผลิต (คนที่ 1)
Personal Sampling คุณเดชฤทธิ์ ไชยชาติ
Date Analysis Commenced Nov 29, 2023

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	08:30 AM - 08:30 PM	%	-	-	22.4	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	08:30 AM - 08:30 PM	%	-	1	20.9	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	08:30 AM - 08:30 PM	dB(A)	-	-	76.5	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 08:30 PM	dB(A)	-	-	78.2	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

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

Sampled By : Amnat Wongsakhe

Remark :

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

Approved by

Wichan Choonharat
Assistant Manager

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Amphur Muang Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 2388583

Date Received : Nov 28, 2023

Date Reported : Nov 30, 2023

Report Number : 2732347-1

Page 3 of 3

Sample Number 2388583-3
Sampled Date Nov 24, 2023
Sample Description Noise Dose
Location พนักงานส่วนการผลิต (คนที่ 1)
Personal Sampling คุณชูเกียรติ แก้วเกิด
Date Analysis Commenced Nov 29, 2023

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	08:30 AM - 08:30 PM	%	-	-	38.9	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	08:30 AM - 08:30 PM	%	-	1	37.2	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	08:30 AM - 08:30 PM	dB(A)	-	-	78.9	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 08:30 PM	dB(A)	-	-	80.7	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

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

Sampled By : Amnat Wongsakhe

Remark :

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

Approved by

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

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Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 2388582

Date Received : Nov 27, 2023
Date Reported : Nov 30, 2023
Report Number: 2851071-1

Page 1 of 1

Sample Number 2388582-1
Parameter Noise (Leq 12 hrs.)
Location เครื่องเพิ่มความดัน
Measurement Date Nov 24, 2023
Measurement by Amnat Wongsakhe

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:22 AM - 09:22 AM	86.9	91.4	84.5
09:22 AM - 10:22 AM	88.2	89.8	87.3
10:22 AM - 11:22 AM	87.7	89.7	86.9
11:22 AM - 12:22 PM	87.4	89.4	86.7
12:22 PM - 01:22 PM	87.1	89.9	86.4
01:22 PM - 02:22 PM	86.6	89.9	85.6
02:22 PM - 03:22 PM	86.8	89.6	85.5
03:22 PM - 04:22 PM	87.5	90.1	85.9
04:22 PM - 05:22 PM	87.5	89.6	86.4
05:22 PM - 06:22 PM	86.2	88.3	85.6
06:22 PM - 07:22 PM	86.5	89.3	85.2
07:22 PM - 08:22 PM	86.8	89.6	86.1

Leq Average 12 hrs. (dB(A)) 87.1
Lmax (dB(A)) 91.4
Standard (dB(A)) 87 140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

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11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur Muang
Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 2388582

Date Received : Nov 27, 2023
Date Reported : Nov 30, 2023
Report Number: 2851072-1

Page 1 of 1

Sample Number 2388582-2
Parameter Noise (Leq 12 hrs.)
Location เครื่องเป่าหมุนเวียนอากาศ
Measurement Date Nov 24, 2023
Measurement by Amnat Wongsakhe

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:27 AM - 09:27 AM	85.8	87.7	85.1
09:27 AM - 10:27 AM	86.8	88.5	84.9
10:27 AM - 11:27 AM	86.8	88.3	86.0
11:27 AM - 12:27 PM	86.1	88.0	85.2
12:27 PM - 01:27 PM	85.9	87.5	85.2
01:27 PM - 02:27 PM	85.6	88.1	84.8
02:27 PM - 03:27 PM	85.5	88.2	84.8
03:27 PM - 04:27 PM	86.8	89.8	85.4
04:27 PM - 05:27 PM	86.6	88.4	85.9
05:27 PM - 06:27 PM	86.9	88.7	86.1
06:27 PM - 07:27 PM	86.0	87.9	85.3
07:27 PM - 08:27 PM	86.2	87.8	85.5

Leq Average 12 hrs. (dB(A)) 86.3
Lmax (dB(A)) 89.8
Standard (dB(A)) 87

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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ภาคผนวก ค-7

คุณภาพดินและน้ำใต้ดิน



Analysis / Test Report

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur
Muang Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 23123503

Date Received : Nov 21, 2023

Date Reported : Nov 29, 2023

Report Number : 2850029-1

Page 1 of 1

Sample Number	23123503-1
Sampled Date	Nov 21, 2023 1:48 PM
Sample Description	Underground water
Location	Underground water (Up-Gradient)
Date Analysis Commenced	Nov 23, 2023
Condition of Sample	Contained in four glass vials and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Organic Compounds							
Methanol	mg/L	-	0.01	<0.01	60	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B, 6200B	Bangkok
Volatile Organics Compounds							
Toluene	mg/L	0.00004	0.0005	Not Detected	5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Kardbundit Kitisupavanit ทะเบียนเลขที่ ว-204-จ-0001

Remark :

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

Technical Management

Suwimon C.

Suwimon Chairuangwut
Scientist (3)
ทะเบียนเลขที่ ว-204-จ-5417

Approved by

Kanokkorn Anek

Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur
Muang Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 23123503

Date Received : Nov 21, 2023

Date Reported : Nov 29, 2023

Report Number : 2850029-2

Page 1 of 1

Sample Number	23123503-1
Sampled Date	Nov 21, 2023 1:48 PM
Sample Description	Underground water
Location	Underground water (Up-Gradient)
Date Analysis Commenced	Nov 22, 2023
Condition of Sample	Contained in four glass vials and 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							
Formaldehyde	mg/L	0.03	0.1	Not Detected	No Standard	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Rayong
Water Level	m	-	-	7.63	No Standard	Water Level Meter	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampling By : Sansoen Khuiyoksui , Kardbundit Kitisupavanit

Remark :

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Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : Kuraray Advanced Chemicals (Thailand) Co., Ltd.
11,18, Asia Industrial Estate, Phungmuang Chapor 2-1 Road, Tambol Huai Pong, Amphur
Muang Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 23123503

Date Received : Nov 21, 2023

Date Reported : Nov 29, 2023

Report Number : 2850030-1

Page 1 of 1

Sample Number	23123503-2
Sampled Date	Nov 21, 2023 2:07 PM
Sample Description	Underground water
Location	Underground water (Down-Gradient)
Date Analysis Commenced	Nov 23, 2023
Condition of Sample	Contained in four glass vials and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Organic Compounds							
Methanol	mg/L	-	0.01	<0.01	60	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B, 6200B	Bangkok
Volatile Organics Compounds							
Toluene	mg/L	0.00004	0.0005	Not Detected	5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6200 B	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Kardbundit Kitisupavanit ทะเบียนเลขที่ ว-204-จ-0001

Remark :

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Technical Management

Suwimon C.

Suwimon Chairuangwut
Scientist (3)
ทะเบียนเลขที่ ว-204-จ-5417

Approved by

Kanokkorn Anek

Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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Analysis / Test Report

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Muang Rayong, Rayong Thailand 21150
P/O : 4500134068
Project Name : EIA Monitoring
Project Location :

Lot ID: 23123503

Date Received : Nov 21, 2023

Date Reported : Nov 29, 2023

Report Number : 2850030-2

Page 1 of 1

Sample Number	23123503-2
Sampled Date	Nov 21, 2023 2:07 PM
Sample Description	Underground water
Location	Underground water (Down-Gradient)
Date Analysis Commenced	Nov 22, 2023
Condition of Sample	Contained in four glass vials and 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							
Formaldehyde	mg/L	0.03	0.1	Not Detected	No Standard	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Rayong
Water Level	m	-	-	5.45	No Standard	Water Level Meter	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

Sampling By : Sansoen Khuiyoksui , Kardbundit Kitisupavanit

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