

ภาคผนวก ค

ใบรับรองผลการตรวจวัดคุณภาพสิ่งแวดล้อม

ภาคผนวก ค-1

ผลการตรวจวิเคราะห์คุณภาพน้ำทิ้ง



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O :

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 231361

Date Received : Jan 11, 2023

Date Reported : Jan 19, 2023

Report Number : 2535033-1

Page 1 of 2

Sample Number	231361-1
Sampled Date	Jan 11, 2023 9:35 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	Jan 11, 2023
Condition of Sample	Contained in two glass vials, two amber glass bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD	mg/L	1.5	5	34	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	16	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	17	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	27.5	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	620	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

Technical Management

N. Banchongkit

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ 7-323-จ-9445

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ 7-323-ก-9442

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Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O :

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 231361

Date Received : Jan 11, 2023

Date Reported : Jan 19, 2023

Report Number : 2535033-1

Page 2 of 2

Sampling By : Wanlop Hunchainaow ทะเบียนเลขที่ 7-323-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. Banchongkit

Narumon Banchongkit
Supervisor

ทะเบียนเลขที่ 7-323-จ-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ 7-323-ค-9442

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Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O :

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 231361

Date Received : Jan 11, 2023

Date Reported : Jan 19, 2023

Report Number : 2535033-2

Page 1 of 1

Sample Number	231361-1
Sampled Date	Jan 11, 2023 9:35 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	Jan 14, 2023
Condition of Sample	Contained in two glass vials, two amber glass bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Organic Carbon	mg/L	0.01	0.1	13.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

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

Sampling By :

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Approved by

Narin Saiseng
Supervisor



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4514144155

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 231787

Date Received : Feb 03, 2023

Date Reported : Feb 10, 2023

Report Number : 2536022-1

Page 1 of 2

Sample Number	231787-1						
Sampled Date	Feb 03, 2023 10:40 AM						
Sample Description	Wastewater						
Location	H-304						
Date Analysis Commenced	Feb 03, 2023						
Condition of Sample	Contained in two glass vials, two amber glass bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD	mg/L	1.5	25	33	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	20	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	18	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	8.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	28.9	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	596	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

Technical Management

N. Banchongkit

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ 7-323-จ-9445

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ 7-323-ก-9442

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Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4514144155

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 231787

Date Received : Feb 03, 2023

Date Reported : Feb 10, 2023

Report Number : 2536022-1

Page 2 of 2

Sampling By : Wanlop Hunchainaow ทะเบียนเลขที่ 7-323-จ-9457 , Thanasoun Namakunna ทะเบียนเลขที่ 7-204-จ-8592

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Technical Management

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Narumon Banchongkit
Supervisor

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Approved by

D. Changchon

Dej Changchon
Senior Manager

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Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4514144155

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 231787

Date Received : Feb 03, 2023

Date Reported : Feb 10, 2023

Report Number : 2536022-2

Page 1 of 1

Sample Number	231787-1						
Sampled Date	Feb 03, 2023 10:40 AM						
Sample Description	Wastewater						
Location	H-304						
Date Analysis Commenced	Feb 08, 2023						
Condition of Sample	Contained in two glass vials, two amber glass bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Organic Carbon	mg/L	0.01	0.1	10.7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

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

Sampling By : Wanlop Hunchainaow , Thanasoun Namakunna

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Siriluk P.

Siriluk Puengpang
Supervisor

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Analysis / Test Report

TESTING

No.0042

Lot ID: 2320308

Date Received : Mar 01, 2023

Date Reported : Mar 10, 2023

Report Number : 2574728-1

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4514144155

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Page 1 of 2

Sample Number	2320308-1						
Sampled Date	Mar 01, 2023 9:40 AM						
Sample Description	Wastewater						
Location	H-304						
Date Analysis Commenced	Mar 01, 2023						
Condition of Sample	Contained in two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	2.4	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD	mg/L	1.5	25	30	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	9	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	9	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	28.6	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	780	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	10	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

Technical Management

N. Banchongkit

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ 7-323-จ-9445

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ 7-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4514144155

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2320308

Date Received : Mar 01, 2023

Date Reported : Mar 10, 2023

Report Number : 2574728-1

Page 2 of 2

Sampling By : Pathompong Kornawat ทะเบียนเลขที่ ๖-323-จ-9468 , Thanasoun Namakunna ทะเบียนเลขที่ ๖-204-จ-8592

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Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor

ทะเบียนเลขที่ ๖-323-จ-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ ๖-323-ค-9442

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Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4514144155

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2320308

Date Received : Mar 01, 2023

Date Reported : Mar 10, 2023

Report Number : 2574728-2

Page 1 of 1

Sample Number	2320308-1
Sampled Date	Mar 01, 2023 9:40 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	Mar 03, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Organic Carbon	mg/L	0.01	0.1	9.90	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

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

Sampling By : Pathompong Kornawat , Thanasoun Namakunna

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Approved by

Narin Saiseng
Supervisor



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4514144155

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2329625

Date Received : Apr 05, 2023

Date Reported : Apr 12, 2023

Report Number : 2595601-1

Page 1 of 2

Sample Number	2329625-1
Sampled Date	Apr 05, 2023 11:15 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	Apr 05, 2023
Condition of Sample	Contained in two glass vials, two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD	mg/L	1.5	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	15	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	13	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	38.2	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	536	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

Technical Management

N. Banchongkit

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ 7-323-จ-9445

Approved by

D. Changchon

Dej Changchon

Senior Manager

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Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4514144155

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2329625

Date Received : Apr 05, 2023

Date Reported : Apr 12, 2023

Report Number : 2595601-1

Page 2 of 2

Note : Raw data of COD value (Refer to Lot ID 2329625-1) is 22.7 mg/L

Sampling By : Wanlop Hunchainaow ทะเบียนเลขที่ ๖-323-๖-9457 , Thanasoun Namakunna ทะเบียนเลขที่ ๖-204-๖-8592

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

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Dej Changchon

Senior Manager

ทะเบียนเลขที่ ๖-323-๖-9442

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Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4514144155

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2329625

Date Received : Apr 05, 2023

Date Reported : Apr 12, 2023

Report Number : 2595601-2

Page 1 of 1

Sample Number	2329625-1
Sampled Date	Apr 05, 2023 11:15 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	Apr 07, 2023
Condition of Sample	Contained in two glass vials, two amber glass bottles and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Organic Carbon	mg/L	0.01	0.1	8.12	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

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

Note : Raw data of COD value (Refer to Lot ID 2329625-1) is 22.7 mg/L

Sampling By : Wanlop Hunchainaow , Thanasoun Namakunna

Remark :

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

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Approved by

Nanthawadee Somboon
Specialist 1



Analysis / Test Report

TESTING

No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4514144155

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2347489

Date Received : May 02, 2023

Date Reported : May 11, 2023

Report Number : 2634987-1

Page 1 of 2

Sample Number	2347489-1
Sampled Date	May 02, 2023 9:40 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	May 02, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD	mg/L	1.5	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	14	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	12	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.6	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	296	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

Technical Management

N. Banchongkit

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ 7-323-จ-9445

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ 7-323-ค-9442

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Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4514144155

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2347489

Date Received : May 02, 2023

Date Reported : May 11, 2023

Report Number : 2634987-1

Page 2 of 2

Note : Raw data of COD value (Refer to Lot ID 2347489-1) is 13.9 mg/L

Sampling By : Wanlop Hunchainaow ทะเบียนเลขที่ ๖-323-จ-9457 , Thanasoun Namakunna ทะเบียนเลขที่ ๖-204-จ-8592

Remark :

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

Technical Management

N. Banchongkit

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ ๖-323-จ-9445

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ๖-323-ค-9442

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Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4514144155

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2347489

Date Received : May 02, 2023

Date Reported : May 11, 2023

Report Number : 2634987-2

Page 1 of 1

Sample Number	2347489-1
Sampled Date	May 02, 2023 9:40 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	May 05, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Organic Carbon	mg/L	0.01	0.1	6.14	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

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

Note : Raw data of COD value (Refer to Lot ID 2347489-1) is 13.9 mg/L

Sampling By : Wanlop Hunchainaow , Thanasoun Namakunna

Remark :

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

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Approved by

Siriluk P.

Siriluk Puengpang
Supervisor

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Analysis / Test Report

TESTING

No.0042

Lot ID: 2359884

Date Received : Jun 07, 2023

Date Reported : Jun 15, 2023

Report Number : 2660287-1

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4514144155

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Page 1 of 2

Sample Number	2359884-1
Sampled Date	Jun 07, 2023 9:45 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	Jun 07, 2023
Condition of Sample	Contained in two glass vials, two amber glass bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	15	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	14	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.3	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	144	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

N. Banchongkit

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ 7-323-จ-9445

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ 7-323-ก-9442

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Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4514144155

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2359884

Date Received : Jun 07, 2023

Date Reported : Jun 15, 2023

Report Number : 2660287-1

Page 2 of 2

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

Note : Raw data of COD value (Refer to Lot ID 2359884-1) is 15.8 mg/L

Sampling By : Wanlop Hunchainaow ทะเบียนเลขที่ ๖-323-๖-9457 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ๖-204-๖-0002

Remark :

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

Technical Management

N. Banchongkit

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ ๖-323-๖-9445

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ๖-323-๖-9442

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Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4514144155

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2359884

Date Received : Jun 07, 2023

Date Reported : Jun 15, 2023

Report Number : 2660287-2

Page 1 of 1

Sample Number	2359884-1
Sampled Date	Jun 07, 2023 9:45 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	Jun 09, 2023
Condition of Sample	Contained in two glass vials, two amber glass bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Organic Carbon	mg/L	0.01	0.1	4.49	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

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

Note : Raw data of COD value (Refer to Lot ID 2359884-1) is 15.8 mg/L

Sampling By : Wanlop Hunchainaow , Pattarapol Sawangjaitam

Remark :

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Approved by

Siriluk P.

Siriluk Puengpang
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 00081289

Project Name : Water Testing

Project Location : Map Ta Phut_PU (PPTL)

Lot ID: 22155334

Date Received : Jan 11, 2023

Date Reported : Mar 14, 2023

Report Number : 2535052-1 C4

Page 1 of 2

Sample Number	22155334-1
Sampling Date	Jan 11, 2023 11:00 AM
Sample Description	Wastewater
Location	Outfall
Date Analysis Commenced	Jan 11, 2023
Condition of Sample	Contained in six glass vials, two amber glass bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD	mg/L	1.5	25	33	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	20	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	18	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.5	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	636	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor

ทะเบียนเลขที่ 7-323-ก-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ 7-323-ก-9442

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Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 00081289

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

TESTING

No.0042

Lot ID: 22155334

Date Received : Jan 11, 2023

Date Reported : Mar 14, 2023

Report Number : 2535052-1 C4

Page 2 of 2

Sampling By : Wanlop Hunchainaow , Thanasoun Namakunna

Remark :

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

Technical Management

N. Banchongkit

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ 7-323-ก-9445

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ 7-323-ก-9442

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Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 00081289

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 22155334

Date Received : Jan 11, 2023

Date Reported : Mar 14, 2023

Report Number : 2535052-3 C4

Page 1 of 1

Sample Number	22155334-1
Sampling Date	Jan 11, 2023 11:00 AM
Sample Description	Wastewater
Location	Outfall
Date Analysis Commenced	Jan 12, 2023
Condition of Sample	Contained in six glass vials, two amber glass bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Organic Carbon	mg/L	0.01	0.1	10.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

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

Sampling By : Wanlop Hunchainaow , Thanasoun Namakunna

Remark :

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

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Approved by

Nanthawadee Somboon
Specialist 1



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 00081289

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 231796

Date Received : Feb 01, 2023

Date Reported : Mar 14, 2023

Report Number : 2536040-1 C4

Page 1 of 2

Sample Number 231796-1
Sampling Date Feb 01, 2023 10:05 AM
Sample Description Wastewater
Location Outfall
Date Analysis Commenced Feb 01, 2023
Condition of Sample Contained in six glass vials, two amber glass bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD	mg/L	1.5	25	26	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	13	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	12	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	28.7	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	756	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor

ทะเบียนเลขที่ 7-323-ก-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ 7-323-ก-9442

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Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 00081289

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 231796

Date Received : Feb 01, 2023

Date Reported : Mar 14, 2023

Report Number : 2536040-1 C4

Page 2 of 2

Sampling By : Wanlop Hunchainaow , Thanasoun Namakunna

Remark :

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Technical Management

N. Banchongkit

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ทะเบียนเลขที่ 7-323-ก-9445

Approved by

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Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 00081289

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 231796

Date Received : Feb 01, 2023

Date Reported : Mar 14, 2023

Report Number : 2536040-3 C4

Page 1 of 1

Sample Number	231796-1
Sampling Date	Feb 01, 2023 10:05 AM
Sample Description	Wastewater
Location	Outfall
Date Analysis Commenced	Feb 02, 2023
Condition of Sample	Contained in six glass vials, two amber glass bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Organic Carbon	mg/L	0.01	0.1	11.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

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

Sampling By : Wanlop Hunchainaow , Thanasoun Namakunna

Remark :

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

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Approved by

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Sawitree Noisangiam
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Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 00081289

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2320339

Date Received : Mar 01, 2023

Date Reported : Mar 14, 2023

Report Number : 2574813-1 C4

Page 1 of 2

Sample Number	2320339-1
Sampling Date	Mar 01, 2023 11:00 AM
Sample Description	Wastewater
Location	Outfall
Date Analysis Commenced	Mar 01, 2023
Condition of Sample	Contained in six glass vials, two amber glass bottles and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD	mg/L	1.5	25	40	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	18	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	17	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.2	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	796	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	10	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor

ทะเบียนเลขที่ 7-323-ก-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ 7-323-ก-9442

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Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 00081289

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2320339

Date Received : Mar 01, 2023

Date Reported : Mar 14, 2023

Report Number : 2574813-1 C4

Page 2 of 2

Sampling By : Pathompong Kornawat , Thanasoun Namakunna

Remark :

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Technical Management

N. Banchongkit

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ ๖-323-๖-9445

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ๖-323-๖-9442

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Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 00081289

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2320339

Date Received : Mar 01, 2023

Date Reported : Mar 14, 2023

Report Number : 2574813-3 C4

Page 1 of 1

Sample Number	2320339-1
Sampling Date	Mar 01, 2023 11:00 AM
Sample Description	Wastewater
Location	Outfall
Date Analysis Commenced	Mar 02, 2023
Condition of Sample	Contained in six glass vials, two amber glass bottles and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Organic Carbon	mg/L	0.01	0.1	12.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

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

Sampling By : Pathompong Kornawat , Thanasoun Namakunna

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Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 00081289

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2329629

Date Received : Apr 05, 2023

Date Reported : Jun 27, 2023

Report Number : 2595629-1 C4

Page 1 of 2

Sample Number	2329629-1
Sampling Date	Apr 05, 2023 10:55 AM
Sample Description	Wastewater
Location	Outfall
Date Analysis Commenced	Apr 05, 2023
Condition of Sample	Contained in six glass vials, two amber glass bottles and seven plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD	mg/L	1.5	25	34	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	13	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	12	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	34.5	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	744	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor

ทะเบียนเลขที่ 7-323-ก-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ 7-323-ก-9442

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Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 00081289

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2329629

Date Received : Apr 05, 2023

Date Reported : Jun 27, 2023

Report Number : 2595629-1 C4

Page 2 of 2

Sampling By : Wanlop Hunchainaow , Thanasoun Namakunna

Remark :

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Technical Management

N. Banchongkit

Narumon Banchongkit

Supervisor

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Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ 7-323-ก-9442

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Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 00081289

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2329629

Date Received : Apr 05, 2023

Date Reported : Jun 27, 2023

Report Number : 2595629-3 C4

Page 1 of 1

Sample Number 2329629-1
Sampling Date Apr 05, 2023 10:55 AM
Sample Description Wastewater
Location Outfall
Date Analysis Commenced Apr 06, 2023
Condition of Sample Contained in six glass vials, two amber glass bottles and seven plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Organic Carbon	mg/L	0.01	0.1	13.5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

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

Sampling By : Wanlop Hunchainaow , Thanasoun Namakunna

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Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 00081289

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2347503

Date Received : May 02, 2023

Date Reported : May 11, 2023

Report Number : 2635024-1 C4

Page 1 of 2

Sample Number	2347503-1
Sampling Date	May 02, 2023 10:55 AM
Sample Description	Wastewater
Location	Outfall
Date Analysis Commenced	May 02, 2023
Condition of Sample	Contained in six glass vials, two amber glass bottles and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD	mg/L	1.5	25	33	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	14	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	12	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.8	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	648	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	8	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor

ทะเบียนเลขที่ 7-323-ก-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ 7-323-ก-9442

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Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 00081289

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2347503

Date Received : May 02, 2023

Date Reported : May 11, 2023

Report Number : 2635024-1 C4

Page 2 of 2

Sampling By : Wanlop Hunchainaow , Thanasoun Namakunna

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Technical Management

N. Banchongkit

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ 7-323-ก-9445

Approved by

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Dej Changchon

Senior Manager

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Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 00081289

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2347503

Date Received : May 02, 2023

Date Reported : May 11, 2023

Report Number : 2635024-3 C4

Page 1 of 1

Sample Number	2347503-1
Sampling Date	May 02, 2023 10:55 AM
Sample Description	Wastewater
Location	Outfall
Date Analysis Commenced	May 03, 2023
Condition of Sample	Contained in six glass vials, two amber glass bottles and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Organic Carbon	mg/L	0.01	0.1	11.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

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

Sampling By : Wanlop Hunchainaow , Thanasoun Namakunna

Remark :

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Approved by

Sawitree N.

Sawitree Noisangiam
Manager

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Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 00081289

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2359892

Date Received : Jun 07, 2023

Date Reported : Jun 27, 2023

Report Number : 2660300-1 C4

Page 1 of 2

Sample Number	2359892-1
Sampling Date	Jun 07, 2023 11:10 AM
Sample Description	Wastewater
Location	Outfall
Date Analysis Commenced	Jun 07, 2023
Condition of Sample	Contained in six glass vials, two amber glass bottles and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	34	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	22	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	20	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.5	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	864	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

N. Banchongkit

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ 7-323-ก-9445

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ 7-323-ก-9442

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Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 00081289

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2359892

Date Received : Jun 07, 2023

Date Reported : Jun 27, 2023

Report Number : 2660300-1 C4

Page 2 of 2

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

Sampling By : Wanlop Hunchainaow , Pattarapol Sawangjaitam

Remark :

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

Technical Management

N. Banchongkit

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ ๖-323-๖-9445

Approved by

D. Changchon

Dej Changchon

Senior Manager

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Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 00081289

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2359892

Date Received : Jun 07, 2023

Date Reported : Jun 27, 2023

Report Number : 2660300-3 C4

Page 1 of 1

Sample Number	2359892-1
Sampling Date	Jun 07, 2023 11:10 AM
Sample Description	Wastewater
Location	Outfall
Date Analysis Commenced	Jun 08, 2023
Condition of Sample	Contained in six glass vials, two amber glass bottles and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Organic Carbon	mg/L	0.01	0.1	12.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

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

Sampling By : Wanlop Hunchainaow , Pattarapol Sawangjaitam

Remark :

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

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Approved by

Siriluk P.

Siriluk Puengpang
Section Head

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ภาคผนวก ค-2

ผลการตรวจวัดระดับเสียงทั่วไปและระดับเสียงรบกวน



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O :

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Lot ID: 2321112

Date Received : Jun 06, 2023

Date Reported : Jun 15, 2023

Report Number: 2676433-1C22

Page 1 of 1

Sample Number 2321112-15
Parameter Noise (Leq 24 hrs.)
Location ชุมชนตากวน-อาภาประดู่ (GPS 47P 0735531, 1402769)
Measurement Date May 25 - May 26, 2023
Measurement by Nantawat Sarin
Sound Level meter Serial No. 873109

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	52.9	76.9	46.6
11:00 AM - 12:00 PM	52.6	73.4	46.8
12:00 PM - 01:00 PM	53.9	77.4	47.9
01:00 PM - 02:00 PM	52.7	75.7	45.9
02:00 PM - 03:00 PM	54.8	84.2	49.1
03:00 PM - 04:00 PM	54.0	78.1	46.6
04:00 PM - 05:00 PM	55.2	76.2	49.2
05:00 PM - 06:00 PM	55.7	79.4	50.1
06:00 PM - 07:00 PM	58.8	82.2	53.0
07:00 PM - 08:00 PM	56.2	80.5	49.4
08:00 PM - 09:00 PM	56.0	79.7	50.3
09:00 PM - 10:00 PM	56.0	79.5	49.9
10:00 PM - 11:00 PM	56.1	82.3	47.5
11:00 PM - 12:00 AM	57.1	81.3	50.5
12:00 AM - 01:00 AM	62.9	89.3	48.6
01:00 AM - 02:00 AM	52.3	69.5	49.0
02:00 AM - 03:00 AM	49.6	72.7	45.8
03:00 AM - 04:00 AM	50.4	74.8	45.9
04:00 AM - 05:00 AM	51.0	73.8	44.4
05:00 AM - 06:00 AM	54.3	74.8	48.6
06:00 AM - 07:00 AM	56.2	80.0	49.7
07:00 AM - 08:00 AM	55.8	76.4	49.3
08:00 AM - 09:00 AM	52.8	73.4	46.9
09:00 AM - 10:00 AM	50.9	69.6	44.6

Leq Average 24 hrs. (dB(A)) 55.6
Lmax (dB(A)) 89.3
L90 (dB(A)) 48.6

Ldn (dB(A)) 62.7

Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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 : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O :

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Lot ID: 2321112

Date Received : Jun 06, 2023

Date Reported : Jun 15, 2023

Report Number: 2676434-1C22

Page 1 of 1

Sample Number 2321112-16
Parameter Noise (Leq 24 hrs.)
Location ชุมชนตากวน-อาภาประดู่ (GPS 47P 0735531, 1402769)
Measurement Date May 26 - May 27, 2023
Measurement by Nantawat Sarin
Sound Level meter Serial No. 873109

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	51.4	69.3	44.9
11:00 AM - 12:00 PM	53.7	76.8	46.4
12:00 PM - 01:00 PM	52.5	71.3	47.7
01:00 PM - 02:00 PM	51.8	72.4	44.7
02:00 PM - 03:00 PM	49.8	66.4	43.5
03:00 PM - 04:00 PM	54.4	84.4	45.0
04:00 PM - 05:00 PM	53.5	79.0	47.9
05:00 PM - 06:00 PM	56.6	81.2	49.4
06:00 PM - 07:00 PM	56.8	78.7	51.8
07:00 PM - 08:00 PM	57.2	81.8	50.1
08:00 PM - 09:00 PM	59.3	78.1	56.9
09:00 PM - 10:00 PM	55.7	77.0	51.3
10:00 PM - 11:00 PM	55.8	80.9	48.0
11:00 PM - 12:00 AM	54.5	76.0	47.5
12:00 AM - 01:00 AM	55.3	83.8	47.1
01:00 AM - 02:00 AM	53.4	80.5	47.4
02:00 AM - 03:00 AM	52.1	79.5	46.6
03:00 AM - 04:00 AM	57.8	86.1	47.9
04:00 AM - 05:00 AM	50.9	75.9	44.4
05:00 AM - 06:00 AM	53.2	73.4	47.5
06:00 AM - 07:00 AM	54.7	72.0	48.4
07:00 AM - 08:00 AM	56.9	75.3	48.8
08:00 AM - 09:00 AM	53.1	75.1	46.2
09:00 AM - 10:00 AM	51.1	70.1	44.8

Leq Average 24 hrs. (dB(A)) 54.9
Lmax (dB(A)) 86.1
L90 (dB(A)) 47.5

Ldn (dB(A)) 61.1

Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O :

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Lot ID: 2321112

Date Received : Jun 06, 2023

Date Reported : Jun 15, 2023

Report Number: 2676435-1C22

Page 1 of 1

Sample Number 2321112-17
Parameter Noise (Leq 24 hrs.)
Location ชุมชนตากวน-ฉะปะรุ (GPS 47P 0735531, 1402769)
Measurement Date May 27 - May 28, 2023
Measurement by Nantawat Sarin
Sound Level meter Serial No. 873109

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	51.8	70.8	46.2
11:00 AM - 12:00 PM	54.0	82.8	46.2
12:00 PM - 01:00 PM	53.0	75.2	46.5
01:00 PM - 02:00 PM	52.9	75.1	47.6
02:00 PM - 03:00 PM	52.5	73.0	45.6
03:00 PM - 04:00 PM	52.8	78.3	45.3
04:00 PM - 05:00 PM	54.1	77.4	47.5
05:00 PM - 06:00 PM	56.1	79.0	50.2
06:00 PM - 07:00 PM	57.2	78.4	52.6
07:00 PM - 08:00 PM	56.6	82.4	50.0
08:00 PM - 09:00 PM	57.8	82.6	53.8
09:00 PM - 10:00 PM	56.2	75.9	50.9
10:00 PM - 11:00 PM	56.2	82.9	47.1
11:00 PM - 12:00 AM	56.6	78.6	46.8
12:00 AM - 01:00 AM	53.9	78.6	46.3
01:00 AM - 02:00 AM	52.5	77.8	46.9
02:00 AM - 03:00 AM	50.2	72.0	44.3
03:00 AM - 04:00 AM	67.8	92.9	40.8
04:00 AM - 05:00 AM	63.2	96.0	51.0
05:00 AM - 06:00 AM	53.2	75.7	47.9
06:00 AM - 07:00 AM	53.9	73.3	47.3
07:00 AM - 08:00 AM	55.0	75.0	48.3
08:00 AM - 09:00 AM	54.2	75.5	48.2
09:00 AM - 10:00 AM	53.8	72.4	46.8

Leq Average 24 hrs. (dB(A)) 57.8
Lmax (dB(A)) 96.0
L90 (dB(A)) 47.1

Ldn (dB(A)) 66.4

Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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 : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2321280
Date Received : Jun 06, 2023
Date Reported : Jul 12, 2023
Report Number : 2715486-1

P/O : 4514144155

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Page 1 of 3

Sample No. 2321280-1
Parameter เสียงรบกวน
Location ขนขนตากาน-ลำประดู่ (GPS 47P 0735531, 1402769)
Measurement Date May 25 - 26, 2023
Measurement by Nantawat Sarin
Sound Level Meter 00873109

ระดับเสียง (dB(A))								
เวลา	(A) เสียงจากแหล่งกำเนิด	(B) เสียงขณะไม่มีกิจกรรม	(A-B) ผลต่างระดับเสียง	(C) ตัวปรับค่า	(D) ปรับค่าเสียงจากแหล่งกำเนิด		(E) เสียงพื้นฐาน	(D-E) ค่าระดับการรบกวน
					(A-C) กลางวัน	(A-C)+3 กลางคืน		
10:00 AM - 11:00 AM	52.9	52.9	0.0	7.0	45.9	-	45.5	0.4
11:00 AM - 12:00 PM	52.6	54.0	-1.4	7.0	45.6	-	46.9	-1.3
12:00 PM - 01:00 PM	53.9	52.3	1.6	4.5	49.4	-	45.4	4.0
01:00 PM - 02:00 PM	52.7	52.5	0.2	7.0	45.7	-	44.9	0.8
02:00 PM - 03:00 PM	54.8	52.6	2.2	4.5	50.3	-	45.2	5.1
03:00 PM - 04:00 PM	54.0	52.8	1.2	7.0	47.0	-	46.7	0.3
04:00 PM - 05:00 PM	55.2	55.1	0.1	7.0	48.2	-	49.7	-1.5
05:00 PM - 06:00 PM	55.7	56.1	-0.4	7.0	48.7	-	51.0	-2.3
06:00 PM - 07:00 PM	58.8	56.4	2.4	4.5	54.3	-	50.7	3.6
07:00 PM - 08:00 PM	56.2	56.6	-0.4	7.0	49.2	-	51.5	-2.3
08:00 PM - 09:00 PM	56.0	56.1	-0.1	7.0	49.0	-	51.8	-2.8
09:00 PM - 10:00 PM	56.0	55.8	0.2	7.0	49.0	-	50.1	-1.1
10:00 PM - 10:05 PM	53.1	53.1	0.0	7.0	-	49.1	48.3	0.8
10:05 PM - 10:10 PM	54.7	53.1	1.6	4.5	-	53.2	48.0	5.2
10:10 PM - 10:15 PM	57.4	55.6	1.8	4.5	-	55.9	51.9	4.0
10:15 PM - 10:20 PM	55.5	54.3	1.2	7.0	-	51.5	51.9	-0.4
10:20 PM - 10:25 PM	56.1	56.1	0.0	7.0	-	52.1	52.3	-0.2
10:25 PM - 10:30 PM	51.5	54.3	-2.8	7.0	-	47.5	51.6	-4.1
10:30 PM - 10:35 PM	53.1	56.3	-3.2	7.0	-	49.1	51.9	-2.8
10:35 PM - 10:40 PM	55.5	53.9	1.6	4.5	-	54.0	50.8	3.2
10:40 PM - 10:45 PM	61.9	53.7	8.2	0.5	-	64.4	49.8	14.6
10:45 PM - 10:50 PM	54.7	54.7	0.0	7.0	-	50.7	48.4	2.3
10:50 PM - 10:55 PM	53.9	52.6	1.3	7.0	-	49.9	49.0	0.9
10:55 PM - 11:00 PM	54.1	55.5	-1.4	7.0	-	50.1	49.2	0.9
11:00 PM - 11:05 PM	56.7	55.2	1.5	4.5	-	55.2	48.7	6.5
11:05 PM - 11:10 PM	59.1	53.3	5.8	1.5	-	60.6	48.9	11.7
11:10 PM - 11:15 PM	60.4	52.6	7.8	0.5	-	62.9	48.1	14.8
11:15 PM - 11:20 PM	61.6	53.4	8.2	0.5	-	64.1	49.2	14.9
11:20 PM - 11:25 PM	55.2	53.5	1.7	4.5	-	53.7	48.5	5.2
11:25 PM - 11:30 PM	56.3	52.1	4.2	2.0	-	57.3	48.2	9.1
11:30 PM - 11:35 PM	50.4	53.2	-2.8	7.0	-	46.4	49.3	-2.9
11:35 PM - 11:40 PM	53.8	54.8	-1.0	7.0	-	49.8	49.1	0.7
11:40 PM - 11:45 PM	57.2	54.0	3.2	3.0	-	57.2	48.4	8.8
11:45 PM - 11:50 PM	54.8	52.5	2.3	4.5	-	53.3	48.2	5.1
11:50 PM - 11:55 PM	52.1	53.5	-1.4	7.0	-	48.1	49.3	-1.2
11:55 PM - 12:00 AM	53.9	53.5	0.4	7.0	-	49.9	48.6	1.3
12:00 AM - 12:05 AM	55.7	53.9	1.8	4.5	-	54.2	49.2	5.0
12:05 AM - 12:10 AM	55.3	52.6	2.7	3.0	-	55.3	48.7	6.6
12:10 AM - 12:15 AM	54.2	50.9	3.3	3.0	-	54.2	48.6	5.6
12:15 AM - 12:20 AM	57.9	50.7	7.2	1.0	-	59.9	47.2	12.7

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

Approved by

Wilawan Borirak

Wilawan Borirak
Assistant Manager



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2321280
Date Received : Jun 06, 2023
Date Reported : Jul 12, 2023
Report Number : 2715486-1

P/O : 4514144155

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Page 2 of 3

Sample No. 2321280-1
Parameter เสียงรบกวน
Location ขนขมดากาน-อ่าวประดู่ (GPS 47P 0735531, 1402769)
Measurement Date May 25 - 26, 2023
Measurement by Nantawat Sarin
Sound Level Meter 00873109

ระดับเสียง (dB(A))								
เวลา	(A) เสียงจากแหล่งกำเนิด	(B) เสียงขณะไม่มีการรบกวน	(A-B) ผลต่างระดับเสียง	(C) ตัวปรับค่า	(D) ปรับค่าเสียงจากแหล่งกำเนิด		(E) เสียงพื้นฐาน	(D-E) ค่าระดับการรบกวน
					(A-C) กลางวัน	(A-C)+3 กลางคืน		
12:20 AM - 12:25 AM	71.0	50.3	20.7	0.0	-	74.0	47.7	26.3
12:25 AM - 12:30 AM	69.1	50.2	18.9	0.0	-	72.1	47.4	24.7
12:30 AM - 12:35 AM	49.0	48.7	0.3	7.0	-	45.0	44.4	0.6
12:35 AM - 12:40 AM	49.0	55.4	-6.4	7.0	-	45.0	47.2	-2.2
12:40 AM - 12:45 AM	51.6	52.1	-0.5	7.0	-	47.6	48.2	-0.6
12:45 AM - 12:50 AM	49.0	50.1	-1.1	7.0	-	45.0	48.3	-3.3
12:50 AM - 12:55 AM	47.7	50.6	-2.9	7.0	-	43.7	48.0	-4.3
12:55 AM - 01:00 AM	57.2	50.2	7.0	1.0	-	59.2	47.8	11.4
01:00 AM - 01:05 AM	58.8	49.2	9.6	0.5	-	61.3	45.0	16.3
01:05 AM - 01:10 AM	52.5	48.3	4.2	2.0	-	53.5	45.4	8.1
01:10 AM - 01:15 AM	48.8	56.5	-7.7	7.0	-	44.8	44.9	-0.1
01:15 AM - 01:20 AM	52.0	51.6	0.4	7.0	-	48.0	45.0	3.0
01:20 AM - 01:25 AM	50.2	54.4	-4.2	7.0	-	46.2	44.6	1.6
01:25 AM - 01:30 AM	50.8	61.6	-10.8	7.0	-	46.8	44.0	2.8
01:30 AM - 01:35 AM	48.3	54.9	-6.6	7.0	-	44.3	44.6	-0.3
01:35 AM - 01:40 AM	50.5	48.2	2.3	4.5	-	49.0	45.0	4.0
01:40 AM - 01:45 AM	50.9	54.9	-4.0	7.0	-	46.9	45.4	1.5
01:45 AM - 01:50 AM	50.2	47.3	2.9	3.0	-	50.2	44.3	5.9
01:50 AM - 01:55 AM	51.8	48.2	3.6	2.0	-	52.8	43.4	9.4
01:55 AM - 02:00 AM	48.1	46.4	1.7	4.5	-	46.6	44.2	2.4
02:00 AM - 02:05 AM	49.1	47.2	1.9	4.5	-	47.6	43.5	4.1
02:05 AM - 02:10 AM	51.3	50.2	1.1	7.0	-	47.3	44.2	3.1
02:10 AM - 02:15 AM	47.3	48.8	-1.5	7.0	-	43.3	44.1	-0.8
02:15 AM - 02:20 AM	47.3	49.2	-1.9	7.0	-	43.3	44.2	-0.9
02:20 AM - 02:25 AM	46.9	48.2	-1.3	7.0	-	42.9	44.2	-1.3
02:25 AM - 02:30 AM	50.2	46.6	3.6	2.0	-	51.2	44.0	7.2
02:30 AM - 02:35 AM	53.9	46.1	7.8	0.5	-	56.4	43.3	13.1
02:35 AM - 02:40 AM	48.0	47.3	0.7	7.0	-	44.0	43.3	0.7
02:40 AM - 02:45 AM	47.8	48.3	-0.5	7.0	-	43.8	43.5	0.3
02:45 AM - 02:50 AM	47.5	47.6	-0.1	7.0	-	43.5	42.9	0.6
02:50 AM - 02:55 AM	49.3	48.4	0.9	7.0	-	45.3	43.0	2.3
02:55 AM - 03:00 AM	50.4	52.3	-1.9	7.0	-	46.4	43.0	3.4
03:00 AM - 03:05 AM	47.7	47.9	-0.2	7.0	-	43.7	43.3	0.4
03:05 AM - 03:10 AM	48.6	45.0	3.6	2.0	-	49.6	42.7	6.9
03:10 AM - 03:15 AM	49.2	50.0	-0.8	7.0	-	45.2	44.1	1.1
03:15 AM - 03:20 AM	49.4	45.2	4.2	2.0	-	50.4	43.1	7.3
03:20 AM - 03:25 AM	49.5	47.5	2.0	4.5	-	48.0	44.7	3.3
03:25 AM - 03:30 AM	50.8	47.6	3.2	3.0	-	50.8	46.0	4.8
03:30 AM - 03:35 AM	50.3	51.1	-0.8	7.0	-	46.3	47.2	-0.9
03:35 AM - 03:40 AM	47.9	50.0	-2.1	7.0	-	43.9	46.7	-2.8

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Approved by

Wilawan Borirak

Wilawan Borirak
Assistant Manager



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2321280
Date Received : Jun 06, 2023
Date Reported : Jul 12, 2023
Report Number : 2715486-1

P/O : 4514144155

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Page 3 of 3

Sample No. 2321280-1
Parameter เสียงรบกวน
Location ชุมชนตากาน-อ่าวประดู่ (GPS 47P 0735531, 1402769)
Measurement Date May 25 - 26, 2023
Measurement by Nantawat Sarin
Sound Level Meter 00873109

ระดับเสียง (dB(A))

เวลา	(A)	(B)	(A-B)	(C)	(D)		(E)	(D-E)
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ตัวปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					(A-C)	(A-C)+3		
03:40 AM - 03:45 AM	48.6	50.6	-2.0	7.0	-	44.6	45.5	-0.9
03:45 AM - 03:50 AM	55.5	58.5	-3.0	7.0	-	51.5	48.9	2.6
03:50 AM - 03:55 AM	48.1	56.9	-8.8	7.0	-	44.1	48.0	-3.9
03:55 AM - 04:00 AM	51.8	50.0	1.8	4.5	-	50.3	47.7	2.6
04:00 AM - 04:05 AM	49.4	53.0	-3.6	7.0	-	45.4	47.1	-1.7
04:05 AM - 04:10 AM	46.4	53.1	-6.7	7.0	-	42.4	45.2	-2.8
04:10 AM - 04:15 AM	51.3	46.9	4.4	2.0	-	52.3	44.3	8.0
04:15 AM - 04:20 AM	47.3	49.1	-1.8	7.0	-	43.3	46.4	-3.1
04:20 AM - 04:25 AM	48.0	49.4	-1.4	7.0	-	44.0	46.8	-2.8
04:25 AM - 04:30 AM	51.8	54.5	-2.7	7.0	-	47.8	47.1	0.7
04:30 AM - 04:35 AM	50.3	48.7	1.6	4.5	-	48.8	45.9	2.9
04:35 AM - 04:40 AM	52.4	50.9	1.5	4.5	-	50.9	46.8	4.1
04:40 AM - 04:45 AM	52.0	49.1	2.9	3.0	-	52.0	45.8	6.2
04:45 AM - 04:50 AM	51.1	48.8	2.3	4.5	-	49.6	45.3	4.3
04:50 AM - 04:55 AM	48.2	49.6	-1.4	7.0	-	44.2	46.2	-2.0
04:55 AM - 05:00 AM	55.3	50.5	4.8	1.5	-	56.8	48.5	8.3
05:00 AM - 05:05 AM	52.4	56.8	-4.4	7.0	-	48.4	45.7	2.7
05:05 AM - 05:10 AM	56.6	50.2	6.4	1.5	-	58.1	45.9	12.2
05:10 AM - 05:15 AM	54.3	51.2	3.1	3.0	-	54.3	47.3	7.0
05:15 AM - 05:20 AM	50.8	49.7	1.1	7.0	-	46.8	46.7	0.1
05:20 AM - 05:25 AM	56.9	52.4	4.5	1.5	-	58.4	46.7	11.7
05:25 AM - 05:30 AM	55.3	51.0	4.3	2.0	-	56.3	46.6	9.7
05:30 AM - 05:35 AM	54.8	50.9	3.9	2.0	-	55.8	46.2	9.6
05:35 AM - 05:40 AM	51.1	54.7	-3.6	7.0	-	47.1	50.4	-3.3
05:40 AM - 05:45 AM	53.7	51.7	2.0	4.5	-	52.2	47.6	4.6
05:45 AM - 05:50 AM	52.7	50.3	2.4	4.5	-	51.2	45.8	5.4
05:50 AM - 05:55 AM	54.1	52.7	1.4	7.0	-	50.1	46.3	3.8
05:55 AM - 06:00 AM	54.6	51.8	2.8	3.0	-	54.6	47.8	6.8
06:00 AM - 07:00 AM	56.2	55.7	0.5	7.0	49.2	-	50.4	-1.2
07:00 AM - 08:00 AM	55.8	56.1	-0.3	7.0	48.8	-	49.9	-1.1
08:00 AM - 09:00 AM	52.8	53.8	-1.0	7.0	45.8	-	47.0	-1.2
09:00 AM - 10:00 AM	50.9	53.1	-2.2	7.0	43.9	-	46.1	-2.2
ค่ามาตรฐาน								≤ 10

Reference Method : Based on ISO 1996-1 and ISO 1996-2

มาตรฐาน

- ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
- ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ เรื่อง ค่าระดับเสียงรบกวน ฉบับที่ 29 พ.ศ. 2550
- ประกาศคณะกรรมการควบคุมมลพิษ เรื่อง วิธีการตรวจวัดระดับเสียงพื้นฐาน ระดับเสียงขณะไม่มีการรบกวน การตรวจวัดและคำนวณระดับเสียงขณะมีการรบกวน การคำนวณค่าระดับการรบกวน และแบบบันทึกการตรวจวัดเสียงรบกวน พ.ศ. 2550 และประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553
- ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 25-26 พฤษภาคม 2566
ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2227105-1 วันที่ตรวจวัด 25-26 กรกฎาคม 2565)

Note : This Analysis test report is issued to supersede report No.2443947-1, Date Reported : Sep 23, 2022 due to revise analytical information.

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Approved by

Wilawan Borirak

Wilawan Borirak
Assistant Manager



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2321280
Date Received : Jun 06, 2023
Date Reported : Jul 12, 2023
Report Number : 2715487-1

P/O : 4514144155

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Page 1 of 3

Sample No. 2321280-2
Parameter เสียงรบกวน
Location ขนขนาจาก-อ่าวประดู่ (GPS 47P 0735531, 1402769)
Measurement Date May 26 - 27, 2023
Measurement by Nantawat Sarin
Sound Level Meter 00873109

ระดับเสียง (dB(A))								
เวลา	(A) เสียงจากแหล่งกำเนิด	(B) เสียงขณะไม่มีการรบกวน	(A-B) ผลต่างระดับเสียง	(C) ตัวปรับค่า	(D) ปรับค่าเสียงจากแหล่งกำเนิด		(E) เสียงพื้นฐาน	(D+E) ค่าระดับการรบกวน
					(A-C) กลางวัน	(A-C)+3 กลางคืน		
10:00 AM - 11:00 AM	51.4	51.7	-0.3	7.0	44.4	-	44.5	-0.1
11:00 AM - 12:00 PM	53.7	52.6	1.1	7.0	46.7	-	45.3	1.4
12:00 PM - 01:00 PM	52.5	52.6	-0.1	7.0	45.5	-	45.3	0.2
01:00 PM - 02:00 PM	51.8	53.5	-1.7	7.0	44.8	-	45.8	-1.0
02:00 PM - 03:00 PM	49.8	51.7	-1.9	7.0	42.8	-	45.2	-2.4
03:00 PM - 04:00 PM	54.4	53.2	1.2	7.0	47.4	-	46.8	0.6
04:00 PM - 05:00 PM	53.5	55.5	-2.0	7.0	46.5	-	49.9	-3.4
05:00 PM - 06:00 PM	56.6	55.4	1.2	7.0	49.6	-	50.5	-0.9
06:00 PM - 07:00 PM	56.8	55.8	1.0	7.0	49.8	-	50.7	-0.9
07:00 PM - 08:00 PM	57.2	56.1	1.1	7.0	50.2	-	52.5	-2.3
08:00 PM - 09:00 PM	59.3	56.0	3.3	3.0	56.3	-	51.8	4.5
09:00 PM - 10:00 PM	55.7	54.9	0.8	7.0	48.7	-	49.4	-0.7
10:00 PM - 10:05 PM	57.2	54.3	2.9	3.0	-	57.2	50.0	7.2
10:05 PM - 10:10 PM	54.7	53.6	1.1	7.0	-	50.7	50.7	0.0
10:10 PM - 10:15 PM	55.0	56.1	-1.1	7.0	-	51.0	52.8	-1.8
10:15 PM - 10:20 PM	59.5	54.4	5.1	1.5	-	61.0	49.5	11.5
10:20 PM - 10:25 PM	56.2	64.1	-7.9	7.0	-	52.2	53.0	-0.8
10:25 PM - 10:30 PM	55.4	63.7	-8.3	7.0	-	51.4	52.5	-1.1
10:30 PM - 10:35 PM	53.9	64.0	-10.1	7.0	-	49.9	51.3	-1.4
10:35 PM - 10:40 PM	53.7	57.6	-3.9	7.0	-	49.7	51.3	-1.6
10:40 PM - 10:45 PM	53.4	57.9	-4.5	7.0	-	49.4	48.2	1.2
10:45 PM - 10:50 PM	58.6	54.7	3.9	2.0	-	59.6	49.3	10.3
10:50 PM - 10:55 PM	52.3	54.0	-1.7	7.0	-	48.3	48.5	-0.2
10:55 PM - 11:00 PM	51.8	51.1	0.7	7.0	-	47.8	46.1	1.7
11:00 PM - 11:05 PM	56.1	49.9	6.2	1.5	-	57.6	46.4	11.2
11:05 PM - 11:10 PM	55.2	52.4	2.8	3.0	-	55.2	46.0	9.2
11:10 PM - 11:15 PM	56.0	50.2	5.8	1.5	-	57.5	45.4	12.1
11:15 PM - 11:20 PM	50.5	51.6	-1.1	7.0	-	46.5	46.4	0.1
11:20 PM - 11:25 PM	51.0	51.5	-0.5	7.0	-	47.0	45.5	1.5
11:25 PM - 11:30 PM	51.2	52.3	-1.1	7.0	-	47.2	46.4	0.8
11:30 PM - 11:35 PM	52.7	54.2	-1.5	7.0	-	48.7	50.7	-2.0
11:35 PM - 11:40 PM	52.2	57.7	-5.5	7.0	-	48.2	50.8	-2.6
11:40 PM - 11:45 PM	54.2	57.1	-2.9	7.0	-	50.2	50.1	0.1
11:45 PM - 11:50 PM	59.0	52.6	6.4	1.5	-	60.5	50.3	10.2
11:50 PM - 11:55 PM	52.7	58.1	-5.4	7.0	-	48.7	49.6	-0.9
11:55 PM - 12:00 AM	54.6	52.6	2.0	4.5	-	53.1	48.9	4.2
12:00 AM - 12:05 AM	55.9	51.2	4.7	1.5	-	57.4	46.5	10.9
12:05 AM - 12:10 AM	52.4	51.1	1.3	7.0	-	48.4	47.6	0.8
12:10 AM - 12:15 AM	49.9	53.0	-3.1	7.0	-	45.9	47.5	-1.6
12:15 AM - 12:20 AM	54.9	53.7	1.2	7.0	-	50.9	48.0	2.9

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Approved by

Wilawan Borirak

Wilawan Borirak
Assistant Manager



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2321280
Date Received : Jun 06, 2023
Date Reported : Jul 12, 2023
Report Number : 2715487-1

P/O : 4514144155

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Page 2 of 3

Sample No. 2321280-2
Parameter เสียงรบกวน
Location ขนขมดากาน-อ่าวประดู่ (GPS 47P 0735531, 1402769)
Measurement Date May 26 - 27, 2023
Measurement by Nantawat Sarin
Sound Level Meter 00873109

ระดับเสียง (dB(A))								
เวลา	(A) เสียงจากแหล่งกำเนิด	(B) เสียงขณะไม่มีการรบกวน	(A-B) ผลต่างระดับเสียง	(C) ตัวปรับค่า	(D) ปรับค่าเสียงจากแหล่งกำเนิด		(E) เสียงพื้นฐาน	(D+E) ค่าระดับการรบกวน
					(A-C) กลางวัน	(A-C)+3 กลางคืน		
12:20 AM - 12:25 AM	54.3	50.6	3.7	2.0	-	55.3	45.7	9.6
12:25 AM - 12:30 AM	55.4	48.6	6.8	1.0	-	57.4	45.3	12.1
12:30 AM - 12:35 AM	49.6	58.1	-8.5	7.0	-	45.6	48.2	-2.6
12:35 AM - 12:40 AM	52.9	51.8	1.1	7.0	-	48.9	49.2	-0.3
12:40 AM - 12:45 AM	56.5	50.8	5.7	1.5	-	58.0	49.2	8.8
12:45 AM - 12:50 AM	49.6	50.0	-0.4	7.0	-	45.6	45.9	-0.3
12:50 AM - 12:55 AM	49.5	47.5	2.0	4.5	-	48.0	45.9	2.1
12:55 AM - 01:00 AM	61.9	50.3	11.6	0.5	-	64.4	44.5	19.9
01:00 AM - 01:05 AM	49.2	47.9	1.3	7.0	-	45.2	43.7	1.5
01:05 AM - 01:10 AM	53.4	48.4	5.0	1.5	-	54.9	43.9	11.0
01:10 AM - 01:15 AM	58.8	46.4	12.4	0.5	-	61.3	44.0	17.3
01:15 AM - 01:20 AM	53.2	45.3	7.9	0.5	-	55.7	43.4	12.3
01:20 AM - 01:25 AM	49.7	51.2	-1.5	7.0	-	45.7	43.7	2.0
01:25 AM - 01:30 AM	57.7	47.8	9.9	0.5	-	60.2	43.1	17.1
01:30 AM - 01:35 AM	49.1	48.5	0.6	7.0	-	45.1	43.0	2.1
01:35 AM - 01:40 AM	51.9	48.6	3.3	3.0	-	51.9	43.9	8.0
01:40 AM - 01:45 AM	49.1	51.7	-2.6	7.0	-	45.1	45.2	-0.1
01:45 AM - 01:50 AM	51.8	47.2	4.6	1.5	-	53.3	43.9	9.4
01:50 AM - 01:55 AM	49.6	48.8	0.8	7.0	-	45.6	44.9	0.7
01:55 AM - 02:00 AM	49.4	45.8	3.6	2.0	-	50.4	43.0	7.4
02:00 AM - 02:05 AM	49.7	46.9	2.8	3.0	-	49.7	43.5	6.2
02:05 AM - 02:10 AM	57.9	49.8	8.1	0.5	-	60.4	43.7	16.7
02:10 AM - 02:15 AM	52.5	49.6	2.9	3.0	-	52.5	45.6	6.9
02:15 AM - 02:20 AM	53.5	49.8	3.7	2.0	-	54.5	45.1	9.4
02:20 AM - 02:25 AM	48.6	48.7	-0.1	7.0	-	44.6	45.0	-0.4
02:25 AM - 02:30 AM	50.9	46.7	4.2	2.0	-	51.9	42.3	9.6
02:30 AM - 02:35 AM	48.3	49.0	-0.7	7.0	-	44.3	43.0	1.3
02:35 AM - 02:40 AM	49.0	48.4	0.6	7.0	-	45.0	45.0	0.0
02:40 AM - 02:45 AM	49.2	48.2	1.0	7.0	-	45.2	45.3	-0.1
02:45 AM - 02:50 AM	51.1	48.6	2.5	3.0	-	51.1	45.3	5.8
02:50 AM - 02:55 AM	49.6	49.8	-0.2	7.0	-	45.6	46.8	-1.2
02:55 AM - 03:00 AM	52.6	48.6	4.0	2.0	-	53.6	46.2	7.4
03:00 AM - 03:05 AM	57.6	50.1	7.5	0.5	-	60.1	46.1	14.0
03:05 AM - 03:10 AM	47.4	46.1	1.3	7.0	-	43.4	42.7	0.7
03:10 AM - 03:15 AM	49.5	48.0	1.5	4.5	-	48.0	44.1	3.9
03:15 AM - 03:20 AM	54.3	45.7	8.6	0.5	-	56.8	43.2	13.6
03:20 AM - 03:25 AM	52.6	46.3	6.3	1.5	-	54.1	43.2	10.9
03:25 AM - 03:30 AM	50.6	45.4	5.2	1.5	-	52.1	41.2	10.9
03:30 AM - 03:35 AM	64.8	48.0	16.8	0.0	-	67.8	43.6	24.2
03:35 AM - 03:40 AM	63.9	48.2	15.7	0.0	-	66.9	42.9	24.0

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

Approved by

Wilawan Borirak

Wilawan Borirak
Assistant Manager



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2321280
Date Received : Jun 06, 2023
Date Reported : Jul 12, 2023
Report Number : 2715487-1

P/O : 4514144155

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Page 3 of 3

Sample No. 2321280-2
Parameter เสียงรบกวน
Location ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735531, 1402769)
Measurement Date May 26 - 27, 2023
Measurement by Nantawat Sarin
Sound Level Meter 00873109

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด (A)	เสียงขณะไม่มีการรบกวน (B)	ผลต่างระดับเสียง (A-B)	ตัวปรับค่า (C)	ปรับค่าเสียงจากแหล่งกำเนิด (D)		เสียงพื้นฐาน (E)	ค่าระดับการรบกวน (F)
					กลางวัน (A-C)	กลางคืน (A-C)+3		
03:40 AM - 03:45 AM	50.9	44.5	6.4	1.5	-	52.4	42.5	9.9
03:45 AM - 03:50 AM	47.9	48.1	-0.2	7.0	-	43.9	42.5	1.4
03:50 AM - 03:55 AM	51.5	47.8	3.7	2.0	-	52.5	43.0	9.5
03:55 AM - 04:00 AM	48.7	47.8	0.9	7.0	-	44.7	43.3	1.4
04:00 AM - 04:05 AM	47.1	46.0	1.1	7.0	-	43.1	42.2	0.9
04:05 AM - 04:10 AM	52.5	46.9	5.6	1.5	-	54.0	44.5	9.5
04:10 AM - 04:15 AM	48.6	51.5	-2.9	7.0	-	44.6	44.4	0.2
04:15 AM - 04:20 AM	49.8	47.1	2.7	3.0	-	49.8	44.4	5.4
04:20 AM - 04:25 AM	56.3	55.3	1.0	7.0	-	52.3	44.5	7.8
04:25 AM - 04:30 AM	52.1	48.4	3.7	2.0	-	53.1	42.0	11.1
04:30 AM - 04:35 AM	49.5	45.0	4.5	1.5	-	51.0	41.7	9.3
04:35 AM - 04:40 AM	46.8	46.6	0.2	7.0	-	42.8	41.9	0.9
04:40 AM - 04:45 AM	51.7	47.7	4.0	2.0	-	52.7	41.5	11.2
04:45 AM - 04:50 AM	48.7	48.9	-0.2	7.0	-	44.7	42.9	1.8
04:50 AM - 04:55 AM	46.9	47.6	-0.7	7.0	-	42.9	42.7	0.2
04:55 AM - 05:00 AM	48.8	48.4	0.4	7.0	-	44.8	42.5	2.3
05:00 AM - 05:05 AM	52.5	51.2	1.3	7.0	-	48.5	43.0	5.5
05:05 AM - 05:10 AM	52.7	48.8	3.9	2.0	-	53.7	43.9	9.8
05:10 AM - 05:15 AM	53.1	48.3	4.8	1.5	-	54.6	42.8	11.8
05:15 AM - 05:20 AM	50.6	49.2	1.4	7.0	-	46.6	43.3	3.3
05:20 AM - 05:25 AM	54.1	50.0	4.1	2.0	-	55.1	43.9	11.2
05:25 AM - 05:30 AM	56.1	50.3	5.8	1.5	-	57.6	45.2	12.4
05:30 AM - 05:35 AM	52.8	50.5	2.3	4.5	-	51.3	45.0	6.3
05:35 AM - 05:40 AM	51.4	51.9	-0.5	7.0	-	47.4	46.8	0.6
05:40 AM - 05:45 AM	52.0	52.2	-0.2	7.0	-	48.0	46.6	1.4
05:45 AM - 05:50 AM	50.9	51.8	-0.9	7.0	-	46.9	45.5	1.4
05:50 AM - 05:55 AM	51.6	52.6	-1.0	7.0	-	47.6	46.7	0.9
05:55 AM - 06:00 AM	56.2	51.6	4.6	1.5	-	57.7	45.6	12.1
06:00 AM - 07:00 AM	54.7	56.3	-1.6	7.0	47.7	-	49.3	-1.6
07:00 AM - 08:00 AM	56.9	55.6	1.3	7.0	49.9	-	49.3	0.6
08:00 AM - 09:00 AM	53.1	53.4	-0.3	7.0	46.1	-	47.0	-0.9
09:00 AM - 10:00 AM	51.1	52.0	-0.9	7.0	44.1	-	45.2	-1.1
ค่ามาตรฐาน								≤ 10

Reference Method : Based on ISO 1996-1 and ISO 1996-2

มาตรฐาน

- ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
- ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ เรื่อง ค่าระดับเสียงรบกวน ฉบับที่ 29 พ.ศ. 2550
- ประกาศคณะกรรมการควบคุมมลพิษ เรื่อง วิธีการตรวจวัดระดับเสียงพื้นฐาน ระดับเสียงขณะไม่มีการรบกวน การตรวจวัดและคำนวณระดับเสียงขณะมีการรบกวน การคำนวณค่าระดับการรบกวน และแบบบันทึกการตรวจวัดเสียงรบกวน พ.ศ. 2550 และประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553
- ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 26-27 พฤษภาคม 2566
ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2227105-2 วันที่ตรวจวัด 26-27 กรกฎาคม 2565)

Note : This Analysis test report is reissued to supersede report No.2443948-1, Date Reported : Sep 23, 2022 due to revise analytical information.

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Approved by

Wilawan Borirak

Wilawan Borirak
Assistant Manager



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2321280
Date Received : Jun 06, 2023
Date Reported : Jul 12, 2023
Report Number : 2715488-1

P/O : 4514144155

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Page 1 of 3

Sample No. 2321280-3
Parameter เสียงรบกวน
Location ขนถ่ายจาก-ลำประดู่ (GPS 47P 0735531, 1402769)
Measurement Date May 27 - 28, 2023
Measurement by Nantawat Sarin
Sound Level Meter 00873109

ระดับเสียง (dB(A))								
เวลา	(A) เสียงจากแหล่งกำเนิด	(B) เสียงขณะไม่มีกิจกรรม	(A-B) ผลต่างระดับเสียง	(C) ตัวปรับค่า	(D) ปรับค่าเสียงจากแหล่งกำเนิด		(E) เสียงพื้นฐาน	(D-E) ค่าระดับการรบกวน
					(A-C) กลางวัน	(A-C+3) กลางคืน		
10:00 AM - 11:00 AM	51.8	52.2	-0.4	7.0	44.8	-	44.5	0.3
11:00 AM - 12:00 PM	54.0	53.8	0.2	7.0	47.0	-	45.7	1.3
12:00 PM - 01:00 PM	53.0	53.6	-0.6	7.0	46.0	-	46.9	-0.9
01:00 PM - 02:00 PM	52.9	52.4	0.5	7.0	45.9	-	44.6	1.3
02:00 PM - 03:00 PM	52.5	52.3	0.2	7.0	45.5	-	45.1	0.4
03:00 PM - 04:00 PM	52.8	53.0	-0.2	7.0	45.8	-	45.8	0.0
04:00 PM - 05:00 PM	54.1	55.3	-1.2	7.0	47.1	-	49.6	-2.5
05:00 PM - 06:00 PM	56.1	55.4	0.7	7.0	49.1	-	50.6	-1.5
06:00 PM - 07:00 PM	57.2	54.9	2.3	4.5	52.7	-	50.2	2.5
07:00 PM - 08:00 PM	56.6	56.1	0.5	7.0	49.6	-	50.6	-1.0
08:00 PM - 09:00 PM	57.8	55.8	2.0	4.5	53.3	-	48.7	4.6
09:00 PM - 10:00 PM	56.2	53.3	2.9	3.0	53.2	-	48.1	5.1
10:00 PM - 10:05 PM	51.2	51.9	-0.7	7.0	-	47.2	46.3	0.9
10:05 PM - 10:10 PM	55.5	52.5	3.0	3.0	-	55.5	46.4	9.1
10:10 PM - 10:15 PM	52.8	53.5	-0.7	7.0	-	48.8	48.3	0.5
10:15 PM - 10:20 PM	56.2	50.6	5.6	1.5	-	57.7	46.3	11.4
10:20 PM - 10:25 PM	56.3	51.1	5.2	1.5	-	57.8	46.6	11.2
10:25 PM - 10:30 PM	52.0	54.4	-2.4	7.0	-	48.0	47.2	0.8
10:30 PM - 10:35 PM	62.1	51.8	10.3	0.5	-	64.6	47.1	17.5
10:35 PM - 10:40 PM	58.2	53.5	4.7	1.5	-	59.7	48.6	11.1
10:40 PM - 10:45 PM	55.0	54.5	0.5	7.0	-	51.0	47.9	3.1
10:45 PM - 10:50 PM	53.5	53.0	0.5	7.0	-	49.5	46.3	3.2
10:50 PM - 10:55 PM	52.9	56.8	-3.9	7.0	-	48.9	48.7	0.2
10:55 PM - 11:00 PM	55.6	52.8	2.8	3.0	-	55.6	47.1	8.5
11:00 PM - 11:05 PM	54.0	54.4	-0.4	7.0	-	50.0	46.5	3.5
11:05 PM - 11:10 PM	62.7	53.1	9.6	0.5	-	65.2	46.9	18.3
11:10 PM - 11:15 PM	57.5	51.8	5.7	1.5	-	59.0	47.0	12.0
11:15 PM - 11:20 PM	52.1	54.7	-2.6	7.0	-	48.1	48.4	-0.3
11:20 PM - 11:25 PM	52.4	54.9	-2.5	7.0	-	48.4	47.1	1.3
11:25 PM - 11:30 PM	52.9	51.9	1.0	7.0	-	48.9	47.2	1.7
11:30 PM - 11:35 PM	54.3	53.0	1.3	7.0	-	50.3	47.8	2.5
11:35 PM - 11:40 PM	53.6	51.6	2.0	4.5	-	52.1	44.7	7.4
11:40 PM - 11:45 PM	56.3	50.5	5.8	1.5	-	57.8	45.4	12.4
11:45 PM - 11:50 PM	50.5	51.3	-0.8	7.0	-	46.5	46.8	-0.3
11:50 PM - 11:55 PM	56.3	52.9	3.4	3.0	-	56.3	44.5	11.8
11:55 PM - 12:00 AM	59.3	54.3	5.0	1.5	-	60.8	45.8	15.0
12:00 AM - 12:05 AM	56.0	53.1	2.9	3.0	-	56.0	44.3	11.7
12:05 AM - 12:10 AM	53.1	52.9	0.2	7.0	-	49.1	47.1	2.0
12:10 AM - 12:15 AM	52.4	49.1	3.3	3.0	-	52.4	43.4	9.0
12:15 AM - 12:20 AM	54.2	47.9	6.3	1.5	-	55.7	43.1	12.6

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Approved by

Wilawan Borirak

Wilawan Borirak
Assistant Manager



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2321280
Date Received : Jun 06, 2023
Date Reported : Jul 12, 2023
Report Number : 2715488-1

P/O : 4514144155

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Page 2 of 3

Sample No. 2321280-3
Parameter เสียงรบกวน
Location ขนบดากาน-อ่าวประดู่ (GPS 47P 0735531, 1402769)
Measurement Date May 27 - 28, 2023
Measurement by Nantawat Sarin
Sound Level Meter 00873109

ระดับเสียง (dB(A))								
เวลา	(A) เสียงจากแหล่งกำเนิด	(B) เสียงขณะไม่มีการรบกวน	(A-B) ผลต่างระดับเสียง	(C) ตัวปรับค่า	(D) ปรับค่าเสียงจากแหล่งกำเนิด		(E) เสียงพื้นฐาน	(D+E) ค่าระดับการรบกวน
					(A-C) กลางวัน	(A-C)+3 กลางคืน		
12:20 AM - 12:25 AM	50.2	49.6	0.6	7.0	-	46.2	43.1	3.1
12:25 AM - 12:30 AM	49.5	48.1	1.4	7.0	-	45.5	43.4	2.1
12:30 AM - 12:35 AM	51.5	53.1	-1.6	7.0	-	47.5	43.0	4.5
12:35 AM - 12:40 AM	50.3	54.4	-4.1	7.0	-	46.3	43.9	2.4
12:40 AM - 12:45 AM	56.7	48.2	8.5	0.5	-	59.2	43.7	15.5
12:45 AM - 12:50 AM	58.0	54.9	3.1	3.0	-	58.0	43.2	14.8
12:50 AM - 12:55 AM	50.8	45.3	5.5	1.5	-	52.3	41.5	10.8
12:55 AM - 01:00 AM	53.9	49.7	4.2	2.0	-	54.9	43.2	11.7
01:00 AM - 01:05 AM	53.6	47.1	6.5	1.0	-	55.6	43.6	12.0
01:05 AM - 01:10 AM	51.5	49.7	1.8	4.5	-	50.0	44.2	5.8
01:10 AM - 01:15 AM	55.4	47.3	8.1	0.5	-	57.9	44.8	13.1
01:15 AM - 01:20 AM	48.3	58.7	-10.4	7.0	-	44.3	43.5	0.8
01:20 AM - 01:25 AM	51.1	48.4	2.7	3.0	-	51.1	43.6	7.5
01:25 AM - 01:30 AM	48.9	49.1	-0.2	7.0	-	44.9	44.0	0.9
01:30 AM - 01:35 AM	50.4	59.3	-8.9	7.0	-	46.4	45.0	1.4
01:35 AM - 01:40 AM	49.4	48.6	0.8	7.0	-	45.4	44.7	0.7
01:40 AM - 01:45 AM	49.6	48.2	1.4	7.0	-	45.6	46.0	-0.4
01:45 AM - 01:50 AM	49.3	50.9	-1.6	7.0	-	45.3	45.0	0.3
01:50 AM - 01:55 AM	52.2	47.8	4.4	2.0	-	53.2	45.0	8.2
01:55 AM - 02:00 AM	57.7	48.4	9.3	0.5	-	60.2	45.5	14.7
02:00 AM - 02:05 AM	49.9	47.5	2.4	4.5	-	48.4	44.9	3.5
02:05 AM - 02:10 AM	49.1	47.1	2.0	4.5	-	47.6	44.9	2.7
02:10 AM - 02:15 AM	50.0	53.2	-3.2	7.0	-	46.0	45.2	0.8
02:15 AM - 02:20 AM	51.3	46.9	4.4	2.0	-	52.3	44.6	7.7
02:20 AM - 02:25 AM	46.6	48.4	-1.8	7.0	-	42.6	44.3	-1.7
02:25 AM - 02:30 AM	50.5	47.2	3.3	3.0	-	50.5	43.3	7.2
02:30 AM - 02:35 AM	50.4	48.1	2.3	4.5	-	48.9	43.7	5.2
02:35 AM - 02:40 AM	47.4	47.1	0.3	7.0	-	43.4	44.5	-1.1
02:40 AM - 02:45 AM	45.8	47.7	-1.9	7.0	-	41.8	45.0	-3.2
02:45 AM - 02:50 AM	50.8	48.1	2.7	3.0	-	50.8	45.8	5.0
02:50 AM - 02:55 AM	52.6	47.9	4.7	1.5	-	54.1	45.1	9.0
02:55 AM - 03:00 AM	52.7	46.2	6.5	1.0	-	54.7	44.3	10.4
03:00 AM - 03:05 AM	44.9	50.0	-5.1	7.0	-	40.9	45.0	-4.1
03:05 AM - 03:10 AM	45.6	47.0	-1.4	7.0	-	41.6	44.0	-2.4
03:10 AM - 03:15 AM	45.7	47.6	-1.9	7.0	-	41.7	45.1	-3.4
03:15 AM - 03:20 AM	43.6	50.2	-6.6	7.0	-	39.6	44.1	-4.5
03:20 AM - 03:25 AM	75.1	45.5	29.6	0.0	-	78.1	43.6	34.5
03:25 AM - 03:30 AM	74.5	53.2	21.3	0.0	-	77.5	45.5	32.0
03:30 AM - 03:35 AM	68.7	48.0	20.7	0.0	-	71.7	45.4	26.3
03:35 AM - 03:40 AM	66.0	49.4	16.6	0.0	-	69.0	45.7	23.3

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

Approved by

Wilawan Borirak

Wilawan Borirak
Assistant Manager



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2321280
Date Received : Jun 06, 2023
Date Reported : Jul 12, 2023
Report Number : 2715488-1

P/O : 4514144155

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Page 3 of 3

Sample No. 2321280-3
Parameter เสียงรบกวน
Location ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735531, 1402769)
Measurement Date May 27 - 28, 2023
Measurement by Nantawat Sarin
Sound Level Meter 00873109

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด (A)	เสียงขณะไม่มีการรบกวน (B)	ผลต่างระดับเสียง (A-B)	ตัวปรับค่า (C)	ปรับค่าเสียงจากแหล่งกำเนิด (D)		เสียงพื้นฐาน (E)	ค่าระดับการรบกวน (F-E)
					กลางวัน (A-C)	กลางคืน (A-C)+3		
03:40 AM - 03:45 AM	44.7	47.0	-2.3	7.0	-	40.7	44.7	-4.0
03:45 AM - 03:50 AM	46.3	49.6	-3.3	7.0	-	42.3	44.8	-2.5
03:50 AM - 03:55 AM	45.7	49.2	-3.5	7.0	-	41.7	44.8	-3.1
03:55 AM - 04:00 AM	45.6	49.8	-4.2	7.0	-	41.6	44.9	-3.3
04:00 AM - 04:05 AM	42.9	45.8	-2.9	7.0	-	38.9	43.9	-5.0
04:05 AM - 04:10 AM	46.0	46.5	-0.5	7.0	-	42.0	43.8	-1.8
04:10 AM - 04:15 AM	47.1	50.2	-3.1	7.0	-	43.1	44.1	-1.0
04:15 AM - 04:20 AM	69.5	50.1	19.4	0.0	-	72.5	44.6	27.9
04:20 AM - 04:25 AM	71.5	47.0	24.5	0.0	-	74.5	44.6	29.9
04:25 AM - 04:30 AM	60.6	49.3	11.3	0.5	-	63.1	44.8	18.3
04:30 AM - 04:35 AM	52.2	46.4	5.8	1.5	-	53.7	43.0	10.7
04:35 AM - 04:40 AM	54.0	47.6	6.4	1.5	-	55.5	43.6	11.9
04:40 AM - 04:45 AM	50.6	48.0	2.6	3.0	-	50.6	44.3	6.3
04:45 AM - 04:50 AM	50.9	48.3	2.6	3.0	-	50.9	46.0	4.9
04:50 AM - 04:55 AM	53.9	47.4	6.5	1.0	-	55.9	44.4	11.5
04:55 AM - 05:00 AM	49.7	54.4	-4.7	7.0	-	45.7	44.5	1.2
05:00 AM - 05:05 AM	51.6	48.1	3.5	2.0	-	52.6	44.1	8.5
05:05 AM - 05:10 AM	53.0	51.0	2.0	4.5	-	51.5	45.8	5.7
05:10 AM - 05:15 AM	49.6	48.2	1.4	7.0	-	45.6	44.6	1.0
05:15 AM - 05:20 AM	53.6	49.3	4.3	2.0	-	54.6	44.4	10.2
05:20 AM - 05:25 AM	54.6	48.3	6.3	1.5	-	56.1	43.7	12.4
05:25 AM - 05:30 AM	55.9	50.1	5.8	1.5	-	57.4	47.3	10.1
05:30 AM - 05:35 AM	54.7	48.9	5.8	1.5	-	56.2	45.3	10.9
05:35 AM - 05:40 AM	52.2	49.8	2.4	4.5	-	50.7	46.7	4.0
05:40 AM - 05:45 AM	52.3	50.4	1.9	4.5	-	50.8	46.4	4.4
05:45 AM - 05:50 AM	51.2	50.1	1.1	7.0	-	47.2	44.6	2.6
05:50 AM - 05:55 AM	53.0	51.4	1.6	4.5	-	51.5	45.6	5.9
05:55 AM - 06:00 AM	52.8	51.9	0.9	7.0	-	48.8	46.0	2.8
06:00 AM - 07:00 AM	53.9	54.9	-1.0	7.0	46.9	-	47.7	-0.8
07:00 AM - 08:00 AM	55.0	54.8	0.2	7.0	48.0	-	47.1	0.9
08:00 AM - 09:00 AM	54.2	54.0	0.2	7.0	47.2	-	48.3	-1.1
09:00 AM - 10:00 AM	53.8	54.0	-0.2	7.0	46.8	-	49.2	-2.4
ค่ามาตรฐาน								≤ 10

Reference Method : Based on ISO 1996-1 and ISO 1996-2

มาตรฐาน

- ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
- ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ เรื่อง ค่าระดับเสียงรบกวน ฉบับที่ 29 พ.ศ. 2550
- ประกาศคณะกรรมการควบคุมมลพิษ เรื่อง วิธีการตรวจวัดระดับเสียงพื้นฐาน ระดับเสียงขณะไม่มีการรบกวน การตรวจวัดและคำนวณระดับเสียงขณะมีการรบกวน การคำนวณค่าระดับการรบกวน และแบบบันทึกการตรวจวัดเสียงรบกวน พ.ศ. 2550 และประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553
- ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 27-28 พฤษภาคม 2566
ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2227105-3 วันที่ตรวจวัด 27-28 กรกฎาคม 2565)

Note : This Analysis test report is issued to supersede report No.2443949-1, Date Reported : Sep 23, 2022 due to revise analytical information.

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Approved by

Wilawan Borirak

Wilawan Borirak
Assistant Manager



Analysis / Test Report

TESTING
No.0009

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2227105
Date Received : Jul 29, 2022
Date Reported : Aug 03, 2022
Report No. : 2393119-1

P/O :
Project Name : Environmental Quality Monitoring
Project Location : Map Ta Phut_PU (PPTL)

Page 1 of 3

Sample No. 2227105-1
Parameter Noise
Location ทุ่งนาตาพรุ-ธาราประดู (GPS 47P 0735531, 1402769) (Shut down)
Measurement Date Jul 25 - 26, 2022
Measurement by Puwanart Pimpan
Sound Level Meter 00597168

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	52.9	77.7	45.5
11:00 AM - 12:00 PM	54.0	76.8	46.9
12:00 PM - 01:00 PM	52.3	69.1	45.4
01:00 PM - 02:00 PM	52.5	72.2	44.9
02:00 PM - 03:00 PM	52.6	73.1	45.2
03:00 PM - 04:00 PM	52.8	70.8	46.7
04:00 PM - 05:00 PM	55.1	73.0	49.7
05:00 PM - 06:00 PM	56.1	76.5	51.0
06:00 PM - 07:00 PM	56.4	75.8	50.7
07:00 PM - 08:00 PM	56.6	79.4	51.5
08:00 PM - 09:00 PM	56.1	78.9	51.8
09:00 PM - 10:00 PM	55.8	75.9	50.1
10:00 PM - 10:05 PM	53.1	65.3	48.3
10:05 PM - 10:10 PM	53.1	69.6	48.0
10:10 PM - 10:15 PM	55.6	73.6	51.9
10:15 PM - 10:20 PM	54.3	60.9	51.9
10:20 PM - 10:25 PM	56.1	68.3	52.3
10:25 PM - 10:30 PM	54.3	64.4	51.6
10:30 PM - 10:35 PM	56.3	74.4	51.9
10:35 PM - 10:40 PM	53.9	66.7	50.8
10:40 PM - 10:45 PM	53.7	65.8	49.8
10:45 PM - 10:50 PM	54.7	72.3	48.4
10:50 PM - 10:55 PM	52.6	62.5	49.0
10:55 PM - 11:00 PM	55.5	76.0	49.2
11:00 PM - 11:05 PM	55.2	69.5	48.7
11:05 PM - 11:10 PM	53.3	61.5	48.9
11:10 PM - 11:15 PM	52.6	60.6	48.1
11:15 PM - 11:20 PM	53.4	62.0	49.2
11:20 PM - 11:25 PM	53.5	69.5	48.5
11:25 PM - 11:30 PM	52.1	61.7	48.2
11:30 PM - 11:35 PM	53.2	67.8	49.3
11:35 PM - 11:40 PM	54.8	71.2	49.1
11:40 PM - 11:45 PM	54.0	71.3	48.4
11:45 PM - 11:50 PM	52.5	69.1	48.2
11:50 PM - 11:55 PM	53.5	64.3	49.3
11:55 PM - 12:00 AM	53.5	72.7	48.6
12:00 AM - 12:05 AM	53.9	69.6	49.2
12:05 AM - 12:10 AM	52.6	63.2	48.7
12:10 AM - 12:15 AM	50.9	67.8	48.6
12:15 AM - 12:20 AM	50.7	61.9	47.2

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

Approved by

Kanok Korn Anek

Kanokkorn Anek
Senior Manager



Analysis / Test Report

TESTING
No.0009

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2227105
Date Received : Jul 29, 2022
Date Reported : Aug 03, 2022
Report No. : 2393119-1

P/O :
Project Name : Environmental Quality Monitoring
Project Location : Map Ta Phut_PU (PPTL)

Page 2 of 3

Sample No. 2227105-1
Parameter Noise
Location หนองนาคำ-ท่าเรือ (GPS 47P 0735531, 1402769) (Shut down)
Measurement Date Jul 25 - 26, 2022
Measurement by Puwanart Pimpan
Sound Level Meter 00597168

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	50.3	60.8	47.7
12:25 AM - 12:30 AM	50.2	63.5	47.4
12:30 AM - 12:35 AM	48.7	64.1	44.4
12:35 AM - 12:40 AM	55.4	74.8	47.2
12:40 AM - 12:45 AM	52.1	68.3	48.2
12:45 AM - 12:50 AM	50.1	58.9	48.3
12:50 AM - 12:55 AM	50.6	63.5	48.0
12:55 AM - 01:00 AM	50.2	60.2	47.8
01:00 AM - 01:05 AM	49.2	61.3	45.0
01:05 AM - 01:10 AM	48.3	58.5	45.4
01:10 AM - 01:15 AM	56.5	80.3	44.9
01:15 AM - 01:20 AM	51.6	70.7	45.0
01:20 AM - 01:25 AM	54.4	76.3	44.6
01:25 AM - 01:30 AM	61.6	83.6	44.0
01:30 AM - 01:35 AM	54.9	76.8	44.6
01:35 AM - 01:40 AM	48.2	61.9	45.0
01:40 AM - 01:45 AM	54.9	75.8	45.4
01:45 AM - 01:50 AM	47.3	59.9	44.3
01:50 AM - 01:55 AM	48.2	62.2	43.4
01:55 AM - 02:00 AM	46.4	56.2	44.2
02:00 AM - 02:05 AM	47.2	61.1	43.5
02:05 AM - 02:10 AM	50.2	63.3	44.2
02:10 AM - 02:15 AM	48.8	64.3	44.1
02:15 AM - 02:20 AM	49.2	63.6	44.2
02:20 AM - 02:25 AM	48.2	64.9	44.2
02:25 AM - 02:30 AM	46.6	57.8	44.0
02:30 AM - 02:35 AM	46.1	58.1	43.3
02:35 AM - 02:40 AM	47.3	62.9	43.3
02:40 AM - 02:45 AM	48.3	67.1	43.5
02:45 AM - 02:50 AM	47.6	64.0	42.9
02:50 AM - 02:55 AM	48.4	65.5	43.0
02:55 AM - 03:00 AM	52.3	70.2	43.0
03:00 AM - 03:05 AM	47.9	62.1	43.3
03:05 AM - 03:10 AM	45.0	56.5	42.7
03:10 AM - 03:15 AM	50.0	71.0	44.1
03:15 AM - 03:20 AM	45.2	56.7	43.1
03:20 AM - 03:25 AM	47.5	66.1	44.7
03:25 AM - 03:30 AM	47.6	56.4	46.0
03:30 AM - 03:35 AM	51.1	63.2	47.2
03:35 AM - 03:40 AM	50.0	61.7	46.7

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

Approved by

Kanok Korn Anek

Kanokkorn Anek
Senior Manager



Analysis / Test Report

TESTING
No.0009

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2227105
Date Received : Jul 29, 2022
Date Reported : Aug 03, 2022
Report No. : 2393119-1

P/O :
Project Name : Environmental Quality Monitoring
Project Location : Map Ta Phut_PU (PPTL)

Page 3 of 3

Sample No. 2227105-1
Parameter Noise
Location ชุมชนดงนาทาม-ระยอง (GPS 47P 0735531, 1402769) (Shut down)
Measurement Date Jul 25 - 26, 2022
Measurement by Puwanart Pimpan
Sound Level Meter 00597168

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	50.6	69.7	45.5
03:45 AM - 03:50 AM	58.5	68.9	48.9
03:50 AM - 03:55 AM	56.9	67.5	48.0
03:55 AM - 04:00 AM	50.0	56.7	47.7
04:00 AM - 04:05 AM	53.0	71.9	47.1
04:05 AM - 04:10 AM	53.1	72.1	45.2
04:10 AM - 04:15 AM	46.9	57.2	44.3
04:15 AM - 04:20 AM	49.1	57.9	46.4
04:20 AM - 04:25 AM	49.4	59.0	46.8
04:25 AM - 04:30 AM	54.5	65.8	47.1
04:30 AM - 04:35 AM	48.7	54.9	45.9
04:35 AM - 04:40 AM	50.9	65.5	46.8
04:40 AM - 04:45 AM	49.1	63.6	45.8
04:45 AM - 04:50 AM	48.8	59.6	45.3
04:50 AM - 04:55 AM	49.6	61.6	46.2
04:55 AM - 05:00 AM	50.5	60.8	48.5
05:00 AM - 05:05 AM	56.8	78.7	45.7
05:05 AM - 05:10 AM	50.2	63.5	45.9
05:10 AM - 05:15 AM	51.2	66.4	47.3
05:15 AM - 05:20 AM	49.7	58.9	46.7
05:20 AM - 05:25 AM	52.4	73.4	46.7
05:25 AM - 05:30 AM	51.0	61.2	46.6
05:30 AM - 05:35 AM	50.9	60.3	46.2
05:35 AM - 05:40 AM	54.7	62.9	50.4
05:40 AM - 05:45 AM	51.7	62.1	47.6
05:45 AM - 05:50 AM	50.3	59.3	45.8
05:50 AM - 05:55 AM	52.7	65.4	46.3
05:55 AM - 06:00 AM	51.8	60.2	47.8
06:00 AM - 07:00 AM	55.7	72.2	50.4
07:00 AM - 08:00 AM	56.1	77.5	49.9
08:00 AM - 09:00 AM	53.8	82.9	47.0
09:00 AM - 10:00 AM	53.1	74.3	46.1

Reference Method : Based on ISO 1996-1 and ISO 1996-2

Note : This Analysis test report is reissued to supersede report No. 2036565-1, Date Reported : Aug 03, 2021 due to revise sample information.

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

Approved by

Kanok Korn Anek

Kanok Korn Anek
Senior Manager



Analysis / Test Report

TESTING
No.0009

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2227105
Date Received : Jul 29, 2022
Date Reported : Aug 03, 2022
Report No. : 2393120-1

P/O :
Project Name : Environmental Quality Monitoring
Project Location : Map Ta Phut_PU (PPTL)

Page 1 of 3

Sample No. 2227105-2
Parameter Noise
Location ชุมชนอุตสาหกรรม-ธารา-ระยอง (GPS 47P 0735531, 1402769) (Shut down)
Measurement Date Jul 26 - 27, 2022
Measurement by Puwanart Pimpan
Sound Level Meter 00597168

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	51.7	70.3	44.5
11:00 AM - 12:00 PM	52.6	75.1	45.3
12:00 PM - 01:00 PM	52.6	72.9	45.3
01:00 PM - 02:00 PM	53.5	73.5	45.8
02:00 PM - 03:00 PM	51.7	67.1	45.2
03:00 PM - 04:00 PM	53.2	73.0	46.8
04:00 PM - 05:00 PM	55.5	74.9	49.9
05:00 PM - 06:00 PM	55.4	80.1	50.5
06:00 PM - 07:00 PM	55.8	72.6	50.7
07:00 PM - 08:00 PM	56.1	75.1	52.5
08:00 PM - 09:00 PM	56.0	76.3	51.8
09:00 PM - 10:00 PM	54.9	81.0	49.4
10:00 PM - 10:05 PM	54.3	67.1	50.0
10:05 PM - 10:10 PM	53.6	65.6	50.7
10:10 PM - 10:15 PM	56.1	65.7	52.8
10:15 PM - 10:20 PM	54.4	69.8	49.5
10:20 PM - 10:25 PM	64.1	75.5	53.0
10:25 PM - 10:30 PM	63.7	67.3	52.5
10:30 PM - 10:35 PM	64.0	68.0	51.3
10:35 PM - 10:40 PM	57.6	75.4	51.3
10:40 PM - 10:45 PM	57.9	78.2	48.2
10:45 PM - 10:50 PM	54.7	75.5	49.3
10:50 PM - 10:55 PM	54.0	71.0	48.5
10:55 PM - 11:00 PM	51.1	65.0	46.1
11:00 PM - 11:05 PM	49.9	59.4	46.4
11:05 PM - 11:10 PM	52.4	68.3	46.0
11:10 PM - 11:15 PM	50.2	66.8	45.4
11:15 PM - 11:20 PM	51.6	68.6	46.4
11:20 PM - 11:25 PM	51.5	68.5	45.5
11:25 PM - 11:30 PM	52.3	69.1	46.4
11:30 PM - 11:35 PM	54.2	63.9	50.7
11:35 PM - 11:40 PM	57.7	77.0	50.8
11:40 PM - 11:45 PM	57.1	78.1	50.1
11:45 PM - 11:50 PM	52.6	62.9	50.3
11:50 PM - 11:55 PM	58.1	73.1	49.6
11:55 PM - 12:00 AM	52.6	61.3	48.9
12:00 AM - 12:05 AM	51.2	65.3	46.5
12:05 AM - 12:10 AM	51.1	61.3	47.6
12:10 AM - 12:15 AM	53.0	64.8	47.5
12:15 AM - 12:20 AM	53.7	67.6	48.0

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Approved by

Kanok Korn Anek

Kanok Korn Anek
Senior Manager



Analysis / Test Report

TESTING

No.0009

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2227105
Date Received : Jul 29, 2022
Date Reported : Aug 03, 2022
Report No. : 2393120-1

P/O :
Project Name : Environmental Quality Monitoring
Project Location : Map Ta Phut_PU (PPTL)

Page 2 of 3

Sample No. 2227105-2
Parameter Noise
Location เขตอุตสาหกรรม-ธาร์ประดู่ (GPS 47P 0735531, 1402769) (Shut down)
Measurement Date Jul 26 - 27, 2022
Measurement by Puwanart Pimpan
Sound Level Meter 00597168

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	50.6	60.6	45.7
12:25 AM - 12:30 AM	48.6	59.7	45.3
12:30 AM - 12:35 AM	58.1	76.4	48.2
12:35 AM - 12:40 AM	51.8	63.6	49.2
12:40 AM - 12:45 AM	50.8	57.4	49.2
12:45 AM - 12:50 AM	50.0	62.5	45.9
12:50 AM - 12:55 AM	47.5	57.2	45.9
12:55 AM - 01:00 AM	50.3	62.8	44.5
01:00 AM - 01:05 AM	47.9	61.2	43.7
01:05 AM - 01:10 AM	48.4	58.7	43.9
01:10 AM - 01:15 AM	46.4	52.9	44.0
01:15 AM - 01:20 AM	45.3	56.9	43.4
01:20 AM - 01:25 AM	51.2	71.6	43.7
01:25 AM - 01:30 AM	47.8	61.4	43.1
01:30 AM - 01:35 AM	48.5	63.2	43.0
01:35 AM - 01:40 AM	48.6	64.9	43.9
01:40 AM - 01:45 AM	51.7	67.4	45.2
01:45 AM - 01:50 AM	47.2	58.5	43.9
01:50 AM - 01:55 AM	48.8	60.1	44.9
01:55 AM - 02:00 AM	45.8	54.4	43.0
02:00 AM - 02:05 AM	46.9	61.4	43.5
02:05 AM - 02:10 AM	49.8	65.4	43.7
02:10 AM - 02:15 AM	49.6	64.1	45.6
02:15 AM - 02:20 AM	49.8	67.7	45.1
02:20 AM - 02:25 AM	48.7	58.6	45.0
02:25 AM - 02:30 AM	46.7	57.9	42.3
02:30 AM - 02:35 AM	49.0	66.2	43.0
02:35 AM - 02:40 AM	48.4	64.1	45.0
02:40 AM - 02:45 AM	48.2	58.9	45.3
02:45 AM - 02:50 AM	48.6	57.8	45.3
02:50 AM - 02:55 AM	49.8	63.1	46.8
02:55 AM - 03:00 AM	48.6	60.0	46.2
03:00 AM - 03:05 AM	50.1	62.9	46.1
03:05 AM - 03:10 AM	46.1	55.8	42.7
03:10 AM - 03:15 AM	48.0	61.2	44.1
03:15 AM - 03:20 AM	45.7	55.6	43.2
03:20 AM - 03:25 AM	46.3	59.3	43.2
03:25 AM - 03:30 AM	45.4	55.1	41.2
03:30 AM - 03:35 AM	48.0	60.7	43.6
03:35 AM - 03:40 AM	48.2	61.6	42.9

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Approved by

Kanok Korn Anek

Kanok Korn Anek
Senior Manager



Analysis / Test Report

TESTING
No.0009

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2227105
Date Received : Jul 29, 2022
Date Reported : Aug 03, 2022
Report No. : 2393120-1

P/O :
Project Name : Environmental Quality Monitoring
Project Location : Map Ta Phut_PU (PPTL)

Page 3 of 3

Sample No. 2227105-2
Parameter Noise
Location เขตอุตสาหกรรม-ธาราประดู (GPS 47P 0735531, 1402769) (Shut down)
Measurement Date Jul 26 - 27, 2022
Measurement by Puwanart Pimpan
Sound Level Meter 00597168

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	44.5	51.7	42.5
03:45 AM - 03:50 AM	48.1	66.7	42.5
03:50 AM - 03:55 AM	47.8	63.2	43.0
03:55 AM - 04:00 AM	47.8	62.0	43.3
04:00 AM - 04:05 AM	46.0	56.1	42.2
04:05 AM - 04:10 AM	46.9	56.6	44.5
04:10 AM - 04:15 AM	51.5	68.3	44.4
04:15 AM - 04:20 AM	47.1	63.6	44.4
04:20 AM - 04:25 AM	55.3	75.4	44.5
04:25 AM - 04:30 AM	48.4	62.1	42.0
04:30 AM - 04:35 AM	45.0	57.4	41.7
04:35 AM - 04:40 AM	46.6	58.2	41.9
04:40 AM - 04:45 AM	47.7	63.3	41.5
04:45 AM - 04:50 AM	48.9	61.7	42.9
04:50 AM - 04:55 AM	47.6	59.7	42.7
04:55 AM - 05:00 AM	48.4	60.1	42.5
05:00 AM - 05:05 AM	51.2	69.7	43.0
05:05 AM - 05:10 AM	48.8	57.8	43.9
05:10 AM - 05:15 AM	48.3	60.8	42.8
05:15 AM - 05:20 AM	49.2	60.7	43.3
05:20 AM - 05:25 AM	50.0	61.9	43.9
05:25 AM - 05:30 AM	50.3	63.2	45.2
05:30 AM - 05:35 AM	50.5	59.9	45.0
05:35 AM - 05:40 AM	51.9	71.0	46.8
05:40 AM - 05:45 AM	52.2	70.4	46.6
05:45 AM - 05:50 AM	51.8	63.8	45.5
05:50 AM - 05:55 AM	52.6	64.4	46.7
05:55 AM - 06:00 AM	51.6	59.1	45.6
06:00 AM - 07:00 AM	56.3	80.8	49.3
07:00 AM - 08:00 AM	55.6	78.4	49.3
08:00 AM - 09:00 AM	53.4	68.8	47.0
09:00 AM - 10:00 AM	52.0	71.6	45.2

Reference Method : Based on ISO 1996-1 and ISO 1996-2

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Approved by

Kanok Korn Anek

Kanok Korn Anek
Senior Manager



Analysis / Test Report

TESTING
No.0009

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2227105
Date Received : Jul 29, 2022
Date Reported : Aug 03, 2022
Report No. : 2393121-1

P/O :
Project Name : Environmental Quality Monitoring
Project Location : Map Ta Phut_PU (PPTL)

Page 1 of 3

Sample No. 2227105-3
Parameter Noise
Location ชุมชนตลาด-ธาราประดู (GPS 47P 0735531, 1402769) (Shut down)
Measurement Date Jul 27 - 28, 2022
Measurement by Puwanart Pimpan
Sound Level Meter 00597168

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	52.2	72.1	44.5
11:00 AM - 12:00 PM	53.8	72.6	45.7
12:00 PM - 01:00 PM	53.6	70.8	46.9
01:00 PM - 02:00 PM	52.4	74.8	44.6
02:00 PM - 03:00 PM	52.3	66.4	45.1
03:00 PM - 04:00 PM	53.0	77.0	45.8
04:00 PM - 05:00 PM	55.3	73.4	49.6
05:00 PM - 06:00 PM	55.4	73.9	50.6
06:00 PM - 07:00 PM	54.9	73.7	50.2
07:00 PM - 08:00 PM	56.1	82.1	50.6
08:00 PM - 09:00 PM	55.8	82.6	48.7
09:00 PM - 10:00 PM	53.3	76.8	48.1
10:00 PM - 10:05 PM	51.9	66.6	46.3
10:05 PM - 10:10 PM	52.5	67.3	46.4
10:10 PM - 10:15 PM	53.5	70.2	48.3
10:15 PM - 10:20 PM	50.6	66.0	46.3
10:20 PM - 10:25 PM	51.1	62.6	46.6
10:25 PM - 10:30 PM	54.4	71.6	47.2
10:30 PM - 10:35 PM	51.8	62.4	47.1
10:35 PM - 10:40 PM	53.5	62.6	48.6
10:40 PM - 10:45 PM	54.5	64.8	47.9
10:45 PM - 10:50 PM	53.0	63.7	46.3
10:50 PM - 10:55 PM	56.8	72.7	48.7
10:55 PM - 11:00 PM	52.8	69.5	47.1
11:00 PM - 11:05 PM	54.4	72.4	46.5
11:05 PM - 11:10 PM	53.1	67.9	46.9
11:10 PM - 11:15 PM	51.8	64.4	47.0
11:15 PM - 11:20 PM	54.7	74.0	48.4
11:20 PM - 11:25 PM	54.9	73.3	47.1
11:25 PM - 11:30 PM	51.9	63.2	47.2
11:30 PM - 11:35 PM	53.0	68.5	47.8
11:35 PM - 11:40 PM	51.6	63.7	44.7
11:40 PM - 11:45 PM	50.5	61.3	45.4
11:45 PM - 11:50 PM	51.3	66.4	46.8
11:50 PM - 11:55 PM	52.9	74.6	44.5
11:55 PM - 12:00 AM	54.3	71.5	45.8
12:00 AM - 12:05 AM	53.1	70.2	44.3
12:05 AM - 12:10 AM	52.9	63.9	47.1
12:10 AM - 12:15 AM	49.1	62.9	43.4
12:15 AM - 12:20 AM	47.9	60.4	43.1

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Approved by

Kanok Korn Anek

Kanok Korn Anek
Senior Manager



Analysis / Test Report

TESTING
No.0009

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2227105
Date Received : Jul 29, 2022
Date Reported : Aug 03, 2022
Report No. : 2393121-1

P/O :
Project Name : Environmental Quality Monitoring
Project Location : Map Ta Phut_PU (PPTL)

Page 2 of 3

Sample No. 2227105-3
Parameter Noise
Location เขตอุตสาหกรรม-ธาร์ประดู่ (GPS 47P 0735531, 1402769) (Shut down)
Measurement Date Jul 27 - 28, 2022
Measurement by Puwanart Pimpan
Sound Level Meter 00597168

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	49.6	61.7	43.1
12:25 AM - 12:30 AM	48.1	61.2	43.4
12:30 AM - 12:35 AM	53.1	72.6	43.0
12:35 AM - 12:40 AM	54.4	72.4	43.9
12:40 AM - 12:45 AM	48.2	60.9	43.7
12:45 AM - 12:50 AM	54.9	75.5	43.2
12:50 AM - 12:55 AM	45.3	60.7	41.5
12:55 AM - 01:00 AM	49.7	64.2	43.2
01:00 AM - 01:05 AM	47.1	58.6	43.6
01:05 AM - 01:10 AM	49.7	65.3	44.2
01:10 AM - 01:15 AM	47.3	57.8	44.8
01:15 AM - 01:20 AM	58.7	80.7	43.5
01:20 AM - 01:25 AM	48.4	61.5	43.6
01:25 AM - 01:30 AM	49.1	66.0	44.0
01:30 AM - 01:35 AM	59.3	81.8	45.0
01:35 AM - 01:40 AM	48.6	66.3	44.7
01:40 AM - 01:45 AM	48.2	57.9	46.0
01:45 AM - 01:50 AM	50.9	65.0	45.0
01:50 AM - 01:55 AM	47.8	61.6	45.0
01:55 AM - 02:00 AM	48.4	61.9	45.5
02:00 AM - 02:05 AM	47.5	58.0	44.9
02:05 AM - 02:10 AM	47.1	58.1	44.9
02:10 AM - 02:15 AM	53.2	70.0	45.2
02:15 AM - 02:20 AM	46.9	56.2	44.6
02:20 AM - 02:25 AM	48.4	60.0	44.3
02:25 AM - 02:30 AM	47.2	59.9	43.3
02:30 AM - 02:35 AM	48.1	62.3	43.7
02:35 AM - 02:40 AM	47.1	59.3	44.5
02:40 AM - 02:45 AM	47.7	58.6	45.0
02:45 AM - 02:50 AM	48.1	58.4	45.8
02:50 AM - 02:55 AM	47.9	61.7	45.1
02:55 AM - 03:00 AM	46.2	57.7	44.3
03:00 AM - 03:05 AM	50.0	66.8	45.0
03:05 AM - 03:10 AM	47.0	62.2	44.0
03:10 AM - 03:15 AM	47.6	57.5	45.1
03:15 AM - 03:20 AM	50.2	67.5	44.1
03:20 AM - 03:25 AM	45.5	54.0	43.6
03:25 AM - 03:30 AM	53.2	76.5	45.5
03:30 AM - 03:35 AM	48.0	61.7	45.4
03:35 AM - 03:40 AM	49.4	61.3	45.7

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Approved by

Kanok Korn Anek

Kanok Korn Anek
Senior Manager



Analysis / Test Report

TESTING
No.0009

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2227105
Date Received : Jul 29, 2022
Date Reported : Aug 03, 2022
Report No. : 2393121-1

P/O :
Project Name : Environmental Quality Monitoring
Project Location : Map Ta Phut_PU (PPTL)

Page 3 of 3

Sample No. 2227105-3
Parameter Noise
Location เขตอุตสาหกรรม-ธาราประดู (GPS 47P 0735531, 1402769) (Shut down)
Measurement Date Jul 27 - 28, 2022
Measurement by Puwanart Pimpan
Sound Level Meter 00597168

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	47.0	61.1	44.7
03:45 AM - 03:50 AM	49.6	64.6	44.8
03:50 AM - 03:55 AM	49.2	66.1	44.8
03:55 AM - 04:00 AM	49.8	66.3	44.9
04:00 AM - 04:05 AM	45.8	58.4	43.9
04:05 AM - 04:10 AM	46.5	61.9	43.8
04:10 AM - 04:15 AM	50.2	68.0	44.1
04:15 AM - 04:20 AM	50.1	64.7	44.6
04:20 AM - 04:25 AM	47.0	58.4	44.6
04:25 AM - 04:30 AM	49.3	66.9	44.8
04:30 AM - 04:35 AM	46.4	58.8	43.0
04:35 AM - 04:40 AM	47.6	60.1	43.6
04:40 AM - 04:45 AM	48.0	61.7	44.3
04:45 AM - 04:50 AM	48.3	57.1	46.0
04:50 AM - 04:55 AM	47.4	62.4	44.4
04:55 AM - 05:00 AM	54.4	73.2	44.5
05:00 AM - 05:05 AM	48.1	61.2	44.1
05:05 AM - 05:10 AM	51.0	68.8	45.8
05:10 AM - 05:15 AM	48.2	57.7	44.6
05:15 AM - 05:20 AM	49.3	61.4	44.4
05:20 AM - 05:25 AM	48.3	61.5	43.7
05:25 AM - 05:30 AM	50.1	61.2	47.3
05:30 AM - 05:35 AM	48.9	57.8	45.3
05:35 AM - 05:40 AM	49.8	58.3	46.7
05:40 AM - 05:45 AM	50.4	67.6	46.4
05:45 AM - 05:50 AM	50.1	60.0	44.6
05:50 AM - 05:55 AM	51.4	63.3	45.6
05:55 AM - 06:00 AM	51.9	62.8	46.0
06:00 AM - 07:00 AM	54.9	81.4	47.7
07:00 AM - 08:00 AM	54.8	78.5	47.1
08:00 AM - 09:00 AM	54.0	76.9	48.3
09:00 AM - 10:00 AM	54.0	72.9	49.2

Reference Method : Based on ISO 1996-1 and ISO 1996-2

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Kanokkorn Anek
Senior Manager