

## ภาคผนวก ค

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ใบรับรองผลการตรวจวัดคุณภาพสิ่งแวดล้อม

# ภาคผนวก ค-1

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ผลการตรวจวัดคุณภาพน้ำทิ้ง



## Analysis / Test Report

TESTING

No.0042

**Lot ID: 20143136**

Date Received : Jan 19, 2021

Date Reported : Jan 27, 2021

Report Number : 1867086-1

**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)

Page 1 of 1

<b>Sample Number</b>	20143136-1						
<b>Sampled Date</b>	Jan 19, 2021 10:20 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	H-304						
<b>Date Analysis Commenced</b>	Jan 19, 2021						
<b>Condition of Sample</b>	Contained in three plastic bottles, two glass vials and two amber glass bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	Based on APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	21	≤120	Based on APHA (2017), 5220 D	Rayong
Color (at Original pH) *	ADMI	-	1	11	≤300	APHA (2017), 2120 F	Rayong
Color (at pH 7.0) *	ADMI	-	1	10	≤300	APHA (2017), 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH at 25 degree C		-	-	8.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	24.2	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	716	≤3000	Based on APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Based on APHA (2017), 2540 D	Rayong

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

**Sampled By :** Chainusorn Lertnathakunchai, Thanasoun Namakunna

**Remark :**

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

Technical Management

*N. Banichongkit*

Narumon Banichongkit  
Supervisor

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Approved by

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Dej Changchon  
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ทะเบียนเลขที่ ว-225-ค-5283

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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: 20143136**

Date Received : Jan 19, 2021

Date Reported : Jan 27, 2021

Report Number : 1867086-2

Page 1 of 1

<b>Sample Number</b>	20143136-1						
<b>Sampled Date</b>	Jan 19, 2021 10:20 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	H-304						
<b>Date Analysis Commenced</b>	Jan 20, 2021						
<b>Condition of Sample</b>	Contained in three plastic bottles, two glass vials and two amber glass bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Total Organic Carbon	mg/L	0.01	0.1	8.34	No Standard	Based on APHA (2017), 5310 B	Bangkok

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

**Sampled By :** Chainusorn Lertnanthakunchai, 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 : 4511038307

Project Name : Water Testing

Project Location : Map Ta Phut\_PU (PPTL)

Lot ID: 211203

Date Received : Feb 10, 2021

Date Reported : Feb 17, 2021

Report Number : 1868241-1

Page 1 of 1

Sample Number	211203-1
Sampled Date	Feb 10, 2021 9:10 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	Feb 10, 2021
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
<b>Water Testing</b>							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	Based on APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	27	≤120	Based on APHA (2017), 5220 D	Rayong
Color (at Original pH) *	ADMI	-	5	14	≤300	APHA (2017), 2120 F	Rayong
Color (at pH 7.0) *	ADMI	-	5	13	≤300	APHA (2017), 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH at 25 degree C		-	-	7.6	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	27.3	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	324	≤3000	Based on APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	≤50	Based on APHA (2017), 2540 D	Rayong

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

**Sampled By :** Chainusorn Lertnathakunchai, Panupong Manit

Remark :

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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 :** 4511038307

**Project Name :** Water Testing

**Project Location :** Map Ta Phut\_PU (PPTL)

**Lot ID: 211203**

Date Received : Feb 10, 2021

Date Reported : Feb 18, 2021

Report Number : 1868241-2

Page 1 of 1

<b>Sample Number</b>	211203-1						
<b>Sampled Date</b>	Feb 10, 2021 9:10 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	H-304						
<b>Date Analysis Commenced</b>	Feb 12, 2021						
<b>Condition of Sample</b>	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
<b>Water Testing</b>							
Total Organic Carbon	mg/L	0.01	0.1	8.94	No Standard	Based on APHA (2017), 5310 B	Bangkok

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

**Sampled By :** Chainusorn Lertnanthakunchai, Panupong Manit

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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 : 4511038307

Project Name : Water Testing

Project Location : Map Ta Phut\_PU (PPTL)

Lot ID: 2111235

Date Received : Mar 03, 2021

Date Reported : Mar 11, 2021

Report Number : 1888324-1

Page 1 of 1

Sample Number	2111235-1
Sampled Date	Mar 03, 2021 9:00 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	Mar 03, 2021
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
<b>Water Testing</b>							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	Based on APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	14	≤120	Based on APHA (2017), 5220 D	Rayong
Color (at Original pH) *	ADMI	-	5	10	≤300	APHA (2017), 2120 F	Rayong
Color (at pH 7.0) *	ADMI	-	5	9	≤300	APHA (2017), 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH at 25 degree C		-	-	7.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	29.4	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1300	≤3000	Based on APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	13	≤50	Based on APHA (2017), 2540 D	Rayong

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

**Sampled By :** Chainusorn Lertnathakunchai , Thanasoun Namakunna

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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 :** 4511038307

**Project Name :** Water Testing

**Project Location :** Map Ta Phut\_PU (PPTL)

**Lot ID: 2111235**

Date Received : Mar 03, 2021

Date Reported : Mar 11, 2021

Report Number : 1888324-2

Page 1 of 1

<b>Sample Number</b>	2111235-1						
<b>Sampled Date</b>	Mar 03, 2021 9:00 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	H-304						
<b>Date Analysis Commenced</b>	Mar 04, 2021						
<b>Condition of Sample</b>	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
<b>Water Testing</b>							
Total Organic Carbon	mg/L	0.01	0.1	6.77	No Standard	Based on APHA (2017), 5310 B	Bangkok

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

**Sampled By :** Chainusorn Lertnanthakunchai, 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 : 4511038307

Project Name : Water Testing

Project Location: Map Ta Phut\_PU (PPTL)

Lot ID: 2123287

Date Received : Apr 05, 2021

Date Reported : Apr 16, 2021

Report Number : 1912780-1

Page 1 of 1

Sample Number	2123287-1
Sampled Date	Apr 05, 2021 9:30 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	Apr 05, 2021
Condition of Sample	Contained in two glass vials, two amber glass bottles and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C)	mg/L	-	2	3	≤20	Based on APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	44	≤120	Based on APHA (2017), 5220 D	Rayong
Color (at Original pH) *	ADMI	-	5	36	≤300	APHA (2017), 2120 F	Rayong
Color (at pH 7.0) *	ADMI	-	5	34	≤300	APHA (2017), 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH at 25 degree C		-	-	7.8	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	28.7	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	664	≤3000	Based on APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	27	≤50	Based on APHA (2017), 2540 D	Rayong

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

**Sampled By :** Chainusorn Lertnanthakunchai, Thanasoun Namakunna

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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 :** 4511038307

**Project Name :** Water Testing

**Project Location :** Map Ta Phut\_PU (PPTL)

**Lot ID: 2123287**

Date Received : Apr 05, 2021

Date Reported : Apr 15, 2021

Report Number : 1912780-2

Page 1 of 1

<b>Sample Number</b>	2123287-1						
<b>Sampled Date</b>	Apr 05, 2021 9:30 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	H-304						
<b>Date Analysis Commenced</b>	Apr 06, 2021						
<b>Condition of Sample</b>	Contained in two glass vials, two amber glass bottles and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Total Organic Carbon	mg/L	0.01	0.1	11.1	No Standard	Based on APHA (2017), 5310 B	Bangkok

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

**Sampled By :** Chainusorn Lertnanthakunchai, Thanasoun Namakunna

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## 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

P/O : 4511038307

Project Name : Water Testing

Project Location : Map Ta Phut\_PU (PPTL)

Lot ID: 2138270

Date Received : May 14, 2021

Date Reported : May 22, 2021

Report Number : 1944245-1

Page 1 of 1

Sample Number	2138270-1
Sampled Date	May 14, 2021 9:00 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	May 14, 2021
Condition of Sample	Contained in two glass vials, two amber glass bottles and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	Based on APHA (2017), 5210 B	Bangkok
COD	mg/L	1.5	5	18	≤120	Based on APHA (2017), 5220 D	Bangkok
Color (at Original pH) *	ADMI	-	5	11	≤300	APHA (2017), 2120 F	Bangkok
Color (at pH 7.0) *	ADMI	-	5	9	≤300	APHA (2017), 2120 F	Bangkok
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Bangkok
pH at 25 degree C		-	-	8.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Bangkok
Temperature *	Degree C	-	-	30.3	≤40	Based on APHA (2017), 2550 B	Bangkok
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	314	≤3000	Based on APHA (2017), 2540 C	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	17	≤50	Based on APHA (2017), 2540 D	Bangkok

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

**Sampled By :** Thanasoun Namakunna

Remark :

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Technical Management

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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 :** 4511038307

**Project Name :** Water Testing

**Project Location:** Map Ta Phut\_PU (PPTL)

**Lot ID: 2138270**

Date Received : May 14, 2021

Date Reported : May 22, 2021

Report Number : 1944245-2

Page 1 of 1

<b>Sample Number</b>	2138270-1
<b>Sampled Date</b>	May 14, 2021 9:00 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	H-304
<b>Date Analysis Commenced</b>	May 18, 2021
<b>Condition of Sample</b>	Contained in two glass vials, two amber glass bottles and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Total Organic Carbon	mg/L	0.01	0.1	5.75	No Standard	Based on APHA (2017), 5310 B	Bangkok

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

**Sampled By :** Thanasoun Namakunna

Remark :

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

Approved by

Siriluk P.

Siriluk Puenggang  
Supervisor

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## 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

P/O : 4511038307

Project Name : Water Testing

Project Location : Map Ta Phut\_PU (PPTL)

Lot ID: 2153259

Date Received : Jun 02, 2021

Date Reported : Jun 10, 2021

Report Number : 1976013-1

Page 1 of 1

Sample Number	2153259-1
Sampled Date	Jun 02, 2021 9:54 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	Jun 02, 2021
Condition of Sample	Contained in two amber glass bottles, three plastic bottles and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C)	mg/L	-	2	2	≤20	Based on APHA (2017), 5210 B	Bangkok
COD	mg/L	1.5	5	41	≤120	Based on APHA (2017), 5220 D	Bangkok
Color (at Original pH) *	ADMI	-	5	40	≤300	APHA (2017), 2120 F	Bangkok
Color (at pH 7.0) *	ADMI	-	5	39	≤300	APHA (2017), 2120 F	Bangkok
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Bangkok
pH at 25 degree C		-	-	7.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Bangkok
Temperature *	Degree C	-	-	30.4	≤40	Based on APHA (2017), 2550 B	Bangkok
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	540	≤3000	Based on APHA (2017), 2540 C	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	≤50	Based on APHA (2017), 2540 D	Bangkok

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

**Sampled By :** Thanasoun Namakunna

Remark :

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

Technical Management

*Siriluk P.*

Siriluk Puengpang  
Supervisor

ทะเบียนเลขที่ ว-204-จ-4720

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

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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 :** 4511038307

**Project Name :** Water Testing

**Project Location:** Map Ta Phut\_PU (PPTL)

**Lot ID: 2153259**

Date Received : Jun 02, 2021

Date Reported : Jun 10, 2021

Report Number : 1976013-2

Page 1 of 1

<b>Sample Number</b>	2153259-1
<b>Sampled Date</b>	Jun 02, 2021 9:54 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	H-304
<b>Date Analysis Commenced</b>	Jun 03, 2021
<b>Condition of Sample</b>	Contained in two amber glass bottles, three plastic bottles and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Total Organic Carbon	mg/L	0.01	0.1	8.83	No Standard	Based on APHA (2017), 5310 B	Bangkok

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

**Sampled By :** Thanasoun Namakunna

Remark :

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Approved by

Siriluk P.

Siriluk Puengpang  
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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: 20143101**

Date Received : Jan 19, 2021

Date Reported : Jul 16, 2021

Report Number : 1867027-1 C4

Page 1 of 1

<b>Sample Number</b>	20143101-1						
<b>Sampling Date</b>	Jan 19, 2021 11:20 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Outfall						
<b>Date Analysis Commenced</b>	Jan 19, 2021						
<b>Condition of Sample</b>	Contained in six glass vials, seven plastic bottles and one amber glass bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C)	mg/L	-	2	2	≤20	Based on APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	34	≤120	Based on APHA (2017), 5220 D	Rayong
Color (at Original pH) *	ADMI	-	5	16	≤300	APHA (2017), 2120 F	Rayong
Color (at pH 7.0) *	ADMI	-	5	15	≤300	APHA (2017), 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH at 25 degree C		-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	27.0	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	932	≤3000	Based on APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Based on APHA (2017), 2540 D	Rayong

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

**Sampling By :** Chainusorn Lertnanthakunchai, Thanasoun Namakunna

Remark :

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

Technical Management

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

Approved by

*D. Changchon*

Dej Changchon  
Manager

ทะเบียนเลขที่ ว-225-ค-5283

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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: 20143101**

Date Received : Jan 19, 2021

Date Reported : Jul 16, 2021

Report Number : 1867027-3 C4

Page 1 of 1

Sample Number	20143101-1						
Sampling Date	Jan 19, 2021 11:20 AM						
Sample Description	Wastewater						
Location	Outfall						
Date Analysis Commenced	Jan 20, 2021						
Condition of Sample	Contained in six glass vials, seven plastic bottles and one amber glass bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Total Organic Carbon	mg/L	0.01	0.1	15.6	No Standard	Based on APHA (2017), 5310 B	Bangkok

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

**Sampling By :** Chainusorn Lertnanthakunchai , 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: 211168

Date Received : Feb 03, 2021

Date Reported : Jul 16, 2021

Report Number : 1868206-1 C4

Page 1 of 1

Sample Number	211168-1						
Sampling Date	Feb 03, 2021 10:00 AM						
Sample Description	Wastewater						
Location	Outfall						
Date Analysis Commenced	Feb 03, 2021						
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
<b>Water Testing</b>							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	Based on APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	34	≤120	Based on APHA (2017), 5220 D	Rayong
Color (at Original pH) *	ADMI	-	5	17	≤300	APHA (2017), 2120 F	Rayong
Color (at pH 7.0) *	ADMI	-	5	16	≤300	APHA (2017), 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH at 25 degree C		-	-	8.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	31.1	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	932	≤3000	Based on APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Based on APHA (2017), 2540 D	Rayong

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

Sampling By : Chainusorn Lertnanthakunchai , Thanasoun Namakunna

Remark :

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

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

Approved by

*D. Changchon*

Dej Changchon  
Manager

ทะเบียนเลขที่ ว-225-ค-5283

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## Analysis / Test Report

**Client :** 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: 211168**

Date Received : Feb 03, 2021

Date Reported : Jul 16, 2021

Report Number : 1868206-3 C4

Page 1 of 1

<b>Sample Number</b>	211168-1						
<b>Sampling Date</b>	Feb 03, 2021 10:00 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Outfall						
<b>Date Analysis Commenced</b>	Feb 04, 2021						
<b>Condition of Sample</b>	Contained in six glass vials, two amber glass bottles and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
<b>Analyte</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ (LOR)</b>	<b>Result</b>	<b>Guideline / Specification</b>	<b>Method</b>	<b>Testing Location</b>
<b>Water Testing</b>							
Total Organic Carbon	mg/L	0.01	0.1	15.0	No Standard	Based on APHA (2017), 5310 B	Bangkok

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

**Sampling By :** Chainusorn Lertnanthakunchai , Thanasoun Namakunna

Remark :

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Approved by

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Assistant Manager

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## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2111213**

Date Received : Mar 03, 2021

Date Reported : Jul 15, 2021

Report Number : 1888286-1 C4

**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)

Page 1 of 1

<b>Sample Number</b>	2111213-1						
<b>Sampling Date</b>	Mar 03, 2021 10:10 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Outfall						
<b>Date Analysis Commenced</b>	Mar 03, 2021						
<b>Condition of Sample</b>	Contained in six glass vials, four amber glass bottles and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	Based on APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	26	≤120	Based on APHA (2017), 5220 D	Rayong
Color (at Original pH) *	ADMI	-	5	14	≤300	APHA (2017), 2120 F	Rayong
Color (at pH 7.0) *	ADMI	-	5	13	≤300	APHA (2017), 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH at 25 degree C		-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	32.1	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1020	≤3000	Based on APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Based on APHA (2017), 2540 D	Rayong

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

**Sampling By :** Chainusorn Lertnanthakunchai, Thanasoun Namakunna

Remark :

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

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

Approved by

*D. Changchon*

Dej Changchon  
Manager

ทะเบียนเลขที่ ว-225-ค-5283

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## Analysis / Test Report

**Client :** 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: 2111213**

Date Received : Mar 03, 2021

Date Reported : Jul 15, 2021

Report Number : 1888286-3 C4

Page 1 of 1

<b>Sample Number</b>	2111213-1						
<b>Sampling Date</b>	Mar 03, 2021 10:10 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Outfall						
<b>Date Analysis Commenced</b>	Mar 04, 2021						
<b>Condition of Sample</b>	Contained in six glass vials, four amber glass bottles and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
<b>Analyte</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ (LOR)</b>	<b>Result</b>	<b>Guideline / Specification</b>	<b>Method</b>	<b>Testing Location</b>
<b>Water Testing</b>							
Total Organic Carbon	mg/L	0.01	0.1	12.9	No Standard	Based on APHA (2017), 5310 B	Bangkok

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

**Sampling By :** Chainusorn Lertnanthakunchai , Thanasoun Namakunna

Remark :

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Approved by

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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: 2123266**

Date Received : Apr 05, 2021  
Date Reported : Jul 16, 2021  
Report Number : 1912748-1 C4

Page 1 of 1

**Sample Number** 2123266-1  
**Sampling Date** Apr 05, 2021 10:40 AM  
**Sample Description** Wastewater  
**Location** Outfall  
**Date Analysis Commenced** Apr 05, 2021  
**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
<b>Water Testing</b>							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	Based on APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	23	≤120	Based on APHA (2017), 5220 D	Rayong
Color (at Original pH) *	ADMI	-	5	10	≤300	APHA (2017), 2120 F	Rayong
Color (at pH 7.0) *	ADMI	-	5	8	≤300	APHA (2017), 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH at 25 degree C		-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	30.6	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	684	≤3000	Based on APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	9	≤50	Based on APHA (2017), 2540 D	Rayong

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

**Sampling By :** Chainusorn Lertnanthakunchai , Thanasoun Namakunna

Remark :

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

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Manager  
ทะเบียนเลขที่ ว-225-ค-5283

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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: 2123266**

Date Received : Apr 05, 2021

Date Reported : Jul 16, 2021

Report Number : 1912748-3 C4

Page 1 of 1

**Sample Number** 2123266-1  
**Sampling Date** Apr 05, 2021 10:40 AM  
**Sample Description** Wastewater  
**Location** Outfall  
**Date Analysis Commenced** Apr 06, 2021  
**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
<b>Water Testing</b>							
Total Organic Carbon	mg/L	0.01	0.1	11.8	No Standard	Based on APHA (2017), 5310 B	Bangkok

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

**Sampling By :** Chainusorn Lertnanthakunchai , Thanasoun Namakunna

Remark :

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

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Approved by

Siriluk P.

Siriluk Puenggang  
Supervisor

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## 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  
**P/O :** 00081289  
**Project Name :** Water Testing  
**Project Location:** Map Ta Phut\_PU (PPTL)

**Lot ID: 2138228**

Date Received : May 14, 2021  
Date Reported : Jul 16, 2021  
Report Number : 1944205-1 C4

Page 1 of 1

**Sample Number** 2138228-1  
**Sampling Date** May 14, 2021 10:30 AM  
**Sample Description** Wastewater  
**Location** Outfall  
**Date Analysis Commenced** May 14, 2021  
**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
<b>Water Testing</b>							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	Based on APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	32	≤120	Based on APHA (2017), 5220 D	Rayong
Color (at Original pH) *	ADMI	-	5	19	≤300	APHA (2017), 2120 F	Rayong
Color (at pH 7.0) *	ADMI	-	5	17	≤300	APHA (2017), 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH at 25 degree C		-	-	8.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	34.7	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	844	≤3000	Based on APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Based on APHA (2017), 2540 D	Rayong

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

**Sampling By :** Thanasoun Namakunna

**Remark :**

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

Technical Management

*Siriluk P.*

Siriluk Puengpang  
Supervisor

ทะเบียนเลขที่ ว-204-จ-4720

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

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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: 2138228**

Date Received : May 14, 2021

Date Reported : Jul 16, 2021

Report Number : 1944205-2 C4

Page 1 of 1

<b>Sample Number</b>	2138228-1						
<b>Sampling Date</b>	May 14, 2021 10:30 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Outfall						
<b>Date Analysis Commenced</b>	May 15, 2021						
<b>Condition of Sample</b>	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
<b>Water Testing</b>							
Total Organic Carbon	mg/L	0.01	0.1	13.7	No Standard	Based on APHA (2017), 5310 B	Bangkok

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

**Sampling By :** Thanasoun Namakunna

Remark :

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Approved by

*Sawitree N.*

Sawitree Noisanglam  
Assistant Manager

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## 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

P/O : 00081289

Project Name : Water Testing

Project Location: Map Ta Phut\_PU (PPTL)

Lot ID: 2153213

Date Received : Jun 02, 2021

Date Reported : Jul 16, 2021

Report Number : 1975942-1 C4

Page 1 of 1

Sample Number	2153213-1
Sampling Date	Jun 02, 2021 11:00 AM
Sample Description	Wastewater
Location	Outfall
Date Analysis Commenced	Jun 02, 2021
Condition of Sample	Contained in two amber glass bottles, seven plastic bottles and six glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	Based on APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	28	≤120	Based on APHA (2017), 5220 D	Rayong
Color (at Original pH) *	ADMI	-	5	8	≤300	APHA (2017), 2120 F	Rayong
Color (at pH 7.0) *	ADMI	-	5	8	≤300	APHA (2017), 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH at 25 degree C		-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	35.0	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	748	≤3000	Based on APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Based on APHA (2017), 2540 D	Rayong

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

Sampling By : Thanasoun Namakunna

Remark :

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

Technical Management

Siriluk P.

Siriluk Puengpang  
Supervisor

ทะเบียนเลขที่ ว-204-จ-4720

Approved by

Kanokkorn Anek

Kanokkorn Anek  
Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

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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: 2153213**

Date Received : Jun 02, 2021

Date Reported : Jul 16, 2021

Report Number : 1975942-2 C4

Page 1 of 1

<b>Sample Number</b>	2153213-1						
<b>Sampling Date</b>	Jun 02, 2021 11:00 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Outfall						
<b>Date Analysis Commenced</b>	Jun 03, 2021						
<b>Condition of Sample</b>	Contained in two amber glass bottles, seven plastic bottles and six glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Total Organic Carbon	mg/L	0.01	0.1	10.4	No Standard	Based on APHA (2017), 5310 B	Bangkok

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

**Sampling By :** Thanasoun Namakunna

Remark :

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Approved by

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Sawitree Noisangiam  
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## ภาคผนวก ค-2

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ผลการตรวจวัดระดับเสียงทั่วไปและระดับเสียงรบกวน



## 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 :** Environmental Quality Monitoring

**Project Location :** Map Ta Phut\_PU (PPTL)

**Lot ID: 2114539**

Date Received : Mar 19, 2021

Date Reported : Mar 30, 2021

Report Number: 1945229-1C22

Page 1 of 1

**Sample Number** 2114539-15  
**Parameter** Noise (Leq 24 hrs.)  
**Location** ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735531, 1402769)  
**Measurement Date** Mar 11 - Mar 12, 2021  
**Measurement by** Norranon Tathongkham  
**Sound Level meter** Serial No. 1073423

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 AM - 01:00 AM	49.9	73.4	47.1
01:00 AM - 02:00 AM	49.0	74.9	46.1
02:00 AM - 03:00 AM	50.0	74.4	44.5
03:00 AM - 04:00 AM	61.8	81.3	43.9
04:00 AM - 05:00 AM	51.3	69.7	46.7
05:00 AM - 06:00 AM	56.9	82.5	52.8
06:00 AM - 07:00 AM	56.7	81.0	51.7
07:00 AM - 08:00 AM	54.7	74.9	50.6
08:00 AM - 09:00 AM	53.6	80.3	47.9
09:00 AM - 10:00 AM	53.8	79.1	48.3
10:00 AM - 11:00 AM	52.9	69.8	48.2
11:00 AM - 12:00 PM	52.9	74.0	47.7
12:00 PM - 01:00 PM	53.3	74.6	48.4
01:00 PM - 02:00 PM	52.5	70.0	48.3
02:00 PM - 03:00 PM	53.8	72.6	48.7
03:00 PM - 04:00 PM	56.0	75.3	51.1
04:00 PM - 05:00 PM	55.8	79.9	51.3
05:00 PM - 06:00 PM	70.8	100.1	59.4
06:00 PM - 07:00 PM	57.3	80.8	51.9
07:00 PM - 08:00 PM	56.7	74.0	53.0
08:00 PM - 09:00 PM	57.9	84.2	54.4
09:00 PM - 10:00 PM	57.9	78.9	55.4
10:00 PM - 11:00 PM	58.1	70.6	55.3
11:00 PM - 12:00 AM	52.1	72.3	47.8

Leq Average 24 hrs. (dB(A))

59.3

Lmax (dB(A))

100.1

L90 (dB(A))

48.4

Ldn (dB(A))

63.5

Standard (dB(A))

70

115

Reference Method : Based on ISO (1996)/1

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป

2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management

Sararat Mongkonjirawut  
Scientist (4)

Approved by

Supot Salamteh  
Supervisor

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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 :** Environmental Quality Monitoring

**Project Location :** Map Ta Phut\_PU (PPTL)

**Lot ID: 2114539**

Date Received : Mar 19, 2021

Date Reported : Mar 30, 2021

Report Number: 1945230-1C22

Page 1 of 1

**Sample Number** 2114539-16  
**Parameter** Noise (Leq 24 hrs.)  
**Location** มุมชนตากวน-ข้าวประตู่ (GPS 47P 0735531, 1402769)  
**Measurement Date** Mar 12 - Mar 13, 2021  
**Measurement by** Norranon Tathongkham  
**Sound Level meter** Serial No. 1073423

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 AM - 01:00 AM	51.5	76.1	48.0
01:00 AM - 02:00 AM	52.9	69.9	48.5
02:00 AM - 03:00 AM	53.4	81.3	48.1
03:00 AM - 04:00 AM	49.3	65.1	44.0
04:00 AM - 05:00 AM	52.1	77.3	45.8
05:00 AM - 06:00 AM	57.8	80.2	53.2
06:00 AM - 07:00 AM	58.5	85.1	52.0
07:00 AM - 08:00 AM	55.2	73.5	50.7
08:00 AM - 09:00 AM	56.3	81.3	47.9
09:00 AM - 10:00 AM	55.9	78.3	47.6
10:00 AM - 11:00 AM	55.8	76.9	51.0
11:00 AM - 12:00 PM	53.1	81.2	47.4
12:00 PM - 01:00 PM	53.8	76.7	47.6
01:00 PM - 02:00 PM	54.3	73.6	47.6
02:00 PM - 03:00 PM	53.9	73.2	48.0
03:00 PM - 04:00 PM	56.0	82.3	50.2
04:00 PM - 05:00 PM	55.8	72.3	51.9
05:00 PM - 06:00 PM	57.7	71.8	54.8
06:00 PM - 07:00 PM	57.2	77.8	53.8
07:00 PM - 08:00 PM	60.3	78.2	56.8
08:00 PM - 09:00 PM	60.4	81.4	57.1
09:00 PM - 10:00 PM	60.4	78.2	56.5
10:00 PM - 11:00 PM	59.1	79.4	55.6
11:00 PM - 12:00 AM	54.7	75.3	50.4

Leq Average 24 hrs. (dB(A))

56.6

Lmax (dB(A))

85.1

L90 (dB(A))

50.2

Ldn (dB(A))

62.2

Standard (dB(A))

70

115

Reference Method : Based on ISO (1996)/1

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป

2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management

Sararat Mongkonjirawut  
Scientist (4)

Approved by

Supot Salamteh  
Supervisor

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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 :** Environmental Quality Monitoring

**Project Location :** Map Ta Phut\_PU (PPTL)

**Lot ID: 2114539**

Date Received : Mar 19, 2021

Date Reported : Mar 30, 2021

Report Number: 1945231-1C22

Page 1 of 1

**Sample Number** 2114539-17  
**Parameter** Noise (Leq 24 hrs.)  
**Location** ชุมชนตากวน-อ่าวประจักษ์ (GPS 47P 0735531, 1402769)  
**Measurement Date** Mar 13 - Mar 14, 2021  
**Measurement by** Norranon Tathongkham  
**Sound Level meter** Serial No. 1073423

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 AM - 01:00 AM	52.5	77.4	47.7
01:00 AM - 02:00 AM	52.2	77.9	47.1
02:00 AM - 03:00 AM	50.7	77.0	46.2
03:00 AM - 04:00 AM	49.1	76.1	43.6
04:00 AM - 05:00 AM	49.4	68.7	44.9
05:00 AM - 06:00 AM	55.9	75.6	52.5
06:00 AM - 07:00 AM	55.3	72.8	51.5
07:00 AM - 08:00 AM	55.5	73.8	50.3
08:00 AM - 09:00 AM	55.4	73.6	52.6
09:00 AM - 10:00 AM	55.7	79.0	50.8
10:00 AM - 11:00 AM	54.8	70.3	49.0
11:00 AM - 12:00 PM	53.8	75.5	49.4
12:00 PM - 01:00 PM	51.8	71.2	47.6
01:00 PM - 02:00 PM	53.1	78.6	46.8
02:00 PM - 03:00 PM	53.1	71.7	47.9
03:00 PM - 04:00 PM	54.3	78.0	48.8
04:00 PM - 05:00 PM	55.8	80.3	50.7
05:00 PM - 06:00 PM	59.5	78.0	54.9
06:00 PM - 07:00 PM	59.5	78.5	56.3
07:00 PM - 08:00 PM	61.3	75.7	58.6
08:00 PM - 09:00 PM	61.6	77.9	59.0
09:00 PM - 10:00 PM	61.1	73.6	58.5
10:00 PM - 11:00 PM	60.9	77.0	58.1
11:00 PM - 12:00 AM	54.6	80.8	47.8

Leq Average 24 hrs. (dB(A))

56.8

Lmax (dB(A))

80.8

L90 (dB(A))

49.4

Ldn (dB(A))

61.9

Standard (dB(A))

70

115

Reference Method : Based on ISO (1996)/1

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป

2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management

Sararat Mongkonjirawut  
Scientist (4)

Approved by

Supot Salamteh  
Supervisor

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## 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

P/O : 4511038307

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut\_PU (PPTL)

Lot ID: 2114740

Date Received : Mar 19, 2021

Date Reported : Jul 30, 2021

Report Number : 1939138-1Rev.No.1

Page 1 of 3

Sample No. 2114740-1  
Parameter เสียงรบกวน  
Location ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735531, 1402769)  
Measurement Date Mar 11 - 12, 2021  
Measurement by Norranon Tathongkham  
Sound Level Meter 01073423

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	49.9	57.3	-7.4	7.0	42.9	-	49.3	-6.4
11:00 AM - 12:00 PM	49.0	57.4	-8.4	7.0	42.0	-	49.7	-7.7
12:00 PM - 01:00 PM	50.0	57.8	-7.8	7.0	43.0	-	50.3	-7.3
01:00 PM - 02:00 PM	61.8	58.6	3.2	3.0	58.8	-	50.1	8.7
02:00 PM - 03:00 PM	51.3	57.4	-6.1	7.0	44.3	-	50.1	-5.8
03:00 PM - 04:00 PM	56.9	57.4	-0.5	7.0	49.9	-	52.0	-2.1
04:00 PM - 05:00 PM	56.7	59.2	-2.5	7.0	49.7	-	54.3	-4.6
05:00 PM - 06:00 PM	54.7	59.6	-4.9	7.0	47.7	-	54.5	-6.8
06:00 PM - 07:00 PM	53.6	60.1	-6.5	7.0	46.6	-	55.7	-9.1
07:00 PM - 08:00 PM	53.8	58.8	-5.0	7.0	46.8	-	55.0	-8.2
08:00 PM - 09:00 PM	52.9	61.2	-8.3	7.0	45.9	-	56.6	-10.7
09:00 PM - 10:00 PM	52.9	57.0	-4.1	7.0	45.9	-	50.7	-4.8
10:00 PM - 10:05 PM	52.1	55.3	-3.2	7.0	-	48.1	50.9	-2.8
10:05 PM - 10:10 PM	53.8	61.4	-7.6	7.0	-	49.8	50.5	-0.7
10:10 PM - 10:15 PM	52.5	57.2	-4.7	7.0	-	48.5	49.0	-0.5
10:15 PM - 10:20 PM	51.6	53.8	-2.2	7.0	-	47.6	49.3	-1.7
10:20 PM - 10:25 PM	53.2	56.2	-3.0	7.0	-	49.2	49.5	-0.3
10:25 PM - 10:30 PM	51.2	53.0	-1.8	7.0	-	47.2	48.5	-1.3
10:30 PM - 10:35 PM	52.3	52.1	0.2	7.0	-	48.3	48.6	-0.3
10:35 PM - 10:40 PM	53.1	53.3	-0.2	7.0	-	49.1	49.9	-0.8
10:40 PM - 10:45 PM	51.9	52.8	-0.9	7.0	-	47.9	48.9	-1.0
10:45 PM - 10:50 PM	56.3	62.0	-5.7	7.0	-	52.3	49.0	3.3
10:50 PM - 10:55 PM	55.3	61.8	-6.5	7.0	-	51.3	49.9	1.4
10:55 PM - 11:00 PM	53.6	59.2	-5.6	7.0	-	49.6	49.4	0.2
11:00 PM - 11:05 PM	52.0	53.4	-1.4	7.0	-	48.0	48.1	-0.1
11:05 PM - 11:10 PM	53.1	54.0	-0.9	7.0	-	49.1	48.4	0.7
11:10 PM - 11:15 PM	50.9	53.0	-2.1	7.0	-	46.9	49.0	-2.1
11:15 PM - 11:20 PM	51.6	52.7	-1.1	7.0	-	47.6	48.6	-1.0
11:20 PM - 11:25 PM	52.5	52.7	-0.2	7.0	-	48.5	48.4	0.1
11:25 PM - 11:30 PM	51.9	52.7	-0.8	7.0	-	47.9	49.0	-1.1
11:30 PM - 11:35 PM	53.6	58.3	-4.7	7.0	-	49.6	49.4	0.2
11:35 PM - 11:40 PM	51.6	52.3	-0.7	7.0	-	47.6	48.9	-1.3
11:40 PM - 11:45 PM	53.4	52.7	0.7	7.0	-	49.4	48.0	1.4
11:45 PM - 11:50 PM	51.9	54.7	-2.8	7.0	-	47.9	48.1	-0.2
11:50 PM - 11:55 PM	51.9	51.9	0.0	7.0	-	47.9	46.8	1.1
11:55 PM - 12:00 AM	54.6	52.7	1.9	4.5	-	53.1	47.0	6.1
12:00 AM - 12:05 AM	53.3	51.5	1.8	4.5	-	51.8	46.5	5.3
12:05 AM - 12:10 AM	52.6	50.3	2.3	4.5	-	51.1	46.7	4.4
12:10 AM - 12:15 AM	54.9	53.7	1.2	7.0	-	50.9	47.6	3.3
12:15 AM - 12:20 AM	55.0	52.4	2.6	3.0	-	55.0	49.0	6.0

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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: 2114740**  
Date Received : Mar 19, 2021  
Date Reported : Jul 30, 2021  
Report Number : 1939138-1Rev.No.1

**P/O** : 4511038307  
**Project Name** : Environmental Quality Monitoring  
**Project Location** : Map Ta Phut\_PU (PPTL)

Page 2 of 3

**Sample No.** 2114740-1  
**Parameter** เสียงรบกวน  
**Location** ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735531, 1402769)  
**Measurement Date** Mar 11 - 12, 2021  
**Measurement by** Norranon Tathongkham  
**Sound Level Meter** 01073423

เวลา	ระดับเสียง (dB(A))							
	(A)	(B)	(A+B)	(C)	(D)		(E)	(D+E)
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ตัวปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน (A-C)	กลางคืน (A-C)+1		
12:20 AM - 12:25 AM	51.9	54.6	-2.7	7.0	-	47.9	50.5	-2.6
12:25 AM - 12:30 AM	51.8	50.1	1.7	4.5	-	50.3	46.7	3.6
12:30 AM - 12:35 AM	57.0	51.8	5.2	1.5	-	58.5	45.1	13.4
12:35 AM - 12:40 AM	51.8	52.3	-0.5	7.0	-	47.8	44.6	3.2
12:40 AM - 12:45 AM	53.2	52.3	0.9	7.0	-	49.2	46.4	2.8
12:45 AM - 12:50 AM	55.2	50.2	5.0	1.5	-	56.7	46.2	10.5
12:50 AM - 12:55 AM	52.0	53.8	-1.8	7.0	-	48.0	45.3	2.7
12:55 AM - 01:00 AM	53.3	56.3	-3.0	7.0	-	49.3	46.1	3.2
01:00 AM - 01:05 AM	53.0	51.2	1.8	4.5	-	51.5	47.9	3.6
01:05 AM - 01:10 AM	53.0	48.7	4.3	2.0	-	54.0	45.4	8.6
01:10 AM - 01:15 AM	56.8	48.8	8.0	0.5	-	59.3	44.4	14.9
01:15 AM - 01:20 AM	55.2	51.5	3.7	2.0	-	56.2	44.8	11.4
01:20 AM - 01:25 AM	53.8	52.9	0.9	7.0	-	49.8	45.4	4.4
01:25 AM - 01:30 AM	56.0	52.9	3.1	3.0	-	56.0	44.5	11.5
01:30 AM - 01:35 AM	55.2	48.2	7.0	1.0	-	57.2	44.7	12.5
01:35 AM - 01:40 AM	57.1	48.6	8.5	0.5	-	59.6	44.8	14.8
01:40 AM - 01:45 AM	56.4	54.2	2.2	4.5	-	54.9	45.8	9.1
01:45 AM - 01:50 AM	57.4	50.6	6.8	1.0	-	59.4	45.4	14.0
01:50 AM - 01:55 AM	56.2	49.8	6.4	1.5	-	57.7	45.5	12.2
01:55 AM - 02:00 AM	58.3	53.5	4.8	1.5	-	59.8	46.2	13.6
02:00 AM - 02:05 AM	54.6	49.1	5.5	1.5	-	56.1	46.4	9.7
02:05 AM - 02:10 AM	54.5	49.5	5.0	1.5	-	56.0	46.4	9.6
02:10 AM - 02:15 AM	56.7	49.0	7.7	0.5	-	59.2	45.8	13.4
02:15 AM - 02:20 AM	55.5	50.7	4.8	1.5	-	57.0	45.9	11.1
02:20 AM - 02:25 AM	57.8	49.8	8.0	0.5	-	60.3	46.9	13.4
02:25 AM - 02:30 AM	54.8	49.1	5.7	1.5	-	56.3	46.1	10.2
02:30 AM - 02:35 AM	56.0	50.2	5.8	1.5	-	57.5	46.1	11.4
02:35 AM - 02:40 AM	56.1	50.9	5.2	1.5	-	57.6	46.2	11.4
02:40 AM - 02:45 AM	55.0	48.4	6.6	1.0	-	57.0	44.3	12.7
02:45 AM - 02:50 AM	56.0	48.4	7.6	0.5	-	58.5	44.6	13.9
02:50 AM - 02:55 AM	55.6	50.4	5.2	1.5	-	57.1	46.2	10.9
02:55 AM - 03:00 AM	55.8	49.1	6.7	1.0	-	57.8	45.9	11.9
03:00 AM - 03:05 AM	57.5	53.8	3.7	2.0	-	58.5	45.1	13.4
03:05 AM - 03:10 AM	56.4	49.8	6.6	1.0	-	58.4	44.7	13.7
03:10 AM - 03:15 AM	57.0	49.7	7.3	1.0	-	59.0	45.7	13.3
03:15 AM - 03:20 AM	56.0	51.9	4.1	2.0	-	57.0	46.6	10.4
03:20 AM - 03:25 AM	60.0	54.5	5.5	1.5	-	61.5	46.8	14.7
03:25 AM - 03:30 AM	62.0	50.9	11.1	0.5	-	64.5	46.9	17.6
03:30 AM - 03:35 AM	66.7	53.1	13.6	0.0	-	69.7	47.4	22.3
03:35 AM - 03:40 AM	76.5	50.9	25.6	0.0	-	79.5	47.1	32.4

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Approved by

*Kanokkorn 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

P/O : 4511038307

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut\_PU (PPTL)

Lot ID: 2114740

Date Received : Mar 19, 2021

Date Reported : Jul 30, 2021

Report Number : 1939138-1Rev.No.1

Page 3 of 3

Sample No. 2114740-1  
Parameter เสียงรบกวน  
Location ชุมชนดากวน-อ่าวประดู่ (GPS 47P 0735531, 1402769)  
Measurement Date Mar 11 - 12, 2021  
Measurement by Norranon Tathongkham  
Sound Level Meter 01073423

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		
03:40 AM - 03:45 AM	77.7	50.7	27.0	0.0	-	80.7	47.3	33.4
03:45 AM - 03:50 AM	73.9	51.4	22.5	0.0	-	76.9	46.3	30.6
03:50 AM - 03:55 AM	64.4	50.8	13.6	0.0	-	67.4	45.5	21.9
03:55 AM - 04:00 AM	64.3	50.8	13.5	0.0	-	67.3	44.3	23.0
04:00 AM - 04:05 AM	58.7	49.3	9.4	0.5	-	61.2	44.4	16.8
04:05 AM - 04:10 AM	56.8	51.0	5.8	1.5	-	58.3	45.5	12.8
04:10 AM - 04:15 AM	55.9	51.9	4.0	2.0	-	56.9	46.0	10.9
04:15 AM - 04:20 AM	57.0	52.7	4.3	2.0	-	58.0	46.6	11.4
04:20 AM - 04:25 AM	55.0	52.6	2.4	4.5	-	53.5	47.1	6.4
04:25 AM - 04:30 AM	57.1	51.9	5.2	1.5	-	58.6	46.1	12.5
04:30 AM - 04:35 AM	61.9	55.4	6.5	1.0	-	63.9	47.1	16.8
04:35 AM - 04:40 AM	55.7	53.5	2.2	4.5	-	54.2	47.7	6.5
04:40 AM - 04:45 AM	56.0	52.8	3.2	3.0	-	56.0	47.6	8.4
04:45 AM - 04:50 AM	55.1	57.0	-1.9	7.0	-	51.1	49.8	1.3
04:50 AM - 04:55 AM	57.4	52.7	4.7	1.5	-	58.9	46.6	12.3
04:55 AM - 05:00 AM	55.1	54.1	1.0	7.0	-	51.1	49.1	2.0
05:00 AM - 05:05 AM	56.4	54.1	2.3	4.5	-	54.9	48.1	6.8
05:05 AM - 05:10 AM	56.7	58.3	-1.6	7.0	-	52.7	49.0	3.7
05:10 AM - 05:15 AM	56.3	55.9	0.4	7.0	-	52.3	49.2	3.1
05:15 AM - 05:20 AM	57.3	56.2	1.1	7.0	-	53.3	50.3	3.0
05:20 AM - 05:25 AM	56.7	55.3	1.4	7.0	-	52.7	49.4	3.3
05:25 AM - 05:30 AM	57.8	56.7	1.1	7.0	-	53.8	50.3	3.5
05:30 AM - 05:35 AM	57.0	61.8	-4.8	7.0	-	53.0	51.1	1.9
05:35 AM - 05:40 AM	55.4	58.9	-3.5	7.0	-	51.4	50.0	1.4
05:40 AM - 05:45 AM	54.8	57.8	-3.0	7.0	-	50.8	51.4	-0.6
05:45 AM - 05:50 AM	57.3	57.6	-0.3	7.0	-	53.3	53.2	0.1
05:50 AM - 05:55 AM	57.8	57.1	0.7	7.0	-	53.8	52.1	1.7
05:55 AM - 06:00 AM	56.5	59.5	-3.0	7.0	-	52.5	52.8	-0.3
06:00 AM - 07:00 AM	57.9	58.0	-0.1	7.0	50.9	-	53.0	-2.1
07:00 AM - 08:00 AM	57.9	58.5	-0.6	7.0	50.9	-	53.3	-2.4
08:00 AM - 09:00 AM	58.1	60.1	-2.0	7.0	51.1	-	53.5	-2.4
09:00 AM - 10:00 AM	52.1	58.6	-6.5	7.0	45.1	-	52.9	-7.8
ค่ามาตรฐาน								≤ 10

Reference Method : Based on ISO (1996)/1

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
- ระดับเสียงจากแหล่งกำเนิด ที่การตรวจวัด วันที่ 11-12 มีนาคม 2564
- ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.202607-1 วันที่ตรวจวัด 01-02 กรกฎาคม 2563)
- Note : This Analysis test report is reissued to supersede report No. 1939138-1, Date Reported : Mar 22, 2021

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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: 2114740**  
Date Received : Mar 19, 2021  
Date Reported : Jul 30, 2021  
Report Number : 1939139-1Rev.No.1

**P/O** : 4511038307  
**Project Name** : Environmental Quality Monitoring  
**Project Location** : Map Ta Phut\_PU (PPTL)

Page 1 of 3

**Sample No.** 2114740-2  
**Parameter** เสียงรบกวน  
**Location** ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735531, 1402769)  
**Measurement Date** Mar 12 - 13, 2021  
**Measurement by** Norranon Tathongkham  
**Sound Level Meter** 01073423

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)+1 กลางคืน		
10:00 AM - 11:00 AM	51.5	57.3	-5.8	7.0	44.5	-	49.3	-4.8
11:00 AM - 12:00 PM	52.9	57.4	-4.5	7.0	45.9	-	49.7	-3.8
12:00 PM - 01:00 PM	53.4	57.8	-4.4	7.0	46.4	-	50.3	-3.9
01:00 PM - 02:00 PM	49.3	58.6	-9.3	7.0	42.3	-	50.1	-7.8
02:00 PM - 03:00 PM	52.1	57.4	-5.3	7.0	45.1	-	50.1	-5.0
03:00 PM - 04:00 PM	57.8	57.4	0.4	7.0	50.8	-	52.0	-1.2
04:00 PM - 05:00 PM	58.5	59.2	-0.7	7.0	51.5	-	54.3	-2.8
05:00 PM - 06:00 PM	55.2	59.6	-4.4	7.0	48.2	-	54.5	-6.3
06:00 PM - 07:00 PM	56.3	60.1	-3.8	7.0	49.3	-	55.7	-6.4
07:00 PM - 08:00 PM	55.9	58.8	-2.9	7.0	48.9	-	55.0	-6.1
08:00 PM - 09:00 PM	55.8	61.2	-5.4	7.0	48.8	-	56.6	-7.8
09:00 PM - 10:00 PM	53.1	57.0	-3.9	7.0	46.1	-	50.7	-4.6
10:00 PM - 10:05 PM	53.7	55.3	-1.6	7.0	-	49.7	50.9	-1.2
10:05 PM - 10:10 PM	50.3	61.4	-11.1	7.0	-	46.3	50.5	-4.2
10:10 PM - 10:15 PM	52.2	57.2	-5.0	7.0	-	48.2	49.0	-0.8
10:15 PM - 10:20 PM	53.5	53.8	-0.3	7.0	-	49.5	49.3	0.2
10:20 PM - 10:25 PM	56.9	56.2	0.7	7.0	-	52.9	49.5	3.4
10:25 PM - 10:30 PM	52.2	53.0	-0.8	7.0	-	48.2	48.5	-0.3
10:30 PM - 10:35 PM	56.6	52.1	4.5	1.5	-	58.1	48.6	9.5
10:35 PM - 10:40 PM	53.7	53.3	0.4	7.0	-	49.7	49.9	-0.2
10:40 PM - 10:45 PM	55.1	52.8	2.3	4.5	-	53.6	48.9	4.7
10:45 PM - 10:50 PM	51.6	62.0	-10.4	7.0	-	47.6	49.0	-1.4
10:50 PM - 10:55 PM	52.5	61.8	-9.3	7.0	-	48.5	49.9	-1.4
10:55 PM - 11:00 PM	52.5	59.2	-6.7	7.0	-	48.5	49.4	-0.9
11:00 PM - 11:05 PM	51.8	53.4	-1.6	7.0	-	47.8	48.1	-0.3
11:05 PM - 11:10 PM	52.6	54.0	-1.4	7.0	-	48.6	48.4	0.2
11:10 PM - 11:15 PM	51.7	53.0	-1.3	7.0	-	47.7	49.0	-1.3
11:15 PM - 11:20 PM	54.9	52.7	2.2	4.5	-	53.4	48.6	4.8
11:20 PM - 11:25 PM	53.1	52.7	0.4	7.0	-	49.1	48.4	0.7
11:25 PM - 11:30 PM	55.6	52.7	2.9	3.0	-	55.6	49.0	6.6
11:30 PM - 11:35 PM	54.8	58.3	-3.5	7.0	-	50.8	49.4	1.4
11:35 PM - 11:40 PM	56.1	52.3	3.8	2.0	-	57.1	48.9	8.2
11:40 PM - 11:45 PM	54.2	52.7	1.5	4.5	-	52.7	48.0	4.7
11:45 PM - 11:50 PM	53.6	54.7	-1.1	7.0	-	49.6	48.1	1.5
11:50 PM - 11:55 PM	56.7	51.9	4.8	1.5	-	58.2	46.8	11.4
11:55 PM - 12:00 AM	52.9	52.7	0.2	7.0	-	48.9	47.0	1.9
12:00 AM - 12:05 AM	52.8	51.5	1.3	7.0	-	48.8	46.5	2.3
12:05 AM - 12:10 AM	54.0	50.3	3.7	2.0	-	55.0	46.7	8.3
12:10 AM - 12:15 AM	55.0	53.7	1.3	7.0	-	51.0	47.6	3.4
12:15 AM - 12:20 AM	55.2	52.4	2.8	3.0	-	55.2	49.0	6.2

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Approved by

*Kanokkorn 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

P/O : 4511038307

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut\_PU (PPTL)

Lot ID: 2114740

Date Received : Mar 19, 2021

Date Reported : Jul 30, 2021

Report Number : 1939139-1Rev.No.1

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Sample No. 2114740-2  
Parameter เสียงรบกวน  
Location ชุมชนตากวน-ลำน้ำประดู่ (GPS 47P 0735531, 1402769)  
Measurement Date Mar 12 - 13, 2021  
Measurement by Norranon Tathongkham  
Sound Level Meter 01073423

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	54.7	54.6	0.1	7.0	-	50.7	50.5	0.2
12:25 AM - 12:30 AM	52.6	50.1	2.5	3.0	-	52.6	46.7	5.9
12:30 AM - 12:35 AM	52.2	51.8	0.4	7.0	-	48.2	45.1	3.1
12:35 AM - 12:40 AM	54.8	52.3	2.5	3.0	-	54.8	44.6	10.2
12:40 AM - 12:45 AM	53.3	52.3	1.0	7.0	-	49.3	46.4	2.9
12:45 AM - 12:50 AM	52.1	50.2	1.9	4.5	-	50.6	46.2	4.4
12:50 AM - 12:55 AM	53.2	53.8	-0.6	7.0	-	49.2	45.3	3.9
12:55 AM - 01:00 AM	55.0	56.3	-1.3	7.0	-	51.0	46.1	4.9
01:00 AM - 01:05 AM	56.2	51.2	5.0	1.5	-	57.7	47.9	9.8
01:05 AM - 01:10 AM	54.0	48.7	5.3	1.5	-	55.5	45.4	10.1
01:10 AM - 01:15 AM	55.6	48.8	6.8	1.0	-	57.6	44.4	13.2
01:15 AM - 01:20 AM	56.8	51.5	5.3	1.5	-	58.3	44.8	13.5
01:20 AM - 01:25 AM	57.4	52.9	4.5	1.5	-	58.9	45.4	13.5
01:25 AM - 01:30 AM	54.1	52.9	1.2	7.0	-	50.1	44.5	5.6
01:30 AM - 01:35 AM	54.0	48.2	5.8	1.5	-	55.5	44.7	10.8
01:35 AM - 01:40 AM	54.7	48.6	6.1	1.5	-	56.2	44.8	11.4
01:40 AM - 01:45 AM	59.9	54.2	5.7	1.5	-	61.4	45.8	15.6
01:45 AM - 01:50 AM	55.3	50.6	4.7	1.5	-	56.8	45.4	11.4
01:50 AM - 01:55 AM	55.8	49.8	6.0	1.5	-	57.3	45.5	11.8
01:55 AM - 02:00 AM	54.2	53.5	0.7	7.0	-	50.2	46.2	4.0
02:00 AM - 02:05 AM	55.6	49.1	6.5	1.0	-	57.6	46.4	11.2
02:05 AM - 02:10 AM	54.9	49.5	5.4	1.5	-	56.4	46.4	10.0
02:10 AM - 02:15 AM	56.7	49.0	7.7	0.5	-	59.2	45.8	13.4
02:15 AM - 02:20 AM	56.8	50.7	6.1	1.5	-	58.3	45.9	12.4
02:20 AM - 02:25 AM	57.1	49.8	7.3	1.0	-	59.1	46.9	12.2
02:25 AM - 02:30 AM	54.7	49.1	5.6	1.5	-	56.2	46.1	10.1
02:30 AM - 02:35 AM	55.8	50.2	5.6	1.5	-	57.3	46.1	11.2
02:35 AM - 02:40 AM	55.2	50.9	4.3	2.0	-	56.2	46.2	10.0
02:40 AM - 02:45 AM	56.2	48.4	7.8	0.5	-	58.7	44.3	14.4
02:45 AM - 02:50 AM	55.0	48.4	6.6	1.0	-	57.0	44.6	12.4
02:50 AM - 02:55 AM	55.9	50.4	5.5	1.5	-	57.4	46.2	11.2
02:55 AM - 03:00 AM	54.0	49.1	4.9	1.5	-	55.5	45.9	9.6
03:00 AM - 03:05 AM	54.9	53.8	1.1	7.0	-	50.9	45.1	5.8
03:05 AM - 03:10 AM	57.2	49.8	7.4	1.0	-	59.2	44.7	14.5
03:10 AM - 03:15 AM	58.5	49.7	8.8	0.5	-	61.0	45.7	15.3
03:15 AM - 03:20 AM	55.3	51.9	3.4	3.0	-	55.3	46.6	8.7
03:20 AM - 03:25 AM	55.6	54.5	1.1	7.0	-	51.6	46.8	4.8
03:25 AM - 03:30 AM	55.9	50.9	5.0	1.5	-	57.4	46.9	10.5
03:30 AM - 03:35 AM	58.2	53.1	5.1	1.5	-	59.7	47.4	12.3
03:35 AM - 03:40 AM	61.7	50.9	10.8	0.5	-	64.2	47.1	17.1

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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: 2114740**  
Date Received : Mar 19, 2021  
Date Reported : Jul 30, 2021  
Report Number : 1939139-1Rev.No.1

**P/O :** 4511038307  
**Project Name :** Environmental Quality Monitoring  
**Project Location :** Map Ta Phut\_PU (PPTL)

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**Sample No.** 2114740-2  
**Parameter** เสียงรบกวน  
**Location** ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735531, 1402769)  
**Measurement Date** Mar 12 - 13, 2021  
**Measurement by** Norranon Tathongkham  
**Sound Level Meter** 01073423

ระดับเสียง (dB(A))									
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ตัวปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน	(D-E)
					(A-C) กลางวัน	(A-C)+3 กลางคืน			
03:40 AM - 03:45 AM	60.3	50.7	9.6	0.5	-	62.8	47.3	15.5	
03:45 AM - 03:50 AM	56.6	51.4	5.2	1.5	-	58.1	46.3	11.8	
03:50 AM - 03:55 AM	55.3	50.8	4.5	1.5	+	56.8	45.5	11.3	
03:55 AM - 04:00 AM	56.6	50.8	5.8	1.5	-	58.1	44.3	13.8	
04:00 AM - 04:05 AM	56.7	49.3	7.4	1.0	-	58.7	44.4	14.3	
04:05 AM - 04:10 AM	57.6	51.0	6.6	1.0	+	59.6	45.5	14.1	
04:10 AM - 04:15 AM	56.5	51.9	4.6	1.5	-	58.0	46.0	12.0	
04:15 AM - 04:20 AM	56.7	52.7	4.0	2.0	-	57.7	46.6	11.1	
04:20 AM - 04:25 AM	56.9	52.6	4.3	2.0	+	57.9	47.1	10.8	
04:25 AM - 04:30 AM	55.9	51.9	4.0	2.0	-	56.9	46.1	10.8	
04:30 AM - 04:35 AM	55.7	55.4	0.3	7.0	-	51.7	47.1	4.6	
04:35 AM - 04:40 AM	56.1	53.5	2.6	3.0	-	56.1	47.7	8.4	
04:40 AM - 04:45 AM	58.7	52.8	5.9	1.5	+	60.2	47.6	12.6	
04:45 AM - 04:50 AM	57.7	57.0	0.7	7.0	-	53.7	49.8	3.9	
04:50 AM - 04:55 AM	59.3	52.7	6.6	1.0	-	61.3	46.6	14.7	
04:55 AM - 05:00 AM	57.2	54.1	3.1	3.0	+	57.2	49.1	8.1	
05:00 AM - 05:05 AM	59.3	54.1	5.2	1.5	-	60.8	48.1	12.7	
05:05 AM - 05:10 AM	60.4	58.3	2.1	4.5	-	58.9	49.0	9.9	
05:10 AM - 05:15 AM	59.4	55.9	3.5	2.0	-	60.4	49.2	11.2	
05:15 AM - 05:20 AM	60.2	56.2	4.0	2.0	-	61.2	50.3	10.9	
05:20 AM - 05:25 AM	60.7	55.3	5.4	1.5	-	62.2	49.4	12.8	
05:25 AM - 05:30 AM	60.2	56.7	3.5	2.0	-	61.2	50.3	10.9	
05:30 AM - 05:35 AM	60.5	61.8	-1.3	7.0	+	56.5	51.1	5.4	
05:35 AM - 05:40 AM	60.2	58.9	1.3	7.0	-	56.2	50.0	6.2	
05:40 AM - 05:45 AM	60.9	57.8	3.1	3.0	-	60.9	51.4	9.5	
05:45 AM - 05:50 AM	61.5	57.6	3.9	2.0	+	62.5	53.2	9.3	
05:50 AM - 05:55 AM	60.1	57.1	3.0	3.0	-	60.1	52.1	8.0	
05:55 AM - 06:00 AM	59.4	59.5	-0.1	7.0	-	55.4	52.8	2.6	
06:00 AM - 07:00 AM	60.4	58.0	2.4	4.5	55.9	-	53.0	2.9	
07:00 AM - 08:00 AM	60.4	58.5	1.9	4.5	55.9	-	53.3	2.6	
08:00 AM - 09:00 AM	59.1	60.1	-1.0	7.0	52.1	-	53.5	-1.4	
09:00 AM - 10:00 AM	54.7	58.6	-3.9	7.0	47.7	-	52.9	-5.2	
ค่ามาตรฐาน									≤ 10

Reference Method : Based on ISO (1996)/1

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

ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 12-13 มีนาคม 2564

ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.202607-1 วันที่ตรวจวัด 01-02 กรกฎาคม 2563)

Note : This Analysis test report is issued to supersede report No. 1939139-1, Date Reported : Mar 22, 2021

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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

P/O : 4511038307

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut\_PU (PPTL)

Lot ID: 2114740

Date Received : Mar 19, 2021

Date Reported : Jul 30, 2021

Report Number : 1939140-1Rev.No.1

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Sample No. 2114740-3  
Parameter เสียงรบกวน  
Location ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735531, 1402769)  
Measurement Date Mar 13 - 14, 2021  
Measurement by Norranon Tathongkham  
Sound Level Meter 01073423

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	52.5	57.3	-4.8	7.0	45.5	-	49.3	-3.8
11:00 AM - 12:00 PM	52.2	57.4	-5.2	7.0	45.2	-	49.7	-4.5
12:00 PM - 01:00 PM	50.7	57.8	-7.1	7.0	43.7	-	50.3	-6.6
01:00 PM - 02:00 PM	49.1	58.6	-9.5	7.0	42.1	-	50.1	-8.0
02:00 PM - 03:00 PM	49.4	57.4	-8.0	7.0	42.4	-	50.1	-7.7
03:00 PM - 04:00 PM	55.9	57.4	-1.5	7.0	48.9	-	52.0	-3.1
04:00 PM - 05:00 PM	55.3	59.2	-3.9	7.0	48.3	-	54.3	-6.0
05:00 PM - 06:00 PM	55.5	59.6	-4.1	7.0	48.5	-	54.5	-6.0
06:00 PM - 07:00 PM	55.4	60.1	-4.7	7.0	48.4	-	55.7	-7.3
07:00 PM - 08:00 PM	55.7	58.8	-3.1	7.0	48.7	-	55.0	-6.3
08:00 PM - 09:00 PM	54.8	61.2	-6.4	7.0	47.8	-	56.6	-8.8
09:00 PM - 10:00 PM	53.8	57.0	-3.2	7.0	46.8	-	50.7	-3.9
10:00 PM - 10:05 PM	52.1	55.3	-3.2	7.0	-	48.1	50.9	-2.8
10:05 PM - 10:10 PM	52.5	61.4	-8.9	7.0	-	48.5	50.5	-2.0
10:10 PM - 10:15 PM	52.1	57.2	-5.1	7.0	-	48.1	49.0	-0.9
10:15 PM - 10:20 PM	52.4	53.8	-1.4	7.0	-	48.4	49.3	-0.9
10:20 PM - 10:25 PM	53.3	56.2	-2.9	7.0	-	49.3	49.5	-0.2
10:25 PM - 10:30 PM	53.1	53.0	0.1	7.0	-	49.1	48.5	0.6
10:30 PM - 10:35 PM	51.7	52.1	-0.4	7.0	-	47.7	48.6	-0.9
10:35 PM - 10:40 PM	50.9	53.3	-2.4	7.0	-	46.9	49.9	-3.0
10:40 PM - 10:45 PM	50.0	52.8	-2.8	7.0	-	46.0	48.9	-2.9
10:45 PM - 10:50 PM	51.2	62.0	-10.8	7.0	-	47.2	49.0	-1.8
10:50 PM - 10:55 PM	49.1	61.8	-12.7	7.0	-	45.1	49.9	-4.8
10:55 PM - 11:00 PM	51.0	59.2	-8.2	7.0	-	47.0	49.4	-2.4
11:00 PM - 11:05 PM	50.7	53.4	-2.7	7.0	-	46.7	48.1	-1.4
11:05 PM - 11:10 PM	54.3	54.0	0.3	7.0	-	50.3	48.4	1.9
11:10 PM - 11:15 PM	55.0	53.0	2.0	4.5	-	53.5	49.0	4.5
11:15 PM - 11:20 PM	50.1	52.7	-2.6	7.0	-	46.1	48.6	-2.5
11:20 PM - 11:25 PM	52.5	52.7	-0.2	7.0	-	48.5	48.4	0.1
11:25 PM - 11:30 PM	55.0	52.7	2.3	4.5	-	53.5	49.0	4.5
11:30 PM - 11:35 PM	51.8	58.3	-6.5	7.0	-	47.8	49.4	-1.6
11:35 PM - 11:40 PM	50.6	52.3	-1.7	7.0	-	46.6	48.9	-2.3
11:40 PM - 11:45 PM	51.4	52.7	-1.3	7.0	-	47.4	48.0	-0.6
11:45 PM - 11:50 PM	56.9	54.7	2.2	4.5	-	55.4	48.1	7.3
11:50 PM - 11:55 PM	52.0	51.9	0.1	7.0	-	48.0	46.8	1.2
11:55 PM - 12:00 AM	50.7	52.7	-2.0	7.0	-	46.7	47.0	-0.3
12:00 AM - 12:05 AM	55.7	51.5	4.2	2.0	-	56.7	46.5	10.2
12:05 AM - 12:10 AM	51.7	50.3	1.4	7.0	-	47.7	46.7	1.0
12:10 AM - 12:15 AM	51.6	53.7	-2.1	7.0	-	47.6	47.6	0.0
12:15 AM - 12:20 AM	51.8	52.4	-0.6	7.0	-	47.8	49.0	-1.2

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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: 2114740**  
Date Received : Mar 19, 2021  
Date Reported : Jul 30, 2021  
Report Number : 1939140-1Rev.No.1

**P/O :** 4511038307  
**Project Name :** Environmental Quality Monitoring  
**Project Location :** Map Ta Phut\_PU (PPTL)

Page 2 of 3

**Sample No.** 2114740-3  
**Parameter** เสียงรบกวน  
**Location** ชุมชนตากวน-อำเภอประจักษ์ (GPS 47P 0735531, 1402769)  
**Measurement Date** Mar 13 - 14, 2021  
**Measurement by** Norranon Tathongkham  
**Sound Level Meter** 01073423

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	51.7	54.6	-2.9	7.0	-	47.7	50.5	-2.8
12:25 AM - 12:30 AM	50.8	50.1	0.7	7.0	-	46.8	46.7	0.1
12:30 AM - 12:35 AM	52.1	51.8	0.3	7.0	-	48.1	45.1	3.0
12:35 AM - 12:40 AM	54.2	52.3	1.9	4.5	-	52.7	44.6	8.1
12:40 AM - 12:45 AM	53.0	52.3	0.7	7.0	-	49.0	46.4	2.6
12:45 AM - 12:50 AM	51.3	50.2	1.1	7.0	-	47.3	46.2	1.1
12:50 AM - 12:55 AM	56.3	53.8	2.5	3.0	-	56.3	45.3	11.0
12:55 AM - 01:00 AM	52.8	56.3	-3.5	7.0	-	48.8	46.1	2.7
01:00 AM - 01:05 AM	52.5	51.2	1.3	7.0	-	48.5	47.9	0.6
01:05 AM - 01:10 AM	52.8	48.7	4.1	2.0	-	53.8	45.4	8.4
01:10 AM - 01:15 AM	52.7	48.8	3.9	2.0	-	53.7	44.4	9.3
01:15 AM - 01:20 AM	55.8	51.5	4.3	2.0	-	56.8	44.8	12.0
01:20 AM - 01:25 AM	54.3	52.9	1.4	7.0	-	50.3	45.4	4.9
01:25 AM - 01:30 AM	53.9	52.9	1.0	7.0	-	49.9	44.5	5.4
01:30 AM - 01:35 AM	54.5	48.2	6.3	1.5	-	56.0	44.7	11.3
01:35 AM - 01:40 AM	57.0	48.6	8.4	0.5	-	59.5	44.8	14.7
01:40 AM - 01:45 AM	53.8	54.2	-0.4	7.0	-	49.8	45.8	4.0
01:45 AM - 01:50 AM	52.6	50.6	2.0	4.5	-	51.1	45.4	5.7
01:50 AM - 01:55 AM	52.5	49.8	2.7	3.0	-	52.5	45.5	7.0
01:55 AM - 02:00 AM	56.2	53.5	2.7	3.0	-	56.2	46.2	10.0
02:00 AM - 02:05 AM	54.2	49.1	5.1	1.5	-	55.7	46.4	9.3
02:05 AM - 02:10 AM	56.7	49.5	7.2	1.0	-	58.7	46.4	12.3
02:10 AM - 02:15 AM	58.7	49.0	9.7	0.5	-	61.2	45.8	15.4
02:15 AM - 02:20 AM	53.8	50.7	3.1	3.0	-	53.8	45.9	7.9
02:20 AM - 02:25 AM	56.3	49.8	6.5	1.0	-	58.3	46.9	11.4
02:25 AM - 02:30 AM	55.8	49.1	6.7	1.0	-	57.8	46.1	11.7
02:30 AM - 02:35 AM	56.7	50.2	6.5	1.0	-	58.7	46.1	12.6
02:35 AM - 02:40 AM	55.1	50.9	4.2	2.0	-	56.1	46.2	9.9
02:40 AM - 02:45 AM	54.4	48.4	6.0	1.5	-	55.9	44.3	11.6
02:45 AM - 02:50 AM	53.4	48.4	5.0	1.5	-	54.9	44.6	10.3
02:50 AM - 02:55 AM	55.6	50.4	5.2	1.5	-	57.1	46.2	10.9
02:55 AM - 03:00 AM	55.9	49.1	6.8	1.0	-	57.9	45.9	12.0
03:00 AM - 03:05 AM	55.3	53.8	1.5	4.5	-	53.8	45.1	8.7
03:05 AM - 03:10 AM	55.9	49.8	6.1	1.5	-	57.4	44.7	12.7
03:10 AM - 03:15 AM	57.7	49.7	8.0	0.5	-	60.2	45.7	14.5
03:15 AM - 03:20 AM	64.4	51.9	12.5	0.0	-	67.4	46.6	20.8
03:20 AM - 03:25 AM	54.7	54.5	0.2	7.0	-	50.7	46.8	3.9
03:25 AM - 03:30 AM	58.2	50.9	7.3	1.0	-	60.2	46.9	13.3
03:30 AM - 03:35 AM	58.8	53.1	5.7	1.5	-	60.3	47.4	12.9
03:35 AM - 03:40 AM	62.5	50.9	11.6	0.5	-	65.0	47.1	17.9

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Approved by

*Kanokkorn 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

P/O : 4511038307

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut\_PU (PPTL)

Lot ID: 2114740

Date Received : Mar 19, 2021

Date Reported : Jul 30, 2021

Report Number : 1939140-1Rev.No.1

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Sample No. 2114740-3  
Parameter เสียงรบกวน  
Location ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735531, 1402769)  
Measurement Date Mar 13 - 14, 2021  
Measurement by Norranon Tathongkham  
Sound Level Meter 01073423

ระดับเสียง (dB(A))								
เวลา	เสียงจากแหล่งกำเนิด (A)	เสียงขณะไม่มีการรบกวน (B)	ผลต่างระดับเสียง (A-B)	ตัวปรับค่า (C)	ปรับค่าเสียงจากแหล่งกำเนิด (D)		เสียงพื้นฐาน (E)	ค่าระดับการรบกวน (D-E)
					กลางวัน (A-C)	กลางคืน (A-C)+3		
03:40 AM - 03:45 AM	60.6	50.7	9.9	0.5	-	63.1	47.3	15.8
03:45 AM - 03:50 AM	58.1	51.4	6.7	1.0	-	60.1	46.3	13.8
03:50 AM - 03:55 AM	56.3	50.8	5.5	1.5	-	57.8	45.5	12.3
03:55 AM - 04:00 AM	59.3	50.8	8.5	0.5	-	61.8	44.3	17.5
04:00 AM - 04:05 AM	59.7	49.3	10.4	0.5	-	62.2	44.4	17.8
04:05 AM - 04:10 AM	60.0	51.0	9.0	0.5	-	62.5	45.5	17.0
04:10 AM - 04:15 AM	57.8	51.9	5.9	1.5	-	59.3	46.0	13.3
04:15 AM - 04:20 AM	58.1	52.7	5.4	1.5	-	59.6	46.6	13.0
04:20 AM - 04:25 AM	59.0	52.6	6.4	1.5	-	60.5	47.1	13.4
04:25 AM - 04:30 AM	58.0	51.9	6.1	1.5	-	59.5	46.1	13.4
04:30 AM - 04:35 AM	59.0	55.4	3.6	2.0	-	60.0	47.1	12.9
04:35 AM - 04:40 AM	61.3	53.5	7.8	0.5	-	63.8	47.7	16.1
04:40 AM - 04:45 AM	61.0	52.8	8.2	0.5	-	63.5	47.6	15.9
04:45 AM - 04:50 AM	59.9	57.0	2.9	3.0	-	59.9	49.8	10.1
04:50 AM - 04:55 AM	59.5	52.7	6.8	1.0	-	61.5	46.6	14.9
04:55 AM - 05:00 AM	59.6	54.1	5.5	1.5	-	61.1	49.1	12.0
05:00 AM - 05:05 AM	61.1	54.1	7.0	1.0	-	63.1	48.1	15.0
05:05 AM - 05:10 AM	59.3	58.3	1.0	7.0	-	55.3	49.0	6.3
05:10 AM - 05:15 AM	59.0	55.9	3.1	3.0	-	59.0	49.2	9.8
05:15 AM - 05:20 AM	60.8	56.2	4.6	1.5	-	62.3	50.3	12.0
05:20 AM - 05:25 AM	59.8	55.3	4.5	1.5	-	61.3	49.4	11.9
05:25 AM - 05:30 AM	62.1	56.7	5.4	1.5	-	63.6	50.3	13.3
05:30 AM - 05:35 AM	62.4	61.8	0.6	7.0	-	58.4	51.1	7.3
05:35 AM - 05:40 AM	61.7	58.9	2.8	3.0	-	61.7	50.0	11.7
05:40 AM - 05:45 AM	62.8	57.8	5.0	1.5	-	64.3	51.4	12.9
05:45 AM - 05:50 AM	61.6	57.6	4.0	2.0	-	62.6	53.2	9.4
05:50 AM - 05:55 AM	62.2	57.1	5.1	1.5	-	63.7	52.1	11.6
05:55 AM - 06:00 AM	61.2	59.5	1.7	4.5	-	59.7	52.8	6.9
06:00 AM - 07:00 AM	61.6	58.0	3.6	2.0	59.6	-	53.0	6.6
07:00 AM - 08:00 AM	61.1	58.5	2.6	3.0	58.1	-	53.3	4.8
08:00 AM - 09:00 AM	60.9	60.1	0.8	7.0	53.9	-	53.5	0.4
09:00 AM - 10:00 AM	54.6	58.6	-4.0	7.0	47.6	-	52.9	-5.3
ค่ามาตรฐาน								≤ 10

Reference Method : Based on ISO (1996)/1

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
- ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 13-14 มีนาคม 2564
- ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.202607-1 วันที่ตรวจวัด 01-02 กรกฎาคม 2563)
- Note : This Analysis test report is reissued to supersede report No. 1939140-1, Date Reported : Mar 22, 2021

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