

ภาคผนวก ง

รายงานผลการตรวจวัดคุณภาพสิ่งแวดล้อม





## TEST REPORT

**Analysis No. :** R23-1938  
**Received Date:** 23-28/06/23  
**Customer :** Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู  
**Address :** 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280  
**Contact :** Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

**Report Date :** 07/07/23  
**Analysis Date :** 23-30/06/23  
**Job No. :** S660386/June  
**Sampling By :** TET  
**Type of Sample :** Ambient Air

Sampling Point	Sample No.	Sampling Date	Result	Analysis Date
			TSP (mg/m <sup>3</sup> )	
ที่ตั้งเตาเผา Fluidized Bed (บริเวณพื้นที่โครงการฯ) (47P 0679120 UTM 1497166)	2306-AA1016	20-21/06/23	0.060	23-27/06/23
	2306-AA1020	21-22/06/23	0.059	23-27/06/23
	2306-AA1120	22-23/06/23	0.073	26-28/06/23
	2306-AA1124	23-24/06/23	0.056	26-28/06/23
	2306-AA1128	24-25/06/23	0.060	26-28/06/23
	2306-AA1205	25-26/06/23	0.109	27-29/06/23
	2306-AA1284	26-27/06/23	0.090	28-30/06/23
ชุมชนบ้านคลองแก้ว (วัดน้อยสุวรรณาราม) (47P 0683131 UTM 1499647)	2306-AA1017	20-21/06/23	0.044	23-27/06/23
	2306-AA1021	21-22/06/23	0.051	23-27/06/23
	2306-AA1121	22-23/06/23	0.075	26-28/06/23
	2306-AA1125	23-24/06/23	0.066	26-28/06/23
	2306-AA1129	24-25/06/23	0.045	26-28/06/23
	2306-AA1206	25-26/06/23	0.048	27-29/06/23
	2306-AA1285	26-27/06/23	0.049	28-30/06/23
Standard			0.33	

**Method :** TSP = Gravimetric Method (US.EPA 40 CFR Part 50 Appendix B)

**Standard :** Notification of the National Environment Board No. 10 (1995) (B.E. 2538) and No. 24 (2004) (B.E. 2547), 24-hr. average value

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

07.07.23



Approved by

Mrs. Pornpip Pethshee

Laboratory Manager

07.07.23

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## TEST REPORT

**Analysis No. :** R23-1938  
**Received Date:** 23-28/06/23  
**Customer :** Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู  
**Address :** 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280  
**Contact :** Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

**Report Date :** 07/07/23  
**Analysis Date :** 23-30/06/23  
**Job No. :** S660386/June  
**Sampling By :** TET  
**Type of Sample :** Ambient Air

Sampling Point	Sample No.	Sampling Date	Result	Analysis Date
			TSP (mg/m <sup>3</sup> )	
ชุมชนบ้านคอต้อ (วัดศรีจันทร์ประดิษฐ์) (47P 0677850 UTM 1495167)	2306-AA1018	20-21/06/23	0.035	23-27/06/23
	2306-AA1022	21-22/06/23	0.027	23-27/06/23
	2306-AA1122	22-23/06/23	0.040	26-28/06/23
	2306-AA1126	23-24/06/23	0.048	26-28/06/23
	2306-AA1130	24-25/06/23	0.042	26-28/06/23
	2306-AA1207	25-26/06/23	0.040	27-29/06/23
	2306-AA1286	26-27/06/23	0.043	28-30/06/23
ชุมชนบ้านบางเมฆขาว (วัดอโศการาม) (47P 0674111 UTM 1498232)	2306-AA1019	20-21/06/23	0.032	23-27/06/23
	2306-AA1023	21-22/06/23	0.025	23-27/06/23
	2306-AA1123	22-23/06/23	0.037	26-28/06/23
	2306-AA1127	23-24/06/23	0.040	26-28/06/23
	2306-AA1131	24-25/06/23	0.078	26-28/06/23
	2306-AA1208	25-26/06/23	0.042	27-29/06/23
	2306-AA1287	26-27/06/23	0.036	28-30/06/23
Standard			0.33	

**Method :** TSP = Gravimetric Method (US,EPA 40 CFR Part 50 Appendix B)

**Standard :** Notification of the National Environment Board No. 10 (1995) (B.E. 2538) and No. 24 (2004) (B.E. 2547), 24-hr. average value

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

07/07/23



Approved by

Mrs. Pomtip Pethshee

Laboratory Manager

07/07/23

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## TEST REPORT

**Analysis No. :** R23-1955  
**Received Date:** 23-28/06/23  
**Customer :** Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู (เหนือ)  
โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)  
**Address :** ตำบลแพรกษา ตำบลบางปูใหม่ และตำบลแพรกษาใหม่  
อำเภอเมืองสมุทรปราการ จังหวัดสมุทรปราการ  
**Contact :** -

**Report Date :** 03/07/23  
**Analysis Date :** 23-30/06/23  
**Job No. :** S660441/June  
**Sampling By :** TET  
**Type of Sample :** Ambient Air

Sampling Point	Sample No.	Sampling Date	Result	Analysis Date
			TSP (mg/m <sup>3</sup> )	
บริเวณนิคมอุตสาหกรรมบางปู (ระยะ 2B) (47P 0682169 UTM 1498345)	2306-AA1027	20-21/06/23	0.065	23-27/06/23
	2306-AA1030	21-22/06/23	0.038	23-27/06/23
	2306-AA1141	22-23/06/23	0.034	26-28/06/23
	2306-AA1144	23-24/06/23	0.045	26-28/06/23
	2306-AA1147	24-25/06/23	0.074	26-28/06/23
	2306-AA1240	25-26/06/23	0.062	27-29/06/23
	2306-AA1288	26-27/06/23	0.076	28-30/06/23
หมู่บ้านพฤษภา 28 (47P 0681122 UTM 1499599)	2306-AA1028	20-21/06/23	0.028	23-27/06/23
	2306-AA1031	21-22/06/23	0.018	23-27/06/23
	2306-AA1142	22-23/06/23	0.032	26-28/06/23
	2306-AA1145	23-24/06/23	0.028	26-28/06/23
	2306-AA1148	24-25/06/23	0.028	26-28/06/23
	2306-AA1241	25-26/06/23	0.035	27-29/06/23
	2306-AA1289	26-27/06/23	0.025	28-30/06/23
หมู่บ้านพฤษภา 15 (47P 0682189 UTM 1498018)	2306-AA1029	20-21/06/23	0.033	23-27/06/23
	2306-AA1032	21-22/06/23	0.032	23-27/06/23
	2306-AA1143	22-23/06/23	0.030	26-28/06/23
	2306-AA1146	23-24/06/23	0.048	26-28/06/23
	2306-AA1149	24-25/06/23	0.040	26-28/06/23
	2306-AA1242	25-26/06/23	0.044	27-29/06/23
	2306-AA1290	26-27/06/23	0.042	28-30/06/23
Standard			0.33	

**Remarks** : Concentration of each gas in ambient is based on 1 atm and 25 °C  
**Method** : TSP = Gravimetric Method (US.EPA 40 CFR Part 50 Appendix B)  
**Standard** : Notification of the National Environment Board No. 10 (1995) (B.E. 2538) and No. 24 (2004) (B.E. 2547), 24-hr. average value

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory

03/07/23

Approved by

Mrs. Pomtip Pethshee  
Laboratory Manager

03/07/23

END OF REPORT

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## TEST REPORT

Report No. : R23-1938/1-21 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู  
Sampling Date : June 20-27, 2023 Address : เลขที่ 649 หมู่ 4 ถ. สุขุมวิท ต. บางปูใหม่  
อ. เมือง จ. สมุทรปราการ 10280  
Type of Sample : Ambient Air Contact : Tel. (02) 324 0358, 709 3450  
Job No. : S660386/June Fax. (02) 323 0730

อันดับ	เวลา	ผลการตรวจวัด						
		บริเวณที่ตั้งเตาเผา Fluidized Bed (พื้นที่โครงการฯ)						
		NO <sub>2</sub> (ppm)						
		20-21/06/23	21-22/06/23	22-23/06/23	23-24/06/23	24-25/06/23	25-26/06/23	26-27/06/23
1.	10:00	0.0078	0.0079	0.0067	0.0060	0.0081	0.0079	0.0071
2.	11:00	0.0089	0.0084	0.0073	0.0058	0.0070	0.0067	0.0063
3.	12:00	0.0070	0.0079	0.0058	0.0055	0.0067	0.0071	0.0066
4.	13:00	0.0076	0.0071	0.0057	0.0059	0.0065	0.0062	0.0064
5.	14:00	0.0075	0.0066	0.0060	0.0060	0.0058	0.0056	0.0060
6.	15:00	0.0068	0.0058	0.0059	0.0055	0.0057	0.0053	0.0058
7.	16:00	0.0062	0.0057	0.0066	0.0057	0.0060	0.0058	0.0054
8.	17:00	0.0057	0.0057	0.0065	0.0055	0.0057	0.0057	0.0056
9.	18:00	0.0055	0.0066	0.0058	0.0057	0.0058	0.0055	0.0053
10.	19:00	0.0055	0.0060	0.0061	0.0063	0.0062	0.0065	0.0057
11.	20:00	0.0058	0.0058	0.0077	0.0066	0.0054	0.0057	0.0058
12.	21:00	0.0054	0.0058	0.0070	0.0076	0.0053	0.0053	0.0069
13.	22:00	0.0055	0.0074	0.0092	0.0081	0.0068	0.0062	0.0084
14.	23:00	0.0062	0.0082	0.0083	0.0090	0.0070	0.0077	0.0090
15.	00:00	0.0055	0.0079	0.0069	0.0075	0.0080	0.0076	0.0064
16.	01:00	0.0066	0.0071	0.0076	0.0084	0.0070	0.0083	0.0075
17.	02:00	0.0075	0.0082	0.0084	0.0089	0.0083	0.0090	0.0069
18.	03:00	0.0093	0.0071	0.0084	0.0084	0.0080	0.0075	0.0068
19.	04:00	0.0079	0.0071	0.0075	0.0075	0.0093	0.0084	0.0085
20.	05:00	0.0084	0.0079	0.0079	0.0071	0.0071	0.0071	0.0075
21.	06:00	0.0071	0.0062	0.0071	0.0091	0.0084	0.0080	0.0069
22.	07:00	0.0070	0.0070	0.0079	0.0080	0.0078	0.0076	0.0076
23.	08:00	0.0076	0.0084	0.0084	0.0082	0.0080	0.0084	0.0080
24.	09:00	0.0083	0.0061	0.0062	0.0077	0.0081	0.0070	0.0078
ค่าต่ำสุด		0.0054	0.0057	0.0057	0.0055	0.0053	0.0053	0.0053
ค่าสูงสุด		0.0093	0.0084	0.0092	0.0091	0.0093	0.0090	0.0090
ค่าเฉลี่ย		0.0069	0.0070	0.0071	0.0071	0.0070	0.0069	0.0068
มาตรฐาน <sup>(1)</sup>		0.17						

มาตรฐาน : <sup>(1)</sup> ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 33 (พ.ศ. 2552)(ค.ศ. 2009) เรื่องกำหนดมาตรฐานค่าก๊าซไนโตรเจนไดออกไซด์ในบรรยากาศโดยทั่วไป

Wannasiri S.

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul  
General Manager

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## TEST REPORT

Report No. : R23-1938/2-21 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู  
Sampling Date : June 20-27, 2023 Address : เลขที่ 649 หมู่ 4 ถ. สุขุมวิท ต. บางปูใหม่  
อ. เมือง จ. สมุทรปราการ 10280  
Type of Sample : Ambient Air Contact : Tel. (02) 324 0358, 709 3450  
Job No. : S660386/June Fax. (02) 323 0730

อันดับ	เวลา	ผลการตรวจวัด						
		ชุมชนบ้านคลองแก้ว (วัดน้อยสุวรรณาราม)						
		NO <sub>2</sub> (ppm)						
		20-21/06/23	21-22/06/23	22-23/06/23	23-24/06/23	24-25/06/23	25-26/06/23	26-27/06/23
1.	13:00	0.0029	0.0055	0.0020	0.0008	0.0073	0.0042	0.0022
2.	14:00	0.0064	0.0063	0.0070	0.0021	0.0022	0.0016	0.0045
3.	15:00	0.0052	0.0063	0.0029	0.0023	0.0029	0.0009	0.0030
4.	16:00	0.0060	0.0018	0.0029	0.0019	0.0024	0.0038	0.0034
5.	17:00	0.0027	0.0019	0.0024	0.0012	0.0030	0.0027	0.0020
6.	18:00	0.0023	0.0028	0.0033	0.0033	0.0021	0.0022	0.0030
7.	19:00	0.0004	0.0022	0.0058	0.0032	0.0024	0.0014	0.0015
8.	20:00	0.0013	0.0020	0.0034	0.0021	0.0012	0.0018	0.0021
9.	21:00	0.0012	0.0037	0.0027	0.0036	0.0021	0.0014	0.0021
10.	22:00	0.0016	0.0040	0.0040	0.0043	0.0012	0.0031	0.0030
11.	23:00	0.0019	0.0038	0.0083	0.0017	0.0008	0.0020	0.0027
12.	00:00	0.0013	0.0034	0.0020	0.0061	0.0039	0.0024	0.0024
13.	01:00	0.0012	0.0036	0.0080	0.0031	0.0023	0.0038	0.0031
14.	02:00	0.0022	0.0069	0.0059	0.0083	0.0014	0.0034	0.0071
15.	03:00	0.0010	0.0037	0.0053	0.0059	0.0037	0.0036	0.0030
16.	04:00	0.0031	0.0018	0.0039	0.0077	0.0030	0.0069	0.0075
17.	05:00	0.0061	0.0049	0.0067	0.0093	0.0056	0.0073	0.0017
18.	06:00	0.0067	0.0032	0.0080	0.0081	0.0037	0.0027	0.0009
19.	07:00	0.0033	0.0036	0.0039	0.0040	0.0050	0.0054	0.0029
20.	08:00	0.0039	0.0051	0.0051	0.0049	0.0034	0.0031	0.0026
21.	09:00	0.0020	0.0006	0.0043	0.0026	0.0075	0.0036	0.0015
22.	10:00	0.0016	0.0025	0.0052	0.0024	0.0048	0.0025	0.0038
23.	11:00	0.0018	0.0060	0.0069	0.0032	0.0041	0.0057	0.0052
24.	12:00	0.0069	0.0016	0.0025	0.0020	0.0053	0.0026	0.0026
ค่าต่ำสุด		0.0004	0.0006	0.0020	0.0008	0.0008	0.0009	0.0009
ค่าสูงสุด		0.0069	0.0069	0.0083	0.0093	0.0075	0.0073	0.0075
ค่าเฉลี่ย		0.0030	0.0036	0.0047	0.0039	0.0034	0.0033	0.0031
มาตรฐาน <sup>(1)</sup>		0.17						

มาตรฐาน : <sup>(1)</sup> ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 33 (พ.ศ. 2552)(ค.ศ. 2009) เรื่องกำหนดมาตรฐานค่าก๊าซไนโตรเจนไดออกไซด์ในบรรยากาศโดยทั่วไป

Wannasiri S.

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul

General Manager

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## TEST REPORT

Report No. : R23-1938/3-21 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู  
Sampling Date : June 20-27, 2023 Address : เลขที่ 649 หมู่ 4 ถ. สุขุมวิท ต. บางปูใหม่  
อ. เมือง จ. สมุทรปราการ 10280  
Type of Sample : Ambient Air Contact : Tel. (02) 324 0358, 709 3450  
Job No. : S660386/June Fax. (02) 323 0730

อันดับ	เวลา	ผลการตรวจวัด						
		ชุมชนบ้านคอตตอ (วัดศรีจันทร์ประดิษฐ์)						
		NO <sub>2</sub> (ppm)						
		20-21/06/23	21-22/06/23	22-23/06/23	23-24/06/23	24-25/06/23	25-26/06/23	26-27/06/23
1.	14:00	0.0031	0.0060	0.0021	0.0028	0.0081	0.0046	0.0024
2.	15:00	0.0071	0.0069	0.0077	0.0022	0.0024	0.0017	0.0049
3.	16:00	0.0057	0.0069	0.0031	0.0025	0.0031	0.0025	0.0032
4.	17:00	0.0066	0.0019	0.0031	0.0020	0.0026	0.0041	0.0037
5.	18:00	0.0029	0.0020	0.0026	0.0012	0.0032	0.0029	0.0021
6.	19:00	0.0025	0.0030	0.0036	0.0036	0.0022	0.0024	0.0032
7.	20:00	0.0023	0.0024	0.0064	0.0035	0.0026	0.0015	0.0016
8.	21:00	0.0013	0.0021	0.0037	0.0022	0.0012	0.0019	0.0022
9.	22:00	0.0012	0.0040	0.0029	0.0039	0.0022	0.0015	0.0022
10.	23:00	0.0017	0.0044	0.0044	0.0047	0.0012	0.0034	0.0032
11.	00:00	0.0020	0.0041	0.0092	0.0018	0.0020	0.0021	0.0029
12.	01:00	0.0013	0.0037	0.0021	0.0067	0.0043	0.0026	0.0026
13.	02:00	0.0012	0.0039	0.0088	0.0034	0.0025	0.0041	0.0034
14.	03:00	0.0024	0.0076	0.0065	0.0092	0.0015	0.0037	0.0078
15.	04:00	0.0010	0.0040	0.0058	0.0065	0.0040	0.0039	0.0032
16.	05:00	0.0034	0.0019	0.0043	0.0085	0.0032	0.0076	0.0083
17.	06:00	0.0067	0.0054	0.0074	0.0053	0.0062	0.0081	0.0018
18.	07:00	0.0074	0.0035	0.0088	0.0090	0.0040	0.0029	0.0030
19.	08:00	0.0036	0.0039	0.0043	0.0044	0.0055	0.0059	0.0031
20.	09:00	0.0043	0.0056	0.0056	0.0054	0.0037	0.0034	0.0028
21.	10:00	0.0021	0.0016	0.0047	0.0028	0.0083	0.0039	0.0016
22.	11:00	0.0017	0.0027	0.0057	0.0026	0.0053	0.0027	0.0041
23.	12:00	0.0019	0.0066	0.0076	0.0035	0.0045	0.0063	0.0057
24.	13:00	0.0076	0.0017	0.0027	0.0021	0.0058	0.0028	0.0029
ค่าต่ำสุด		0.0010	0.0016	0.0021	0.0012	0.0012	0.0015	0.0016
ค่าสูงสุด		0.0076	0.0076	0.0092	0.0092	0.0083	0.0081	0.0083
ค่าเฉลี่ย		0.0034	0.0040	0.0051	0.0042	0.0037	0.0036	0.0034
มาตรฐาน <sup>(1)</sup>		0.17						

มาตรฐาน : <sup>(1)</sup> ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 33 (พ.ศ. 2552)(ค.ศ. 2009) เรื่องกำหนดมาตรฐานค่าก๊าซไนโตรเจนไดออกไซด์ในบรรยากาศโดยทั่วไป

Wannasiri S

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul  
General Manager

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## TEST REPORT

Report No. : R23-1938/4-21 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู  
Sampling Date : June 20-27, 2023 Address : เลขที่ 649 หมู่ 4 ถ. สุขุมวิท ต. บางปูใหม่  
อ. เมือง จ. สมุทรปราการ 10280  
Type of Sample : Ambient Air Contact : Tel. (02) 324 0358, 709 3450  
Job No. : S660386/June Fax. (02) 323 0730

อันดับ	เวลา	ผลการตรวจวัด						
		ชุมชนบ้านบางเมฆขาว (วัดโคกการาม)						
		NO <sub>2</sub> (ppm)						
		20-21/06/23	21-22/06/23	22-23/06/23	23-24/06/23	24-25/06/23	25-26/06/23	26-27/06/23
1.	15:00	0.0015	0.0015	0.0014	0.0015	0.0021	0.0016	0.0019
2.	16:00	0.0018	0.0015	0.0014	0.0015	0.0013	0.0024	0.0017
3.	17:00	0.0031	0.0014	0.0014	0.0016	0.0022	0.0023	0.0026
4.	18:00	0.0022	0.0015	0.0017	0.0015	0.0021	0.0015	0.0017
5.	19:00	0.0029	0.0014	0.0021	0.0018	0.0015	0.0023	0.0023
6.	20:00	0.0039	0.0015	0.0016	0.0031	0.0022	0.0031	0.0032
7.	21:00	0.0024	0.0016	0.0019	0.0022	0.0022	0.0024	0.0026
8.	22:00	0.0021	0.0028	0.0016	0.0029	0.0022	0.0023	0.0018
9.	23:00	0.0021	0.0021	0.0042	0.0039	0.0021	0.0022	0.0026
10.	00:00	0.0035	0.0037	0.0034	0.0024	0.0022	0.0031	0.0034
11.	01:00	0.0030	0.0019	0.0014	0.0021	0.0024	0.0023	0.0023
12.	02:00	0.0022	0.0029	0.0029	0.0021	0.0023	0.0021	0.0027
13.	03:00	0.0015	0.0018	0.0022	0.0023	0.0027	0.0025	0.0026
14.	04:00	0.0021	0.0017	0.0030	0.0037	0.0033	0.0041	0.0053
15.	05:00	0.0014	0.0032	0.0032	0.0030	0.0030	0.0030	0.0036
16.	06:00	0.0017	0.0031	0.0030	0.0039	0.0035	0.0027	0.0023
17.	07:00	0.0014	0.0030	0.0023	0.0033	0.0031	0.0012	0.0032
18.	08:00	0.0021	0.0022	0.0031	0.0025	0.0037	0.0015	0.0043
19.	09:00	0.0015	0.0014	0.0030	0.0024	0.0026	0.0025	0.0026
20.	10:00	0.0013	0.0012	0.0031	0.0022	0.0023	0.0022	0.0029
21.	11:00	0.0013	0.0013	0.0024	0.0022	0.0016	0.0026	0.0017
22.	12:00	0.0014	0.0013	0.0015	0.0022	0.0015	0.0027	0.0024
23.	13:00	0.0022	0.0015	0.0016	0.0020	0.0024	0.0017	0.0025
24.	14:00	0.0014	0.0013	0.0018	0.0023	0.0023	0.0023	0.0019
ค่าต่ำสุด		0.0013	0.0012	0.0014	0.0015	0.0013	0.0012	0.0017
ค่าสูงสุด		0.0039	0.0037	0.0042	0.0039	0.0037	0.0041	0.0053
ค่าเฉลี่ย		0.0021	0.0019	0.0023	0.0024	0.0024	0.0024	0.0027
มาตรฐาน <sup>(1)</sup>		0.17						

มาตรฐาน : <sup>(1)</sup> ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 33 (พ.ศ. 2552)(ค.ศ. 2009) เรื่องกำหนดมาตรฐานค่าก๊าซไนโตรเจนไดออกไซด์ในบรรยากาศโดยทั่วไป

Wannasiri S.

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul  
General Manager

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## TEST REPORT

Report No. : R23-1955/1-10 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู (เหนือ)  
Sampling Date : June 20-27, 2023 โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)  
Type of Sample : Ambient Air Address : ต. แพรกษา ต. บางปูใหม่ และ ต. แพรกษาใหม่  
Job No. : S660441/JUNE อ. เมืองสมุทรปราการ จ. สมุทรปราการ 10540

อันดับ	เวลา	ผลการตรวจวัด						
		บริเวณนิคมอุตสาหกรรมบางปู (ระยะ 2B)						
		NO <sub>2</sub> (ppm)						
		20-21/06/23	21-22/06/23	22-23/06/23	23-24/06/23	24-25/06/23	25-26/06/23	26-27/06/23
1.	11:00	0.0042	0.0071	0.0058	0.0063	0.0044	0.0063	0.0070
2.	12:00	0.0037	0.0025	0.0061	0.0098	0.0064	0.0045	0.0090
3.	13:00	0.0041	0.0036	0.0060	0.0054	0.0099	0.0038	0.0028
4.	14:00	0.0027	0.0035	0.0046	0.0058	0.0055	0.0040	0.0074
5.	15:00	0.0036	0.0058	0.0041	0.0081	0.0059	0.0036	0.0015
6.	16:00	0.0031	0.0024	0.0047	0.0036	0.0091	0.0029	0.0027
7.	17:00	0.0040	0.0061	0.0038	0.0037	0.0037	0.0020	0.0027
8.	18:00	0.0066	0.0041	0.0041	0.0022	0.0037	0.0029	0.0024
9.	19:00	0.0041	0.0030	0.0029	0.0028	0.0032	0.0018	0.0013
10.	20:00	0.0034	0.0029	0.0029	0.0028	0.0041	0.0033	0.0038
11.	21:00	0.0047	0.0033	0.0027	0.0037	0.0067	0.0040	0.0029
12.	22:00	0.0091	0.0036	0.0044	0.0034	0.0042	0.0014	0.0025
13.	23:00	0.0058	0.0030	0.0047	0.0062	0.0035	0.0069	0.0016
14.	00:00	0.0068	0.0029	0.0045	0.0069	0.0048	0.0038	0.0061
15.	01:00	0.0046	0.0039	0.0041	0.0099	0.0092	0.0081	0.0052
16.	02:00	0.0040	0.0027	0.0074	0.0047	0.0023	0.0057	0.0075
17.	03:00	0.0026	0.0018	0.0057	0.0093	0.0029	0.0075	0.0068
18.	04:00	0.0055	0.0048	0.0024	0.0034	0.0029	0.0091	0.0094
19.	05:00	0.0068	0.0065	0.0056	0.0026	0.0038	0.0059	0.0075
20.	06:00	0.0026	0.0030	0.0036	0.0046	0.0035	0.0047	0.0088
21.	07:00	0.0015	0.0067	0.0019	0.0043	0.0038	0.0057	0.0072
22.	08:00	0.0077	0.0037	0.0023	0.0032	0.0030	0.0064	0.0053
23.	09:00	0.0063	0.0033	0.0038	0.0056	0.0039	0.0062	0.0086
24.	10:00	0.0071	0.0070	0.0043	0.0070	0.0057	0.0063	0.0079
ค่าต่ำสุด		0.0015	0.0018	0.0019	0.0022	0.0023	0.0014	0.0013
ค่าสูงสุด		0.0091	0.0071	0.0074	0.0099	0.0099	0.0091	0.0094
ค่าเฉลี่ย		0.0048	0.0041	0.0043	0.0052	0.0048	0.0049	0.0053
มาตรฐาน <sup>(1)</sup>		0.17						

มาตรฐาน : <sup>(1)</sup> ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 33 (พ.ศ. 2552)(ค.ศ. 2009) เรื่องกำหนดมาตรฐานค่าก๊าซไนโตรเจนไดออกไซด์ในบรรยากาศโดยทั่วไป

Wannasiri S.

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul

General Manager

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## TEST REPORT

Report No. : R23-1955/2-10 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู (เหนือ)  
Sampling Date : June 20-27, 2023 โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)  
Type of Sample : Ambient Air Address : ต. แพรกษา ต. บางปูใหม่ และ ต. แพรกษาใหม่  
Job No. : S660441/JUNE อ. เมืองสมุทรปราการ จ. สมุทรปราการ 10540

อันดับ	เวลา	ผลการตรวจวัด						
		หมู่บ้านพักอาศัย 28						
		NO <sub>2</sub> (ppm)						
		20-21/06/23	21-22/06/23	22-23/06/23	23-24/06/23	24-25/06/23	25-26/06/23	26-27/06/23
1.	13:00	0.0051	0.0017	0.0029	0.0029	0.0034	0.0038	0.0034
2.	14:00	0.0016	0.0029	0.0023	0.0021	0.0040	0.0027	0.0019
3.	15:00	0.0054	0.0028	0.0033	0.0012	0.0031	0.0021	0.0030
4.	16:00	0.0034	0.0021	0.0059	0.0021	0.0034	0.0013	0.0014
5.	17:00	0.0022	0.0019	0.0034	0.0030	0.0021	0.0017	0.0020
6.	18:00	0.0021	0.0037	0.0027	0.0025	0.0031	0.0013	0.0020
7.	19:00	0.0025	0.0040	0.0040	0.0033	0.0021	0.0031	0.0030
8.	20:00	0.0029	0.0038	0.0086	0.0035	0.0017	0.0019	0.0027
9.	21:00	0.0022	0.0034	0.0051	0.0063	0.0037	0.0023	0.0055
10.	22:00	0.0021	0.0068	0.0061	0.0031	0.0054	0.0038	0.0063
11.	23:00	0.0032	0.0050	0.0039	0.0075	0.0045	0.0055	0.0094
12.	00:00	0.0019	0.0016	0.0033	0.0050	0.0069	0.0057	0.0040
13.	01:00	0.0030	0.0049	0.0018	0.0069	0.0061	0.0082	0.0088
14.	02:00	0.0041	0.0029	0.0048	0.0086	0.0089	0.0086	0.0027
15.	03:00	0.0058	0.0011	0.0061	0.0052	0.0069	0.0037	0.0018
16.	04:00	0.0022	0.0015	0.0018	0.0040	0.0083	0.0066	0.0039
17.	05:00	0.0060	0.0031	0.0031	0.0050	0.0066	0.0041	0.0036
18.	06:00	0.0030	0.0036	0.0022	0.0057	0.0046	0.0047	0.0024
19.	07:00	0.0025	0.0056	0.0032	0.0055	0.0081	0.0035	0.0049
20.	08:00	0.0036	0.0093	0.0050	0.0064	0.0073	0.0069	0.0064
21.	09:00	0.0071	0.0047	0.0056	0.0051	0.0086	0.0036	0.0037
22.	10:00	0.0056	0.0051	0.0038	0.0054	0.0074	0.0032	0.0057
23.	11:00	0.0065	0.0034	0.0031	0.0053	0.0047	0.0035	0.0094
24.	12:00	0.0065	0.0029	0.0033	0.0039	0.0039	0.0030	0.0048
ค่าต่ำสุด		0.0016	0.0011	0.0018	0.0012	0.0017	0.0013	0.0014
ค่าสูงสุด		0.0071	0.0093	0.0086	0.0086	0.0089	0.0086	0.0094
ค่าเฉลี่ย		0.0038	0.0037	0.0040	0.0046	0.0052	0.0040	0.0043
มาตรฐาน <sup>(1)</sup>		0.17						

มาตรฐาน : <sup>(1)</sup> ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 33 (พ.ศ. 2552)(ค.ศ. 2009) เรื่องกำหนดมาตรฐานค่าก๊าซไนโตรเจนไดออกไซด์ในบรรยากาศโดยทั่วไป

*Wannasiri S*

Wannasiri Suriyawong



*Somchai P.*

Somchai Piyavorasakul  
General Manager





## TEST REPORT

Report No. : R23-1955/3-10 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู (เหนือ)  
Sampling Date : June 20-27, 2023 โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)  
Type of Sample : Ambient Air Address : ต. แพรกษา ต. บางปูใหม่ และ ต. แพรกษาใหม่  
Job No. : S660441/JUNE อ. เมืองสมุทรปราการ จ. สมุทรปราการ 10540

อันดับ	เวลา	ผลการตรวจวัด						
		หมู่บ้านพุดซา 15						
		NO <sub>2</sub> (ppm)						
		20-21/06/23	21-22/06/23	22-23/06/23	23-24/06/23	24-25/06/23	25-26/06/23	26-27/06/23
1.	12:00	0.0030	0.0046	0.0080	0.0078	0.0021	0.0030	0.0034
2.	13:00	0.0024	0.0045	0.0049	0.0064	0.0025	0.0012	0.0022
3.	14:00	0.0034	0.0034	0.0060	0.0071	0.0025	0.0026	0.0076
4.	15:00	0.0020	0.0029	0.0058	0.0072	0.0022	0.0028	0.0024
5.	16:00	0.0035	0.0021	0.0035	0.0033	0.0015	0.0024	0.0031
6.	17:00	0.0028	0.0025	0.0042	0.0044	0.0021	0.0016	0.0026
7.	18:00	0.0041	0.0021	0.0038	0.0030	0.0028	0.0000	0.0032
8.	19:00	0.0027	0.0038	0.0019	0.0021	0.0033	0.0035	0.0023
9.	20:00	0.0015	0.0027	0.0028	0.0020	0.0029	0.0034	0.0026
10.	21:00	0.0021	0.0031	0.0027	0.0050	0.0010	0.0023	0.0013
11.	22:00	0.0021	0.0045	0.0031	0.0043	0.0035	0.0038	0.0023
12.	23:00	0.0031	0.0062	0.0034	0.0026	0.0059	0.0045	0.0013
13.	00:00	0.0028	0.0064	0.0028	0.0028	0.0025	0.0019	0.0009
14.	01:00	0.0026	0.0087	0.0027	0.0052	0.0087	0.0064	0.0041
15.	02:00	0.0064	0.0091	0.0037	0.0075	0.0065	0.0033	0.0025
16.	03:00	0.0085	0.0044	0.0025	0.0042	0.0059	0.0087	0.0015
17.	04:00	0.0020	0.0072	0.0046	0.0023	0.0044	0.0062	0.0039
18.	05:00	0.0068	0.0048	0.0036	0.0055	0.0073	0.0080	0.0032
19.	06:00	0.0026	0.0054	0.0042	0.0037	0.0087	0.0097	0.0059
20.	07:00	0.0019	0.0042	0.0048	0.0041	0.0044	0.0084	0.0039
21.	08:00	0.0019	0.0075	0.0055	0.0057	0.0057	0.0042	0.0053
22.	09:00	0.0016	0.0043	0.0035	0.0010	0.0048	0.0052	0.0036
23.	10:00	0.0034	0.0039	0.0031	0.0030	0.0058	0.0028	0.0091
24.	11:00	0.0054	0.0055	0.0033	0.0066	0.0075	0.0026	0.0050
ค่าต่ำสุด		0.0015	0.0021	0.0019	0.0010	0.0010	0.0000	0.0009
ค่าสูงสุด		0.0085	0.0091	0.0080	0.0078	0.0087	0.0097	0.0091
ค่าเฉลี่ย		0.0033	0.0047	0.0039	0.0045	0.0044	0.0041	0.0035
มาตรฐาน <sup>(1)</sup>		0.17						

มาตรฐาน : <sup>(1)</sup> ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 33 (พ.ศ. 2552)(ค.ศ. 2009) เรื่องกำหนดมาตรฐานค่าก๊าซไนโตรเจนไดออกไซด์ในบรรยากาศโดยทั่วไป

*Wannasiri S*

Wannasiri Suriyawong



*Somchai P.*

Somchai Piyavorasakul  
General Manager

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## TEST REPORT

Report No. : R23-1938/5-21 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู  
Sampling Date : June 20-27, 2023 Address : เลขที่ 649 หมู่ 4 ถ. สุขุมวิท ต. บางปูใหม่  
อ. เมือง จ. สมุทรปราการ 10280  
Type of Sample : Ambient Air Contact : Tel. (02) 324 0358, 709 3450  
Job No. : S660386/June Fax. (02) 323 0730

อันดับ	เวลา	ผลการตรวจวัด						
		บริเวณที่ตั้งเตาเผา Fluidized Bed (พื้นที่โครงการ)						
		SO <sub>2</sub> (ppm)						
		20-21/06/23	21-22/06/23	22-23/06/23	23-24/06/23	24-25/06/23	25-26/06/23	26-27/06/23
1.	10:00	0.0032	0.0031	0.0034	0.0033	0.0029	0.0033	0.0029
2.	11:00	0.0028	0.0026	0.0033	0.0037	0.0028	0.0027	0.0035
3.	12:00	0.0034	0.0037	0.0027	0.0030	0.0034	0.0028	0.0029
4.	13:00	0.0026	0.0036	0.0026	0.0033	0.0033	0.0036	0.0033
5.	14:00	0.0035	0.0035	0.0028	0.0029	0.0032	0.0032	0.0036
6.	15:00	0.0036	0.0028	0.0036	0.0033	0.0028	0.0035	0.0034
7.	16:00	0.0027	0.0024	0.0033	0.0033	0.0033	0.0030	0.0034
8.	17:00	0.0030	0.0029	0.0035	0.0034	0.0035	0.0033	0.0035
9.	18:00	0.0033	0.0031	0.0036	0.0026	0.0036	0.0035	0.0033
10.	19:00	0.0034	0.0034	0.0027	0.0027	0.0034	0.0035	0.0033
11.	20:00	0.0028	0.0033	0.0030	0.0035	0.0030	0.0028	0.0029
12.	21:00	0.0026	0.0030	0.0036	0.0035	0.0029	0.0032	0.0033
13.	22:00	0.0027	0.0031	0.0037	0.0027	0.0032	0.0033	0.0031
14.	23:00	0.0034	0.0033	0.0036	0.0034	0.0034	0.0037	0.0030
15.	00:00	0.0030	0.0029	0.0030	0.0033	0.0028	0.0032	0.0035
16.	01:00	0.0033	0.0035	0.0036	0.0033	0.0031	0.0034	0.0028
17.	02:00	0.0030	0.0036	0.0034	0.0028	0.0035	0.0035	0.0033
18.	03:00	0.0029	0.0030	0.0033	0.0038	0.0031	0.0035	0.0028
19.	04:00	0.0030	0.0032	0.0030	0.0035	0.0033	0.0032	0.0030
20.	05:00	0.0038	0.0043	0.0029	0.0029	0.0036	0.0031	0.0034
21.	06:00	0.0033	0.0030	0.0035	0.0028	0.0033	0.0030	0.0035
22.	07:00	0.0043	0.0029	0.0029	0.0028	0.0032	0.0036	0.0031
23.	08:00	0.0032	0.0035	0.0033	0.0027	0.0030	0.0036	0.0035
24.	09:00	0.0026	0.0034	0.0031	0.0036	0.0036	0.0033	0.0029
ค่าต่ำสุด		0.0026	0.0024	0.0026	0.0026	0.0028	0.0027	0.0028
ค่าสูงสุด		0.0043	0.0043	0.0037	0.0038	0.0036	0.0037	0.0036
ค่าเฉลี่ย		0.0031	0.0032	0.0032	0.0032	0.0032	0.0033	0.0032
มาตรฐาน <sup>(1)</sup>		0.30						

มาตรฐาน: <sup>(1)</sup> ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 12 (พ.ศ. 2538) (ค.ศ. 1995) และฉบับที่ 21 (พ.ศ. 2544) (ค.ศ. 2001)  
เรื่องกำหนดมาตรฐานค่าก๊าซซัลเฟอร์ไดออกไซด์ในบรรยากาศโดยทั่วไปในเวลา 1 ชั่วโมง

Wannasiri S.

Wannasiri Suriyawong



Somchai F.

Somchai Piyavorasakul  
General Manager

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
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## TEST REPORT

Report No. : R23-1938/6-21 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู  
Sampling Date : June 20-27, 2023 Address : เลขที่ 649 หมู่ 4 ถ. สุขุมวิท ต. บางปูใหม่  
อ. เมือง จ. สมุทรปราการ 10280  
Type of Sample : Ambient Air Contact : Tel. (02) 324 0358, 709 3450  
Job No. : S660386/June Fax. (02) 323 0730

อันดับ	เวลา	ผลการตรวจวัด						
		ชุมชนบ้านคลองแก้ว (วัดน้อยสุวรรณาราม)						
		SO <sub>2</sub> (ppm)						
		20-21/06/23	21-22/06/23	22-23/06/23	23-24/06/23	24-25/06/23	25-26/06/23	26-27/06/23
1.	13:00	0.0036	0.0036	0.0038	0.0032	0.0038	0.0033	0.0034
2.	14:00	0.0033	0.0035	0.0034	0.0033	0.0031	0.0039	0.0038
3.	15:00	0.0032	0.0031	0.0036	0.0041	0.0036	0.0037	0.0034
4.	16:00	0.0038	0.0036	0.0032	0.0036	0.0031	0.0035	0.0036
5.	17:00	0.0032	0.0038	0.0038	0.0046	0.0033	0.0046	0.0039
6.	18:00	0.0036	0.0039	0.0039	0.0035	0.0037	0.0033	0.0036
7.	19:00	0.0034	0.0037	0.0033	0.0029	0.0038	0.0032	0.0035
8.	20:00	0.0036	0.0033	0.0035	0.0034	0.0034	0.0038	0.0033
9.	21:00	0.0040	0.0032	0.0031	0.0029	0.0038	0.0037	0.0039
10.	22:00	0.0033	0.0035	0.0037	0.0040	0.0032	0.0037	0.0036
11.	23:00	0.0036	0.0031	0.0029	0.0039	0.0037	0.0036	0.0030
12.	00:00	0.0032	0.0039	0.0038	0.0038	0.0036	0.0033	0.0038
13.	01:00	0.0036	0.0035	0.0039	0.0031	0.0030	0.0038	0.0035
14.	02:00	0.0036	0.0038	0.0030	0.0027	0.0029	0.0038	0.0034
15.	03:00	0.0037	0.0033	0.0033	0.0032	0.0031	0.0030	0.0033
16.	04:00	0.0029	0.0036	0.0036	0.0034	0.0039	0.0037	0.0039
17.	05:00	0.0030	0.0038	0.0037	0.0037	0.0036	0.0036	0.0039
18.	06:00	0.0031	0.0038	0.0031	0.0038	0.0038	0.0036	0.0036
19.	07:00	0.0031	0.0031	0.0029	0.0036	0.0039	0.0031	0.0032
20.	08:00	0.0030	0.0035	0.0030	0.0036	0.0030	0.0041	0.0038
21.	09:00	0.0039	0.0036	0.0037	0.0032	0.0033	0.0038	0.0032
22.	10:00	0.0032	0.0040	0.0033	0.0036	0.0039	0.0032	0.0036
23.	11:00	0.0031	0.0035	0.0036	0.0034	0.0040	0.0037	0.0039
24.	12:00	0.0037	0.0037	0.0033	0.0033	0.0039	0.0031	0.0037
ค่าต่ำสุด		0.0029	0.0031	0.0029	0.0027	0.0029	0.0030	0.0030
ค่าสูงสุด		0.0040	0.0040	0.0039	0.0046	0.0040	0.0046	0.0039
ค่าเฉลี่ย		0.0034	0.0036	0.0034	0.0035	0.0035	0.0036	0.0036
มาตรฐาน <sup>(1)</sup>		0.30						

มาตรฐาน: <sup>(1)</sup> ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 12 (พ.ศ. 2538) (ค.ศ. 1995) และฉบับที่ 21 (พ.ศ. 2544) (ค.ศ. 2001)  
เรื่องกำหนดมาตรฐานค่าก๊าซซัลเฟอร์ไดออกไซด์ในบรรยากาศโดยทั่วไปในเวลา 1 ชั่วโมง

Wannasiri S.

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul

General Manager

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## TEST REPORT

Report No. : R23-1938/7-21 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู  
Sampling Date : June 20-27, 2023 Address : เลขที่ 649 หมู่ 4 ถ. สุขุมวิท ต. บางปูใหม่  
อ. เมือง จ. สมุทรปราการ 10280  
Type of Sample : Ambient Air Contact : Tel. (02) 324 0358, 709 3450  
Job No. : S660386/June Fax. (02) 323 0730

อันดับ	เวลา	ผลการตรวจวัด						
		ชุมชนบ้านคอตตอ (วัดศรีจันทร์ประดิษฐ์)						
		SO <sub>2</sub> (ppm)						
		20-21/06/23	21-22/06/23	22-23/06/23	23-24/06/23	24-25/06/23	25-26/06/23	26-27/06/23
1.	14:00	0.0032	0.0028	0.0025	0.0030	0.0030	0.0027	0.0029
2.	15:00	0.0027	0.0024	0.0029	0.0024	0.0028	0.0027	0.0029
3.	16:00	0.0037	0.0027	0.0025	0.0029	0.0027	0.0023	0.0021
4.	17:00	0.0026	0.0024	0.0027	0.0024	0.0024	0.0027	0.0028
5.	18:00	0.0020	0.0023	0.0030	0.0027	0.0023	0.0025	0.0027
6.	19:00	0.0025	0.0024	0.0027	0.0029	0.0029	0.0024	0.0027
7.	20:00	0.0020	0.0022	0.0026	0.0029	0.0023	0.0029	0.0022
8.	21:00	0.0031	0.0021	0.0024	0.0022	0.0027	0.0022	0.0032
9.	22:00	0.0030	0.0030	0.0030	0.0026	0.0025	0.0027	0.0029
10.	23:00	0.0029	0.0023	0.0027	0.0027	0.0027	0.0022	0.0023
11.	00:00	0.0022	0.0022	0.0021	0.0031	0.0031	0.0024	0.0022
12.	01:00	0.0026	0.0028	0.0022	0.0026	0.0025	0.0028	0.0028
13.	02:00	0.0022	0.0027	0.0030	0.0028	0.0024	0.0029	0.0028
14.	03:00	0.0028	0.0026	0.0026	0.0029	0.0030	0.0025	0.0027
15.	04:00	0.0020	0.0022	0.0018	0.0029	0.0030	0.0029	0.0021
16.	05:00	0.0029	0.0027	0.0023	0.0026	0.0027	0.0023	0.0020
17.	06:00	0.0030	0.0029	0.0025	0.0026	0.0023	0.0024	0.0022
18.	07:00	0.0021	0.0030	0.0028	0.0037	0.0029	0.0027	0.0030
19.	08:00	0.0024	0.0028	0.0027	0.0024	0.0023	0.0023	0.0027
20.	09:00	0.0027	0.0024	0.0024	0.0023	0.0027	0.0027	0.0029
21.	10:00	0.0028	0.0023	0.0025	0.0029	0.0030	0.0027	0.0030
22.	11:00	0.0022	0.0026	0.0027	0.0031	0.0029	0.0028	0.0021
23.	12:00	0.0020	0.0028	0.0023	0.0030	0.0028	0.0020	0.0024
24.	13:00	0.0021	0.0022	0.0029	0.0024	0.0029	0.0021	0.0030
ค่าต่ำสุด		0.0020	0.0021	0.0018	0.0022	0.0023	0.0020	0.0020
ค่าสูงสุด		0.0037	0.0030	0.0030	0.0037	0.0031	0.0029	0.0032
ค่าเฉลี่ย		0.0026	0.0025	0.0026	0.0028	0.0027	0.0025	0.0026
มาตรฐาน <sup>(1)</sup>		0.30						

มาตรฐาน: <sup>(1)</sup> ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 12 (พ.ศ. 2538) (ค.ศ. 1995) และฉบับที่ 21 (พ.ศ. 2544) (ค.ศ. 2001)  
เรื่องกำหนดมาตรฐานค่าก๊าซซัลเฟอร์ไดออกไซด์ในบรรยากาศโดยทั่วไปในเวลา 1 ชั่วโมง

Wannasiri S.

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul

General Manager

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## TEST REPORT

Report No. : R23-1938/8-21 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู  
Sampling Date : June 20-27, 2023 Address : เลขที่ 649 หมู่ 4 ถ. สุขุมวิท ต. บางปูใหม่  
อ. เมือง จ. สมุทรปราการ 10280  
Type of Sample : Ambient Air Contact : Tel. (02) 324 0358, 709 3450  
Job No. : S660386/June Fax. (02) 323 0730

อันดับ	เวลา	ผลการตรวจวัด						
		ชุมชนบ้านบางเมฆขาว (วัดโคกการาม)						
		SO <sub>2</sub> (ppm)						
		20-21/06/23	21-22/06/23	22-23/06/23	23-24/06/23	24-25/06/23	25-26/06/23	26-27/06/23
1.	15:00	0.0029	0.0021	0.0021	0.0029	0.0022	0.0025	0.0018
2.	16:00	0.0020	0.0021	0.0021	0.0019	0.0022	0.0024	0.0016
3.	17:00	0.0030	0.0021	0.0023	0.0017	0.0022	0.0022	0.0016
4.	18:00	0.0023	0.0025	0.0021	0.0019	0.0014	0.0016	0.0023
5.	19:00	0.0031	0.0030	0.0025	0.0018	0.0019	0.0014	0.0042
6.	20:00	0.0022	0.0024	0.0041	0.0019	0.0013	0.0030	0.0032
7.	21:00	0.0032	0.0027	0.0030	0.0020	0.0016	0.0019	0.0025
8.	22:00	0.0030	0.0025	0.0040	0.0028	0.0014	0.0029	0.0026
9.	23:00	0.0031	0.0048	0.0022	0.0018	0.0045	0.0014	0.0017
10.	00:00	0.0022	0.0038	0.0033	0.0018	0.0035	0.0022	0.0027
11.	01:00	0.0033	0.0022	0.0030	0.0016	0.0022	0.0019	0.0020
12.	02:00	0.0031	0.0040	0.0029	0.0028	0.0025	0.0018	0.0028
13.	03:00	0.0032	0.0031	0.0032	0.0015	0.0030	0.0021	0.0019
14.	04:00	0.0032	0.0041	0.0049	0.0014	0.0028	0.0038	0.0029
15.	05:00	0.0035	0.0024	0.0041	0.0013	0.0030	0.0030	0.0027
16.	06:00	0.0033	0.0042	0.0024	0.0011	0.0029	0.0025	0.0028
17.	07:00	0.0034	0.0033	0.0045	0.0030	0.0030	0.0034	0.0019
18.	08:00	0.0034	0.0043	0.0035	0.0020	0.0031	0.0024	0.0016
19.	09:00	0.0034	0.0041	0.0034	0.0021	0.0039	0.0023	0.0026
20.	10:00	0.0018	0.0042	0.0031	0.0019	0.0029	0.0020	0.0018
21.	11:00	0.0019	0.0033	0.0031	0.0020	0.0029	0.0020	0.0019
22.	12:00	0.0019	0.0022	0.0030	0.0020	0.0027	0.0019	0.0016
23.	13:00	0.0022	0.0023	0.0029	0.0023	0.0039	0.0018	0.0015
24.	14:00	0.0020	0.0025	0.0033	0.0021	0.0026	0.0022	0.0018
ค่าต่ำสุด		0.0018	0.0021	0.0021	0.0011	0.0013	0.0014	0.0015
ค่าสูงสุด		0.0035	0.0048	0.0049	0.0030	0.0045	0.0038	0.0042
ค่าเฉลี่ย		0.0028	0.0031	0.0031	0.0020	0.0027	0.0023	0.0023
มาตรฐาน <sup>(1)</sup>		0.30						

มาตรฐาน: <sup>(1)</sup> ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 12 (พ.ศ. 2538) (ค.ศ. 1995) และฉบับที่ 21 (พ.ศ. 2544) (ค.ศ. 2001)  
เรื่องกำหนดมาตรฐานค่าก๊าซซัลเฟอร์ไดออกไซด์ในบรรยากาศโดยทั่วไปในเวลา 1 ชั่วโมง

Wannasiri S.

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul

General Manager





## TEST REPORT

Report No. : R23-1955/4-10 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู (เหนือ)  
Sampling Date : June 20-27, 2023 โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)  
Type of Sample : Ambient Air Address : ต. แพรกษา ต. บางปูใหม่ และ ต. แพรกษาใหม่  
Job No. : S660441/JUNE อ. เมืองสมุทรปราการ จ. สมุทรปราการ 10540

อันดับ	เวลา	ผลการตรวจวัด						
		บริเวณนิคมอุตสาหกรรมบางปู (ระยะ 2B)						
		SO <sub>2</sub> (ppm)						
		20-21/06/23	21-22/06/23	22-23/06/23	23-24/06/23	24-25/06/23	25-26/06/23	26-27/06/23
1.	11:00	0.0038	0.0034	0.0031	0.0036	0.0036	0.0033	0.0035
2.	12:00	0.0033	0.0030	0.0035	0.0030	0.0034	0.0033	0.0035
3.	13:00	0.0043	0.0033	0.0031	0.0035	0.0033	0.0029	0.0027
4.	14:00	0.0032	0.0030	0.0033	0.0030	0.0030	0.0033	0.0034
5.	15:00	0.0026	0.0029	0.0036	0.0033	0.0029	0.0031	0.0033
6.	16:00	0.0031	0.0030	0.0033	0.0035	0.0035	0.0030	0.0033
7.	17:00	0.0026	0.0028	0.0032	0.0035	0.0029	0.0035	0.0028
8.	18:00	0.0037	0.0027	0.0030	0.0028	0.0033	0.0028	0.0038
9.	19:00	0.0036	0.0036	0.0036	0.0032	0.0031	0.0033	0.0035
10.	20:00	0.0035	0.0029	0.0033	0.0033	0.0033	0.0028	0.0029
11.	21:00	0.0028	0.0028	0.0027	0.0037	0.0037	0.0030	0.0028
12.	22:00	0.0032	0.0034	0.0028	0.0032	0.0031	0.0034	0.0034
13.	23:00	0.0028	0.0033	0.0036	0.0034	0.0030	0.0035	0.0034
14.	00:00	0.0034	0.0032	0.0032	0.0035	0.0036	0.0031	0.0033
15.	01:00	0.0026	0.0028	0.0024	0.0035	0.0036	0.0035	0.0027
16.	02:00	0.0035	0.0033	0.0029	0.0032	0.0033	0.0029	0.0026
17.	03:00	0.0036	0.0035	0.0031	0.0032	0.0029	0.0030	0.0028
18.	04:00	0.0027	0.0036	0.0034	0.0043	0.0035	0.0033	0.0036
19.	05:00	0.0030	0.0034	0.0033	0.0030	0.0029	0.0029	0.0033
20.	06:00	0.0033	0.0030	0.0030	0.0029	0.0033	0.0033	0.0035
21.	07:00	0.0034	0.0029	0.0031	0.0035	0.0036	0.0033	0.0036
22.	08:00	0.0028	0.0032	0.0033	0.0037	0.0035	0.0034	0.0027
23.	09:00	0.0026	0.0034	0.0029	0.0036	0.0034	0.0026	0.0030
24.	10:00	0.0027	0.0028	0.0035	0.0030	0.0035	0.0027	0.0036
ค่าต่ำสุด		0.0026	0.0027	0.0024	0.0028	0.0029	0.0026	0.0026
ค่าสูงสุด		0.0043	0.0036	0.0036	0.0043	0.0037	0.0035	0.0038
ค่าเฉลี่ย		0.0032	0.0031	0.0032	0.0034	0.0033	0.0031	0.0032
มาตรฐาน <sup>(1)</sup>		0.30						

มาตรฐาน: <sup>(1)</sup> ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 12 (พ.ศ. 2538) (ค.ศ. 1995) และฉบับที่ 21 (พ.ศ. 2544) (ค.ศ. 2001)  
เรื่องกำหนดมาตรฐานค่าก๊าซซัลเฟอร์ไดออกไซด์ในบรรยากาศโดยทั่วไปในเวลา 1 ชั่วโมง

Wannasiri S

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul  
General Manager

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## TEST REPORT

Report No. : R23-1955/5-10 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู (เหนือ)  
Sampling Date : June 20-27, 2023 โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)  
Type of Sample : Ambient Air Address : ต. แพรกษา ต. บางปูใหม่ และ ต. แพรกษาใหม่  
Job No. : S660441/JUNE อ. เมืองสมุทรปราการ จ. สมุทรปราการ 10540

อันดับ	เวลา	ผลการตรวจวัด						
		หมู่บ้านพญา 28						
		SO <sub>2</sub> (ppm)						
		20-21/06/23	21-22/06/23	22-23/06/23	23-24/06/23	24-25/06/23	25-26/06/23	26-27/06/23
1.	13:00	0.0024	0.0023	0.0023	0.0034	0.0036	0.0028	0.0025
2.	14:00	0.0022	0.0023	0.0025	0.0045	0.0049	0.0014	0.0045
3.	15:00	0.0024	0.0027	0.0023	0.0065	0.0039	0.0009	0.0033
4.	16:00	0.0023	0.0032	0.0027	0.0037	0.0025	0.0010	0.0044
5.	17:00	0.0024	0.0026	0.0043	0.0037	0.0010	0.0028	0.0034
6.	18:00	0.0025	0.0029	0.0032	0.0044	0.0009	0.0017	0.0047
7.	19:00	0.0041	0.0027	0.0042	0.0057	0.0009	0.0016	0.0033
8.	20:00	0.0031	0.0058	0.0054	0.0035	0.0017	0.0025	0.0018
9.	21:00	0.0051	0.0048	0.0035	0.0046	0.0016	0.0052	0.0017
10.	22:00	0.0029	0.0024	0.0032	0.0046	0.0010	0.0065	0.0017
11.	23:00	0.0041	0.0042	0.0031	0.0034	0.0027	0.0043	0.0025
12.	00:00	0.0028	0.0033	0.0034	0.0022	0.0034	0.0054	0.0024
13.	01:00	0.0027	0.0043	0.0051	0.0023	0.0043	0.0054	0.0018
14.	02:00	0.0046	0.0046	0.0043	0.0033	0.0036	0.0042	0.0035
15.	03:00	0.0044	0.0044	0.0056	0.0014	0.0028	0.0030	0.0042
16.	04:00	0.0043	0.0035	0.0047	0.0015	0.0025	0.0031	0.0051
17.	05:00	0.0033	0.0045	0.0037	0.0037	0.0017	0.0041	0.0044
18.	06:00	0.0022	0.0043	0.0036	0.0035	0.0022	0.0022	0.0036
19.	07:00	0.0020	0.0044	0.0033	0.0026	0.0038	0.0023	0.0033
20.	08:00	0.0021	0.0035	0.0033	0.0025	0.0039	0.0045	0.0025
21.	09:00	0.0021	0.0024	0.0032	0.0025	0.0044	0.0043	0.0029
22.	10:00	0.0024	0.0025	0.0031	0.0017	0.0029	0.0034	0.0030
23.	11:00	0.0022	0.0027	0.0035	0.0037	0.0025	0.0033	0.0026
24.	12:00	0.0023	0.0023	0.0031	0.0025	0.0017	0.0033	0.0023
ค่าต่ำสุด		0.0020	0.0023	0.0023	0.0014	0.0009	0.0009	0.0017
ค่าสูงสุด		0.0051	0.0058	0.0056	0.0065	0.0049	0.0065	0.0051
ค่าเฉลี่ย		0.0030	0.0034	0.0036	0.0034	0.0027	0.0033	0.0031
มาตรฐาน <sup>(1)</sup>		0.30						

มาตรฐาน: <sup>(1)</sup> ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 12 (พ.ศ. 2538) (ค.ศ. 1995) และฉบับที่ 21 (พ.ศ. 2544) (ค.ศ. 2001)  
เรื่องกำหนดมาตรฐานค่าก๊าซซัลเฟอร์ไดออกไซด์ในบรรยากาศโดยทั่วไปในเวลา 1 ชั่วโมง

Wannasiri Suriyawong



Somchai Piyavorasakul  
General Manager





Thai Environmental Technic Limited

บริษัท เทคโนโลยีสิ่งแวดล้อมไทย จำกัด

ORIGINAL

ต้นฉบับ

1/6 Soi Ramkhamhaeng 145, Khwaeng / Khet Saphansung, Bangkok 10240

E-mail : admin@tet1995.com

1/6 ซอยรามคำแหง 145 แขวงสะพานสูง เขตสะพานสูง กรุงเทพมหานคร 10240

Tel : 0-2373-7799 (Auto) Fax : 0-2373-7979

## TEST REPORT

Report No. : R23-1955/6-10 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู (เหนือ)  
Sampling Date : June 20-27, 2023 โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)  
Type of Sample : Ambient Air Address : ต. แพรกษา ต. บางปูใหม่ และ ต. แพรกษาใหม่  
Job No. : S660441/JUNE อ. เมืองสมุทรปราการ จ. สมุทรปราการ 10540

อันดับ	เวลา	ผลการตรวจวัด						
		หมู่บ้านพญา 15						
		SO <sub>2</sub> (ppm)						
		20-21/06/23	21-22/06/23	22-23/06/23	23-24/06/23	24-25/06/23	25-26/06/23	26-27/06/23
1.	12:00	0.0034	0.0026	0.0026	0.0034	0.0027	0.0030	0.0023
2.	13:00	0.0025	0.0026	0.0026	0.0024	0.0027	0.0029	0.0021
3.	14:00	0.0035	0.0026	0.0028	0.0022	0.0027	0.0027	0.0021
4.	15:00	0.0028	0.0030	0.0026	0.0024	0.0019	0.0021	0.0028
5.	16:00	0.0036	0.0035	0.0030	0.0023	0.0024	0.0019	0.0047
6.	17:00	0.0027	0.0029	0.0046	0.0024	0.0018	0.0035	0.0037
7.	18:00	0.0037	0.0032	0.0035	0.0025	0.0021	0.0024	0.0030
8.	19:00	0.0035	0.0030	0.0045	0.0033	0.0019	0.0034	0.0031
9.	20:00	0.0036	0.0053	0.0027	0.0023	0.0050	0.0019	0.0022
10.	21:00	0.0027	0.0043	0.0038	0.0023	0.0040	0.0027	0.0032
11.	22:00	0.0038	0.0027	0.0035	0.0021	0.0027	0.0024	0.0025
12.	23:00	0.0036	0.0045	0.0034	0.0033	0.0030	0.0023	0.0033
13.	00:00	0.0037	0.0036	0.0037	0.0020	0.0035	0.0026	0.0024
14.	01:00	0.0037	0.0046	0.0054	0.0019	0.0033	0.0043	0.0034
15.	02:00	0.0040	0.0029	0.0046	0.0018	0.0035	0.0035	0.0032
16.	03:00	0.0038	0.0047	0.0029	0.0016	0.0034	0.0030	0.0033
17.	04:00	0.0039	0.0038	0.0050	0.0035	0.0035	0.0039	0.0024
18.	05:00	0.0039	0.0048	0.0040	0.0025	0.0036	0.0029	0.0021
19.	06:00	0.0039	0.0046	0.0039	0.0026	0.0044	0.0028	0.0031
20.	07:00	0.0023	0.0047	0.0036	0.0024	0.0034	0.0025	0.0023
21.	08:00	0.0024	0.0038	0.0036	0.0025	0.0034	0.0025	0.0024
22.	09:00	0.0024	0.0027	0.0035	0.0025	0.0032	0.0024	0.0021
23.	10:00	0.0027	0.0028	0.0034	0.0028	0.0044	0.0023	0.0020
24.	11:00	0.0025	0.0030	0.0038	0.0026	0.0031	0.0027	0.0023
ค่าต่ำสุด		0.0023	0.0026	0.0026	0.0016	0.0018	0.0019	0.0020
ค่าสูงสุด		0.0040	0.0053	0.0054	0.0035	0.0050	0.0043	0.0047
ค่าเฉลี่ย		0.0033	0.0036	0.0036	0.0025	0.0032	0.0028	0.0028
มาตรฐาน <sup>(1)</sup>		0.30						

มาตรฐาน: <sup>(1)</sup> ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 12 (พ.ศ. 2538) (ค.ศ. 1995) และฉบับที่ 21 (พ.ศ. 2544) (ค.ศ. 2001)  
เรื่องกำหนดมาตรฐานค่าก๊าซซัลเฟอร์ไดออกไซด์ในบรรยากาศโดยทั่วไปในเวลา 1 ชั่วโมง

Wannasiri S

Wannasiri Suriyawong



Somchai F

Somchai Piyavorasakul

General Manager

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## TEST REPORT

Report No. : R23-1938/9-21 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู  
Sampling Date : June 20-27, 2023 Address : เลขที่ 649 หมู่ 4 ถ. สุขุมวิท ต. บางปูใหม่  
อ. เมือง จ. สมุทรปราการ 10280  
Type of Sample : Ambient Air Contact : Tel. (02) 324 0358, 709 3450  
Job No. : S660386/June Fax. (02) 323 0730

อันดับ	วันที่ตรวจวัด	ผลการตรวจวัด			
		SO <sub>2</sub> <sup>(24 hr)</sup> (ppm)			
		บริเวณพื้นที่โครงการฯ (ที่ตั้งเตาเผา Fluidized Bed)	ชุมชนบ้านคลองเก่า (วัดน้อยสุวรรณาราม)	ชุมชนบ้านคอตตอ (วัดศรีจันทร์ประดิษฐ์)	ชุมชนบ้านบางเมฆขาว (วัดโสการาม)
1.	20-21/06/23	0.0031	0.0034	0.0026	0.0028
2.	21-22/06/23	0.0032	0.0036	0.0025	0.0031
3.	22-23/06/23	0.0032	0.0034	0.0026	0.0031
4.	23-24/06/23	0.0032	0.0035	0.0028	0.0020
5.	24-25/06/23	0.0032	0.0035	0.0027	0.0027
6.	25-26/06/23	0.0033	0.0036	0.0025	0.0023
7.	26-27/06/23	0.0032	0.0036	0.0026	0.0023
Standard <sup>(1)</sup>		0.12			

มาตรฐาน : <sup>(1)</sup> ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 10 (พ.ศ. 2538) (ค.ศ. 1995) และฉบับที่ 24 (พ.ศ. 2547) (ค.ศ. 2004)  
เรื่องกำหนดมาตรฐานคุณภาพอากาศในบรรยากาศโดยทั่วไป  
หมายเหตุ : อ้างอิงวิธีการตรวจวัดตามประกาศกรมควบคุมมลพิษ เรื่องเครื่องวัดค่าเฉลี่ยของก๊าซหรือฝุ่นละอองในบรรยากาศโดยทั่วไป  
ระบบอื่นหรือวิธีอื่นที่กรมควบคุมมลพิษเห็นชอบ (พ.ศ. 2562) (ค.ศ. 2019)

Wannasiri S.

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul  
General Manager



## TEST REPORT

Report No. : R23-1955/7-10 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู (เหนือ)  
Sampling Date : June 20-27, 2023 โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)  
Type of Sample : Ambient Air Address : ต. แพรกษา ต. บางปูใหม่ และ ต. แพรกษาใหม่  
Job No. : S660441/JUNE อ. เมืองสมุทรปราการ จ. สมุทรปราการ 10540

อันดับ	วันที่ตรวจวัด	ผลการตรวจวัด		
		SO <sub>2</sub> (24 hr) (ppm)		
		บริเวณนิคมอุตสาหกรรมบางปู (ระยะ 2B)	หมู่บ้านพฤษภา 28	หมู่บ้านพฤษภา 15
1.	20-21/06/23	0.0032	0.0030	0.0033
2.	21-22/06/23	0.0031	0.0034	0.0036
3.	22-23/06/23	0.0032	0.0036	0.0036
4.	23-24/06/23	0.0034	0.0034	0.0025
5.	24-25/06/23	0.0033	0.0027	0.0032
6.	25-26/06/23	0.0031	0.0033	0.0028
7.	26-27/06/23	0.0032	0.0031	0.0028
Standard <sup>(1)</sup>		0.12		

มาตรฐาน : <sup>(1)</sup> ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 10 (พ.ศ. 2538) (ค.ศ. 1995) และฉบับที่ 24 (พ.ศ. 2547) (ค.ศ. 2004)  
เรื่องกำหนดมาตรฐานคุณภาพอากาศในบรรยากาศโดยทั่วไป

หมายเหตุ : อ้างอิงวิธีการตรวจวัดตามประกาศกรมควบคุมมลพิษ เรื่องเครื่องวัดค่าเฉลี่ยของก๊าซหรือฝุ่นละอองในบรรยากาศโดยทั่วไป  
ระบบอื่นหรือวิธีอื่นที่กรมควบคุมมลพิษเห็นชอบ (พ.ศ. 2562) (ค.ศ. 2019)

Wannasiri S.

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul  
General Manager





## TEST REPORT

Report No. : R23-1938/10-21 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู  
Sampling Date : June 20-27, 2023 Address : เลขที่ 649 หมู่ 4 ถ. สุขุมวิท ต. บางปูใหม่  
อ. เมือง จ. สมุทรปราการ 10280  
Type of Sample : WS & WD Contact : Tel. (02) 324 0358, 709 3450  
Job No. : S660386/June Fax. (02) 323 0730

อันดับ	เวลา	บริเวณที่ตั้งเตาเผา Fluidized Bed (พื้นที่โครงการ)													
		20-21/06/23		21-22/06/23		22-23/06/23		23-24/06/23		24-25/06/23		25-26/06/23		26-27/06/23	
		WS	WD	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD
1.	10:00	2.4	WNW	1.3	WNW	1.3	WSW	1.8	WNW	1.3	WNW	1.8	WNW	2.2	WNW
2.	11:00	1.3	WNW	1.8	W	1.3	WSW	1.8	WSW	1.8	WNW	1.3	WNW	2.2	WNW
3.	12:00	1.8	WNW	1.8	WNW	1.3	SW	1.3	WSW	2.2	WNW	1.3	W	2.2	W
4.	13:00	1.8	WNW	1.8	WNW	1.3	WNW	1.3	SW	2.2	WNW	1.8	WNW	1.8	WNW
5.	14:00	3.4	NNW	1.8	WNW	1.3	WNW	2.2	WNW	2.2	WNW	1.8	WNW	1.8	WNW
6.	15:00	2.9	N	1.8	WNW	0.9	W	1.8	WNW	1.3	SW	1.8	WNW	1.3	NW
7.	16:00	2.5	N	1.3	N	0.9	WSW	1.3	WNW	1.8	SW	1.8	SW	1.3	W
8.	17:00	1.3	WNW	1.8	WNW	0.9	WSW	1.3	WNW	0.9	WSW	1.8	SW	1.3	WSW
9.	18:00	1.8	WSW	1.8	WNW	0.4	WSW	0.9	WNW	1.3	WNW	1.3	WSW	1.3	WSW
10.	19:00	1.3	SW	1.3	WNW	0.4	WNW	0.4	W	0.9	WNW	0.9	WNW	0.9	WSW
11.	20:00	1.3	WSW	1.3	WNW	1.3	NW	1.8	WNW	0.9	W	0.4	WNW	1.8	WSW
12.	21:00	1.3	W	0.9	WNW	1.3	WNW	1.8	WSW	0.9	SW	0.4	SW	0.4	WNW
13.	22:00	1.8	WNW	1.3	WNW	1.3	WNW	2.7	W	0.9	WSW	0.4	WSW	0.9	N
14.	23:00	1.3	SW	2.2	NW	1.3	WNW	1.8	WNW	0.9	WSW	0.4	SW	1.3	N
15.	00:00	1.3	WSW	0.9	WNW	1.8	NW	0.9	WNW	0.9	WNW	0.9	WSW	0.9	N
16.	01:00	1.3	SW	0.4	WNW	1.8	WNW	0.4	WNW	0.9	NW	0.4	WNW	0.9	N
17.	02:00	0.9	WSW	0.4	WNW	1.8	WNW	0.4	WNW	0.4	WNW	0.4	WNW	0.4	N
18.	03:00	0.9	W	0	WNW	1.3	WNW	0.9	WNW	1.3	WNW	0.4	WNW	0.4	N
19.	04:00	0.9	WSW	0	NW	0.9	WNW	0.4	W	0.9	WNW	0.4	NW	0.9	N
20.	05:00	0.9	SW	0.4	WNW	0	NW	0.4	WNW	0.4	W	0.9	WNW	0.9	N
21.	06:00	0.4	WSW	0	WNW	0.4	WNW	0.4	WNW	0.4	WNW	0.9	WNW	0.4	NW
22.	07:00	1.3	WSW	0	WNW	1.3	WNW	0.4	WNW	0.9	WNW	1.3	NW	0.9	NW
23.	08:00	1.3	WNW	0.4	W	1.8	WNW	0.9	WNW	0.9	WNW	0.9	WNW	0.9	N
24.	09:00	0.9	WNW	0.9	WNW	1.3	WNW	1.3	W	1.3	N	1.3	WNW	1.3	WNW
ค่าเฉลี่ย		1.5	-	1.1	-	1.2	-	1.2	-	1.2	-	1.0	-	1.2	-

หมายเหตุ : WS = ความเร็วลม (เมตร/วินาที)

WD = ทิศทางลม

*Wannasiri S.*

Wannasiri Suriyawong



*Somchai P.*

Somchai Piyavorasakul  
General Manager

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## TEST REPORT

Report No. : R23-1938/11-21 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู  
Sampling Date : June 20-27, 2023 Address : เลขที่ 649 หมู่ 4 ถ. สุขุมวิท ต. บางปูใหม่  
อ. เมือง จ. สมุทรปราการ 10280  
Type of Sample : WS & WD Contact : Tel. (02) 324 0358, 709 3450  
Job No. : S660386/June Fax. (02) 323 0730

อันดับ	เวลา	ชุมชนบ้านคลองเก่า (วัดน้อยสุวรรณาราม)													
		20-21/06/23		21-22/06/23		22-23/06/23		23-24/06/23		24-25/06/23		25-26/06/23		26-27/06/23	
		WS	WD	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD
1.	13:00	1.6	WSW	1.8	SW	1.8	W	3.1	N	2.2	WNW	1.3	W	2.7	WNW
2.	14:00	1.3	WSW	1.8	SW	3.1	WNW	1.8	WNW	2.7	WNW	2.7	W	3.6	WNW
3.	15:00	1.8	WSW	1.8	SW	1.8	WSW	1.3	W	2.2	N	2.2	WNW	3.1	WNW
4.	16:00	1.8	WSW	1.3	SW	1.8	WSW	1.3	W	2.7	N	2.7	WNW	3.6	WNW
5.	17:00	2.2	SW	0.9	SW	1.8	SW	1.3	W	3.6	N	0.9	WNW	2.7	WNW
6.	18:00	2.2	WSW	0.9	SW	0.9	SW	1.8	W	3.6	WNW	0.9	W	2.7	WNW
7.	19:00	1.8	WSW	1.3	SW	0.9	SSW	1.8	WNW	2.2	WNW	0.4	W	1.8	WNW
8.	20:00	1.3	W	1.8	SW	4.0	WNW	1.3	WSW	1.3	WNW	0.4	WNW	1.8	WNW
9.	21:00	0.9	WSW	1.3	WSW	3.1	WNW	1.8	WNW	1.3	N	1.3	WNW	2.2	W
10.	22:00	0.9	WSW	2.2	WSW	3.6	WNW	2.2	WNW	1.3	N	0.9	W	2.2	WNW
11.	23:00	1.3	W	1.8	WSW	3.6	WNW	1.3	W	0.9	N	0.4	NNE	2.2	WNW
12.	00:00	1.3	NE	1.3	WSW	1.3	N	3.1	NNW	1.8	NNW	0.0	NNE	1.8	W
13.	01:00	0.0	ENE	1.8	WSW	1.3	WNW	2.2	N	1.8	NNW	0.0	NNE	0.9	W
14.	02:00	0.0	SE	2.2	WNW	1.3	NNW	1.3	N	1.3	N	0.0	NNE	0.4	W
15.	03:00	0.0	SE	2.2	WNW	1.8	N	1.3	NNE	1.8	N	1.3	W	0.4	W
16.	04:00	0.0	SE	2.7	WNW	1.3	N	0.9	N	1.8	NNW	0.9	W	0.4	WSW
17.	05:00	0.0	SE	0.9	WNW	1.3	N	1.8	NNW	1.3	N	1.3	WNW	0.4	W
18.	06:00	0.4	SSW	1.3	NNE	1.8	NNW	1.3	N	2.2	NNW	1.3	W	0.4	W
19.	07:00	0.4	SSW	2.2	NNE	1.8	NNW	1.3	N	1.8	N	1.3	WNW	0.4	W
20.	08:00	0.4	WSW	2.2	N	1.8	N	1.8	N	2.2	N	0.9	W	0.4	W
21.	09:00	0.9	WSW	2.7	NNW	1.8	N	1.8	N	3.1	N	1.3	W	0.4	WNW
22.	10:00	0.9	WSW	2.7	N	2.2	WNW	1.8	N	3.6	NNW	1.3	W	0.4	WNW
23.	11:00	1.3	WNW	1.8	NE	2.2	WNW	2.2	W	3.1	N	2.2	WNW	0.9	WNW
24.	12:00	1.3	WSW	1.3	N	2.7	N	1.8	WNW	2.7	N	2.7	WNW	1.3	WNW
ค่าเฉลี่ย		1.0	-	1.8	-	2.0	-	1.7	-	2.2	-	1.2	-	1.5	-

หมายเหตุ : WS = ความเร็วลม (เมตร/วินาที)  
WD = ทิศทางลม

Wannasiri S.

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul  
General Manager

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## TEST REPORT

Report No. : R23-1938/12-21 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู  
Sampling Date : June 20-27, 2023 Address : เลขที่ 649 หมู่ 4 ถ. สุขุมวิท ต. บางปูใหม่  
อ. เมือง จ. สมุทรปราการ 10280  
Type of Sample : WS & WD Contact : Tel. (02) 324 0358, 709 3450  
Job No. : S660386/June Fax. (02) 323 0730

อันดับ	เวลา	ชุมชนบ้านคอต้อ (วัดศรีจันทร์ประดิษฐ์)													
		20-21/06/23		21-22/06/23		22-23/06/23		23-24/06/23		24-25/06/23		25-26/06/23		26-27/06/23	
		WS	WD	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD
1.	14:00	2.7	W	1.8	WSW	1.8	SW	3.1	WNW	2.7	N	2.2	WNW	1.8	WNW
2.	15:00	3.1	W	1.8	WSW	1.8	WSW	2.2	WNW	1.3	WNW	2.7	WNW	1.8	WNW
3.	16:00	2.7	W	1.8	WSW	1.8	SW	1.8	WSW	1.3	W	2.7	N	1.3	WSW
4.	17:00	1.3	WSW	2.2	SW	1.3	SW	1.8	SW	0.9	WNW	3.1	N	1.3	WSW
5.	18:00	3.6	WNW	1.8	SW	0.9	SW	0.9	SW	1.3	W	4.5	WNW	1.8	WNW
6.	19:00	2.2	WNW	1.8	SW	0.9	SSW	0.9	SSW	1.3	WNW	3.1	WNW	3.6	WNW
7.	20:00	0.9	W	1.3	W	1.8	SW	1.8	WSW	1.8	WNW	1.3	WNW	3.6	WNW
8.	21:00	1.3	WSW	1.3	WSW	1.8	WSW	3.6	WNW	1.3	WSW	2.2	WNW	2.2	WNW
9.	22:00	1.3	W	0.9	W	1.8	WSW	3.1	WNW	2.2	WNW	1.3	NNE	0.9	W
10.	23:00	0.9	W	1.3	SW	2.2	WSW	3.6	WNW	1.8	WNW	1.3	NNW	0.9	W
11.	00:00	0.9	W	4.0	N	1.3	W	2.7	N	2.2	N	1.3	N	0.9	WSW
12.	01:00	0.9	W	0.4	NE	1.3	W	1.3	WNW	2.2	NNW	2.2	N	0.9	W
13.	02:00	0.9	WSW	0.0	SE	1.3	WNW	2.2	NNW	1.8	N	0.9	NNW	0.9	W
14.	03:00	1.3	W	0.0	SE	2.2	WNW	1.3	N	1.8	N	1.3	NNW	0.9	WSW
15.	04:00	1.3	WNW	0.0	SE	2.2	WNW	1.3	N	1.3	N	1.8	NNW	1.3	WNW
16.	05:00	0.9	WNW	0.0	SE	1.8	WNW	1.3	N	1.3	NNW	1.8	N	1.3	W
17.	06:00	1.8	WNW	0.9	SSW	1.3	N	1.3	N	1.3	N	1.8	N	1.3	WNW
18.	07:00	1.3	WNW	0.0	SSW	1.8	N	1.8	N	1.3	N	2.2	N	2.2	WNW
19.	08:00	1.8	WNW	0.4	WSW	2.7	N	2.2	N	1.3	N	2.2	N	1.8	WNW
20.	09:00	1.3	W	0.9	WSW	2.2	N	1.8	N	1.8	N	2.7	N	1.8	W
21.	10:00	1.8	WNW	0.9	WSW	2.7	N	1.8	W	1.8	N	3.1	N	1.3	W
22.	11:00	1.8	WNW	1.3	W	2.7	N	2.2	WNW	1.8	W	3.1	N	1.3	WNW
23.	12:00	1.3	WNW	1.3	WSW	1.8	NE	2.7	N	2.2	WNW	1.8	W	1.8	WNW
24.	13:00	1.3	WSW	1.8	WSW	1.3	NE	2.7	N	1.3	W	2.7	N	1.8	WNW
ค่าเฉลี่ย		1.6	-	1.2	-	1.8	-	2.1	-	1.6	-	2.2	-	1.6	-

หมายเหตุ : WS = ความเร็วลม (เมตร/วินาที)  
WD = ทิศทางลม

*Wannasiri S.*  
Wannasiri Suriyawong



*Somchai P.*  
Somchai Piyavorasakul  
General Manager

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## TEST REPORT

Report No. : R23-1938/13-21

Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย

Report Date : June 30, 2023

Location : นิคมอุตสาหกรรมบางปู

Sampling Date : June 20-27, 2023

Address : เลขที่ 649 หมู่ 4 ถ. สุขุมวิท ต. บางปูใหม่  
อ. เมือง จ. สมุทรปราการ 10280

Type of Sample : WS & WD

Contact : Tel. (02) 324 0358, 709 3450

Job No. : S660386/June

Fax. (02) 323 0730

อันดับ	เวลา	ชุมชนบ้านบางเมฆขาว (วัดโคกกราม)													
		20-21/06/23		21-22/06/23		22-23/06/23		23-24/06/23		24-25/06/23		25-26/06/23		26-27/06/23	
		WS	WD	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD
1.	15:00	0.9	N	1.8	SW	1.3	SW	2.2	WSW	1.8	WSW	1.3	NW	1.8	WNW
2.	16:00	1.3	N	1.8	SW	0.9	SW	1.8	WSW	1.8	WNW	1.8	NW	1.3	WNW
3.	17:00	0.9	N	1.3	SW	0.9	SW	1.3	SW	0.9	N	1.3	NW	1.3	WNW
4.	18:00	1.8	W	1.8	SW	0.9	SW	0.9	SSW	1.3	NW	2.2	WSW	1.3	WSW
5.	19:00	1.3	WSW	1.3	SW	0.4	SW	0.4	SSW	1.3	WSW	1.8	WSW	1.8	WSW
6.	20:00	1.3	SW	1.3	WSW	0.9	SW	1.3	WSW	0.9	WSW	0.9	WSW	2.2	WSW
7.	21:00	1.8	WSW	0.9	SW	1.3	SW	2.2	W	0.9	WSW	0.9	WSW	0.9	WSW
8.	22:00	1.8	WSW	0.9	SW	1.8	WSW	1.8	W	0.9	W	0.4	N	0.4	N
9.	23:00	1.3	WSW	0.9	SW	1.8	SW	1.8	W	0.9	WNW	0.4	NW	0.9	N
10.	00:00	1.3	SW	1.8	WNW	1.8	SW	0.9	WNW	1.8	NNW	0.9	N	1.3	N
11.	01:00	1.3	WSW	0.4	NNE	1.8	WSW	0.4	NW	0.9	NNW	0.4	NW	0.9	N
12.	02:00	0.9	WSW	0.4	NNE	1.8	WSW	0.4	NW	0.4	N	0.4	NW	0.4	N
13.	03:00	0.9	WSW	0.4	NNE	1.3	WSW	0.9	N	0.9	NW	0.4	NNE	0.9	NNW
14.	04:00	0.9	SW	0.0	NNE	1.3	WSW	0.9	N	0.9	N	0.4	NNE	0.9	N
15.	05:00	0.4	WSW	0.0	NNE	0.4	W	0.4	N	0.4	NW	0.4	NW	0.9	N
16.	06:00	0.4	W	0.0	S	0.4	W	0.4	NNW	0.4	NW	0.9	WNW	0.4	NW
17.	07:00	0.4	W	0.0	S	0.9	N	0.4	NNW	0.9	NW	0.9	N	0.9	NNW
18.	08:00	1.3	WNW	0.4	S	1.8	N	0.9	NW	0.9	N	0.9	NW	1.3	N
19.	09:00	1.3	WNW	0.4	W	1.8	N	0.9	NW	0.9	N	1.3	NW	1.3	WNW
20.	10:00	1.3	WNW	0.9	W	1.8	N	1.3	NW	1.3	WNW	1.8	NNW	1.3	NW
21.	11:00	1.8	W	1.3	WSW	1.8	NE	1.8	NW	1.8	NW	2.2	NW	1.8	W
22.	12:00	1.8	WSW	1.3	W	1.8	N	2.2	NNW	1.8	WSW	2.2	NW	2.2	WSW
23.	13:00	1.8	WSW	1.3	SW	1.3	NE	2.2	NW	1.8	WSW	2.2	NW	2.2	WSW
24.	14:00	1.8	WSW	1.3	SW	1.8	WSW	1.8	NW	1.8	WSW	2.2	NW	1.8	WSW
ค่าเฉลี่ย		1.3	-	0.9	-	1.3	-	1.2	-	1.2	-	1.2	-	1.3	-

หมายเหตุ : WS = ความเร็วลม (เมตร/วินาที)

WD = ทิศทางลม

Wannasiri S.

Wannasiri Suriyawong



Somchai F.

Somchai Piyavorasakul

General Manager



## TEST REPORT

Report No. : R23-1938/14-21 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู  
Sampling Date : June 20-27, 2023 Address : เลขที่ 649 หมู่ 4 ถ. สุขุมวิท ต. บางปูใหม่  
อ. เมือง จ. สมุทรปราการ 10280  
Type of Sample : Sound Level Contact : Tel. (02) 324 0358, 709 3450  
Job No. : S660386/June Fax. (02) 323 0730

เวลา (นาฬิกา)	ผลวิเคราะห์ (dB(A))													
	ชุมชนซีทีวีลเลจ													
	20-21/06/23		21-22/06/23		22-23/06/23		23-24/06/23		24-25/06/23		25-26/06/23		26-27/06/23	
	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
08.00	55.0	81.9	51.7	69.6	55.6	77.2	54.6	73.7	63.2	82.2	55.1	64.0	57.7	73.5
09.00	54.8	72.5	52.6	70.9	52.3	70.5	52.9	69.6	58.6	75.2	55.4	65.8	57.0	73.1
10.00	55.8	70.6	56.2	80.7	53.9	71.2	50.7	68.5	57.6	71.1	55.5	69.7	53.7	81.0
11.00	55.5	76.1	52.6	71.5	52.6	71.4	58.1	78.3	58.6	75.2	54.8	66.6	50.6	65.1
12.00	55.4	79.0	52.5	68.5	53.5	74.2	56.1	71.9	57.2	70.3	58.5	88.3	55.1	80.8
13.00	53.4	73.0	51.7	66.7	50.5	68.6	56.7	75.0	57.4	74.2	56.2	87.7	56.6	78.2
14.00	54.0	69.1	51.4	69.5	53.1	73.5	54.8	72.0	56.5	73.4	54.9	63.0	58.2	78.6
15.00	53.4	79.1	51.9	78.7	52.5	76.1	55.0	74.8	58.4	72.7	55.0	65.1	63.2	92.7
16.00	54.8	80.3	52.2	69.8	48.3	68.0	54.9	75.3	64.3	74.7	54.6	63.3	59.1	81.2
17.00	56.2	76.0	53.7	81.0	46.4	66.1	55.4	77.7	61.8	72.5	56.2	77.9	58.7	83.6
18.00	56.3	74.5	50.6	65.1	50.0	71.8	52.0	70.4	61.0	70.8	55.2	79.1	56.0	70.4
19.00	58.3	74.2	55.1	80.8	47.4	70.3	53.6	74.3	58.7	68.7	55.3	64.8	62.0	89.1
20.00	55.8	75.5	56.6	78.2	52.2	67.2	51.6	73.3	59.0	79.2	57.9	83.5	55.2	69.9
21.00	57.3	81.5	54.9	69.2	54.1	69.3	51.6	75.4	57.0	75.1	56.4	71.1	57.3	78.6
22.00	54.2	67.0	54.0	77.1	54.5	67.9	48.9	68.8	57.8	74.5	57.4	74.6	62.2	81.3
23.00	55.0	78.3	52.1	68.6	52.6	69.5	47.3	65.5	56.1	71.2	56.9	74.4	58.5	82.2
00.00	53.0	71.8	55.0	70.5	52.6	73.2	53.9	71.7	64.0	89.4	58.2	74.0	55.8	70.1
01.00	50.7	65.3	52.7	68.1	49.6	71.5	52.5	70.5	63.6	88.1	57.7	73.0	55.5	75.1
02.00	51.2	69.1	52.4	73.0	54.7	72.4	53.0	74.0	64.1	79.4	56.4	72.7	54.6	75.0
03.00	48.0	72.4	54.4	75.3	53.2	75.0	63.9	94.8	61.0	88.1	57.8	73.2	60.5	82.9
04.00	48.4	65.7	54.5	74.6	55.0	81.9	57.1	76.6	58.3	69.9	58.6	77.0	55.5	71.4
05.00	45.2	64.3	57.5	78.9	52.6	70.2	57.8	75.3	63.3	87.7	57.1	69.0	55.5	73.9
06.00	52.4	68.5	58.7	78.4	53.3	69.5	61.3	75.2	56.4	74.5	56.0	73.1	54.3	62.6
07.00	53.1	75.5	57.3	72.7	52.8	73.6	61.3	75.1	56.9	75.2	57.7	82.4	57.4	76.2
Leq 24 hr	54.5	-	54.4	-	52.7	-	56.6	-	60.5	-	56.6	-	58.1	-
Lmax	-	81.9	-	81.0	-	81.9	-	94.8	-	89.4	-	88.3	-	92.7
Ldn	59.0	-	61.4	-	59.6	-	64.1	-	67.8	-	63.7	-	64.3	-
มาตรฐาน <sup>(1)(2)</sup>	70	115	70	115	70	115	70	115	70	115	70	115	70	115
ค่าเฉลี่ย Leq 24 hr	56.2													
ค่าเฉลี่ย Lmax	87.1													
ค่าเฉลี่ย Ldn	62.8													

มาตรฐาน : (1) ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540)(ค.ศ. 1997) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
(2) ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548 (ค.ศ. 2005)

Wannasiri S.

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul  
General Manager

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## TEST REPORT

Report No. : R23-1938/15-21 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู  
Sampling Date : June 20-27, 2023 Address : เลขที่ 649 หมู่ 4 ถ. สุขุมวิท ต. บางปูใหม่  
อ. เมือง จ. สมุทรปราการ 10280  
Type of Sample : Sound Level Contact : Tel. (02) 324 0358, 709 3450  
Job No. : S660386/June Fax. (02) 323 0730

เวลา (นาฬิกา)	ผลวิเคราะห์ (dB(A))													
	เตาเผาการนิคมฯ แกะเขตประกอบการเสรี													
	20-21/06/23		21-22/06/23		22-23/06/23		23-24/06/23		24-25/06/23		25-26/06/23		26-27/06/23	
	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
08.00	64.1	75.4	54.8	88.1	50.1	64.6	53.5	74.7	51.3	72.4	51.5	74.1	53.5	73.3
09.00	59.6	73.4	56.4	77.7	52.1	75.1	57.0	72.0	51.0	72.2	51.9	72.8	48.2	71.7
10.00	64.3	75.9	56.4	90.8	55.4	73.9	57.2	66.1	57.6	75.8	53.8	68.6	49.2	66.8
11.00	62.4	73.3	55.2	74.9	54.2	80.8	56.9	68.1	51.3	69.1	57.7	72.4	49.1	69.7
12.00	58.9	82.4	58.0	82.7	53.6	73.8	56.0	71.4	51.9	81.8	61.5	74.9	47.7	65.6
13.00	62.0	85.8	58.0	74.8	53.1	84.3	58.0	82.2	49.0	63.9	59.7	73.5	53.2	73.6
14.00	61.0	73.5	58.8	77.7	62.3	90.3	64.3	81.9	51.5	70.0	58.5	70.0	47.6	65.4
15.00	54.9	73.4	57.9	71.1	47.9	65.5	61.4	74.1	50.3	69.2	61.9	72.8	45.3	62.5
16.00	55.9	71.8	56.1	79.8	50.9	69.1	62.6	78.2	48.7	64.9	57.1	69.9	45.7	59.5
17.00	53.9	75.0	55.5	75.9	48.4	63.4	62.7	73.9	47.2	65.6	58.4	86.5	46.6	66.8
18.00	54.0	79.4	57.2	75.1	51.7	71.7	63.9	76.4	56.7	76.0	56.9	90.9	47.3	65.7
19.00	49.6	61.7	58.9	79.6	48.4	65.7	59.9	72.0	51.1	72.5	58.6	74.5	50.8	72.3
20.00	45.2	60.6	59.5	82.7	48.9	65.7	54.4	72.1	49.9	75.0	59.1	71.2	43.4	61.3
21.00	61.7	80.9	53.6	75.7	63.4	91.1	62.9	92.4	47.5	68.3	57.3	72.6	42.3	57.6
22.00	69.1	99.7	59.7	73.0	56.9	92.3	58.2	71.1	44.4	62.6	55.8	72.7	47.1	66.1
23.00	57.8	83.2	59.2	71.5	46.8	62.1	61.6	73.7	46.9	64.8	55.9	71.0	43.9	63.8
00.00	64.2	95.4	59.7	70.9	47.0	65.1	54.5	70.8	46.8	65.5	56.0	70.3	42.7	55.0
01.00	55.7	75.3	57.9	85.9	44.8	63.2	60.0	73.5	48.8	71.2	57.3	71.2	44.3	60.3
02.00	60.6	96.0	53.4	71.2	46.7	66.3	57.8	77.6	44.1	61.6	56.3	75.7	44.2	60.5
03.00	65.0	96.7	53.7	70.0	58.7	85.3	55.9	78.3	43.6	70.3	58.4	71.1	46.7	64.5
04.00	64.1	83.6	56.5	73.5	44.1	59.1	61.6	73.8	47.4	66.5	51.3	64.7	50.0	71.1
05.00	59.6	78.6	52.9	74.7	51.6	78.6	57.6	75.1	51.9	80.4	51.3	84.8	52.7	84.9
06.00	60.4	81.7	54.6	71.8	51.5	79.0	56.4	73.3	50.6	67.9	49.4	68.6	52.4	75.1
07.00	66.1	86.8	50.3	68.6	59.7	88.2	51.7	69.7	53.0	78.9	49.7	70.2	51.1	78.6
Leq 24 hr	62.1	-	57.0	-	55.4	-	59.8	-	51.1	-	57.3	-	49.0	-
Lmax	-	99.7	-	90.8	-	92.3	-	92.4	-	81.8	-	90.9	-	84.9
Ldn	69.7	-	63.6	-	60.0	-	65.5	-	55.4	-	62.4	-	55.1	-
มาตรฐาน <sup>(1)(2)</sup>	70	115	70	115	70	115	70	115	70	115	70	115	70	115
ค่าเฉลี่ย Leq 24 hr	56.0													
ค่าเฉลี่ย Lmax	90.4													
ค่าเฉลี่ย Ldn	61.7													

มาตรฐาน : <sup>(1)</sup> ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540)(ค.ศ. 1997) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
<sup>(2)</sup> ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548 (ค.ศ. 2005)

Wannasiri S.

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul  
General Manager

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## TEST REPORT

Report No. : R23-1938/16-21 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู  
Sampling Date : June 20-27, 2023 Address : เลขที่ 649 หมู่ 4 ถ. สุขุมวิท ต. บางปูใหม่  
อ. เมือง จ. สมุทรปราการ 10280  
Type of Sample : Sound Level Contact : Tel. (02) 324 0358, 709 3450  
Job No. : S660386/June Fax. (02) 323 0730

เวลา (นาฬิกา)	ผลวิเคราะห์ (dB(A))													
	จุดระบายน้ำฝน ซอย 3C													
	20-21/06/23		21-22/06/23		22-23/06/23		23-24/06/23		24-25/06/23		25-26/06/23		26-27/06/23	
	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
08.00	51.8	74.4	56.2	72.1	53.9	73.8	50.1	61.2	53.8	77.5	49.3	67.5	46.8	66.4
09.00	49.9	68.2	61.1	74.2	53.3	76.4	49.8	65.9	51.9	76.2	50.3	72.5	45.7	69.7
10.00	58.5	86.5	61.6	75.5	53.2	76.3	49.8	62.6	57.8	82.6	49.5	70.8	50.3	74.6
11.00	51.1	70.0	64.2	76.3	55.1	69.3	50.4	63.0	66.1	79.9	47.9	66.4	41.4	65.3
12.00	58.9	77.1	61.0	75.5	54.0	69.5	56.5	80.6	54.7	69.3	48.2	67.4	47.5	65.6
13.00	68.3	80.6	56.2	75.0	56.2	76.1	51.9	70.1	55.1	70.7	50.1	70.7	50.7	72.6
14.00	57.6	82.4	53.9	76.1	54.6	74.0	52.6	65.2	52.8	65.2	49.9	73.2	48.3	68.3
15.00	57.9	77.1	54.0	77.8	55.2	81.0	55.2	70.1	53.8	67.6	50.8	70.3	45.8	65.1
16.00	55.7	69.2	50.4	65.5	58.1	67.9	52.4	66.2	53.4	63.5	54.5	72.4	48.8	74.8
17.00	56.3	71.1	57.5	81.2	55.7	68.5	53.5	77.9	53.3	69.5	55.0	69.3	47.2	67.2
18.00	60.0	79.9	52.1	67.9	54.9	67.3	55.0	77.8	51.4	63.6	58.8	70.0	45.3	66.3
19.00	56.2	71.4	54.6	72.7	55.7	74.4	54.3	77.8	50.5	67.3	51.6	67.4	48.8	70.2
20.00	54.2	65.7	54.9	73.6	55.2	66.6	52.4	71.6	52.1	65.3	59.6	90.9	52.6	73.3
21.00	54.4	78.2	51.8	67.6	53.2	68.3	50.9	65.7	50.2	64.4	56.2	94.8	49.1	72.4
22.00	53.7	68.8	51.5	73.4	52.4	63.8	51.3	63.5	52.3	73.8	55.3	73.2	44.1	58.1
23.00	56.8	71.9	53.0	71.3	55.5	77.0	52.7	73.1	50.1	64.8	53.2	68.0	49.9	73.4
00.00	58.8	68.8	52.2	72.5	55.0	71.6	55.2	74.0	52.1	66.6	51.7	69.3	41.6	58.1
01.00	57.2	78.7	50.0	64.3	52.2	65.1	52.0	68.9	55.0	62.5	54.4	68.1	45.3	62.3
02.00	59.9	71.2	49.8	72.6	50.6	66.4	52.1	78.3	55.7	67.6	51.2	73.3	39.2	60.6
03.00	62.0	71.2	50.1	70.6	52.1	68.1	55.8	82.7	55.1	67.1	54.9	72.4	41.7	55.8
04.00	62.1	72.5	51.7	70.6	51.2	68.9	52.6	75.4	50.6	65.0	55.6	70.0	49.7	77.7
05.00	60.3	71.8	52.8	71.7	52.7	66.0	52.9	76.3	47.6	79.4	51.3	68.8	44.4	63.9
06.00	60.1	78.5	51.1	75.3	51.5	67.6	57.5	73.2	45.0	59.8	46.4	64.1	47.1	66.5
07.00	57.4	73.5	49.6	70.4	50.7	62.1	52.9	74.1	50.4	77.0	48.3	69.2	49.1	69.4
Leq 24 hr	59.5	-	56.6	-	54.2	-	53.4	-	55.7	-	53.7	-	47.8	-
Lmax	-	86.5	-	81.2	-	81.0	-	82.7	-	82.6	-	94.8	-	77.7
Ldn	66.0	-	59.7	-	59.6	-	60.3	-	59.9	-	59.8	-	53.0	-
มาตรฐาน <sup>(1)(2)</sup>	70	115	70	115	70	115	70	115	70	115	70	115	70	115
ค่าเฉลี่ย Leq 24 hr	54.4													
ค่าเฉลี่ย Lmax	83.8													
ค่าเฉลี่ย Ldn	59.8													

มาตรฐาน : (1) ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540)(ค.ศ. 1997) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
(2) ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548 (ค.ศ. 2005)

Wannasiri S.

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul  
General Manager

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## TEST REPORT

Report No. : R23-1938/17-21 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู  
Sampling Date : June 20-27, 2023 Address : เลขที่ 649 หมู่ 4 ถ. สุขุมวิท ต. บางปูใหม่  
อ. เมือง จ. สมุทรปราการ 10280  
Type of Sample : Sound Level Contact : Tel. (02) 324 0358, 709 3450  
Job No. : S660386/June Fax. (02) 323 0730

เวลา (นาฬิกา)	ผลวิเคราะห์ (dB(A))													
	สถานีบำบัดน้ำ ขอย 1C													
	20-21/06/23		21-22/06/23		22-23/06/23		23-24/06/23		24-25/06/23		25-26/06/23		26-27/06/23	
	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
08.00	58.6	81.8	54.6	74.3	59.5	80.4	59.7	77.7	58.2	72.0	58.5	73.3	58.2	75.8
09.00	58.6	75.4	54.4	78.0	63.9	74.4	61.2	77.4	60.0	77.4	60.2	77.9	57.1	75.3
10.00	58.1	69.0	58.1	79.9	60.6	70.5	63.1	92.2	59.1	73.0	59.8	79.2	56.5	69.2
11.00	58.1	69.1	55.7	74.5	57.5	68.8	64.7	84.4	60.9	82.2	58.6	83.2	57.7	71.9
12.00	59.5	77.3	56.3	72.1	57.7	70.4	61.4	83.5	57.4	79.8	57.4	79.1	57.2	67.0
13.00	57.5	69.8	56.0	69.9	57.8	72.6	59.9	82.5	56.9	68.1	57.9	74.1	58.2	73.1
14.00	56.9	70.7	56.7	76.2	57.7	73.8	57.9	82.4	56.9	68.2	59.7	88.3	57.1	64.4
15.00	57.9	73.2	59.0	77.2	56.2	76.3	57.8	74.1	56.2	66.8	57.5	73.5	57.8	72.3
16.00	57.8	70.5	57.2	82.0	56.2	77.3	57.4	70.1	57.2	72.9	56.4	74.8	56.9	70.4
17.00	57.1	73.2	61.3	84.2	54.0	74.7	58.3	73.6	57.4	68.3	58.5	78.6	56.4	63.6
18.00	57.5	79.0	57.6	73.8	54.1	65.5	60.5	76.1	58.5	82.2	57.9	72.9	55.9	68.9
19.00	56.0	67.0	65.9	83.3	54.4	63.9	60.6	79.8	57.8	79.6	57.9	77.9	54.4	67.3
20.00	54.8	68.8	55.4	74.2	54.8	68.7	61.2	82.9	59.3	80.4	57.6	79.6	54.0	72.1
21.00	54.8	64.8	63.7	81.8	54.6	80.1	60.1	86.7	55.7	67.9	59.3	78.6	54.8	71.3
22.00	56.0	75.3	56.1	69.6	57.5	83.8	61.7	75.8	54.5	77.4	57.0	77.3	55.0	75.1
23.00	54.8	65.7	56.1	71.1	52.9	88.4	59.6	76.8	55.6	69.1	57.0	80.2	56.3	77.3
00.00	55.6	70.4	60.3	84.8	57.1	85.4	58.8	77.6	54.7	67.2	57.4	73.9	56.0	77.8
01.00	54.1	71.1	58.5	78.2	57.4	86.3	58.1	74.6	55.3	75.5	60.7	87.7	56.4	76.0
02.00	55.0	68.5	58.0	77.2	56.9	88.3	57.9	69.7	55.8	70.1	61.6	82.4	57.2	78.1
03.00	57.5	82.0	54.6	66.0	54.7	87.9	59.8	77.2	56.7	80.3	62.5	82.7	57.1	76.2
04.00	53.2	65.9	57.4	75.2	53.8	86.0	59.5	73.1	56.4	79.4	61.5	77.7	62.1	85.7
05.00	53.9	61.6	58.1	82.8	60.7	81.5	61.4	75.9	56.2	80.4	59.3	69.8	58.9	77.2
06.00	55.6	75.6	57.1	72.8	59.6	73.7	58.9	72.6	59.8	79.4	58.9	69.1	58.1	74.7
07.00	57.7	78.7	58.9	79.9	59.9	72.1	58.3	72.1	57.7	77.6	59.5	74.5	58.4	76.9
Leq 24 hr	56.8	-	58.9	-	57.9	-	60.3	-	57.6	-	59.2	-	57.3	-
Lmax	-	82.0	-	84.8	-	88.4	-	92.2	-	82.2	-	88.3	-	85.7
Ldn	62.1	-	64.4	-	63.9	-	66.3	-	63.1	-	66.2	-	64.3	-
มาตรฐาน <sup>(1)(2)</sup>	70	115	70	115	70	115	70	115	70	115	70	115	70	115
ค่าเฉลี่ย Leq 24 hr	58.3													
ค่าเฉลี่ย Lmax	86.2													
ค่าเฉลี่ย Ldn	64.3													

มาตรฐาน : (1) ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540)(ค.ศ. 1997) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
(2) ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548 (ค.ศ. 2005)

Wannasiri S.

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul  
General Manager

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## TEST REPORT

Report No. : R23-1938/18-21 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู  
Sampling Date : June 20-27, 2023 Address : เลขที่ 649 หมู่ 4 ถ. สุขุมวิท ต. บางปูใหม่  
อ. เมือง จ. สมุทรปราการ 10280  
Type of Sample : Sound Level Contact : Tel. (02) 324 0358, 709 3450  
Job No. : S660386/June Fax. (02) 323 0730

เวลา (นาฬิกา)	ผลวิเคราะห์ (dB(A))													
	บริเวณนิคมอุตสาหกรรมบางปู (ที่ตั้งเตาเผา Fluidized Bed)													
	20-21/06/23		21-22/06/23		22-23/06/23		23-24/06/23		24-25/06/23		25-26/06/23		26-27/06/23	
	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
08.00	66.6	73.4	61.6	73.7	46.9	64.8	66.0	74.4	66.6	71.0	66.8	73.4	64.2	70.4
09.00	66.4	70.9	54.5	70.8	46.8	65.5	66.0	72.6	67.6	72.7	66.8	69.4	63.9	67.8
10.00	67.2	77.5	60.0	73.5	48.8	71.2	65.7	69.4	67.3	75.9	66.9	78.4	65.1	77.7
11.00	67.1	78.3	57.8	77.6	44.1	61.6	65.7	72.5	67.0	70.7	66.8	71.1	64.1	75.4
12.00	68.4	86.5	55.9	78.3	43.6	70.3	66.3	80.4	66.9	73.6	66.7	70.4	64.7	86.2
13.00	66.9	73.4	61.6	73.8	47.4	66.5	65.6	76.5	66.6	69.5	66.6	68.0	63.9	77.2
14.00	67.0	74.3	57.6	75.1	51.9	80.4	66.0	74.8	66.7	72.5	66.6	69.2	64.5	81.8
15.00	66.8	70.7	56.4	73.3	50.6	67.9	65.7	71.7	66.9	71.1	66.7	67.9	63.8	77.9
16.00	67.0	74.9	51.7	69.7	53.0	78.9	65.5	72.5	66.8	71.7	66.8	68.9	67.4	85.9
17.00	69.0	74.2	51.3	72.4	51.5	74.1	65.0	69.4	66.8	72.8	66.9	70.3	64.6	82.4
18.00	67.4	77.1	51.0	72.2	51.9	72.8	65.3	69.7	66.4	69.5	67.0	79.4	66.4	78.0
19.00	67.4	74.8	57.6	75.8	53.8	68.6	65.3	68.0	66.6	73.4	66.9	69.6	66.3	74.5
20.00	67.2	72.3	51.3	69.1	57.7	72.4	65.3	69.1	66.6	79.9	66.8	72.1	66.5	74.9
21.00	67.6	75.0	51.9	81.8	61.5	74.9	66.1	78.6	67.2	74.4	67.0	77.3	66.3	74.5
22.00	67.4	75.2	49.0	63.9	66.1	73.8	65.5	71.4	66.8	70.0	67.0	73.1	66.3	69.2
23.00	67.4	81.6	51.5	70.0	66.5	78.3	65.7	81.9	67.0	78.0	65.8	73.1	66.4	82.0
00.00	67.5	79.9	50.3	69.2	66.5	72.7	65.3	66.4	69.4	86.3	63.8	67.2	67.0	75.3
01.00	67.7	72.3	48.7	64.9	66.5	74.6	65.5	70.2	66.8	72.3	63.8	69.2	67.0	79.6
02.00	67.9	77.7	47.2	65.6	66.8	79.5	65.8	70.0	67.1	77.4	64.2	76.0	66.9	80.0
03.00	67.8	78.5	56.7	76.0	66.9	71.4	65.7	70.9	67.0	74.9	64.6	73.9	66.8	69.6
04.00	67.4	69.3	51.1	72.5	66.6	73.4	65.5	71.8	66.7	74.0	64.1	71.7	66.9	73.6
05.00	67.5	69.4	49.9	75.0	66.1	74.0	65.8	75.4	66.6	68.2	64.8	75.6	66.8	71.9
06.00	69.1	92.4	47.5	68.3	66.1	69.8	66.2	73.0	66.8	72.6	65.0	72.0	66.8	69.4
07.00	58.2	71.1	44.4	62.6	66.0	72.6	66.5	71.1	66.8	73.9	64.1	72.2	66.9	70.0
Leq 24 hr	67.4	-	55.6	-	62.9	-	65.7	-	67.0	-	66.1	-	66.0	-
Lmax	-	92.4	-	81.8	-	80.4	-	81.9	-	86.3	-	79.4	-	86.2
Ldn	74.1	-	59.1	-	72.3	-	72.1	-	73.6	-	71.6	-	73.0	-
มาตรฐาน <sup>(1)(2)</sup>	70	115	70	115	70	115	70	115	70	115	70	115	70	115
ค่าเฉลี่ย Leq 24 hr	64.4													
ค่าเฉลี่ย Lmax	84.1													
ค่าเฉลี่ย Ldn	70.8													

มาตรฐาน : (1) ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540)(ค.ศ. 1997) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
(2) ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548 (ค.ศ. 2005)

Wannasiri S.

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul  
General Manager

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## TEST REPORT

Report No. : R23-1938/19-21 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู  
Sampling Date : June 20-27, 2023 Address : เลขที่ 649 หมู่ 4 ถ. สุขุมวิท ต. บางปูใหม่  
อ. เมือง จ. สมุทรปราการ 10280  
Type of Sample : Sound Level Contact : Tel. (02) 324 0358, 709 3450  
Job No. : S660386/June Fax. (02) 323 0730

เวลา (นาฬิกา)	ผลวิเคราะห์ (dB(A))													
	ชุมชนบ้านคลองแก้ว (วัดน้อยสุวรรณาราม)													
	20-21/06/23		21-22/06/23		22-23/06/23		23-24/06/23		24-25/06/23		25-26/06/23		26-27/06/23	
	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
08.00	61.9	83.8	57.8	81.4	61.2	76.4	55.9	76.5	61.9	83.1	54.4	69.8	57.8	79.8
09.00	62.0	74.2	56.2	74.7	61.0	74.4	56.0	78.1	60.8	78.5	55.8	70.6	57.0	77.0
10.00	63.1	77.1	55.9	73.7	61.2	75.2	57.9	77.9	61.9	85.1	54.0	71.9	56.8	79.1
11.00	62.5	82.6	56.7	76.8	61.5	76.0	55.5	71.3	61.2	76.7	56.5	81.3	58.2	79.1
12.00	63.1	74.5	55.9	73.2	61.4	76.0	57.4	73.9	61.0	77.7	57.4	74.3	55.8	76.5
13.00	62.7	81.1	55.7	78.6	61.5	75.9	56.7	72.2	61.5	79.7	59.5	77.7	57.8	77.4
14.00	62.5	74.4	56.5	73.9	60.6	71.4	57.2	71.6	62.1	81.8	61.1	78.2	54.5	72.3
15.00	62.0	75.1	55.0	70.1	62.1	80.0	59.1	74.1	62.0	77.6	61.6	75.8	54.7	72.8
16.00	62.6	75.0	56.2	75.3	62.6	79.5	59.7	73.5	61.5	78.5	62.5	78.1	58.1	79.4
17.00	63.3	70.8	56.4	69.4	62.3	78.3	60.8	72.7	62.0	85.7	62.9	75.7	57.3	78.6
18.00	63.5	80.7	56.9	74.2	62.1	83.9	61.4	77.6	61.2	81.7	62.9	75.2	55.9	72.3
19.00	63.8	81.7	59.0	77.4	61.6	78.5	62.2	78.4	61.2	83.8	62.7	79.5	58.1	75.2
20.00	62.0	85.2	59.7	77.2	61.1	72.7	61.9	75.6	62.2	85.7	63.0	83.9	58.4	72.6
21.00	61.9	73.8	63.1	77.2	61.5	79.6	61.5	76.8	59.6	74.8	62.7	82.0	60.5	75.2
22.00	61.1	78.7	67.9	89.9	60.4	79.6	61.1	75.0	60.7	84.7	62.4	74.5	62.1	81.6
23.00	61.5	75.5	61.9	80.4	60.2	75.9	60.7	78.3	58.7	80.2	61.9	76.3	62.8	80.1
00.00	62.3	82.3	61.3	81.3	59.3	72.7	61.5	86.0	57.4	74.1	61.8	77.4	62.8	75.4
01.00	61.7	76.9	60.7	72.9	59.4	79.4	61.0	76.5	57.9	73.0	61.9	82.7	63.6	80.2
02.00	61.2	81.8	60.8	74.5	59.3	84.4	61.6	77.4	58.1	83.9	61.9	76.9	63.1	80.2
03.00	60.1	74.9	61.9	77.0	57.0	75.0	60.6	76.4	57.0	72.6	62.7	79.9	62.2	76.9
04.00	61.2	81.8	62.4	75.2	56.8	75.4	61.5	79.6	57.4	74.3	61.1	75.4	62.5	82.1
05.00	61.0	84.1	60.9	71.9	58.7	86.5	61.0	73.5	56.3	79.7	59.8	73.6	61.7	80.3
06.00	58.0	74.6	61.4	76.3	57.2	72.2	61.5	79.0	56.2	80.1	58.4	75.0	62.4	79.8
07.00	56.5	70.0	61.9	80.6	57.2	79.8	60.9	75.2	54.7	70.8	60.0	81.1	62.4	80.7
Leq 24 hr	62.0	-	60.6	-	60.6	-	60.2	-	60.3	-	61.1	-	60.3	-
Lmax	-	85.2	-	89.9	-	86.5	-	86.0	-	85.7	-	83.9	-	82.1
Ldn	67.7	-	68.8	-	65.8	-	67.4	-	65.0	-	67.8	-	68.6	-
มาตรฐาน <sup>(1)(2)</sup>	70	115	70	115	70	115	70	115	70	115	70	115	70	115
ค่าเฉลี่ย Leq 24 hr	60.7													
ค่าเฉลี่ย Lmax	85.6													
ค่าเฉลี่ย Ldn	67.3													

มาตรฐาน : (1) ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540)(ค.ศ. 1997) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
(2) ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548 (ค.ศ. 2005)

Wannasiri S.

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul

General Manager

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## TEST REPORT

Report No. : R23-1938/20-21 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู  
Sampling Date : June 20-27, 2023 Address : เลขที่ 649 หมู่ 4 ถ. สุขุมวิท ต. บางปูใหม่  
อ. เมือง จ. สมุทรปราการ 10280  
Type of Sample : Sound Level Contact : Tel. (02) 324 0358, 709 3450  
Job No. : S660386/June Fax. (02) 323 0730

เวลา (นาฬิกา)	ผลวิเคราะห์ (dB(A))													
	ชุมชนบ้านคอต (วัดศรีจันทร์ประดิษฐ์)													
	20-21/06/23		21-22/06/23		22-23/06/23		23-24/06/23		24-25/06/23		25-26/06/23		26-27/06/23	
	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
08.00	60.5	80.3	58.8	73.8	57.6	84.0	62.9	75.0	58.8	65.7	58.1	73.8	57.8	73.1
09.00	60.1	83.4	58.2	73.5	58.2	77.3	64.0	79.0	58.3	65.8	58.5	72.5	58.6	74.1
10.00	59.9	91.5	59.2	80.5	60.7	82.1	64.1	82.4	58.7	67.1	58.0	68.5	58.8	70.7
11.00	61.5	81.4	58.6	70.7	57.6	74.0	59.5	79.8	58.6	72.6	58.5	80.9	57.8	67.7
12.00	64.0	90.3	59.2	71.1	58.1	75.1	57.5	74.3	58.7	73.1	58.2	68.8	56.6	70.1
13.00	58.0	73.6	59.9	75.3	57.5	69.4	58.0	72.0	57.9	59.6	57.9	76.0	56.0	70.0
14.00	57.5	70.4	59.8	78.4	57.3	72.5	59.1	79.6	58.0	67.0	58.1	73.4	56.1	72.3
15.00	57.5	69.3	59.3	72.6	57.5	70.3	58.7	71.3	58.2	62.2	58.1	73.5	56.4	70.7
16.00	57.7	68.3	60.2	77.4	56.9	66.0	57.4	72.6	58.3	65.2	57.8	72.4	56.0	66.4
17.00	58.5	69.6	59.4	72.7	56.4	63.0	58.2	73.8	58.6	68.7	57.8	75.4	56.5	66.8
18.00	59.5	69.4	58.9	69.6	55.9	59.4	57.4	70.1	57.7	60.0	58.6	82.5	56.5	66.3
19.00	59.1	68.8	58.6	69.7	55.9	60.7	58.4	75.8	57.7	67.9	58.4	74.8	56.9	63.7
20.00	58.2	68.8	58.7	72.9	65.9	87.9	58.0	74.7	58.2	72.1	60.6	80.7	56.6	62.1
21.00	58.1	70.5	59.2	75.9	64.4	74.4	58.0	74.1	58.2	67.6	61.5	89.4	56.7	72.7
22.00	57.7	70.6	58.9	69.9	62.3	74.8	61.5	83.8	58.4	63.7	59.9	81.3	58.1	73.1
23.00	58.1	70.6	59.1	71.7	61.4	80.1	58.8	73.3	58.1	61.6	60.6	73.7	56.2	67.9
00.00	59.1	72.5	59.0	68.9	62.5	75.5	58.2	70.0	58.5	70.0	59.6	78.9	56.2	68.4
01.00	59.2	72.6	59.4	79.8	63.9	75.3	59.2	80.9	59.0	75.0	58.5	75.4	57.3	82.4
02.00	58.7	71.9	58.4	67.4	64.3	84.7	60.4	82.4	59.2	75.9	57.3	67.7	56.8	73.4
03.00	58.2	71.7	58.1	72.3	65.3	70.2	59.0	74.3	59.2	74.1	58.0	72.6	57.7	75.8
04.00	58.3	69.2	57.9	73.3	64.0	67.4	59.2	80.9	59.5	78.8	58.9	70.9	58.7	78.8
05.00	57.9	68.7	61.4	94.7	65.0	77.7	59.1	74.4	59.5	80.3	58.4	68.7	57.6	73.2
06.00	58.4	70.9	59.1	88.5	63.7	78.3	58.9	81.5	60.9	79.5	58.1	75.6	56.8	67.9
07.00	58.6	72.7	56.7	74.0	62.9	80.9	59.9	76.3	58.9	73.0	58.6	77.9	57.7	72.9
Leq 24 hr	59.2	-	59.1	-	61.9	-	59.9	-	58.7	-	58.8	-	57.2	-
Lmax	-	90.3	-	94.7	-	87.9	-	83.8	-	80.3	-	89.4	-	82.4
Ldn	65.0	-	65.5	-	69.8	-	66.0	-	65.5	-	65.3	-	63.7	-
มาตรฐาน <sup>(1)(2)</sup>	70	115	70	115	70	115	70	115	70	115	70	115	70	115
ค่าเฉลี่ย Leq 24 hr	59.3													
ค่าเฉลี่ย Lmax	87.0													
ค่าเฉลี่ย Ldn	65.8													

มาตรฐาน : (1) ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540)(ค.ศ. 1997) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
(2) ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548 (ค.ศ. 2005)

Wannasiri S.

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul

General Manager

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## TEST REPORT

Report No. : R23-1938/21-21 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู  
Sampling Date : June 20-27, 2023 Address : เลขที่ 649 หมู่ 4 ถ. สุขุมวิท ต. บางปูใหม่  
อ. เมือง จ. สมุทรปราการ 10280  
Type of Sample : Sound Level Contact : Tel. (02) 324 0358, 709 3450  
Job No. : S660386/June Fax. (02) 323 0730

เวลา (นาฬิกา)	ผลวิเคราะห์ (dB(A))													
	หมู่บ้านยั่งยืน													
	20-21/06/23		21-22/06/23		22-23/06/23		23-24/06/23		24-25/06/23		25-26/06/23		26-27/06/23	
	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
08.00	57.2	75.2	55.2	70.7	59.9	78.8	57.5	83.0	56.5	72.2	55.2	65.9	56.7	75.8
09.00	56.3	70.3	53.3	61.7	61.6	72.2	55.8	73.6	57.8	71.5	55.8	75.1	57.1	71.3
10.00	55.5	71.7	56.7	76.8	65.3	91.3	54.7	59.3	59.0	71.3	53.8	67.9	57.4	73.2
11.00	58.0	74.8	54.8	74.6	64.5	89.4	55.8	75.2	60.0	72.5	54.2	68.7	56.9	74.0
12.00	56.2	70.7	53.9	65.4	60.5	82.0	54.3	69.2	62.5	81.6	54.5	76.5	58.4	82.6
13.00	56.9	75.5	54.3	68.4	58.5	75.2	53.8	68.4	59.1	71.1	57.7	81.1	57.3	71.4
14.00	56.9	75.5	53.2	72.0	61.1	76.0	55.4	75.2	56.4	76.2	56.5	76.5	57.9	73.9
15.00	63.2	71.8	53.7	66.4	59.5	81.3	56.0	77.9	57.3	74.3	60.4	90.3	58.5	71.4
16.00	54.9	70.7	53.9	67.0	60.6	79.7	57.1	77.7	56.6	73.8	57.8	76.2	57.7	72.6
17.00	55.3	66.9	53.4	65.3	58.5	75.6	55.7	75.2	55.1	78.6	56.5	71.2	58.6	72.4
18.00	57.9	79.5	56.0	76.0	57.7	70.6	55.8	72.0	59.0	89.4	59.2	80.7	56.9	69.3
19.00	58.3	79.2	56.0	80.3	57.7	77.7	57.1	76.9	61.2	78.5	57.7	76.3	58.5	78.1
20.00	58.4	72.3	55.7	73.5	56.5	80.9	56.7	74.6	60.4	71.1	63.1	76.0	58.0	71.7
21.00	56.5	79.2	56.9	80.0	57.4	69.8	57.2	74.8	54.6	66.5	59.5	70.4	58.5	72.5
22.00	55.8	72.2	55.9	72.0	56.8	74.1	60.8	85.4	58.8	77.7	59.3	79.1	57.1	72.4
23.00	57.8	72.6	56.6	76.3	56.2	66.7	58.0	74.5	53.9	72.1	58.3	80.5	56.6	77.0
00.00	59.7	87.1	57.0	75.0	57.3	74.1	57.4	74.9	55.1	74.4	58.7	78.5	59.2	81.8
01.00	66.1	92.3	56.6	69.9	56.6	69.0	56.6	79.1	56.7	77.3	58.6	89.0	59.2	76.1
02.00	66.5	84.5	57.7	74.8	56.2	67.5	56.4	71.8	54.1	71.2	57.5	70.8	60.0	77.3
03.00	64.7	87.4	58.0	76.9	56.5	76.0	57.7	77.0	54.7	72.2	61.5	83.6	57.3	73.9
04.00	56.6	75.5	59.5	78.5	56.4	66.8	56.8	77.8	56.7	73.7	55.0	70.7	59.0	73.0
05.00	56.7	80.1	58.1	76.3	56.1	65.7	56.7	75.3	54.9	66.6	57.3	70.8	61.2	82.4
06.00	54.6	75.8	57.5	73.2	55.6	69.7	56.1	77.5	54.1	72.0	56.8	72.6	57.9	71.1
07.00	53.2	64.5	58.6	74.0	54.9	67.9	55.9	69.3	54.1	68.4	57.8	73.3	60.1	75.6
Leq 24 hr	59.9	-	56.3	-	59.4	-	56.7	-	57.8	-	58.2	-	58.3	-
Lmax	-	92.3	-	80.3	-	91.3	-	85.4	-	89.4	-	90.3	-	82.6
Ldn	68.1	-	63.7	-	63.7	-	63.8	-	62.7	-	64.8	-	65.1	-
มาตรฐาน <sup>(1)(2)</sup>	70	115	70	115	70	115	70	115	70	115	70	115	70	115
ค่าเฉลี่ย Leq 24 hr	58.1													
ค่าเฉลี่ย Lmax	87.4													
ค่าเฉลี่ย Ldn	64.6													

มาตรฐาน : (1) ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540)(ค.ศ. 1997) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
(2) ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548 (ค.ศ. 2005)

Wannasiri S.

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul  
General Manager

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1/6 Soi Ramkhamhaeng 145, Khwaeng / Khet Saphansung, Bangkok 10240  
1/6 ซอยรามคำแหง 145 แขวงสะพานสูง เขตสะพานสูง กรุงเทพมหานคร 10240

E-mail : admin@tet1995.com

Tel : 0-2373-7799 (Auto) Fax : 0-2373-7979

## TEST REPORT

Report No. : R23-1955/8-10 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู (เหนือ)  
Sampling Date : June 20-27, 2023 โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)  
Type of Sample : Sound Level Address : ต. แพรกษา ต. บางปูใหม่ และ ต. แพรกษาใหม่  
Job No. : S660441/JUNE อ. เมืองสมุทรปราการ จ. สมุทรปราการ 10540

เวลา (นาฬิกา)	ผลวิเคราะห์ (dB(A))													
	บริเวณนิคมอุตสาหกรรมบางปู (ระยะ 2B)													
	20-21/06/23		21-22/06/23		22-23/06/23		23-24/06/23		24-25/06/23		25-26/06/23		26-27/06/23	
	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
08.00	50.7	73.3	49.1	59.9	50.8	66.2	51.1	63.5	49.5	67.5	51.4	61.1	49.4	56.9
09.00	49.0	62.6	49.2	63.4	50.7	68.8	53.4	69.1	48.2	63.5	51.2	61.3	49.9	60.8
10.00	49.2	66.1	49.5	63.4	50.5	62.8	57.9	73.3	50.9	69.6	51.5	66.9	49.3	54.0
11.00	49.9	65.8	50.2	60.4	49.7	61.7	52.3	68.0	51.2	67.0	51.6	62.2	49.3	54.5
12.00	49.8	61.7	49.8	61.9	49.9	62.2	51.9	66.4	53.7	78.8	52.5	67.7	49.0	61.6
13.00	49.9	64.7	50.0	62.9	50.1	63.3	53.3	78.9	52.9	69.1	52.8	66.8	49.6	58.8
14.00	48.7	59.1	49.3	60.8	50.2	64.4	55.7	69.7	52.4	63.2	49.6	63.2	50.0	60.8
15.00	49.0	62.2	49.1	61.4	49.6	68.8	54.4	66.9	53.5	75.2	50.6	67.6	50.0	60.6
16.00	49.1	62.7	48.2	58.8	49.5	61.8	50.1	68.9	52.9	62.1	50.4	67.1	50.6	60.0
17.00	48.6	67.2	65.7	86.6	49.8	63.7	49.9	65.6	50.6	69.1	50.8	67.4	49.9	62.4
18.00	49.1	65.6	59.9	86.8	49.5	63.3	51.6	70.5	50.7	65.2	49.1	61.3	50.2	60.8
19.00	48.4	59.7	56.0	73.6	50.1	64.1	51.9	65.8	52.0	73.7	48.9	56.8	51.1	65.4
20.00	48.5	60.2	59.5	80.2	49.9	60.6	50.1	66.9	50.1	64.2	49.2	59.0	52.1	65.2
21.00	48.7	60.5	61.2	73.5	49.5	60.7	49.0	65.0	51.0	65.5	49.9	60.6	52.9	64.9
22.00	48.5	56.3	60.0	70.4	50.8	78.5	50.0	70.2	49.1	63.2	49.8	61.6	56.7	83.5
23.00	48.5	57.3	56.3	65.7	50.3	67.8	49.7	68.2	48.1	66.1	49.8	61.4	59.6	84.3
00.00	49.4	79.1	56.0	70.1	51.0	62.7	51.6	67.8	52.1	65.5	50.1	54.3	57.2	79.2
01.00	49.1	62.4	56.2	70.8	51.1	70.3	49.4	65.4	51.7	63.1	50.6	66.0	56.1	64.3
02.00	51.4	70.5	55.4	75.4	49.6	66.9	50.6	66.2	51.9	65.6	49.9	57.3	56.7	71.0
03.00	54.1	77.6	53.9	71.9	48.9	61.9	49.0	63.5	50.8	62.7	50.1	59.8	55.4	68.1
04.00	53.8	72.5	51.8	70.5	48.4	62.0	50.3	67.7	50.4	66.6	50.5	65.7	54.6	63.6
05.00	54.4	74.3	50.1	62.6	50.6	64.8	48.6	66.1	49.2	63.5	49.7	59.7	54.0	67.2
06.00	49.4	65.3	51.9	65.9	49.9	63.5	48.7	62.2	49.4	62.4	50.1	60.3	55.5	67.2
07.00	50.2	66.7	51.4	66.9	51.3	68.0	49.4	62.3	49.8	56.7	50.4	62.2	54.4	60.5
Leq 24 hr	50.3	-	56.8	-	50.1	-	52.0	-	51.2	-	50.6	-	53.9	-
Lmax	-	79.1	-	86.8	-	78.5	-	78.9	-	78.8	-	67.7	-	84.3
Ldn	57.8	-	62.3	-	56.6	-	56.9	-	57.1	-	56.6	-	62.4	-
มาตรฐาน <sup>(1)(2)</sup>	70	115	70	115	70	115	70	115	70	115	70	115	70	115
ค่าเฉลี่ย Leq 24 hr	52.1													
ค่าเฉลี่ย Lmax	79.2													
ค่าเฉลี่ย Ldn	58.5													

มาตรฐาน : <sup>(1)</sup> ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540)(ค.ศ. 1997) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
<sup>(2)</sup> ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548 (ค.ศ. 2005)

Wannasiri S.

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul  
General Manager

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## TEST REPORT

Report No. : R23-1955/9-10 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู (เหนือ)  
Sampling Date : June 20-27, 2023 โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)  
Type of Sample : Sound Level Address : ต. แพรกษา ต. บางปูใหม่ และ ต. แพรกษาใหม่  
Job No. : S660441/JUNE อ. เมืองสมุทรปราการ จ. สมุทรปราการ 10540

เวลา (นาฬิกา)	ผลวิเคราะห์ (dB(A))													
	หมู่บ้านพักอาศัย 28													
	20-21/06/23		21-22/06/23		22-23/06/23		23-24/06/23		24-25/06/23		25-26/06/23		26-27/06/23	
	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
08.00	56.7	80.6	47.9	62.1	51.7	67.5	58.4	74.1	51.6	63.9	46.6	64.5	57.0	79.5
09.00	53.1	65.9	48.6	62.3	52.5	63.4	56.0	82.2	53.1	67.8	47.5	68.1	55.2	77.4
10.00	55.3	79.3	48.0	59.3	53.5	70.7	50.4	65.1	52.8	67.4	50.5	66.6	53.7	66.6
11.00	58.4	73.6	48.7	63.7	53.8	69.7	53.5	65.7	54.5	79.5	52.2	67.4	56.3	84.2
12.00	56.4	78.6	49.5	60.1	55.9	77.8	54.7	65.8	52.7	77.3	53.0	71.5	54.2	75.4
13.00	54.9	68.3	54.3	69.5	56.7	76.8	55.3	66.5	55.0	84.2	54.6	72.4	53.3	70.2
14.00	60.8	81.9	54.9	64.2	55.4	75.3	55.2	69.5	52.9	74.7	58.1	75.1	54.6	83.6
15.00	54.5	69.5	54.0	65.7	57.8	77.8	55.9	66.0	52.2	67.8	56.7	74.5	51.8	74.2
16.00	54.8	75.1	54.9	65.2	55.0	64.5	53.5	63.4	53.8	80.6	57.7	75.5	51.6	72.9
17.00	56.9	82.0	55.3	73.0	62.7	82.7	52.8	68.8	52.1	69.4	55.8	74.0	51.5	67.5
18.00	55.6	76.7	54.4	66.2	56.5	78.9	50.7	63.8	51.7	79.3	52.6	71.3	50.1	67.3
19.00	55.8	77.7	53.4	65.9	57.9	79.4	50.8	65.4	49.7	63.9	55.6	72.2	49.3	67.2
20.00	53.0	67.3	53.9	63.8	52.0	63.6	51.0	64.9	49.9	71.2	52.5	72.6	58.8	83.6
21.00	50.8	65.1	52.9	66.5	50.0	62.3	54.6	66.7	49.6	69.9	52.5	74.6	49.3	61.2
22.00	48.7	62.1	52.8	63.9	50.9	70.4	51.9	62.8	48.6	65.0	54.1	72.6	49.2	65.1
23.00	47.4	61.5	51.6	64.2	49.9	63.6	51.4	63.4	48.9	63.8	53.2	71.4	49.5	66.2
00.00	49.5	64.3	51.1	61.3	57.1	73.6	49.3	64.6	48.6	68.6	54.8	75.0	49.8	69.4
01.00	50.8	71.7	57.0	65.6	65.2	87.7	49.2	63.0	48.6	65.1	53.9	73.3	47.1	63.5
02.00	49.6	64.2	51.1	65.6	58.1	73.5	50.3	70.7	48.3	65.6	53.2	72.4	46.8	60.8
03.00	47.5	66.9	53.0	64.2	56.0	72.6	49.5	65.2	45.7	63.2	52.4	70.9	48.8	62.4
04.00	46.7	59.5	51.4	63.1	54.6	68.9	48.3	59.1	46.2	63.3	52.7	81.7	47.4	63.3
05.00	46.2	59.6	51.7	61.9	56.4	72.2	50.1	65.3	46.9	62.7	52.8	73.2	46.8	63.8
06.00	51.9	73.2	51.8	68.0	58.2	77.6	50.4	65.7	46.5	61.7	53.7	76.1	48.0	71.5
07.00	47.8	65.1	51.1	63.9	58.0	73.4	50.6	64.0	46.9	72.5	57.4	78.5	47.1	59.5
Leq 24 hr	54.4	-	52.9	-	57.4	-	53.1	-	51.1	-	54.3	-	52.6	-
Lmax	-	82.0	-	73.0	-	87.7	-	82.2	-	84.2	-	81.7	-	84.2
Ldn	57.4	-	59.3	-	64.7	-	57.4	-	55.2	-	60.1	-	56.1	-
มาตรฐาน <sup>(1)(2)</sup>	70	115	70	115	70	115	70	115	70	115	70	115	70	115
ค่าเฉลี่ย Leq 24 hr	53.7													
ค่าเฉลี่ย Lmax	82.1													
ค่าเฉลี่ย Ldn	58.6													

มาตรฐาน : <sup>(1)</sup> ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540)(ค.ศ. 1997) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
<sup>(2)</sup> ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548 (ค.ศ. 2005)

Wannasiri S.

Wannasiri Suriyawong



Somchai P.

Somchai Piyavorasakul

General Manager

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## TEST REPORT

Report No. : R23-1955/10-10 Customer Name : การนิคมอุตสาหกรรมแห่งประเทศไทย  
Report Date : June 30, 2023 Location : นิคมอุตสาหกรรมบางปู (เหนือ)  
Sampling Date : June 20-27, 2023 โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)  
Type of Sample : Sound Level Address : ต. แพรกษา ต. บางปูใหม่ และ ต. แพรกษาใหม่  
Job No. : S660441/JUNE อ. เมืองสมุทรปราการ จ. สมุทรปราการ 10540

เวลา (นาฬิกา)	ผลวิเคราะห์ (dB(A))													
	หมู่บ้านพญา 15													
	20-21/06/23		21-22/06/23		22-23/06/23		23-24/06/23		24-25/06/23		25-26/06/23		26-27/06/23	
	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
08.00	54.5	71.0	62.0	74.1	50.2	73.6	57.6	77.2	55.1	70.3	58.1	73.5	57.1	73.5
09.00	55.4	72.0	61.0	74.4	51.3	71.5	57.4	74.6	54.3	69.5	55.6	74.5	59.6	64.0
10.00	57.2	74.3	56.7	71.6	53.4	67.7	55.8	69.3	55.3	70.5	56.6	74.0	54.9	66.0
11.00	54.8	73.5	58.0	71.2	48.3	61.3	60.0	78.6	55.5	71.0	56.0	67.6	57.8	76.6
12.00	56.3	74.8	59.1	73.7	51.0	68.3	57.0	70.5	56.7	70.5	56.1	70.1	52.7	63.7
13.00	54.4	69.6	58.1	74.7	55.6	71.6	55.2	70.7	54.2	65.2	55.0	69.1	59.0	74.7
14.00	55.4	72.1	58.3	73.8	54.7	68.3	54.7	69.1	56.3	73.1	55.7	73.4	58.5	76.1
15.00	54.4	66.0	57.7	70.5	52.4	62.1	55.6	71.6	56.5	78.9	54.1	72.5	56.0	77.7
16.00	54.7	71.3	59.1	82.4	48.4	67.2	58.7	76.2	57.0	71.1	53.9	74.7	56.7	74.2
17.00	55.7	70.7	57.8	73.9	51.7	74.0	54.9	72.7	56.7	73.4	53.7	68.8	56.6	74.0
18.00	55.7	69.1	57.1	77.8	51.6	63.9	54.3	68.5	58.1	71.9	53.4	69.5	58.0	70.8
19.00	57.4	74.6	57.8	76.1	52.2	65.2	57.3	73.6	57.4	72.6	54.7	73.6	58.5	70.0
20.00	57.9	80.2	56.0	72.0	51.5	68.7	56.1	72.2	58.2	73.0	53.9	71.4	59.9	73.9
21.00	57.5	71.0	53.7	70.0	62.6	77.8	54.8	71.6	59.2	72.9	56.5	72.1	59.6	73.2
22.00	57.7	72.4	55.1	73.1	62.2	81.9	57.9	77.2	58.5	73.3	57.7	77.0	57.0	69.5
23.00	57.9	77.1	52.5	66.9	56.7	72.7	57.7	74.9	68.6	84.5	56.4	73.8	54.4	73.7
00.00	58.1	72.0	52.1	67.0	56.3	71.8	54.9	74.2	59.3	72.1	54.1	78.3	52.8	69.2
01.00	58.1	72.8	55.0	73.5	57.4	81.3	54.6	74.3	58.6	78.3	54.1	77.9	54.5	74.9
02.00	60.1	79.0	53.6	69.7	58.9	73.7	56.4	75.6	58.5	73.1	54.5	72.7	54.9	75.1
03.00	60.0	72.9	50.4	64.5	58.9	69.1	54.9	71.1	58.4	79.8	51.8	70.3	53.1	70.1
04.00	58.6	73.9	53.3	69.5	62.6	80.0	57.0	73.4	58.9	72.9	57.1	78.9	54.5	76.9
05.00	63.1	82.1	56.0	74.5	63.5	79.4	55.8	75.5	58.2	74.8	56.6	73.4	56.2	75.1
06.00	60.7	75.3	53.5	73.0	61.1	75.9	55.6	73.3	58.1	72.9	55.5	69.3	55.6	77.4
07.00	61.7	74.6	54.8	69.1	63.1	81.9	54.1	72.7	59.2	76.0	54.1	70.0	54.7	72.3
Leq 24 hr	58.1	-	57.1	-	58.2	-	56.5	-	59.3	-	55.5	-	56.9	-
Lmax	-	82.1	-	82.4	-	81.9	-	78.6	-	84.5	-	78.9	-	77.7
Ldn	65.8	-	61.2	-	66.5	-	62.7	-	67.6	-	62.0	-	61.9	-
มาตรฐาน <sup>(1)(2)</sup>	70	115	70	115	70	115	70	115	70	115	70	115	70	115
ค่าเฉลี่ย Leq 24 hr	57.4													
ค่าเฉลี่ย Lmax	80.9													
ค่าเฉลี่ย Ldn	64.0													

มาตรฐาน : (1) ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540)(ค.ศ. 1997) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
(2) ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548 (ค.ศ. 2005)

Wannasiri S.

Wannasiri Suriyawong



Somchai F.

Somchai Piyavorasakul  
General Manager

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## TEST REPORT

Analysis No. : R23-0070

Received Date: 10/01/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Report Date : 16/01/23

Analysis Date : 09-16/01/23

Job No. : S660037/Jan

Sampling Date \* : 09/01/23

Sampling By \* : TET

Type of Sample : Wastewater

Sample Conditions : 2301-WW0133 = yellow turbid/high black sediment/covered with oil slick/smell, Flow Rate = 15,396 m<sup>3</sup>/Day, Odor = smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2301-WW0133		
				W1		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	29.6	45	09/01/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.55	-	09/01/23
3	Color (Original pH) *	ADMI	ADMI Weighted-Ordinate Spectrophotometric Method (SM 2120 F)	281	Acceptable by the neighbor	11/01/23
	Color (pH 7) *	ADMI		246		11/01/23
4	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	178.0	200	11/01/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,181	3,000	11/01/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	116	1,000	11-16/01/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	380	1,500	11/01/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	10.1	10	13/01/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	48.88	100	11/01/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	30.69	-	11/01/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	16.89	-	12/01/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	0.003	0.2	11/01/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	0.040	1.0	12/01/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	6.76	1.0	10/01/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	0.10	1.0	12/01/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	1.0	11/01/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	0.09	-	11/01/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.75	10/01/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	0.0006	0.005	13/01/23
20	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0054	0.25	10/01/23
21	Se *	mg/L		< 0.0005	0.02	10/01/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.11	1.0	11/01/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	11/01/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.10	2.0	11/01/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.19	5.0	11/01/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.19	1.0	11/01/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	11/01/23
28	Zn *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	2.55	5.0	11/01/23

continue

● REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY

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## TEST REPORT

Analysis No. : R23-0070

Received Date: 10/01/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 16/01/23

Analysis Date : 09-23/01/23

Job No. : S660037/Jan

Sampling Date \* : 09/01/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2301-WW0133		
				WI		
29	Organochlorine *					
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	can not found	10-11/01/23
	- Beta-BHC	µg/L		Not Detected	can not found	10-11/01/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	can not found	10-11/01/23
	- Heptachlor	µg/L		Not Detected	can not found	10-11/01/23
	- Aldrin	µg/L		Not Detected	can not found	10-11/01/23
	- Dicofol	µg/L		Not Detected	can not found	10-11/01/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	can not found	10-11/01/23
	- Heptachlor-endo-epoxide (tran-isomer A)	µg/L		Not Detected	can not found	10-11/01/23
	- Gamma-Chlordane	µg/L		Not Detected	can not found	10-11/01/23
	- o,p'-DDE	µg/L		Not Detected	can not found	10-11/01/23
	- Alpha Endosulfan	µg/L		Not Detected	can not found	10-11/01/23
	- Alpha-Chlordane	µg/L		Not Detected	can not found	10-11/01/23
	- Dieldrin	µg/L		Not Detected	can not found	10-11/01/23
	- p,p'-DDE	µg/L		Not Detected	can not found	10-11/01/23
	- o,p'-DDD	µg/L		Not Detected	can not found	10-11/01/23
	- Endrin	µg/L		Not Detected	can not found	10-11/01/23
	- Beta Endosulfan	µg/L		Not Detected	can not found	10-11/01/23
	- p,p'-DDD	µg/L		Not Detected	can not found	10-11/01/23
	- o,p'-DDT	µg/L		Not Detected	can not found	10-11/01/23
	- p,p'-DDT	µg/L		Not Detected	can not found	10-11/01/23
	- Endosulfan sulfate	µg/L		Not Detected	can not found	10-11/01/23
30	Carbamate ***					
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	can not found	12-23/01/23
	- Isoprocab	µg/L		Not Detected	can not found	12-23/01/23
	- Fenobucarb	µg/L		Not Detected	can not found	12-23/01/23
	- Promecarb	µg/L		Not Detected	can not found	12-23/01/23
	- Carbofuran	µg/L		Not Detected	can not found	12-23/01/23
	- Methiocarb	µg/L		Not Detected	can not found	12-23/01/23
	- Methomyl	µg/L		Not Detected	can not found	12-23/01/23
	- Aldicarb	µg/L		Not Detected	can not found	12-23/01/23
	- Oxamyl	µg/L		Not Detected	can not found	12-23/01/23
	- Metolcarb	µg/L		Not Detected	can not found	12-23/01/23
31	Organophosphate *					
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	11-13/01/23
	- Mevinphos	µg/L		Not Detected	can not found	11-13/01/23
	- Diazinon	µg/L		Not Detected	can not found	11-13/01/23
	- Dicrotophos	µg/L		Not Detected	can not found	11-13/01/23
	- Monocrotophos	µg/L		Not Detected	can not found	11-13/01/23
	- Dimethoate	µg/L		Not Detected	can not found	11-13/01/23

continue

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## TEST REPORT

Analysis No. : R23-0070

Received Date: 10/01/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Report Date : 16/01/23

Analysis Date : 09-16/01/23

Job No. : S660037/Jan

Sampling Date \* : 09/01/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2301-WW0133		
				W1		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	11-13/01/23
	- Chlorpyrifos	µg/L		Not Detected	can not found	11-13/01/23
	- Parathion-methyl	µg/L		Not Detected	can not found	11-13/01/23
	- Pirimiphos	µg/L		Not Detected	can not found	11-13/01/23
	- Malathion	µg/L		Not Detected	can not found	11-13/01/23
	- Fenitrothion	µg/L		Not Detected	can not found	11-13/01/23
	- Parathion	µg/L		Not Detected	can not found	11-13/01/23
	- Prothiofos	µg/L		Not Detected	can not found	11-13/01/23
	- Methidathion	µg/L		Not Detected	can not found	11-13/01/23
	- Profenofos	µg/L		Not Detected	can not found	11-13/01/23
	- Ethion	µg/L		Not Detected	can not found	11-13/01/23
	- Triazophos	µg/L		Not Detected	can not found	11-13/01/23
	- EPN	µg/L		Not Detected	can not found	11-13/01/23
	- Phosalone	µg/L		Not Detected	can not found	11-13/01/23
	- Azinphos-ethyl	µg/L		Not Detected	can not found	11-13/01/23
	Pyrethroid *					
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	can not found	10-11/01/23
	- Bifenthrin	µg/L		Not Detected	can not found	10-11/01/23
	- Phenothrin	µg/L		Not Detected	can not found	10-11/01/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	can not found	10-11/01/23
	- Cypermethrin	µg/L		Not Detected	can not found	10-11/01/23
	- Cyfluthrin	µg/L		Not Detected	can not found	10-11/01/23
	- Fenvalerate	µg/L		Not Detected	can not found	10-11/01/23

Remarks \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: W1 = น้ำเสียก่อนเข้าบ่อที่ 1 (บ่อ Aerated Lagoon) ของระบบ Activated Sludge ของเขตอุตสาหกรรมทั่วไป (พื้นที่นิคมฯ ระยะที่ 1) (47P 0677849 UTM 1497537)

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิสูตรศักดิ์

(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual

Standard : According to specified requirement in the Environmental Impact Assessment of Bangpoo Industrial Estate (2014) (B.E. 2557)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
16/01/23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager  
16/01/23



## TEST REPORT

Analysis No. : R23-0380

Received Date: 10/02/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Sample Conditions : 2302-WW0259 = black turbid/high black sediment/covered with oil slick/smell, Flow Rate = 16,495 m<sup>3</sup>/Day, Odor = smell

Report Date : 21/02/23

Analysis Date : 09-20/02/23

Job No. : S660037/Feb

Sampling Date \* : 09/02/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2302-WW0259		
				W1		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	32.1	45	09/02/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.10	-	09/02/23
3	Color (Original pH) *	ADMI	ADMI Weighted-Ordinate	189	Acceptable by the neighbor	10/02/23
	Color (pH 7) *	ADMI	Spectrophotometric Method (SM 2120 F)	183	Acceptable by the neighbor	10/02/23
4	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	98.0	200	14/02/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,200	3,000	13/02/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	98	1,000	10-15/02/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	327	1,500	10/02/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	10.1	10	14/02/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	78.01	100	14/02/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	65.47	-	14/02/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	6.88	-	15/02/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	0.004	0.2	13/02/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	0.225	1.0	14/02/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	13.86	1.0	14/02/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1.0	14/02/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	1.0	13/02/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	0.06	-	16/02/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.75	10/02/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	0.0007	0.005	10/02/23
20	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0048	0.25	14/02/23
21	Se *	mg/L		< 0.0005	0.02	14/02/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.11	1.0	16/02/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	16/02/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.09	2.0	16/02/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.14	5.0	16/02/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.27	1.0	16/02/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	16/02/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.57	5.0	16/02/23

Continue

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## TEST REPORT

Analysis No. : R23-0380

Received Date: 10/02/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 21/02/23

Analysis Date : 09-20/02/23

Job No. : S660037/Feb

Sampling Date \* : 09/02/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2302-WW0259 W1		
29	Organochlorine *					
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	can not found	17-20/02/23
	- Beta-BHC	µg/L		Not Detected	can not found	17-20/02/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	can not found	17-20/02/23
	- Heptachlor	µg/L		Not Detected	can not found	17-20/02/23
	- Aldrin	µg/L		Not Detected	can not found	17-20/02/23
	- Dicofol	µg/L		Not Detected	can not found	17-20/02/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	can not found	17-20/02/23
	- Heptachlor-endo-epoxide (trans-isomer A)	µg/L		Not Detected	can not found	17-20/02/23
	- Gamma-Chlordane	µg/L		Not Detected	can not found	17-20/02/23
	- o,p'-DDE	µg/L		Not Detected	can not found	17-20/02/23
	- Alpha Endosulfan	µg/L		Not Detected	can not found	17-20/02/23
	- Alpha-Chlordane	µg/L		Not Detected	can not found	17-20/02/23
	- Dieldrin	µg/L		Not Detected	can not found	17-20/02/23
	- p,p'-DDE	µg/L		Not Detected	can not found	17-20/02/23
	- o,p'-DDD	µg/L		Not Detected	can not found	17-20/02/23
	- Endrin	µg/L		Not Detected	can not found	17-20/02/23
	- Beta Endosulfan	µg/L		Not Detected	can not found	17-20/02/23
	- p,p'-DDD	µg/L		Not Detected	can not found	17-20/02/23
	- o,p'-DDT	µg/L		Not Detected	can not found	17-20/02/23
	- p,p'-DDT	µg/L		Not Detected	can not found	17-20/02/23
	- Endosulfan sulfate	µg/L		Not Detected	can not found	17-20/02/23
30	Carbamate ***					
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	can not found	13-18/02/23
	- Isoprocab	µg/L		Not Detected	can not found	13-18/02/23
	- Fenobucarb	µg/L		Not Detected	can not found	13-18/02/23
	- Promecarb	µg/L		Not Detected	can not found	13-18/02/23
	- Carbofuran	µg/L		Not Detected	can not found	13-18/02/23
	- Methiocarb	µg/L		Not Detected	can not found	13-18/02/23
	- Methomyl	µg/L		Not Detected	can not found	13-18/02/23
	- Aldicarb	µg/L		Not Detected	can not found	13-18/02/23
	- Oxamyl	µg/L		Not Detected	can not found	13-18/02/23
	- Metolcarb	µg/L		Not Detected	can not found	13-18/02/23
31	Organophosphate *					
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	17-20/02/23
	- Mevinphos	µg/L		Not Detected	can not found	17-20/02/23
	- Diazinon	µg/L		Not Detected	can not found	17-20/02/23
	- Dicrotophos	µg/L		Not Detected	can not found	17-20/02/23
	- Monocrotophos	µg/L		Not Detected	can not found	17-20/02/23
	- Dimethoate	µg/L		Not Detected	can not found	17-20/02/23

continue

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## TEST REPORT

**Analysis No. :** R23-0380  
**Received Date:** 10/02/23  
**Customer :** Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู  
โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)  
**Address :** 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280  
**Contact :** Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

**Report Date :** 21/02/23  
**Analysis Date :** 09-20/02/23  
**Job No. :** S660037/Feb  
**Sampling Date \* :** 09/02/23  
**Sampling By \* :** TET  
**Type of Sample :** Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2302-WW0259		
				W1		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	17-20/02/23
	- Chlorpyrifos	µg/L		Not Detected	can not found	17-20/02/23
	- Parathion-methyl	µg/L		Not Detected	can not found	17-20/02/23
	- Pirimiphos	µg/L		Not Detected	can not found	17-20/02/23
	- Malathion	µg/L		Not Detected	can not found	17-20/02/23
	- Fenitrothion	µg/L		Not Detected	can not found	17-20/02/23
	- Parathion	µg/L		Not Detected	can not found	17-20/02/23
	- Prothiofos	µg/L		Not Detected	can not found	17-20/02/23
	- Methidathion	µg/L		Not Detected	can not found	17-20/02/23
	- Profenofos	µg/L		Not Detected	can not found	17-20/02/23
	- Ethion	µg/L		Not Detected	can not found	17-20/02/23
	- Triazophos	µg/L		Not Detected	can not found	17-20/02/23
	- EPN	µg/L		Not Detected	can not found	17-20/02/23
	- Phosalone	µg/L		Not Detected	can not found	17-20/02/23
	- Azinphos-ethyl	µg/L		Not Detected	can not found	17-20/02/23
	Pyrethroid *					
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	can not found	17-20/02/23
	- Bifenthrin	µg/L		Not Detected	can not found	17-20/02/23
	- Phenothrin	µg/L		Not Detected	can not found	17-20/02/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	can not found	17-20/02/23
	- Cypermethrin	µg/L		Not Detected	can not found	17-20/02/23
	- Cyfluthrin	µg/L		Not Detected	can not found	17-20/02/23
	- Fenvalerate	µg/L		Not Detected	can not found	17-20/02/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"  
\*\*\* Subcontractor "Not TISI Accredited"  
: W1 = น้ำเสียก่อนเข้าบ่อที่ 1 (บ่อ Aerated Lagoon) ของระบบ Activated Sludge ของเขตอุตสาหกรรมทั่วไป (พื้นที่นิคมฯ ระยะที่ 1) (47P 0677849 UTM 1497537)  
**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017  
(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมสวัสดิ์, วิทยาลัยเทคนิค วิศวกรรมศาสตร์  
(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW-846 Manual  
**Standard** : According to specified requirement in the Environmental Impact Assessment of Bangkok Industrial Estate (2019) (B.E. 2562)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
21/2/23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager  
21/2/23

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
- DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL





## TEST REPORT

Analysis No. : R23-1239

Received Date: 27/04/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 19/5/23

Analysis Date : 26/04-16/05/23

Job No. : S660386/Apr

Sampling Date \* : 26/04/23

Sampling By \* : TET

Type of Sample : Wastewater

Sample Conditions : 2304-WW0482 = black turbid/high black sediment/covered with oil slick/smell, Flow Rate = 21,340 m<sup>3</sup>/Day, Odor = smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2304-WW0482		
				W1		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	33.9	45	26/04/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.55	-	26/04/23
3	Color (Original pH) *	ADMI	ADMI Weighted-Ordinate Spectrophotometric Method (SM 2120 F)	397	Acceptable by the neighbor	27/04/23
	Color (pH 7) *	ADMI		365		27/04/23
4	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	364.7	200	27/04/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,316	3,000	27/04/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	243	1,000	27/04-02/05/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	708	1,500	27/04/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	23.3	10	27/04/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	74.09	100	28/04/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	47.89	-	28/04/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	12.73	-	28/04/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.2	28/04/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	0.158	1.0	27/04/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	25.26	1.0	28/04/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	0.23	1.0	27/04/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	1.0	28/04/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	0.18	-	02/05/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.75	28/04/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	0.0008	0.005	02/05/23
20	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0078	0.25	03/05/23
21	Se *	mg/L		0.0007	0.02	03/05/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.22	1.0	02/05/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	02/05/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.49	2.0	02/05/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.39	5.0	02/05/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	1.10	1.0	02/05/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.05	0.2	02/05/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	2.04	5.0	02/05/23

continue

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## TEST REPORT

Analysis No. : R23-1239

Received Date: 27/04/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 19/05/23

Analysis Date : 26/04-16/05/23

Job No. : S660386/Apr

Sampling Date \* : 26/04/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2304-WW0482		
				W1		
29	Organochlorine *					
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	can not found	27/04-02/05/23
	- Beta-BHC	µg/L		Not Detected	can not found	27/04-02/05/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	can not found	27/04-02/05/23
	- Heptachlor	µg/L		Not Detected	can not found	27/04-02/05/23
	- Aldrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- Dicofol	µg/L		Not Detected	can not found	27/04-02/05/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	can not found	27/04-02/05/23
	- Heptachlor-endo-epoxide (tran-isomer A)	µg/L		Not Detected	can not found	27/04-02/05/23
	- Gamma-Chlordane	µg/L		Not Detected	can not found	27/04-02/05/23
	- o,p'-DDE	µg/L		Not Detected	can not found	27/04-02/05/23
	- Alpha Endosulfan	µg/L		Not Detected	can not found	27/04-02/05/23
	- Alpha-Chlordane	µg/L		Not Detected	can not found	27/04-02/05/23
	- Dieldrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- p,p'-DDE	µg/L		Not Detected	can not found	27/04-02/05/23
	- o,p'-DDD	µg/L		Not Detected	can not found	27/04-02/05/23
	- Endrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- Beta Endosulfan	µg/L		Not Detected	can not found	27/04-02/05/23
	- p,p'-DDD	µg/L		Not Detected	can not found	27/04-02/05/23
	- o,p'-DDT	µg/L		Not Detected	can not found	27/04-02/05/23
	- p,p'-DDT	µg/L		Not Detected	can not found	27/04-02/05/23
	- Endosulfan sulfate	µg/L		Not Detected	can not found	27/04-02/05/23
30	Carbamate ***					
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	can not found	02-11/05/23
	- Isoprocarb	µg/L		Not Detected	can not found	02-11/05/23
	- Fenobucarb	µg/L		Not Detected	can not found	02-11/05/23
	- Promecarb	µg/L		Not Detected	can not found	02-11/05/23
	- Carbofuran	µg/L		Not Detected	can not found	02-11/05/23
	- Methiocarb	µg/L		Not Detected	can not found	02-11/05/23
	- Methomyl	µg/L		Not Detected	can not found	02-11/05/23
	- Aldicarb	µg/L		Not Detected	can not found	02-11/05/23
	- Oxamyl	µg/L		Not Detected	can not found	02-11/05/23
	- Metolcarb	µg/L		Not Detected	can not found	02-11/05/23
31	Organophosphate *					
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	15-16/05/23
	- Mevinphos	µg/L		Not Detected	can not found	15-16/05/23
	- Diazinon	µg/L		Not Detected	can not found	15-16/05/23
	- Dicrotophos	µg/L		Not Detected	can not found	15-16/05/23
	- Monocrotophos	µg/L		Not Detected	can not found	15-16/05/23
	- Dimethoate	µg/L		Not Detected	can not found	15-16/05/23

continue

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## TEST REPORT

**Analysis No. :** R23-1239  
**Received Date:** 27/04/23  
**Customer :** Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู  
**Address :** 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280  
**Contact :** Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

**Report Date :** 19/05/23  
**Analysis Date :** 26/04-16/05/23  
**Job No. :** S660386/Apr  
**Sampling Date \* :** 26/04/23  
**Sampling By \* :** TET  
**Type of Sample :** Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2304-WW0482		
				W1		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	15-16/05/23
	- Chlorpyrifos	µg/L		Not Detected	can not found	15-16/05/23
	- Parathion-methyl	µg/L		Not Detected	can not found	15-16/05/23
	- Pirimiphos-ethyl	µg/L		Not Detected	can not found	15-16/05/23
	- Malathion	µg/L		Not Detected	can not found	15-16/05/23
	- Fenitrothion	µg/L		Not Detected	can not found	15-16/05/23
	- Parathion	µg/L		Not Detected	can not found	15-16/05/23
	- Prothiofos	µg/L		Not Detected	can not found	15-16/05/23
	- Methidathion	µg/L		Not Detected	can not found	15-16/05/23
	- Profenofos	µg/L		Not Detected	can not found	15-16/05/23
	- Ethion	µg/L		Not Detected	can not found	15-16/05/23
	- Triazophos	µg/L		Not Detected	can not found	15-16/05/23
	- EPN	µg/L		Not Detected	can not found	15-16/05/23
	- Phosalone	µg/L		Not Detected	can not found	15-16/05/23
	- Azinphos-ethyl	µg/L		Not Detected	can not found	15-16/05/23
	Pyrethroid *					
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	can not found	27/04-02/05/23
	- Bifenthrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- Phenothrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- Cypermethrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- Cyfluthrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- Fenvalerate	µg/L		Not Detected	can not found	27/04-02/05/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"  
\*\*\* Subcontractor "Not TISI Accredited"  
: W1 = น้ำเสียก่อนเข้าบ่อที่ 1 (บ่อ Aerated Lagoon ของระบบ Activated Sludge) ของเขตอุตสาหกรรมทั่วไป (พื้นที่นิคมฯ ระยะที่ 1) (47P 0677849 UTM 1497537)  
**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017  
(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ชงชัย พรหมสวัสดิ์, วิทยาลัยเทคนิค วิศวกรรมศาสตร์  
(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual  
**Standard** : According to specified requirement in the Environmental Impact Assessment of Bangpoo Industrial Estate (2019) (B.E. 2562)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
19/05/23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager  
19/05/23

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
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## TEST REPORT

Analysis No. : R23-1468

Received Date: 18/05/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 25/07/23

Analysis Date : 17-24/05/23

Job No. : S660386/May

Sampling Date \* : 17/05/23

Sampling By \* : Mr. Chalermwut Poolsanguan

Type of Sample : Wastewater

Sample Conditions : 2305-WW0411 = black turbid/high black sediment/covered with oil slick/smell, Flow Rate = 17,843 m<sup>3</sup>/Day, Odor = smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2305-WW0411		
				W1		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	34.3	45	17/05/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.87	-	17/05/23
3	Color (Original pH) *	ADMI	ADMI Weighted-Ordinate Spectrophotometric Method (SM 2120 F)	178	Acceptable by the neighbor	18/05/23
	Color (pH 7) *	ADMI		152		18/05/23
4	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	81.1	200	19/05/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,394	3,000	19/05/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	101	1,000	18-23/05/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	316	1,500	19/05/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	12.2	10	19/05/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	51.75	100	22/05/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	37.05	-	22/05/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	12.57	-	23/05/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	0.011	0.2	19/05/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	0.143	1.0	19/05/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	9.11	1.0	18/05/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	0.05	1.0	19/05/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	1.0	19/05/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	0.05	-	19/05/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.75	18/05/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	18/05/23
20	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0043	0.25	23/05/23
21	Se *	mg/L		< 0.0005	0.02	23/05/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.08	1.0	19/05/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	19/05/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.06	2.0	19/05/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.08	5.0	19/05/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.54	1.0	19/05/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	19/05/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.28	5.0	19/05/23

continue

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## TEST REPORT

Analysis No. : R23-1468

Received Date: 18/05/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 25/07/23

Analysis Date : 17-26/05/23

Job No. : S660386/May

Sampling Date \* : 17/05/23

Sampling By \* : Mr. Chalermwut Poolsanguan

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2305-WW0411		
				WI		
29	Organochlorine *					
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	can not found	22-23/05/23
	- Beta-BHC	µg/L		Not Detected	can not found	22-23/05/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	can not found	22-23/05/23
	- Heptachlor	µg/L		Not Detected	can not found	22-23/05/23
	- Aldrin	µg/L		Not Detected	can not found	22-23/05/23
	- Dicofol	µg/L		Not Detected	can not found	22-23/05/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	can not found	22-23/05/23
	- Heptachlor-endo-epoxide (tran-isomer A)	µg/L		Not Detected	can not found	22-23/05/23
	- Gamma-Chlordane	µg/L		Not Detected	can not found	22-23/05/23
	- o,p'-DDE	µg/L		Not Detected	can not found	22-23/05/23
	- Alpha Endosulfan	µg/L		Not Detected	can not found	22-23/05/23
	- Alpha-Chlordane	µg/L		Not Detected	can not found	22-23/05/23
	- Dieldrin	µg/L		Not Detected	can not found	22-23/05/23
	- p,p'-DDE	µg/L		Not Detected	can not found	22-23/05/23
	- o,p'-DDD	µg/L		Not Detected	can not found	22-23/05/23
	- Endrin	µg/L		Not Detected	can not found	22-23/05/23
	- Beta Endosulfan	µg/L		Not Detected	can not found	22-23/05/23
	- p,p'-DDD	µg/L		Not Detected	can not found	22-23/05/23
	- o,p'-DDT	µg/L		Not Detected	can not found	22-23/05/23
	- p,p'-DDT	µg/L		Not Detected	can not found	22-23/05/23
	- Endosulfan sulfate	µg/L		Not Detected	can not found	22-23/05/23
30	Carbamate ***					
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	can not found	19-26/05/22
	- Isoproc carb	µg/L		Not Detected	can not found	19-26/05/22
	- Fenobucarb	µg/L		Not Detected	can not found	19-26/05/22
	- Promecarb	µg/L		Not Detected	can not found	19-26/05/22
	- Carbofuran	µg/L		Not Detected	can not found	19-26/05/22
	- Methiocarb	µg/L		Not Detected	can not found	19-26/05/22
	- Methomyl	µg/L		Not Detected	can not found	19-26/05/22
	- Aldicarb	µg/L		Not Detected	can not found	19-26/05/22
	- Oxamyl	µg/L		Not Detected	can not found	19-26/05/22
	- Metolcarb	µg/L		Not Detected	can not found	19-26/05/22
31	Organophosphate *					
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	22-24/05/23
	- Mevinphos	µg/L		Not Detected	can not found	22-24/05/23
	- Diazinon	µg/L		Not Detected	can not found	22-24/05/23
	- Dicrotophos	µg/L		Not Detected	can not found	22-24/05/23
	- Monocrotophos	µg/L		Not Detected	can not found	22-24/05/23
	- Dimethoate	µg/L		Not Detected	can not found	22-24/05/23

continue

● REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY

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## TEST REPORT

**Analysis No. :** R23-1468  
**Received Date:** 18/05/23  
**Customer :** Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู  
**Address :** 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280  
**Contact :** Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

**Report Date :** 25/07/23  
**Analysis Date :** 17-24/05/23  
**Job No. :** S660386/May  
**Sampling Date \* :** 17/05/23  
**Sampling By \* :** Mr. Chalermwut Poolsanguan  
**Type of Sample :** Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2305-WW0411		
				W1		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	22-24/05/23
	- Chlorpyrifos	µg/L		Not Detected	can not found	22-24/05/23
	- Parathion-methyl	µg/L		Not Detected	can not found	22-24/05/23
	- Pirimiphos-ethyl	µg/L		Not Detected	can not found	22-24/05/23
	- Malathion	µg/L		Not Detected	can not found	22-24/05/23
	- Fenitrothion	µg/L		Not Detected	can not found	22-24/05/23
	- Parathion	µg/L		Not Detected	can not found	22-24/05/23
	- Prothiofos	µg/L		Not Detected	can not found	22-24/05/23
	- Methidathion	µg/L		Not Detected	can not found	22-24/05/23
	- Profenofos	µg/L		Not Detected	can not found	22-24/05/23
	- Ethion	µg/L		Not Detected	can not found	22-24/05/23
	- Triazophos	µg/L		Not Detected	can not found	22-24/05/23
	- EPN	µg/L		Not Detected	can not found	22-24/05/23
	- Phosalone	µg/L		Not Detected	can not found	22-24/05/23
	- Azinphos-ethyl	µg/L		Not Detected	can not found	22-24/05/23
	Pyrethroid *					
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	can not found	22-23/05/23
	- Bifenthrin	µg/L		Not Detected	can not found	22-23/05/23
	- Phenothrin	µg/L		Not Detected	can not found	22-23/05/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	can not found	22-23/05/23
	- Cypermethrin	µg/L		Not Detected	can not found	22-23/05/23
	- Cyfluthrin	µg/L		Not Detected	can not found	22-23/05/23
	- Fenvalerate	µg/L		Not Detected	can not found	22-23/05/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"  
\*\*\* Subcontractor "Not TISI Accredited"  
: W1 = น้ำเสียก่อนเข้าบ่อที่ 1 (บ่อ Aerated Lagoon) ของระบบ Activated Sludge ของเขตอุตสาหกรรมทั่วไป (พื้นที่นิคมฯ ระยะที่ 1) (47P 0677849 UTM 1497537)  
**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017  
(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ของชัย พรธนะสวัสดิ์, วิบูลย์ลักษณ์ วิสุทธศักดิ์  
(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual  
**Standard** : According to specified requirement in the Environmental Impact Assessment of Bangpoo Industrial Estate (2019) (B.E. 2562)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
25/07/23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager  
25/07/23





## TEST REPORT

Analysis No. : R23-1938

Received Date: 22/06/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Report Date : 07/07/23

Analysis Date : 21-30/06/23

Job No. : S660386/June

Sampling Date \* : 21/06/23

Sampling By \* : TET

Type of Sample : Wastewater

Sample Conditions : 2306-WW0624 = black turbid/slight black sediment/smell, Flow Rate = 19,637 m<sup>3</sup>/Day, Odor = smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2306-WW0624		
				W1		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	34.3	45	21/06/23
2	pH *	-	Electrometric Method (SM 4500 B)	6.68	-	21/06/23
3	Color (Original pH) *	ADMI	ADMI Weighted-Ordinate Spectrophotometric Method (SM 2120 F)	86	Acceptable by the neighbor	23/06/23
	Color (pH 7) *	ADMI		81		23/06/23
4	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	160.4	200	22/06/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,185	3,000	23/06/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	81	1,000	22-27/06/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	296	1,500	22/06/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	6.8	10	23/06/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	56.73	100	27/06/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	46.31	-	27/06/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	2.78	-	26/06/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	0.003	0.2	23/06/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	0.107	1.0	27/06/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	5.92	1.0	23/06/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	0.66	1.0	27/06/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	1.0	23/06/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	0.18	-	26/06/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.75	22/06/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	30/06/23
20	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0020	0.25	28/06/23
21	Se *	mg/L		< 0.0005	0.02	28/06/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.07	1.0	26/06/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	26/06/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	2.0	26/06/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.39	5.0	26/06/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	2.08	1.0	26/06/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	26/06/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	28.00	5.0	26/06/23

continue

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## TEST REPORT

**Analysis No. :** R23-1938  
**Received Date:** 22/06/23  
**Customer :** Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู  
**Address :** 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280  
**Contact :** Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

**Report Date :** 07/07/23  
**Analysis Date :** 21/06-05/07/23  
**Job No. :** S660386/June  
**Sampling Date \* :** 21/06/23  
**Sampling By \* :** TET  
**Type of Sample :** Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2306-WW0624 W1		
29	Organochlorine *					
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	can not found	22-26/06/23
	- Beta-BHC	µg/L		Not Detected	can not found	22-26/06/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	can not found	22-26/06/23
	- Heptachlor	µg/L		Not Detected	can not found	22-26/06/23
	- Aldrin	µg/L		Not Detected	can not found	22-26/06/23
	- Dicofof	µg/L		Not Detected	can not found	22-26/06/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	can not found	22-26/06/23
	- Heptachlor-endo-epoxide (tran-isomer A)	µg/L		Not Detected	can not found	22-26/06/23
	- Gamma-Chlordane	µg/L		Not Detected	can not found	22-26/06/23
	- o,p'-DDE	µg/L		Not Detected	can not found	22-26/06/23
	- Alpha Endosulfan	µg/L		Not Detected	can not found	22-26/06/23
	- Alpha-Chlordane	µg/L		Not Detected	can not found	22-26/06/23
	- Dieldrin	µg/L		Not Detected	can not found	22-26/06/23
	- p,p'-DDE	µg/L		Not Detected	can not found	22-26/06/23
	- o,p'-DDD	µg/L		Not Detected	can not found	22-26/06/23
	- Endrin	µg/L		Not Detected	can not found	22-26/06/23
	- Beta Endosulfan	µg/L		Not Detected	can not found	22-26/06/23
	- p,p'-DDD	µg/L		Not Detected	can not found	22-26/06/23
	- o,p'-DDT	µg/L		Not Detected	can not found	22-26/06/23
	- p,p'-DDT	µg/L		Not Detected	can not found	22-26/06/23
	- Endosulfan sulfate	µg/L		Not Detected	can not found	22-26/06/23
30	Carbamate ***					
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	can not found	26/06-05/07/23
	- Isoproc carb	µg/L		Not Detected	can not found	26/06-05/07/23
	- Fenobucarb	µg/L		11.55	can not found	26/06-05/07/23
	- Promecarb	µg/L		Not Detected	can not found	26/06-05/07/23
	- Carbofuran	µg/L		Not Detected	can not found	26/06-05/07/23
	- Methiocarb	µg/L		Not Detected	can not found	26/06-05/07/23
	- Methomyl	µg/L		Not Detected	can not found	26/06-05/07/23
	- Aldicarb	µg/L		Not Detected	can not found	26/06-05/07/23
	- Oxamyl	µg/L		Not Detected	can not found	26/06-05/07/23
	- Metolcarb	µg/L		Not Detected	can not found	26/06-05/07/23
31	Organophosphate *					
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	22-28/06/23
	- Mevinphos	µg/L		Not Detected	can not found	22-28/06/23
	- Diazinon	µg/L		Not Detected	can not found	22-28/06/23
	- Dicrotophos	µg/L		Not Detected	can not found	22-28/06/23
	- Monocrotophos	µg/L		Not Detected	can not found	22-28/06/23
	- Dimethoate	µg/L		Not Detected	can not found	22-28/06/23

continue

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- DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL





Thai Environmental Technic Limited  
บริษัท เทคนิคสิ่งแวดล้อมไทย จำกัด



ORIGINAL

ต้นฉบับ

1/6 Soi Ramkhamhaeng 145, Khwaeng / Khet Saphansung, Bangkok 10240  
1/6 ซอยรามคำแหง 145 แขวงสะพานสูง เขตสะพานสูง กรุงเทพมหานคร 10240

E-mail : admin@tet1995.com

Tel : 0-2373-7799 (Auto) Fax : 0-2373-7979

Page 5 of 20

## TEST REPORT

Analysis No. : R23-1938

Received Date: 22/06/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Report Date : 07/07/23

Analysis Date : 21-30/06/23

Job No. : S660386/June

Sampling Date \* : 21/06/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2306-WW0624		
				W1		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	22-28/06/23
	- Chlorpyrifos	µg/L		Not Detected	can not found	22-28/06/23
	- Parathion-methyl	µg/L		Not Detected	can not found	22-28/06/23
	- Pirimiphos-ethyl	µg/L		Not Detected	can not found	22-28/06/23
	- Malathion	µg/L		Not Detected	can not found	22-28/06/23
	- Fenitrothion	µg/L		Not Detected	can not found	22-28/06/23
	- Parathion	µg/L		Not Detected	can not found	22-28/06/23
	- Prothiofos	µg/L		Not Detected	can not found	22-28/06/23
	- Methidathion	µg/L		Not Detected	can not found	22-28/06/23
	- Profenofos	µg/L		Not Detected	can not found	22-28/06/23
	- Ethion	µg/L		Not Detected	can not found	22-28/06/23
	- Triazophos	µg/L		Not Detected	can not found	22-28/06/23
	- EPN	µg/L		Not Detected	can not found	22-28/06/23
	- Phosalone	µg/L		Not Detected	can not found	22-28/06/23
	- Azinphos-ethyl	µg/L		Not Detected	can not found	22-28/06/23
	Pyrethroid *					
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	can not found	22-26/06/23
	- Bifenthrin	µg/L		Not Detected	can not found	22-26/06/23
	- Phenothrin	µg/L		Not Detected	can not found	22-26/06/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	can not found	22-26/06/23
	- Cypermethrin	µg/L		Not Detected	can not found	22-26/06/23
	- Cyfluthrin	µg/L		Not Detected	can not found	22-26/06/23
	- Fenvalerate	µg/L		Not Detected	can not found	22-26/06/23

Remarks \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: W1 = น้ำเสียก่อนเข้าบ่อที่ 1 (บ่อ Aerated Lagoon ของระบบ Activated Sludge) ของเขตอุตสาหกรรมทั่วไป (พื้นที่นิคมฯ ระยะที่ 1) (47P 0677849 UTM 1497537)

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรธนะสวัสดิ์, วิทยาลัยเกษตรและเทคโนโลยีสุพรรณบุรี

(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual

Standard : According to specified requirement in the Environmental Impact Assessment of Bangpoo Industrial Estate (2019) (B.E. 2562)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory

07/07/23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager

07/07/23

REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY

DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL



## TEST REPORT

Analysis No. : R23-0070

Received Date: 10/01/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 16/01/23

Analysis Date : 09-16/01/23

Job No. : S660037/Jan

Sampling Date \* : 09/01/23

Sampling By \* : TET

Type of Sample : Wastewater

Sample Conditions : 2301-WW0134 = yellow turbid/slight black sediment/covered with oil slick, Flow Rate = 15,396 m<sup>3</sup>/Day, Odor = no smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard <sup>(1)</sup>	Analysis Date
				2301-WW0134		
				W2		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	28.5	40	09/01/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.60	5.5-9.0	09/01/23
3	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate	119	300	11/01/23
	Color (pH 7) *	ADMI		98	300	11/01/23
4	TSS *	mg/L	Dried at 103-105 °C (SM 2540 D)	3.3	50	11/01/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	2,633	(2)	11/01/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	5	20	11-16/01/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	50	120	11/01/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	1.0	5	13/01/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	2.16	100	11/01/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	< 0.10	-	11/01/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	8.25	-	12/01/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.2	11/01/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1	12/01/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1	10/01/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	0.03	1	12/01/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	1	11/01/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	< 0.02	0.75	11/01/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	10/01/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	13/01/23
20	As *	mg/L	} Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0046	0.25	10/01/23
21	Se *	mg/L		< 0.0005	0.02	10/01/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.05	1.0	11/01/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	11/01/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.07	2.0	11/01/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.09	5.0	11/01/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.21	1.0	11/01/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	11/01/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.39	5.0	11/01/23

continue

• REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY

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## TEST REPORT

Analysis No. : R23-0070

Received Date: 10/01/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 16/01/23

Analysis Date : 09-23/01/23

Job No. : S660037/Jan

Sampling Date \* : 09/01/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard <sup>(1)</sup>	Analysis Date
				2301-WW0134		
				W2		
29	Organochlorine *					
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	can not found	10-11/01/23
	- Beta-BHC	µg/L		Not Detected	can not found	10-11/01/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	can not found	10-11/01/23
	- Heptachlor	µg/L		Not Detected	can not found	10-11/01/23
	- Aldrin	µg/L		Not Detected	can not found	10-11/01/23
	- Dicolfol	µg/L		Not Detected	can not found	10-11/01/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	can not found	10-11/01/23
	- Heptachlor-endo-epoxide (trans-isomer A)	µg/L		Not Detected	can not found	10-11/01/23
	- Gamma-Chlordane	µg/L		Not Detected	can not found	10-11/01/23
	- o,p'-DDE	µg/L		Not Detected	can not found	10-11/01/23
	- Alpha Endosulfan	µg/L		Not Detected	can not found	10-11/01/23
	- Alpha-Chlordane	µg/L		Not Detected	can not found	10-11/01/23
	- Dieldrin	µg/L		Not Detected	can not found	10-11/01/23
	- p,p'-DDE	µg/L		Not Detected	can not found	10-11/01/23
	- o,p'-DDD	µg/L		Not Detected	can not found	10-11/01/23
	- Endrin	µg/L		Not Detected	can not found	10-11/01/23
	- Beta Endosulfan	µg/L		Not Detected	can not found	10-11/01/23
	- p,p'-DDD	µg/L		Not Detected	can not found	10-11/01/23
	- o,p'-DDT	µg/L		Not Detected	can not found	10-11/01/23
	- p,p'-DDT	µg/L		Not Detected	can not found	10-11/01/23
	- Endosulfan sulfate	µg/L		Not Detected	can not found	10-11/01/23
30	Carbamate ***					
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	can not found	12-23/01/23
	- Isoproc carb	µg/L		Not Detected	can not found	12-23/01/23
	- Fenobucarb	µg/L		Not Detected	can not found	12-23/01/23
	- Promecarb	µg/L		Not Detected	can not found	12-23/01/23
	- Carbofuran	µg/L		Not Detected	can not found	12-23/01/23
	- Methiocarb	µg/L		Not Detected	can not found	12-23/01/23
	- Methomyl	µg/L		Not Detected	can not found	12-23/01/23
	- Aldicarb	µg/L		Not Detected	can not found	12-23/01/23
	- Oxamyl	µg/L		Not Detected	can not found	12-23/01/23
	- Metolcarb	µg/L		Not Detected	can not found	12-23/01/23
31	Organophosphate *					
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	11-13/01/23
	- Mevinphos	µg/L		Not Detected	can not found	11-13/01/23
	- Diazinon	µg/L		Not Detected	can not found	11-13/01/23
	- Dicrotophos	µg/L		Not Detected	can not found	11-13/01/23
	- Monocrotophos	µg/L		Not Detected	can not found	11-13/01/23
	- Dimethoate	µg/L		Not Detected	can not found	11-13/01/23

continue

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## TEST REPORT

Analysis No. : R23-0070

Received Date: 10/01/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 16/01/23

Analysis Date : 09-16/01/23

Job No. : S660037/Jan

Sampling Date \* : 09/01/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard <sup>(1)</sup>	Analysis Date
				2301-WW0134		
				W2		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	11-13/01/23
	- Chlorpyrifos	µg/L		Not Detected	can not found	11-13/01/23
	- Parathion-methyl	µg/L		Not Detected	can not found	11-13/01/23
	- Pirimiphos	µg/L		Not Detected	can not found	11-13/01/23
	- Malathion	µg/L		Not Detected	can not found	11-13/01/23
	- Fenitrothion	µg/L		Not Detected	can not found	11-13/01/23
	- Parathion	µg/L		Not Detected	can not found	11-13/01/23
	- Prothiofos	µg/L		Not Detected	can not found	11-13/01/23
	- Methidathion	µg/L		Not Detected	can not found	11-13/01/23
	- Profenofos	µg/L		Not Detected	can not found	11-13/01/23
	- Ethion	µg/L		Not Detected	can not found	11-13/01/23
	- Triazophos	µg/L		Not Detected	can not found	11-13/01/23
	- EPN	µg/L		Not Detected	can not found	11-13/01/23
	- Phosalone	µg/L		Not Detected	can not found	11-13/01/23
	- Azinphos-ethyl	µg/L		Not Detected	can not found	11-13/01/23
	Pyrethroid *					
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	can not found	10-11/01/23
	- Bifenthrin	µg/L		Not Detected	can not found	10-11/01/23
	- Phenothrin	µg/L		Not Detected	can not found	10-11/01/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	can not found	10-11/01/23
	- Cypermethrin	µg/L		Not Detected	can not found	10-11/01/23
	- Cyfluthrin	µg/L		Not Detected	can not found	10-11/01/23
	- Fenvalerate	µg/L		Not Detected	can not found	10-11/01/23

Remarks \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: W2 = น้ำทิ้งในบ่อ Holding Pond 2 ก่อนสูบน้ำออกทะเลของระบบ Aerated Lagoon & Activated Sludge ของเขตอุตสาหกรรมทั่วไป (พื้นที่โครงการ ระยะที่ 1)  
(47P 0677828 UTM 1497478)

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิสสุทธีศักดิ์

(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual

Standard (1) Notification of the Ministry of Natural Resources and Environment (2016) (B.E. 2559)

(2) Water source with TDS more than 3,000 mg/L in the water shall not exceed TDS in the water source by 5,000 mg/L

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
16/01/23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager  
16/01/23

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## TEST REPORT

Analysis No. : R23-0070

Received Date: 10/01/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Sample Conditions : 2301-WS0142 = yellow turbid/slight black sediment  
2301-WS0143 = yellow turbid/slight black sediment

Report Date : 16/01/23

Analysis Date : 09-11/01/23

Job No. : S660037/Jan

Sampling Date : 09/01/23

Sampling By : TET

Type of Sample : Seawater

Item	Parameter	Unit	Method	Result		Standard	Analysis Date
				2301-WS0142	2301-WS0143		
				จุดระบายน้ำทิ้งริมถนน สุขุมวิทบริเวณ กม. ที่ 34 (Mixing Zone)	หลังประตูกั้นน้ำทะเล		
1	pH	-	Electrometric Method (SM 4500 B)	7.57	7.68	7.0-8.5	09/01/23
2	TDS	mg/L	Dried at 180 °C (SM 2540 C)	2,024	22,195	-	11/01/23

Remarks : จุดระบายน้ำทิ้งริมถนนสุขุมวิทบริเวณ กม. ที่ 34 (Mixing Zone) = 47P 0676017 UTM 1496895  
หลังประตูกั้นน้ำทะเล = 47P 0675615 UTM 1496215

Method : SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

Standard : Notification of the National Environment Board (2021) (B.E. 2564) : Class 5

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
16 / 01 / 23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager  
16 / 01 / 23

..... END OF REPORT .....

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## TEST REPORT

Analysis No. : R23-0380

Received Date: 10/02/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 21/02/23

Analysis Date : 09-20/02/23

Job No. : S660037/Feb

Sampling Date \* : 09/02/23

Sampling By \* : TET

Type of Sample : Wastewater

Sample Conditions : 2302-WW0260 = light red/high white sediment/covered with oil slick, Flow Rate = 16,495 m<sup>3</sup>/Day, Odor = no smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard <sup>(1)</sup>	Analysis Date
				2302-WW0260		
				W2		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	31.7	40	09/02/23
2	pH *	-	Electrometric Method (SM 4500 B)	6.55	5.5-9.0	09/02/23
3	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate Spectrophotometric Method (SM 2120 F)	82	300	10/02/23
	Color (pH 7) *	ADMI		96	300	10/02/23
4	TSS *	mg/L	Dried at 103-105 °C (SM 2540 D)	3.2	50	14/02/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,820	(2)	13/02/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	10	20	10-15/02/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	101	120	10/02/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.8	5	14/02/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	2.79	100	14/02/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	0.28	-	14/02/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	6.42	-	15/02/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.2	13/02/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1	14/02/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1	14/02/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1	14/02/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	1	13/02/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	< 0.02	0.75	16/02/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	10/02/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	10/02/23
20	As *	mg/L	} Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0036	0.25	14/02/23
21	Se *	mg/L		< 0.0005	0.02	14/02/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	1.0	16/02/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	16/02/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	2.0	16/02/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.09	5.0	16/02/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.17	1.0	16/02/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.06	0.2	16/02/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.37	5.0	16/02/23

continue

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## TEST REPORT

Analysis No. : R23-0380

Received Date: 10/02/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 21/02/23

Analysis Date : 09-20/02/23

Job No. : S660037/Feb

Sampling Date \* : 09/02/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard <sup>(1)</sup>	Analysis Date
				2302-WW0260		
				W2		
29	Organochlorine *					
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	can not found	17-20/02/23
	- Beta-BHC	µg/L		Not Detected	can not found	17-20/02/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	can not found	17-20/02/23
	- Heptachlor	µg/L		Not Detected	can not found	17-20/02/23
	- Aldrin	µg/L		Not Detected	can not found	17-20/02/23
	- Dicofol	µg/L		Not Detected	can not found	17-20/02/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	can not found	17-20/02/23
	- Heptachlor-endo-epoxide (trans-isomer A)	µg/L		Not Detected	can not found	17-20/02/23
	- Gamma-Chlordane	µg/L		Not Detected	can not found	17-20/02/23
	- o,p'-DDE	µg/L		Not Detected	can not found	17-20/02/23
	- Alpha Endosulfan	µg/L		Not Detected	can not found	17-20/02/23
	- Alpha-Chlordane	µg/L		Not Detected	can not found	17-20/02/23
	- Dieldrin	µg/L		Not Detected	can not found	17-20/02/23
	- p,p'-DDE	µg/L		Not Detected	can not found	17-20/02/23
	- o,p'-DDD	µg/L		Not Detected	can not found	17-20/02/23
	- Endrin	µg/L		Not Detected	can not found	17-20/02/23
	- Beta Endosulfan	µg/L		Not Detected	can not found	17-20/02/23
	- p,p'-DDD	µg/L		Not Detected	can not found	17-20/02/23
	- o,p'-DDT	µg/L		Not Detected	can not found	17-20/02/23
	- p,p'-DDT	µg/L		Not Detected	can not found	17-20/02/23
	- Endosulfan sulfate	µg/L		Not Detected	can not found	17-20/02/23
30	Carbamate ***					
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	can not found	13-18/02/23
	- Isoprocab	µg/L		Not Detected	can not found	13-18/02/23
	- Fenobucarb	µg/L		Not Detected	can not found	13-18/02/23
	- Promecarb	µg/L		Not Detected	can not found	13-18/02/23
	- Carbofuran	µg/L		Not Detected	can not found	13-18/02/23
	- Methiocarb	µg/L		Not Detected	can not found	13-18/02/23
	- Methomyl	µg/L		Not Detected	can not found	13-18/02/23
	- Aldicarb	µg/L		Not Detected	can not found	13-18/02/23
	- Oxamyl	µg/L		Not Detected	can not found	13-18/02/23
	- Metolcarb	µg/L		Not Detected	can not found	13-18/02/23
31	Organophosphate *					
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	17-20/02/23
	- Mevinphos	µg/L		Not Detected	can not found	17-20/02/23
	- Diazinon	µg/L		Not Detected	can not found	17-20/02/23
	- Dicrotophos	µg/L		Not Detected	can not found	17-20/02/23
	- Monocrotophos	µg/L		Not Detected	can not found	17-20/02/23
	- Dimethoate	µg/L		Not Detected	can not found	17-20/02/23

continue

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## TEST REPORT

Analysis No. : R23-0380

Received Date: 10/02/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 21/02/23

Analysis Date : 09-20/02/23

Job No. : S660037/Feb

Sampling Date \* : 09/02/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard <sup>(1)</sup>	Analysis Date
				2302-WW0260		
				W2		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	17-20/02/23
	- Chlorpyrifos	µg/L		Not Detected	can not found	17-20/02/23
	- Parathion-methyl	µg/L		Not Detected	can not found	17-20/02/23
	- Pirimiphos	µg/L		Not Detected	can not found	17-20/02/23
	- Malathion	µg/L		Not Detected	can not found	17-20/02/23
	- Fenitrothion	µg/L		Not Detected	can not found	17-20/02/23
	- Parathion	µg/L		Not Detected	can not found	17-20/02/23
	- Prothiofos	µg/L		Not Detected	can not found	17-20/02/23
	- Methidathion	µg/L		Not Detected	can not found	17-20/02/23
	- Profenofos	µg/L		Not Detected	can not found	17-20/02/23
	- Ethion	µg/L		Not Detected	can not found	17-20/02/23
	- Triazophos	µg/L		Not Detected	can not found	17-20/02/23
	- EPN	µg/L		Not Detected	can not found	17-20/02/23
	- Phosalone	µg/L		Not Detected	can not found	17-20/02/23
	- Azinphos-ethyl	µg/L		Not Detected	can not found	17-20/02/23
	Pyrethroid *					
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	can not found	17-20/02/23
	- Bifenthrin	µg/L		Not Detected	can not found	17-20/02/23
	- Phenothrin	µg/L		Not Detected	can not found	17-20/02/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	can not found	17-20/02/23
	- Cypermethrin	µg/L		Not Detected	can not found	17-20/02/23
	- Cyfluthrin	µg/L		Not Detected	can not found	17-20/02/23
	- Fenvalerate	µg/L		Not Detected	can not found	17-20/02/23

Remarks \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: W2 = น้ำทิ้งในบ่อ Holding Pond 2 ก่อนสูบน้ำออกทะเลของระบบ Aerated Lagoon & Activated Sludge ของเขตอุตสาหกรรมทั่วไป (พื้นที่โครงการ ระยะที่ 1)  
(47P 0677828 UTM 1497478)

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ของชัย พรธนะสวัสดิ์, วิทยาลัยอาชีวศึกษา วิทยาศาสตร์

(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW-846 Manual

Standard (1) Notification of the Ministry of Natural Resources and Environment (2016) (B.E. 2559)

(2) Water source with TDS more than 3,000 mg/L in the water shall not exceed TDS in the water source by 5,000 mg/L

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

21/02/23



Approved by

Mrs. Pornpip Pethshee

Laboratory Manager

21/02/23





## TEST REPORT

Analysis No. : R23-0380

Received Date: 10/02/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Sample Conditions : 2302-WS0268 = red turbid/high white sediment/covered with oil slick

2302-WS0269 = red turbid/high white sediment/covered with oil slick

Report Date : 21/02/23

Analysis Date : 09-14/02/23

Job No. : S660037/Feb

Sampling Date : 09/02/23

Sampling By : TET

Type of Sample : Seawater

Item	Parameter	Unit	Method	Result		Standard	Analysis Date
				2302-WS0268	2302-WS0269		
				จุดระบายน้ำทิ้งริมถนน สุขุมวิทบริเวณ กม. ที่ 34 (Mixing Zone)	หลังประตูกั้นน้ำทะเล		
1	pH	-	Electrometric Method (SM 4500 B)	6.96 <sup>(1)</sup>	7.16	7.0-8.5	09/02/23, 14/02/23 <sup>(1)</sup>
2	TDS	mg/L	Dried at 180 °C (SM 2540 C)	2,350	9,987	-	13/02/23

Remarks : จุดระบายน้ำทิ้งริมถนนสุขุมวิทบริเวณ กม. ที่ 34 (Mixing Zone) = 47P 0676017 UTM 1496895  
หลังประตูกั้นน้ำทะเล = 47P 0675615 UTM 1496215

Method : SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

Standard : Notification of the National Environment Board (2021) (B.E. 2564) ; Class 5

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory

21/2/23



Approved by

Mrs. Porntip Pethshee  
Laboratory Manager

21/2/23

..... END OF REPORT .....

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
- DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL



## TEST REPORT

Analysis No. : R23-1239

Received Date: 27/04/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 19/05/23

Analysis Date : 26/04-16/05/23

Job No. : S660386/Apr

Sampling Date \* : 26/04/23

Sampling By \* : TET

Type of Sample : Wastewater

Sample Conditions : 2304-WW0483 = light violet/slight black sediment, Flow Rate = 21,340 m<sup>3</sup>/Day, Odor = no smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard <sup>(1)</sup>	Analysis Date
				2304-WW0483		
				W2		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	30.9	40	26/04/23
2	pH *	-	Electrometric Method (SM 4500 B)	6.91	5.5-9.0	26/04/23
3	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate	112	300	27/04/23
	Color (pH 7) *	ADMI		118	300	27/04/23
4	TSS *	mg/L	Dried at 103-105 °C (SM 2540 D)	2.8	50	27/04/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,699	(2)	27/04/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	5	20	27/04-02/05/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	35	120	27/04/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.8	5	27/04/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	1.92	100	28/04/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	< 0.10	-	28/04/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	8.65	-	28/04/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.2	28/04/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1	27/04/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1	28/04/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1	27/04/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	1	28/04/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	< 0.02	0.75	02/05/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	28/04/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	02/05/23
20	As *	mg/L	} Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0056	0.25	03/05/23
21	Se *	mg/L		< 0.0005	0.02	03/05/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	1.0	02/05/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	02/05/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.05	2.0	02/05/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.10	5.0	02/05/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.15	1.0	02/05/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	02/05/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.34	5.0	02/05/23

continue

● REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY

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## TEST REPORT

Analysis No. : R23-1239

Received Date: 27/04/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 19/05/23

Analysis Date : 26/04-16/05/23

Job No. : S660386/Apr

Sampling Date \* : 26/04/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard <sup>(I)</sup>	Analysis Date
				2304-WW0483		
				W2		
29	Organochlorine *					
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	can not found	27/04-02/05/23
	- Beta-BHC	µg/L		Not Detected	can not found	27/04-02/05/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	can not found	27/04-02/05/23
	- Heptachlor	µg/L		Not Detected	can not found	27/04-02/05/23
	- Aldrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- Dicofof	µg/L		Not Detected	can not found	27/04-02/05/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	can not found	27/04-02/05/23
	- Heptachlor-endo-epoxide (tran-isomer A)	µg/L		Not Detected	can not found	27/04-02/05/23
	- Gamma-Chlordane	µg/L		Not Detected	can not found	27/04-02/05/23
	- o,p'-DDE	µg/L		Not Detected	can not found	27/04-02/05/23
	- Alpha Endosulfan	µg/L		Not Detected	can not found	27/04-02/05/23
	- Alpha-Chlordane	µg/L		Not Detected	can not found	27/04-02/05/23
	- Dieldrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- p,p'-DDE	µg/L		Not Detected	can not found	27/04-02/05/23
	- o,p'-DDD	µg/L		Not Detected	can not found	27/04-02/05/23
	- Endrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- Beta Endosulfan	µg/L		Not Detected	can not found	27/04-02/05/23
	- p,p'-DDD	µg/L		Not Detected	can not found	27/04-02/05/23
	- o,p'-DDT	µg/L		Not Detected	can not found	27/04-02/05/23
	- p,p'-DDT	µg/L		Not Detected	can not found	27/04-02/05/23
	- Endosulfan sulfate	µg/L		Not Detected	can not found	27/04-02/05/23
30	Carbamate ***					
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	can not found	02-11/05/23
	- Isoprocab	µg/L		Not Detected	can not found	02-11/05/23
	- Fenobucarb	µg/L		Not Detected	can not found	02-11/05/23
	- Promecarb	µg/L		Not Detected	can not found	02-11/05/23
	- Carbofuran	µg/L		Not Detected	can not found	02-11/05/23
	- Methiocarb	µg/L		Not Detected	can not found	02-11/05/23
	- Methomyl	µg/L		Not Detected	can not found	02-11/05/23
	- Aldicarb	µg/L		Not Detected	can not found	02-11/05/23
	- Oxamyl	µg/L		Not Detected	can not found	02-11/05/23
	- Metolcarb	µg/L		Not Detected	can not found	02-11/05/23
31	Organophosphate *					
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	15-16/05/23
	- Mevinphos	µg/L		Not Detected	can not found	15-16/05/23
	- Diazinon	µg/L		Not Detected	can not found	15-16/05/23
	- Dicrotophos	µg/L		Not Detected	can not found	15-16/05/23
	- Monocrotophos	µg/L		Not Detected	can not found	15-16/05/23
	- Dimethoate	µg/L		Not Detected	can not found	15-16/05/23

continue

● REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY

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## TEST REPORT

Analysis No. : R23-1239

Received Date: 27/04/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 19/05/23

Analysis Date : 26/04-16/05/23

Job No. : S660386/Apr

Sampling Date \* : 26/04/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard <sup>(1)</sup>	Analysis Date
				2304-WW0483		
				W2		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	15-16/05/23
	- Chlorpyrifos	µg/L		Not Detected	can not found	15-16/05/23
	- Parathion-methyl	µg/L		Not Detected	can not found	15-16/05/23
	- Pirimiphos-ethyl	µg/L		Not Detected	can not found	15-16/05/23
	- Malathion	µg/L		Not Detected	can not found	15-16/05/23
	- Fenitrothion	µg/L		Not Detected	can not found	15-16/05/23
	- Parathion	µg/L		Not Detected	can not found	15-16/05/23
	- Prothiofos	µg/L		Not Detected	can not found	15-16/05/23
	- Methidathion	µg/L		Not Detected	can not found	15-16/05/23
	- Profenofos	µg/L		Not Detected	can not found	15-16/05/23
	- Ethion	µg/L		Not Detected	can not found	15-16/05/23
	- Triazophos	µg/L		Not Detected	can not found	15-16/05/23
	- EPN	µg/L		Not Detected	can not found	15-16/05/23
	- Phosalone	µg/L		Not Detected	can not found	15-16/05/23
	- Azinphos-ethyl	µg/L		Not Detected	can not found	15-16/05/23
	Pyrethroid *					
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	can not found	27/04-02/05/23
	- Bifenthrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- Phenothrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- Cypermethrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- Cyfluthrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- Fenvalerate	µg/L		Not Detected	can not found	27/04-02/05/23

Remarks \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: W2 = น้ำทิ้งในบ่อ Holding Pond 2 ก่อนสูบน้ำออกทะเลของระบบ Aerated Lagoon & Activated Sludge ของเขตอุตสาหกรรมทั่วไป (พื้นที่โครงการ ระยะที่ 1)  
(47P 0677828 UTM 1497478)

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 รชชช พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิสุทธิศักดิ์

(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual

Standard (1) Notification of the Ministry of Natural Resources and Environment (2016) (B.E. 2559)

(2) Water source with TDS more than 3,000 mg/L in the water shall not exceed TDS in the water source by 5,000 mg/L

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager

REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY

DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL





## TEST REPORT

**Analysis No. :** R23-1239

**Received Date:** 27/04/23

**Customer :** Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

**Address :** 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

**Contact :** Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

**Sample Conditions :** 2304-WS0491 = light violet/slight black sediment

2304-WS0492 = black turbid/high black sediment

**Report Date :** 19/05/23

**Analysis Date :** 26-27/04/23

**Job No. :** S660386/Apr

**Sampling Date :** 26/04/23

**Sampling By :** TET

**Type of Sample :** Seawater

Item	Parameter	Unit	Method	Result		Standard	Analysis Date
				2304-WS0491	2304-WS0492		
				จุดระบายน้ำทิ้งริมถนน สุขุมวิทบริเวณ กม. ที่ 34 (Mixing Zone)	หลังประตูกั้นน้ำทะเล		
1	pH	-	Electrometric Method (SM 4500 B)	7.34	7.47	7.0-8.5	26/04/23
2	TDS	mg/L	Dried at 180 °C (SM 2540 C)	1,946	2,726	-	27/04/23

**Remarks :** จุดระบายน้ำทิ้งริมถนนสุขุมวิทบริเวณ กม. ที่ 34 (Mixing Zone) = 47P 0676017 UTM 1496895

หลังประตูกั้นน้ำทะเล = 47P 0675615 UTM 1496215

**Method :** SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

**Standard :** Notification of the National Environment Board (2021) (B.E. 2564) : Class 5

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory

19.05.23



Approved by

Mrs. Porntip Pethshee  
Laboratory Manager

19.05.23

..... END OF REPORT .....

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
- DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL



## TEST REPORT

Analysis No. : R23-1468

Received Date: 18/05/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 25/07/23

Analysis Date : 17-24/05/23

Job No. : S660386/May

Sampling Date \* : 17/05/23

Sampling By \* : Mr. Chalermwut Poolsanguan

Type of Sample : Wastewater

Sample Conditions : 2305-WW0412 = brown turbid/slight brown sediment, Flow Rate = 17,843 m<sup>3</sup>/Day, Odor = no smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard <sup>(1)</sup>	Analysis Date
				2305-WW0412		
				W2		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	34.6	40	17/05/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.61	5.5-9.0	17/05/23
3	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate	77	300	18/05/23
	Color (pH 7) *	ADMI		62	300	18/05/23
4	TSS *	mg/L	Dried at 103-105 °C (SM 2540 D)	4.0	50	19/05/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,984	(2)	19/05/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	5	20	18-23/05/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	47	120	19/05/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.6	5	19/05/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	1.92	100	22/05/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	< 0.10	-	22/05/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	7.16	-	23/05/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.2	19/05/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1	19/05/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1	18/05/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1	19/05/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	1	19/05/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	< 0.02	0.75	19/05/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	18/05/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	18/05/23
20	As *	mg/L	} Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0034	0.25	23/05/23
21	Se *	mg/L		< 0.0005	0.02	23/05/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.05	1.0	19/05/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	19/05/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.06	2.0	19/05/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.07	5.0	19/05/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.14	1.0	19/05/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	19/05/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.26	5.0	19/05/23

continue

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## TEST REPORT

Analysis No. : R23-1468

Received Date: 18/05/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 25/07/23

Analysis Date : 17-26/05/23

Job No. : S660386/May

Sampling Date \* : 17/05/23

Sampling By \* : Mr. Chalermwut Poolsanguan

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard <sup>(1)</sup>	Analysis Date
				2305-WW0412		
				W2		
29	Organochlorine *					
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	can not found	22-23/05/23
	- Beta-BHC	µg/L		Not Detected	can not found	22-23/05/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	can not found	22-23/05/23
	- Heptachlor	µg/L		Not Detected	can not found	22-23/05/23
	- Aldrin	µg/L		Not Detected	can not found	22-23/05/23
	- Dicofol	µg/L		Not Detected	can not found	22-23/05/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	can not found	22-23/05/23
	- Heptachlor-endo-epoxide (trans-isomer A)	µg/L		Not Detected	can not found	22-23/05/23
	- Gamma-Chlordane	µg/L		Not Detected	can not found	22-23/05/23
	- o,p'-DDE	µg/L		Not Detected	can not found	22-23/05/23
	- Alpha Endosulfan	µg/L		Not Detected	can not found	22-23/05/23
	- Alpha-Chlordane	µg/L		Not Detected	can not found	22-23/05/23
	- Dieldrin	µg/L		Not Detected	can not found	22-23/05/23
	- p,p'-DDE	µg/L		Not Detected	can not found	22-23/05/23
	- o,p'-DDD	µg/L		Not Detected	can not found	22-23/05/23
	- Endrin	µg/L		Not Detected	can not found	22-23/05/23
	- Beta Endosulfan	µg/L		Not Detected	can not found	22-23/05/23
	- p,p'-DDD	µg/L		Not Detected	can not found	22-23/05/23
	- o,p'-DDT	µg/L		Not Detected	can not found	22-23/05/23
	- p,p'-DDT	µg/L		Not Detected	can not found	22-23/05/23
	- Endosulfan sulfate	µg/L		Not Detected	can not found	22-23/05/23
30	Carbamate ***					
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	can not found	19-26/05/22
	- Isoprocab	µg/L		Not Detected	can not found	19-26/05/22
	- Fenobucarb	µg/L		Not Detected	can not found	19-26/05/22
	- Promecarb	µg/L		Not Detected	can not found	19-26/05/22
	- Carbofuran	µg/L		Not Detected	can not found	19-26/05/22
	- Methiocarb	µg/L		Not Detected	can not found	19-26/05/22
	- Methomyl	µg/L		Not Detected	can not found	19-26/05/22
	- Aldicarb	µg/L		Not Detected	can not found	19-26/05/22
	- Oxamyl	µg/L		Not Detected	can not found	19-26/05/22
	- Metolcarb	µg/L		Not Detected	can not found	19-26/05/22
31	Organophosphate *					
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	22-24/05/23
	- Mevinphos	µg/L		Not Detected	can not found	22-24/05/23
	- Diazinon	µg/L		Not Detected	can not found	22-24/05/23
	- Dicrotophos	µg/L		Not Detected	can not found	22-24/05/23
	- Monocrotophos	µg/L		Not Detected	can not found	22-24/05/23
	- Dimethoate	µg/L		Not Detected	can not found	22-24/05/23

continue

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## TEST REPORT

Analysis No. : R23-1468

Received Date: 18/05/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 25/07/23

Analysis Date : 17-24/05/23

Job No. : S660386/May

Sampling Date \* : 17/05/23

Sampling By \* : Mr. Chalermwut Poolsanguan

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard <sup>(1)</sup>	Analysis Date
				2305-WW0412		
				W2		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	22-24/05/23
	- Chlorpyrifos	µg/L		Not Detected	can not found	22-24/05/23
	- Parathion-methyl	µg/L		Not Detected	can not found	22-24/05/23
	- Pirimiphos-ethyl	µg/L		Not Detected	can not found	22-24/05/23
	- Malathion	µg/L		Not Detected	can not found	22-24/05/23
	- Fenitrothion	µg/L		Not Detected	can not found	22-24/05/23
	- Parathion	µg/L		Not Detected	can not found	22-24/05/23
	- Prothiofos	µg/L		Not Detected	can not found	22-24/05/23
	- Methidathion	µg/L		Not Detected	can not found	22-24/05/23
	- Profenofos	µg/L		Not Detected	can not found	22-24/05/23
	- Ethion	µg/L		Not Detected	can not found	22-24/05/23
	- Triazophos	µg/L		Not Detected	can not found	22-24/05/23
	- EPN	µg/L		Not Detected	can not found	22-24/05/23
	- Phosalone	µg/L		Not Detected	can not found	22-24/05/23
	- Azinphos-ethyl	µg/L		Not Detected	can not found	22-24/05/23
	Pyrethroid *					
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	can not found	22-23/05/23
	- Bifenthrin	µg/L		Not Detected	can not found	22-23/05/23
	- Phenothrin	µg/L		Not Detected	can not found	22-23/05/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	can not found	22-23/05/23
	- Cypermethrin	µg/L		Not Detected	can not found	22-23/05/23
	- Cyfluthrin	µg/L		Not Detected	can not found	22-23/05/23
	- Fenvalerate	µg/L		Not Detected	can not found	22-23/05/23

Remarks \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: W2 = น้ำทิ้งในบ่อ Holding Pond 2 ก่อนสูบน้ำออกทะเลของระบบ Aerated Lagoon & Activated Sludge ของเขตอุตสาหกรรมทั่วไป (พื้นที่โครงการ ระยะที่ 1)  
(47P 0677828 UTM 1497478)

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมสวัสดิ์, วิทยาลัยถาวร วิศวกรรมศาสตร์

(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual

Standard (1) Notification of the Ministry of Natural Resources and Environment (2016) (B.E. 2559)

(2) Water source with TDS more than 3,000 mg/L in the water shall not exceed TDS in the water source by 5,000 mg/L

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
25/07/23

Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager  
25/07/23







## TEST REPORT

Analysis No. : R23-1468

Received Date: 18/05/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Sample Conditions : 2305-WS0420 = brown turbid/high brown sediment

2305-WS0421 = brown turbid/high gray and black sediment

Report Date : 25/07/23

Analysis Date : 17-19/05/23

Job No. : S660386/May

Sampling Date : 17/05/23

Sampling By : Mr. Chalermwut Poolsanguan

Type of Sample : Seawater

Item	Parameter	Unit	Method	Result		Standard	Analysis Date
				2305-WS0420	2305-WS0421		
				จุดระบายน้ำทิ้งริมถนน สุขุมวิทบริเวณ กม. ที่ 34 (Mixing Zone)	หลังประตูกั้นน้ำทะเล		
1	pH	-	Electrometric Method (SM 4500 B)	7.59	7.91	7.0-8.5	17/05/23
2	TDS	mg/L	Dried at 180 °C (SM 2540 C)	1,800	17,850	-	19/05/23

Remarks : จุดระบายน้ำทิ้งริมถนนสุขุมวิทบริเวณ กม. ที่ 34 (Mixing Zone) = 47P 0676017 UTM 1496895  
หลังประตูกั้นน้ำทะเล = 47P 0675615 UTM 1496215

Method : SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

Standard : Notification of the National Environment Board (2021) (B.E. 2564) ; Class 5

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

25/07/23



Approved by

Mrs. Porntip Pethshee

Laboratory Manager

25/07/23

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
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## TEST REPORT

Analysis No. : R23-1938

Received Date: 22/06/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Sample Conditions : 2306-WW0625 = yellow turbid/slight black sediment, Flow Rate = 19,637 m<sup>3</sup>/Day, Odor = no smell

Report Date : 07/07/23

Analysis Date : 21-30/06/23

Job No. : S660386/June

Sampling Date \* : 21/06/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard <sup>(1)</sup>	Analysis Date
				2306-WW0625		
				W2		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	34.4	40	21/06/23
2	pH *	-	Electrometric Method (SM 4500 B)	6.64	5.5-9.0	21/06/23
3	Color (Original pH) *	ADMI	} ADM I Weighted-Ordinate Spectrophotometric Method (SM 2120 F)	65	300	23/06/23
	Color (pH 7) *	ADMI		60	300	23/06/23
4	TSS *	mg/L	Dried at 103-105 °C (SM 2540 D)	4.5	50	22/06/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	2,214	(2)	23/06/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	5	20	22-27/06/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	44	120	22/06/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	1.0	5	23/06/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	2.08	100	27/06/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	< 0.10	-	27/06/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	8.05	-	26/06/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.2	23/06/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1	27/06/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1	23/06/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1	27/06/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	1	23/06/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	< 0.02	0.75	26/06/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	22/06/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	30/06/23
20	As *	mg/L	} Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0048	0.25	28/06/23
21	Se *	mg/L		< 0.0005	0.02	28/06/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	1.0	26/06/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	26/06/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	2.0	26/06/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.13	5.0	26/06/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.12	1.0	26/06/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	26/06/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.22	5.0	26/06/23

continue

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## TEST REPORT

Analysis No. : R23-1938

Received Date: 22/06/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 07/07/23

Analysis Date : 21/06-05/07/23

Job No. : S660386/June

Sampling Date \* : 21/06/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard <sup>(1)</sup>	Analysis Date
				2306-WW0625		
				W2		
29	Organochlorine *					
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	can not found	22-26/06/23
	- Beta-BHC	µg/L		Not Detected	can not found	22-26/06/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	can not found	22-26/06/23
	- Heptachlor	µg/L		Not Detected	can not found	22-26/06/23
	- Aldrin	µg/L		Not Detected	can not found	22-26/06/23
	- Dicofof	µg/L		Not Detected	can not found	22-26/06/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	can not found	22-26/06/23
	- Heptachlor-endo-epoxide (trans-isomer A)	µg/L		Not Detected	can not found	22-26/06/23
	- Gamma-Chlordane	µg/L		Not Detected	can not found	22-26/06/23
	- o,p'-DDE	µg/L		Not Detected	can not found	22-26/06/23
	- Alpha Endosulfan	µg/L		Not Detected	can not found	22-26/06/23
	- Alpha-Chlordane	µg/L		Not Detected	can not found	22-26/06/23
	- Dieldrin	µg/L		Not Detected	can not found	22-26/06/23
	- p,p'-DDE	µg/L		Not Detected	can not found	22-26/06/23
	- o,p'-DDD	µg/L		Not Detected	can not found	22-26/06/23
	- Endrin	µg/L		Not Detected	can not found	22-26/06/23
	- Beta Endosulfan	µg/L		Not Detected	can not found	22-26/06/23
	- p,p'-DDD	µg/L		Not Detected	can not found	22-26/06/23
	- o,p'-DDT	µg/L		Not Detected	can not found	22-26/06/23
	- p,p'-DDT	µg/L		Not Detected	can not found	22-26/06/23
	- Endosulfan sulfate	µg/L		Not Detected	can not found	22-26/06/23
30	Carbamate ***					
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	can not found	26/06-05/07/23
	- Isoprocarb	µg/L		Not Detected	can not found	26/06-05/07/23
	- Fenobucarb	µg/L		Not Detected	can not found	26/06-05/07/23
	- Promecarb	µg/L		Not Detected	can not found	26/06-05/07/23
	- Carbofuran	µg/L		Not Detected	can not found	26/06-05/07/23
	- Methiocarb	µg/L		Not Detected	can not found	26/06-05/07/23
	- Methomyl	µg/L		Not Detected	can not found	26/06-05/07/23
	- Aldicarb	µg/L		Not Detected	can not found	26/06-05/07/23
	- Oxamyl	µg/L		Not Detected	can not found	26/06-05/07/23
	- Metolcarb	µg/L		Not Detected	can not found	26/06-05/07/23
31	Organophosphate *					
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	22-28/06/23
	- Mevinphos	µg/L		Not Detected	can not found	22-28/06/23
	- Diazinon	µg/L		Not Detected	can not found	22-28/06/23
	- Dicrotophos	µg/L		Not Detected	can not found	22-28/06/23
	- Monocrotophos	µg/L		Not Detected	can not found	22-28/06/23
	- Dimethoate	µg/L		Not Detected	can not found	22-28/06/23

continue

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## TEST REPORT

Analysis No. : R23-1938

Received Date: 22/06/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 07/07/23

Analysis Date : 21-30/06/23

Job No. : S660386/June

Sampling Date \* : 21/06/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard <sup>(1)</sup>	Analysis Date
				2306-WW0625		
				W2		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	22-28/06/23
	- Chlorpyrifos	µg/L		Not Detected	can not found	22-28/06/23
	- Parathion-methyl	µg/L		Not Detected	can not found	22-28/06/23
	- Pirimiphos-ethyl	µg/L		Not Detected	can not found	22-28/06/23
	- Malathion	µg/L		Not Detected	can not found	22-28/06/23
	- Fenitrothion	µg/L		Not Detected	can not found	22-28/06/23
	- Parathion	µg/L		Not Detected	can not found	22-28/06/23
	- Prothiofos	µg/L		Not Detected	can not found	22-28/06/23
	- Methidathion	µg/L		Not Detected	can not found	22-28/06/23
	- Profenofos	µg/L		Not Detected	can not found	22-28/06/23
	- Ethion	µg/L		Not Detected	can not found	22-28/06/23
	- Triazophos	µg/L		Not Detected	can not found	22-28/06/23
	- EPN	µg/L		Not Detected	can not found	22-28/06/23
	- Phosalone	µg/L		Not Detected	can not found	22-28/06/23
	- Azinphos-ethyl	µg/L		Not Detected	can not found	22-28/06/23
	Pyrethroid *					
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	can not found	22-26/06/23
	- Bifenthrin	µg/L		Not Detected	can not found	22-26/06/23
	- Phenothrin	µg/L		Not Detected	can not found	22-26/06/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	can not found	22-26/06/23
	- Cypermethrin	µg/L		Not Detected	can not found	22-26/06/23
	- Cyfluthrin	µg/L		Not Detected	can not found	22-26/06/23
	- Fenvalerate	µg/L		Not Detected	can not found	22-26/06/23

Remarks \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: W2 = น้ำทิ้งในบ่อ Holding Pond 2 ก่อนสูบน้ำออกทะเลของระบบ Aerated Lagoon & Activated Sludge ของเขตอุตสาหกรรมทั่วไป (พื้นที่โครงการ ระยะที่ 1)  
(47P 0677828 UTM 1497478)

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิสุทธิศักดิ์

(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual

Standard (1) Notification of the Ministry of Natural Resources and Environment (2016) (B.E. 2559)

(2) Water source with TDS more than 3,000 mg/L in the water shall not exceed TDS in the water source by 5,000 mg/L

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory

07/07/23



Approved by

Mrs. Pomtip Pethshee  
Laboratory Manager

07/07/23

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S)
- DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL





## TEST REPORT

Analysis No. : R23-1938

Received Date: 23/06/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Sample Conditions : 2306-WS0647 = brown turbid/slight black sediment/covered with oil slick

2306-WS0648 = yellow turbid/moderate black sediment/covered with oil slick/smell

Report Date : 07/07/23

Analysis Date : 21-26/06/23

Job No. : S660386/June

Sampling Date : 21/06/23

Sampling By : TET

Type of Sample : Seawater

Item	Parameter	Unit	Method	Result		Standard	Analysis Date
				2306-WS0647	2306-WS0648		
				จุดระบายน้ำทิ้งริมถนน สุขุมวิทบริเวณ กม. ที่ 34 (Mixing Zone)	หลังประตูกั้นน้ำทะเล		
1	pH	-	Electrometric Method (SM 4500 B)	7.38	7.04	7.0-8.5	21/06/23
2	TDS	mg/L	Dried at 180 °C (SM 2540 C)	4,678	13,667	-	26/06/23

Remarks : จุดระบายน้ำทิ้งริมถนนสุขุมวิทบริเวณ กม. ที่ 34 (Mixing Zone) = 47P 0676017 UTM 1496895  
หลังประตูกั้นน้ำทะเล = 47P 0675615 UTM 1496215

Method : SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

Standard : Notification of the National Environment Board (2021) (B.E. 2564) ; Class 5

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

07/07/23



Approved by

Mrs. Pomtip Pethshee

Laboratory Manager

07/07/23

..... END OF REPORT .....

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## TEST REPORT

Analysis No. : R23-0070

Received Date: 10/01/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 16/01/23

Analysis Date : 09-16/01/23

Job No. : S660037/Jan

Sampling Date \* : 09/01/23

Sampling By \* : TET

Type of Sample : Wastewater

Sample Conditions : 2301-WW0135 = yellow turbid/high black sediment/covered with oil slick/smell, Flow Rate = 1,440 m<sup>3</sup>/Day, Odor = smell  
2301-WW0137 = yellow turbid/high black sediment/covered with oil slick/smell, Flow Rate = 3,056 m<sup>3</sup>/Day, Odor = smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2301-WW0135	2301-WW0137		
				W3	W5		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	28.1	28.6	45	09/01/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.66	7.66	5.5-9.0	09/01/23
3	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate	112	79	600	11/01/23
	Color (pH 7) *	ADMI		99	70	600	11/01/23
4	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	51.6	58.0	200	11/01/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	519	1,052	3,000	11/01/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	56	26	500	11-16/01/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	180	128	750	11/01/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	2.2	2.9	10	13/01/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	44.62	15.06	100	11/01/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	36.95	11.08	-	11/01/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	9.04	5.68	-	12/01/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	0.002	0.001	0.2	11/01/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	< 0.001	1	12/01/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	1.30	0.22	1	10/01/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	0.04	0.07	1	12/01/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	< 0.01	1	11/01/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	< 0.02	0.95	0.75	11/01/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.12	0.25	10/01/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	< 0.0005	0.005	13/01/23
20	As *	mg/L	} Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0014	0.0028	0.25	10/01/23
21	Se *	mg/L		< 0.0005	< 0.0005	0.02	10/01/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.08	0.10	1.0	11/01/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	< 0.02	0.03	11/01/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.12	0.08	2.0	11/01/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.38	0.08	5.0	11/01/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.04	1.0	11/01/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	< 0.04	0.2	11/01/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.12	0.37	5.0	11/01/23

continue

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## TEST REPORT

Analysis No. : R23-0070

Received Date: 10/01/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 16/01/23

Analysis Date : 09-23/01/23

Job No. : S660037/Jan

Sampling Date \* : 09/01/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2301-WW0135	2301-WW0137		
				W3	W5		
29	Organochlorine *						
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	Not Detected	can not found	10-11/01/23
	- Beta-BHC	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Heptachlor	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Aldrin	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Dicofol	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Heptachlor-endo-epoxide (trans-isomer A)	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Gamma-Chlordane	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- o,p'-DDE	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Alpha Endosulfan	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Alpha-Chlordane	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Dieldrin	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- p,p'-DDE	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- o,p'-DDD	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Endrin	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Beta Endosulfan	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- p,p'-DDD	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- o,p'-DDT	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- p,p'-DDT	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Endosulfan sulfate	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
30	Carbamate ***						
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	Not Detected	can not found	12-23/01/23
	- Isoproc carb	µg/L		Not Detected	Not Detected	can not found	12-23/01/23
	- Fenobucarb	µg/L		Not Detected	Not Detected	can not found	12-23/01/23
	- Promecarb	µg/L		Not Detected	Not Detected	can not found	12-23/01/23
	- Carbofuran	µg/L		Not Detected	Not Detected	can not found	12-23/01/23
	- Methiocarb	µg/L		Not Detected	Not Detected	can not found	12-23/01/23
	- Methomyl	µg/L		Not Detected	Not Detected	can not found	12-23/01/23
	- Aldicarb	µg/L		Not Detected	Not Detected	can not found	12-23/01/23
	- Oxamyl	µg/L		Not Detected	Not Detected	can not found	12-23/01/23
	- Metolcarb	µg/L		Not Detected	Not Detected	can not found	12-23/01/23
31	Organophosphate *						
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	can not found	11-13/01/23
	- Mevinphos	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Diazinon	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Dicrotophos	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Monocrotophos	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Dimethoate	µg/L		Not Detected	Not Detected	can not found	11-13/01/23

continue

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## TEST REPORT

Analysis No. : R23-0070

Received Date: 10/01/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 16/01/23

Analysis Date : 09-16/01/23

Job No. : S660037/Jan

Sampling Date \* : 09/01/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2301-WW0135	2301-WW0137		
				W3	W5		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	can not found	11-13/01/23
	- Chlorpyrifos	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Parathion-methyl	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Pirimiphos	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Malathion	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Fenitrothion	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Parathion	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Prothiofos	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Methidathion	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Profenofos	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Ethion	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Triazophos	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- EPN	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Phosalone	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Azinphos-ethyl	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	Pyrethroid *						
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	Not Detected	can not found	10-11/01/23
	- Bifenthrin	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Phenothrin	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Cypermethrin	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Cyfluthrin	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Fenvalerate	µg/L		Not Detected	Not Detected	can not found	10-11/01/23

Remarks \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: W3 = น้ำเสียรวมเข้า Wet Well ของระบบบำบัดน้ำเสียแบบแผ่นจานหมุนชีวภาพ (RBC) ในเขตอุตสาหกรรมส่งออก (พื้นที่โครงการ ระยะที่ 1) (47P 0680521 UTM 1498087)  
W5 = น้ำเสียก่อนเข้า Automatic Screening ของระบบ Extended Activated Sludge ของพื้นที่โครงการระยะที่ 2 (47P 0679749 UTM 1499564)

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิสุทธิศักดิ์

(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual

Standard : Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
16/01/23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager  
16/01/23

● REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY

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## TEST REPORT

Analysis No. : R23-0380

Received Date: 10/02/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู  
โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Report Date : 21/02/23

Analysis Date : 09-20/02/23

Job No. : S660037/Feb

Sampling Date \* : 09/02/23

Sampling By \* : TET

Type of Sample : Wastewater

Sample Conditions : 2302-WW0261 = yellow turbid/high black sediment/covered with oil slick/smell, Flow Rate = 1,452 m<sup>3</sup>/Day, Odor = smell  
2302-WW0263 = black turbid/high black sediment/covered with oil slick/smell, Flow Rate = 3,179 m<sup>3</sup>/Day, Odor = smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2302-WW0261	2302-WW0263		
				W3	W5		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	29.8	30.1	45	09/02/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.33	6.67 <sup>(1)</sup>	5.5-9.0	09/02/23,14/02/23 <sup>(1)</sup>
3	Color (Original pH) *	ADMI	ADMI Weighted-Ordinate	105	25	600	10/02/23
	Color (pH 7) *	ADMI	Spectrophotometric Method (SM 2120 F)	53	27	600	10/02/23
4	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	34.3	141.7	200	14/02/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	710	980	3,000	13/02/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	29	86	500	10-15/02/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	125	218	750	10/02/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	5.6	6.3	10	14/02/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	36.22	23.40	100	14/02/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	28.42	13.37	-	14/02/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	9.00	19.98	-	15/02/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.002	0.2	13/02/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	< 0.001	1	14/02/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	1.40	1.98	1	14/02/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	< 0.01	1	14/02/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	< 0.01	1	13/02/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	< 0.02	0.68	0.75	16/02/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	< 0.02	0.25	10/02/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	< 0.0005	0.005	10/02/23
20	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0008	0.0031	0.25	14/02/23
21	Se *	mg/L		< 0.0005	< 0.0005	0.02	14/02/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.09	0.17	1.0	16/02/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	< 0.02	0.03	16/02/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.14	0.53	2.0	16/02/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.26	0.11	5.0	16/02/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.18	1.0	16/02/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	< 0.04	0.2	16/02/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.11	3.31 *	5.0	16/02/23

continue

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## TEST REPORT

Analysis No. : R23-0380

Received Date: 10/02/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 21/02/23

Analysis Date : 09-20/02/23

Job No. : S660037/Feb

Sampling Date \* : 09/02/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2302-WW0261	2302-WW0263		
				W3	W5		
29	Organochlorine *						
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	Not Detected	can not found	17-20/02/23
	- Beta-BHC	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Heptachlor	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Aldrin	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Dicofof	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Heptachlor-endo-epoxide (trans-isomer A)	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Gamma-Chlordane	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- o,p'-DDE	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Alpha Endosulfan	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Alpha-Chlordane	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Dieldrin	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- p,p'-DDE	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- o,p'-DDD	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Endrin	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Beta Endosulfan	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- p,p'-DDD	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- o,p'-DDT	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- p,p'-DDT	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Endosulfan sulfate	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
30	Carbamate ***						
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	Not Detected	can not found	13-18/02/23
	- Isoprocarb	µg/L		Not Detected	Not Detected	can not found	13-18/02/23
	- Fenobucarb	µg/L		Not Detected	Not Detected	can not found	13-18/02/23
	- Promecarb	µg/L		Not Detected	Not Detected	can not found	13-18/02/23
	- Carbofuran	µg/L		Not Detected	Not Detected	can not found	13-18/02/23
	- Methiocarb	µg/L		Not Detected	Not Detected	can not found	13-18/02/23
	- Methomyl	µg/L		Not Detected	Not Detected	can not found	13-18/02/23
	- Aldicarb	µg/L		Not Detected	Not Detected	can not found	13-18/02/23
	- Oxamyl	µg/L		Not Detected	Not Detected	can not found	13-18/02/23
	- Metolcarb	µg/L		Not Detected	Not Detected	can not found	13-18/02/23
31	Organophosphate *						
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	can not found	17-20/02/23
	- Mevinphos	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Diazinon	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Dicrotophos	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Monocrotophos	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Dimethoate	µg/L		Not Detected	Not Detected	can not found	17-20/02/23

continue

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**TET**

Thai Environmental Technic Limited  
บริษัท เทคนิคสิ่งแวดล้อมไทย จำกัด



ORIGINAL  
ต้นฉบับ

1/6 Soi Ramkhamhaeng 145, Khwaeng / Khet Saphansung, Bangkok 10240  
1/6 ซอยรามคำแหง 145 แขวงสะพานสูง เขตสะพานสูง กรุงเทพมหานคร 10240

E-mail : admin@tet1995.com

Tel : 0-2373-7799 (Auto) Fax : 0-2373-7979

Page 6 of 18

## TEST REPORT

Analysis No. : R23-0380

Received Date: 10/02/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 21/02/23

Analysis Date : 09-20/02/23

Job No. : S660037/Feb

Sampling Date \* : 09/02/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2302-WW0261	2302-WW0263		
				W3	W5		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	can not found	17-20/02/23
	- Chlorpyrifos	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Parathion-methyl	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Pirimiphos	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Malathion	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Fenitrothion	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Parathion	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Prothiofos	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Methidathion	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Profenofos	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Ethion	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Triazophos	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- EPN	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Phosalone	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Azinphos-ethyl	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	Pyrethroid *						
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	Not Detected	can not found	17-20/02/23
	- Bifenthrin	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Phenothrin	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Cypermethrin	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Cyfluthrin	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Fenvalerate	µg/L		Not Detected	Not Detected	can not found	17-20/02/23

Remarks \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: W3 = น้ำเสียรวมเข้า Wet Well ของระบบบำบัดน้ำเสียแบบแผ่นจานหมุนชีวภาพ (RBC) ในเขตอุตสาหกรรมส่งออก (พื้นที่โครงการ ระยะที่ 1) (47P 0680521 UTM 1498087)  
W5 = น้ำเสียก่อนเข้า Automatic Screening ของระบบ Extended Activated Sludge ของพื้นที่โครงการระยะที่ 2 (47P 0679749 UTM 1499564)

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิศุทธิ์ศักดิ์

(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual

Standard : Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory

21/02/23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager

21/02/23

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## TEST REPORT

Analysis No. : R23-1239

Received Date: 27/04/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 19/05/23

Analysis Date : 26/04-16/05/23

Job No. : S660386/Apr

Sampling Date \* : 26/04/23

Sampling By \* : TET

Type of Sample : Wastewater

Sample Conditions : 2304-WW0484 = yellow turbid/slight black sediment/covered with oil slick/smell, Flow Rate = 1,817 m<sup>3</sup>/Day, Odor = smell  
2304-WW0486 = yellow turbid/slight black sediment/covered with oil slick/smell, Flow Rate = 3,572 m<sup>3</sup>/Day, Odor = smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2304-WW0484	2304-WW0486		
				W3	W5		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	31.8	31.9	45	26/04/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.41	7.27	5.5-9.0	26/04/23
3	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate Spectrophotometric Method (SM 2120 F)	232	61	600	27/04/23
	Color (pH 7) *	ADMI		193	53	600	27/04/23
4	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	44.3	43.8	200	27/04/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	443	780	3,000	27/04/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	59	27	500	27/04-02/05/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	195	122	750	27/04/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	4.2	6.7	10	27/04/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	49.77	13.95	100	28/04/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	36.95	9.24	-	28/04/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	8.82	46.46	-	28/04/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.004	0.2	28/04/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	0.036	1	27/04/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	2.14	0.12	1	28/04/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	0.04	0.08	1	27/04/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	0.02	1	28/04/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	< 0.02	0.79	0.75	02/05/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	< 0.02	0.25	28/04/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	< 0.0005	0.005	02/05/23
20	As *	mg/L	} Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0039	0.0040	0.25	03/05/23
21	Se *	mg/L		< 0.0005	< 0.0005	0.02	03/05/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.06	0.07	1.0	02/05/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	< 0.02	0.03	02/05/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.07	1.64	2.0	02/05/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.38	0.07	5.0	02/05/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.13	1.0	02/05/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	< 0.04	0.2	02/05/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.08	1.48	5.0	02/05/23

continue

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## TEST REPORT

Analysis No. : R23-1239

Received Date: 27/04/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 19/05/23

Analysis Date : 26/04-16/05/23

Job No. : S660386/Apr

Sampling Date \* : 26/04/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2304-WW0484	2304-WW0486		
				W3	W5		
29	Organochlorine *						
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	Not Detected	can not found	27/04-02/05/23
	- Beta-BHC	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Heptachlor	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Aldrin	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Dicofof	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Heptachlor-endo-epoxide (tran-isomer A)	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Gamma-Chlordane	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- o,p'-DDE	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Alpha Endosulfan	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Alpha-Chlordane	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Dieldrin	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- p,p'-DDE	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- o,p'-DDD	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Endrin	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Beta Endosulfan	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- p,p'-DDD	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- o,p'-DDT	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- p,p'-DDT	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Endosulfan sulfate	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
30	Carbamate ***						
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	Not Detected	can not found	02-11/05/23
	- Isoproc carb	µg/L		Not Detected	Not Detected	can not found	02-11/05/23
	- Fenobucarb	µg/L		Not Detected	Not Detected	can not found	02-11/05/23
	- Promecarb	µg/L		Not Detected	Not Detected	can not found	02-11/05/23
	- Carbofuran	µg/L		Not Detected	Not Detected	can not found	02-11/05/23
	- Methiocarb	µg/L		Not Detected	Not Detected	can not found	02-11/05/23
	- Methomyl	µg/L		Not Detected	Not Detected	can not found	02-11/05/23
	- Aldicarb	µg/L		Not Detected	Not Detected	can not found	02-11/05/23
	- Oxamyl	µg/L		Not Detected	Not Detected	can not found	02-11/05/23
	- Metolcarb	µg/L		Not Detected	Not Detected	can not found	02-11/05/23
31	Organophosphate *						
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	can not found	15-16/05/23
	- Mevinphos	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Diazinon	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Dicrotophos	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Monocrotophos	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Dimethoate	µg/L		Not Detected	Not Detected	can not found	15-16/05/23

continue

● REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY

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## TEST REPORT

**Analysis No. :** R23-1239  
**Received Date:** 27/04/23  
**Customer :** Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู  
**Address :** 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280  
**Contact :** Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

**Report Date :** 19/05/23  
**Analysis Date :** 26/04-16/05/23  
**Job No. :** S660386/Apr  
**Sampling Date \* :** 26/04/23  
**Sampling By \* :** TET  
**Type of Sample :** Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2304-WW0484	2304-WW0486		
				W3	W5		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	can not found	15-16/05/23
	- Chlorpyrifos	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Parathion-methyl	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Pirimiphos-ethyl	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Malathion	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Fenitrothion	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Parathion	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Prothiofos	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Methidathion	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Profenofos	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Ethion	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Triazophos	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- EPN	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Phosalone	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Azinphos-ethyl	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	Pyrethroid *						
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	Not Detected	can not found	27/04-02/05/23
	- Bifenthrin	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Phenothrin	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Cypermethrin	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Cyfluthrin	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Fenvalerate	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23

**Remarks :** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: W3 = น้ำเสียรวมเข้า Wet Well ของระบบบำบัดน้ำเสียแบบแผ่นจานหมุนชีวภาพ (RBC) ในเขตอุตสาหกรรมส่งออก (พื้นที่โครงการ ระยะที่ 1) (47P 0680521 UTM 1498087)  
W5 = น้ำเสียก่อนเข้า Automatic Screening ของระบบ Extended Activated Sludge ของพื้นที่โครงการระยะที่ 2 (47P 0679749 UTM 1499564)

**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ของ พ.ร.บ. ควบคุมมลพิษ, วิทยาลัยเทคนิค วิศวกรรมศาสตร์

(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual

**Standard :** Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
19/05/23



Approved by

Mrs. Pomtip Pethshee  
Laboratory Manager  
19/05/23

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- DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL





## TEST REPORT

Analysis No. : R23-1468

Received Date: 18/05/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 25/07/23

Analysis Date : 17-24/05/23

Job No. : S660386/May

Sampling Date \* : 17/05/23

Sampling By \* : Mr. Chalermwut Poolsanguan

Type of Sample : Wastewater

Sample Conditions : 2305-WW0413 = yellow turbid/high brown sediment/covered with oil slick/smell, Flow Rate = 1,581 m<sup>3</sup>/Day, Odor = smell

2305-WW0415 = black turbid/high black sediment/covered with oil slick/smell, Flow Rate = 2,995 m<sup>3</sup>/Day, Odor = smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2305-WW0413	2305-WW0415		
				W3	W5		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	33.1	32.7	45	17/05/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.83	7.40	5.5-9.0	17/05/23
3	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate	144	35	600	18/05/23
	Color (pH 7) *	ADMI		141	31	600	18/05/23
4	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	18.9	167.5	200	19/05/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	558	1,083	3,000	19/05/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	47	27	500	18-23/05/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	150	124	750	19/05/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	4.2	3.8	10	19/05/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	34.78	12.44	100	22/05/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	31.96	7.64	-	22/05/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	10.54	27.53	-	23/05/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	2.462	0.2	19, 23/05/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	< 0.001	1	19/05/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	0.95	0.11	1	18/05/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	0.02	1	19/05/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	< 0.01	1	19/05/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	< 0.02	0.23	0.75	19/05/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	< 0.02	0.25	18/05/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	< 0.0005	0.005	18/05/23
20	As *	mg/L	} Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0021	0.0050	0.25	23/05/23
21	Se *	mg/L		< 0.0005	< 0.0005	0.02	23/05/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.06	0.28	1.0	19/05/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	< 0.02	0.03	19/05/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.11	2.74 *	2.0	19/05/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.58	0.13	5.0	19/05/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.11	1.0	19/05/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	< 0.04	0.2	19/05/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.05	3.97 *	5.0	19/05/23

continue

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## TEST REPORT

Analysis No. : R23-1468

Received Date: 18/05/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 25/07/23

Analysis Date : 17-26/05/23

Job No. : S660386/May

Sampling Date \* : 17/05/23

Sampling By \* : Mr. Chalermwut Poolsanguan

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2305-WW0413	2305-WW0415		
				W3	W5		
29	Organochlorine *						
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	Not Detected	can not found	22-23/05/23
	- Beta-BHC	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Heptachlor	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Aldrin	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Dicofol	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Heptachlor-endo-epoxide (trans-isomer A)	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Gamma-Chlordane	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- o,p'-DDE	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Alpha Endosulfan	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Alpha-Chlordane	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Dieldrin	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- p,p'-DDE	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- o,p'-DDD	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Endrin	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Beta Endosulfan	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- p,p'-DDD	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- o,p'-DDT	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- p,p'-DDT	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Endosulfan sulfate	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
30	Carbamate ***						
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	Not Detected	can not found	19-26/05/22
	- Isoproc carb	µg/L		Not Detected	Not Detected	can not found	19-26/05/22
	- Fenobucarb	µg/L		Not Detected	Not Detected	can not found	19-26/05/22
	- Promecarb	µg/L		Not Detected	Not Detected	can not found	19-26/05/22
	- Carbofuran	µg/L		Not Detected	Not Detected	can not found	19-26/05/22
	- Methiocarb	µg/L		Not Detected	Not Detected	can not found	19-26/05/22
	- Methomyl	µg/L		Not Detected	Not Detected	can not found	19-26/05/22
	- Aldicarb	µg/L		Not Detected	Not Detected	can not found	19-26/05/22
	- Oxamyl	µg/L		Not Detected	Not Detected	can not found	19-26/05/22
	- Metolcarb	µg/L		Not Detected	Not Detected	can not found	19-26/05/22
31	Organophosphate *						
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	can not found	22-24/05/23
	- Mevinphos	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Diazinon	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Dicrotophos	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Monocrotophos	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Dimethoate	µg/L		Not Detected	Not Detected	can not found	22-24/05/23

continue

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## TEST REPORT

**Analysis No. :** R23-1468  
**Received Date:** 18/05/23  
**Customer :** Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู  
**Address :** 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280  
**Contact :** Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

**Report Date :** 25/07/23  
**Analysis Date :** 17-24/05/23  
**Job No. :** S660386/May  
**Sampling Date \* :** 17/05/23  
**Sampling By \* :** Mr. Chalermwut Poolsanguan  
**Type of Sample :** Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2305-WW0413	2305-WW0415		
				W3	W5		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	can not found	22-24/05/23
	- Chlorpyrifos	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Parathion-methyl	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Pirimiphos-ethyl	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Malathion	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Fenitrothion	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Parathion	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Prothiofos	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Methidathion	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Profenofos	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Ethion	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Triazophos	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- EPN	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Phosalone	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Azinphos-ethyl	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	Pyrethroid *						
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	Not Detected	can not found	22-23/05/23
	- Bifenthrin	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Phenothrin	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Cypermethrin	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Cyfluthrin	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Fenvalerate	µg/L		Not Detected	Not Detected	can not found	22-23/05/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: W3 = น้ำเสียรวมเข้า Wet Well ของระบบบำบัดน้ำเสียแบบแผ่นจานหมุนชีวภาพ (RBC) ในเขตอุตสาหกรรมส่งออก (พื้นที่โครงการ ระยะที่ 1) (47P 0680521 UTM 1498087), Analysis Date Cyanide = 19/05/23

W5 = น้ำเสียก่อนเข้า Automatic Screening ของระบบ Extended Activated Sludge ของพื้นที่โครงการระยะที่ 2 (47P 0679749 UTM 1499564), Analysis Date Cyanide = 23/05/23

**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ราชภัฏ พระนครสวรรค์, วิทยาลัยเกษตร วิสุทธรักษ์

(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual

**Standard** : Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
25/07/23



Approved by

Mrs. Pomtip Pethshee  
Laboratory Manager  
25/07/23

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
- DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL





## TEST REPORT

Analysis No. : R23-1938

Received Date: 22/06/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 07/07/23

Analysis Date : 21-30/06/23

Job No. : S660386/June

Sampling Date \* : 21/06/23

Sampling By \* : TET

Type of Sample : Wastewater

Sample Conditions : 2306-WW0626 = yellow turbid/slight black sediment/smell, Flow Rate = 1,829 m<sup>3</sup>/Day, Odor = smell

2306-WW0628 = black turbid/slight black sediment/smell, Flow Rate = 3,018 m<sup>3</sup>/Day, Odor = smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2306-WW0626	2306-WW0628		
				W3	W5		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	32.1	33.0	45	21/06/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.29	6.72	5.5-9.0	21/06/23
3	Color (Original pH) *	ADMI	ADMI Weighted-Ordinate	210	89	600	23/06/23
	Color (pH 7) *	ADMI	Spectrophotometric Method (SM 2120 F)	175	114	600	23/06/23
4	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	59.5	58.5	200	22/06/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	630	917	3,000	23/06/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	58	89	500	22-27/06/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	200	300	750	22/06/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	5.7	13.2	10	23/06/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	54.99	25.47	100	27/06/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	41.68	14.47	-	27/06/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	11.68	10.84	-	23/06/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	1.754	0.2	23, 27/06/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	0.017	< 0.001	1	27/06/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	2.80	0.27	1	23/06/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	0.44	0.29	1	27/06/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	< 0.01	1	23/06/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	< 0.02	0.08	0.75	26/06/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	< 0.02	0.25	22/06/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	< 0.0005	0.005	30/06/23
20	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0014	0.0039	0.25	28/06/23
21	Se *	mg/L		< 0.0005	< 0.0005	0.02	28/06/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	0.05	1.0	26/06/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	< 0.02	0.03	26/06/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	5.41	2.0	26, 27/06/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.89	0.09	5.0	26/06/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	1.0	26/06/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	< 0.04	0.2	26/06/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.80	5.0	26/06/23

continue

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## TEST REPORT

Analysis No. : R23-1938

Received Date: 22/06/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 07/07/23

Analysis Date : 21/06-05/07/23

Job No. : S660386/June

Sampling Date \* : 21/06/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2306-WW0626	2306-WW0628		
				W3	W5		
29	Organochlorine *						
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	Not Detected	can not found	22-26/06/23
	- Beta-BHC	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Heptachlor	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Aldrin	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Dicofol	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Heptachlor-endo-epoxide (trans-isomer A)	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Gamma-Chlordane	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- o,p'-DDE	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Alpha Endosulfan	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Alpha-Chlordane	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Dieldrin	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- p,p'-DDE	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- o,p'-DDD	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Endrin	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Beta Endosulfan	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- p,p'-DDD	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- o,p'-DDT	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- p,p'-DDT	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Endosulfan sulfate	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
30	Carbamate ***						
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	Not Detected	can not found	26/06-05/07/23
	- Isoproc carb	µg/L		Not Detected	Not Detected	can not found	26/06-05/07/23
	- Fenobucarb	µg/L		Not Detected	Not Detected	can not found	26/06-05/07/23
	- Promecarb	µg/L		Not Detected	Not Detected	can not found	26/06-05/07/23
	- Carbofuran	µg/L		Not Detected	Not Detected	can not found	26/06-05/07/23
	- Methiocarb	µg/L		Not Detected	Not Detected	can not found	26/06-05/07/23
	- Methomyl	µg/L		Not Detected	Not Detected	can not found	26/06-05/07/23
	- Aldicarb	µg/L		Not Detected	Not Detected	can not found	26/06-05/07/23
	- Oxamyl	µg/L		Not Detected	Not Detected	can not found	26/06-05/07/23
	- Metolcarb	µg/L		Not Detected	Not Detected	can not found	26/06-05/07/23
31	Organophosphate *						
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	can not found	22-28/06/23
	- Mevinphos	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Diazinon	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Dicrotophos	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Monocrotophos	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Dimethoate	µg/L		Not Detected	Not Detected	can not found	22-28/06/23

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## TEST REPORT

Analysis No. : R23-1938

Received Date: 22/06/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 07/07/23

Analysis Date : 21-30/06/23

Job No. : S660386/June

Sampling Date \* : 21/06/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2306-WW0626	2306-WW0628		
				W3	W5		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	can not found	22-28/06/23
	- Chlorpyrifos	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Parathion-methyl	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Pirimiphos-ethyl	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Malathion	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Fenitrothion	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Parathion	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Prothiofos	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Methidathion	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Profenofos	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Ethion	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Triazophos	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- EPN	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Phosalone	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Azinphos-ethyl	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	Pyrethroid *						
	- Deltamethrin	µg/L	LLE, GC/EC (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	Not Detected	can not found	22-26/06/23
	- Bifenthrin	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Phenothrin	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Cypermethrin	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Cyfluthrin	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Fenvalerate	µg/L		Not Detected	Not Detected	can not found	22-26/06/23

Remarks \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: W3 = น้ำเสียรวมเข้า Wet Well ของระบบบำบัดน้ำเสียแบบแผ่นจานหมุนชีวภาพ (RBC) ในเขตอุตสาหกรรมส่งออก (พื้นที่โครงการ ระยะที่ 1) (47P 0680521 UTM 1498087),

Analysis Date Cyanide = 23/06/23, Cu = 26/06/23

W5 = น้ำเสียก่อนเข้า Automatic Screening ของระบบ Extended Activated Sludge ของพื้นที่โครงการระยะที่ 2 (47P 0679749 UTM 1499564),

Analysis Date Cyanide = 27/06/23, Cu = 27/06/23

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ของ พ.ร.บ. ควบคุมมลพิษ, วิทยาลัยเทคนิค วิทยาศาสตร์

(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual

Standard : Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

07/07/23



Approved by

Mrs. Porntip Pethshee

Laboratory Manager

07/07/23

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## TEST REPORT

Analysis No. : R23-0070

Received Date: 10/01/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Report Date : 16/01/23

Analysis Date : 09-16/01/23

Job No. : S660037/Jan

Sampling Date \* : 09/01/23

Sampling By \* : TET

Type of Sample : Wastewater

Sample Conditions : 2301-WW0136 = yellow turbid/slight black sediment/covered with oil slick, Flow Rate = 1,440 m<sup>3</sup>/Day, Odor = no smell  
2301-WW0138 = yellow turbid/slight black sediment/covered with oil slick, Flow Rate = 3,056 m<sup>3</sup>/Day, Odor = no smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2301-WW0136	2301-WW0138		
				W4	W6		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	26.7	26.9	40	09/01/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.39	7.82	5.5-9.0	09/01/23
3	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate Spectrophotometric Method (SM 2120 F)	38	21	300	11/01/23
	Color (pH 7) *	ADMI		32	19	300	11/01/23
4	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	10.2	12.3	50	11/01/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,000	1,081	3,000	11/01/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	5	3	20	11-16/01/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	46	38	120	11/01/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	1.0	0.6	5	13/01/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	2.73	1.36	100	11/01/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	0.80	< 0.10	-	11/01/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	8.96	5.03	-	12/01/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	< 0.001	0.2	11/01/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	< 0.001	1	12/01/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	< 0.01	1	10/01/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	< 0.01	1	12/01/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	< 0.01	1	11/01/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	< 0.02	0.06	0.75	11/01/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	< 0.02	0.25	10/01/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	< 0.0005	0.005	13/01/23
20	As *	mg/L	} Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0011	0.0029	0.25	10/01/23
21	Se *	mg/L		< 0.0005	< 0.0005	0.02	10/01/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	< 0.05	1.0	11/01/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	< 0.02	0.03	11/01/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.13	0.25	2.0	11/01/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.30	0.09	5.0	11/01/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.04	1.0	11/01/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	< 0.04	0.2	11/01/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.07	0.30	5.0	11/01/23

continue

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## TEST REPORT

**Analysis No. :** R23-0070  
**Received Date:** 10/01/23  
**Customer :** Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู  
**Address :** 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280  
**Contact :** Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

**Report Date :** 16/01/23  
**Analysis Date :** 09-23/01/23  
**Job No. :** S660037/Jan  
**Sampling Date \* :** 09/01/23  
**Sampling By \* :** TET  
**Type of Sample :** Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2301-WW0136	2301-WW0138		
				W4	W6		
29	Organochlorine *						
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	Not Detected	can not found	10-11/01/23
	- Beta-BHC	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Heptachlor	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Aldrin	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Dicofof	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Heptachlor-endo-epoxide (tran-isomer A)	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Gamma-Chlordane	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- o,p'-DDE	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Alpha Endosulfan	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Alpha-Chlordane	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Dieldrin	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- p,p'-DDE	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- o,p'-DDD	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Endrin	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Beta Endosulfan	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- p,p'-DDD	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- o,p'-DDT	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- p,p'-DDT	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Endosulfan sulfate	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
30	Carbamate ***						
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	Not Detected	can not found	12-23/01/23
	- Isoproc carb	µg/L		Not Detected	Not Detected	can not found	12-23/01/23
	- Fenobucarb	µg/L		Not Detected	Not Detected	can not found	12-23/01/23
	- Promecarb	µg/L		Not Detected	Not Detected	can not found	12-23/01/23
	- Carbofuran	µg/L		Not Detected	Not Detected	can not found	12-23/01/23
	- Methiocarb	µg/L		Not Detected	Not Detected	can not found	12-23/01/23
	- Methomyl	µg/L		Not Detected	Not Detected	can not found	12-23/01/23
	- Aldicarb	µg/L		Not Detected	Not Detected	can not found	12-23/01/23
	- Oxamyl	µg/L		Not Detected	Not Detected	can not found	12-23/01/23
	- Metolcarb	µg/L		Not Detected	Not Detected	can not found	12-23/01/23
31	Organophosphate *						
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	can not found	11-13/01/23
	- Mevinphos	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Diazinon	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Dicrotophos	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Monocrotophos	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Dimethoate	µg/L		Not Detected	Not Detected	can not found	11-13/01/23

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## TEST REPORT

Analysis No. : R23-0070

Received Date: 10/01/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 16/01/23

Analysis Date : 09-16/01/23

Job No. : S660037/Jan

Sampling Date \* : 09/01/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2301-WW0136	2301-WW0138		
				W4	W6		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	can not found	11-13/01/23
	- Chlorpyrifos	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Parathion-methyl	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Pirimiphos	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Malathion	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Fenitrothion	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Parathion	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Prothiofos	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Methidathion	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Profenofos	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Ethion	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Triazophos	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- EPN	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Phosalone	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	- Azinphos-ethyl	µg/L		Not Detected	Not Detected	can not found	11-13/01/23
	Pyrethroid *						
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	Not Detected	can not found	10-11/01/23
	- Bifenthrin	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Phenothrin	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Cypermethrin	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Cyfluthrin	µg/L		Not Detected	Not Detected	can not found	10-11/01/23
	- Fenvalerate	µg/L		Not Detected	Not Detected	can not found	10-11/01/23

Remarks \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: W4 = น้ำเสียที่ออกจากถังตกตะกอนของระบบ RBC ในเขตอุตสาหกรรม (พื้นที่โครงการ ระยะที่ 1) ก่อนระบายลงคลองสลัด (47P 0680511 UTM 1498026)  
W6 = น้ำทิ้งที่ออกจากระบบบำบัดชีวโรค (ก่อนระบายผ่านระบบเส้นท่อลงทะเล) ของระบบ Extended Activated Sludge ของพื้นที่โครงการ ระยะที่ 2  
(47P 0679771 UTM 1499589)

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 รงชัย พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิศุทธิ์ศักดิ์

(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual

Standard : Notification of the Ministry of Natural Resources and Environment (2016) (B.E. 2559)

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

16/01/23



Approved by

Mrs. Pornpip Pethshee

Laboratory Manager

16/01/23

● REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY

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Thai Environmental Technic Limited

บริษัท เทคนิคสิ่งแวดล้อมไทย จำกัด



ORIGINAL

ต้นฉบับ

1/6 Soi Ramkhamhaeng 145, Khwaeng / Khet Saphansung, Bangkok 10240

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1/6 ซอยรามคำแหง 145 แขวงสะพานสูง เขตสะพานสูง กรุงเทพมหานคร 10240

Tel : 0-2373-7799 (Auto) Fax : 0-2373-7979

Page 13 of 18

## TEST REPORT

Analysis No. : R23-0380

Received Date: 10/02/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 21/02/23

Analysis Date : 09-20/02/23

Job No. : S660037/Feb

Sampling Date \* : 09/02/23

Sampling By \* : TET

Type of Sample : Wastewater

Sample Conditions : 2302-WW0262 = yellow turbid/high white sediment/covered with oil slick, Flow Rate = 1,452 m<sup>3</sup>/Day, Odor = no smell

2302-WW0264 = yellow turbid/high black sediment/covered with oil slick, Flow Rate = 3,179 m<sup>3</sup>/Day, Odor = no smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2302-WW0262	2302-WW0264		
				W4	W6		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	29.4	30.0	40	09/02/23
2	pH *	-	Electrometric Method (SM 4500 B)	6.54	6.88	5.5-9.0	09/02/23
3	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate	29	16	300	10/02/23
	Color (pH 7) *	ADMI		30	17	300	10/02/23
4	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	9.0 *	11.2	50	14/02/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	866	1,014	3,000	13/02/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	3	1	20	10-15/02/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	46	11	120	10/02/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	1.0	0.6	5	14/02/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	1.78	2.79	100	14/02/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	0.89	1.17	-	14/02/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	14.06	9.96	-	15/02/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	0.003	< 0.001	0.2	13/02/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	< 0.001	1	14/02/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	< 0.01	1	14/02/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	< 0.01	1	14/02/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	< 0.01	1	13/02/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	< 0.02	0.11	0.75	16/02/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	< 0.02	0.25	10/02/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	< 0.0005	0.005	10/02/23
20	As *	mg/L	} Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0009	0.0032	0.25	14/02/23
21	Se *	mg/L		< 0.0005	< 0.0005	0.02	14/02/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	< 0.05	1.0	16/02/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	< 0.02	0.03	16/02/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.08	0.26	2.0	16/02/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.23	0.09	5.0	16/02/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.11	1.0	16/02/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	< 0.04	0.2	16/02/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.06	0.42	5.0	16/02/23

continue

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## TEST REPORT

Analysis No. : R23-0380

Received Date: 10/02/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 21/02/23

Analysis Date : 09-20/02/23

Job No. : S660037/Feb

Sampling Date \* : 09/02/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2302-WW0262	2302-WW0264		
				W4	W6		
29	Organochlorine *						
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	Not Detected	can not found	17-20/02/23
	- Beta-BHC	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Heptachlor	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Aldrin	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Dicofol	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Heptachlor-endo-epoxide (tran-isomer A)	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Gamma-Chlordane	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- o,p'-DDE	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Alpha Endosulfan	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Alpha-Chlordane	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Dieldrin	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- p,p'-DDE	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- o,p'-DDD	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Endrin	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Beta Endosulfan	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- p,p'-DDD	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- o,p'-DDT	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- p,p'-DDT	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Endosulfan sulfate	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
30	Carbamate ***						
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	Not Detected	can not found	13-18/02/23
	- Isoprocab	µg/L		Not Detected	Not Detected	can not found	13-18/02/23
	- Fenobucarb	µg/L		Not Detected	Not Detected	can not found	13-18/02/23
	- Promecarb	µg/L		Not Detected	Not Detected	can not found	13-18/02/23
	- Carbofuran	µg/L		Not Detected	Not Detected	can not found	13-18/02/23
	- Methiocarb	µg/L		Not Detected	Not Detected	can not found	13-18/02/23
	- Methomyl	µg/L		Not Detected	Not Detected	can not found	13-18/02/23
	- Aldicarb	µg/L		Not Detected	Not Detected	can not found	13-18/02/23
	- Oxamyl	µg/L		Not Detected	Not Detected	can not found	13-18/02/23
	- Metolcarb	µg/L		Not Detected	Not Detected	can not found	13-18/02/23
31	Organophosphate *						
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	can not found	17-20/02/23
	- Mevinphos	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Diazinon	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Dicrotophos	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Monocrotophos	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Dimethoate	µg/L		Not Detected	Not Detected	can not found	17-20/02/23

continue

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## TEST REPORT

Analysis No. : R23-0380

Received Date: 10/02/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 21/02/23

Analysis Date : 09-20/02/23

Job No. : S660037/Feb

Sampling Date \* : 09/02/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2302-WW0262	2302-WW0264		
				W4	W6		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	can not found	17-20/02/23
	- Chlorpyrifos	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Parathion-methyl	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Pirimiphos	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Malathion	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Fenitrothion	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Parathion	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Prothiofos	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Methidathion	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Profenofos	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Ethion	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Triazophos	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- EPN	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Phosalone	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Azinphos-ethyl	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	Pyrethroid *						
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	Not Detected	can not found	17-20/02/23
	- Bifenthrin	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Phenothrin	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Cypermethrin	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Cyfluthrin	µg/L		Not Detected	Not Detected	can not found	17-20/02/23
	- Fenvalerate	µg/L		Not Detected	Not Detected	can not found	17-20/02/23

Remarks \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: W4 = น้ำเสียที่ออกจากถังตกตะกอนของระบบ RBC ในเขตอุตสาหกรรม (พื้นที่โครงการ ระยะที่ 1) ก่อนระบายลงคลองสลัด (47P 0680511 UTM 1498026)  
W6 = น้ำทิ้งที่ออกจากระบบฆ่าเชื้อโรค (ก่อนระบายผ่านระบบเส้นท่อลงทะเล) ของระบบ Extended Activated Sludge ของพื้นที่โครงการ ระยะที่ 2 (47P 0679762 UTM 1499627)

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมสวัสดิ์, วิทยาลัยเกษตรและเทคโนโลยีสุพรรณบุรี

(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW-846 Manual

Standard : Notification of the Ministry of Natural Resources and Environment (2016) (B.E. 2559)

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

21/02/23



Approved by

Mrs. Pornpip Pethshee

Laboratory Manager

21/02/23





## TEST REPORT

Analysis No. : R23-1239

Received Date: 27/04/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Report Date : 19/05/23

Analysis Date : 26/04-16/05/23

Job No. : S660386/Apr

Sampling Date \* : 26/04/23

Sampling By \* : TET

Type of Sample : Wastewater

Sample Conditions : 2304-WW0485 = yellow turbid/slight black sediment, Flow Rate = 1,817 m<sup>3</sup>/Day, Odor = no smell

2304-WW0487 = yellow turbid/slight black sediment, Flow Rate = 3,572 m<sup>3</sup>/Day, Odor = no smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2304-WW0485	2304-WW0487		
				W4	W6		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	30.9	31.2	40	26/04/23
2	pH *	-	Electrometric Method (SM 4500 B)	6.98	7.65	5.5-9.0	26/04/23
3	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate Spectrophotometric Method (SM 2120 F)	20	12	300	27/04/23
	Color (pH 7) *	ADMI		20	9	300	27/04/23
4	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	8.5 *	14.3	50	27/04/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	795	1,040	3,000	27/04/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	3	4	20	27/04-02/05/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	29	39	120	27/04/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	1.1	1.3	5	27/04/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	1.13	1.36	100	28/04/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	0.68	0.17	-	28/04/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	7.38	4.78	-	28/04/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.002	0.2	28/04/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	< 0.001	1	27/04/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	< 0.01	1	28/04/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	< 0.01	1	27/04/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	< 0.01	1	28/04/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	< 0.02	0.06	0.75	02/05/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	< 0.02	0.25	28/04/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	< 0.0005	0.005	02/05/23
20	As *	mg/L	} Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0021	0.0027	0.25	03/05/23
21	Se *	mg/L		< 0.0005	< 0.0005	0.02	03/05/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.06	< 0.05	1.0	02/05/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	< 0.02	0.03	02/05/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.10	0.24	2.0	02/05/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.21	0.09	5.0	02/05/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.14	1.0	02/05/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	< 0.04	0.2	02/05/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.06	0.51	5.0	02/05/23

continue

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## TEST REPORT

Analysis No. : R23-1239

Received Date: 27/04/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 19/05/23

Analysis Date : 26/04-16/05/23

Job No. : S660386/Apr

Sampling Date \* : 26/04/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2304-WW0485	2304-WW0487		
				W4	W6		
29	Organochlorine *						
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	Not Detected	can not found	27/04-02/05/23
	- Beta-BHC	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Heptachlor	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Aldrin	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Dicofof	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Heptachlor-endo-epoxide (tran-isomer A)	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Gamma-Chlordane	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- o,p'-DDE	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Alpha Endosulfan	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Alpha-Chlordane	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Dieldrin	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- p,p'-DDE	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- o,p'-DDD	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Endrin	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Beta Endosulfan	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- p,p'-DDD	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- o,p'-DDT	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- p,p'-DDT	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Endosulfan sulfate	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
30	Carbamate ***						
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	Not Detected	can not found	02-11/05/23
	- Isoprocab	µg/L		Not Detected	Not Detected	can not found	02-11/05/23
	- Fenobucarb	µg/L		Not Detected	Not Detected	can not found	02-11/05/23
	- Promecarb	µg/L		Not Detected	Not Detected	can not found	02-11/05/23
	- Carbofuran	µg/L		Not Detected	Not Detected	can not found	02-11/05/23
	- Methiocarb	µg/L		Not Detected	Not Detected	can not found	02-11/05/23
	- Methomyl	µg/L		Not Detected	Not Detected	can not found	02-11/05/23
	- Aldicarb	µg/L		Not Detected	Not Detected	can not found	02-11/05/23
	- Oxamyl	µg/L		Not Detected	Not Detected	can not found	02-11/05/23
	- Metolcarb	µg/L		Not Detected	Not Detected	can not found	02-11/05/23
31	Organophosphate *						
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	can not found	15-16/05/23
	- Mevinphos	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Diazinon	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Dicrotophos	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Monocrotophos	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Dimethoate	µg/L		Not Detected	Not Detected	can not found	15-16/05/23

continue

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## TEST REPORT

**Analysis No. :** R23-1239  
**Received Date:** 27/04/23  
**Customer :** Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู  
**Address :** 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280  
**Contact :** Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

**Report Date :** 19/05/23  
**Analysis Date :** 26/04-16/05/23  
**Job No. :** S660386/Apr  
**Sampling Date \* :** 26/04/23  
**Sampling By \* :** TET  
**Type of Sample :** Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2304-WW0485	2304-WW0487		
				W4	W6		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	can not found	15-16/05/23
	- Chlorpyrifos	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Parathion-methyl	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Pirimiphos-ethyl	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Malathion	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Fenitrothion	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Parathion	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Prothiofos	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Methidathion	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Profenofos	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Ethion	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Triazophos	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- EPN	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Phosalone	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	- Azinphos-ethyl	µg/L		Not Detected	Not Detected	can not found	15-16/05/23
	Pyrethroid *						
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	Not Detected	can not found	27/04-02/05/23
	- Bifenthrin	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Phenothrin	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Cypermethrin	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Cyfluthrin	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23
	- Fenvalerate	µg/L		Not Detected	Not Detected	can not found	27/04-02/05/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: W4 = น้ำเสียที่ออกจากถังตกตะกอนของระบบ RBC ในเขตอุตสาหกรรม (พื้นที่โครงการ ระยะที่ 1) ก่อนระบายลงคลองสลัด (47P 0680511 UTM 1498026)  
W6 = น้ำทิ้งที่ออกจากระบบบำบัดเชื้อโรค (ก่อนระบายผ่านระบบเส้นท่อลงทะเล) ของระบบ Extended Activated Sludge ของพื้นที่โครงการ ระยะที่ 2 (47P 0679771 UTM 1499589)

**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิสุทธิศักดิ์

(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual

**Standard** : Notification of the Ministry of Natural Resources and Environment (2016) (B.E. 2559)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
19/05/23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager  
19/05/23

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## TEST REPORT

Analysis No. : R23-1468

Received Date: 18/05/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Report Date : 25/07/23

Analysis Date : 17-24/05/23

Job No. : S660386/May

Sampling Date \* : 17/05/23

Sampling By \* : Mr. Chalermwut Poolsanguan

Type of Sample : Wastewater

Sample Conditions : 2305-WW0414 = yellow turbid/slight brown sediment, Flow Rate = 1,581 m<sup>3</sup>/Day, Odor = no smell

2305-WW0416 = yellow turbid/slight brown sediment, Flow Rate = 2,995 m<sup>3</sup>/Day, Odor = no smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2305-WW0414	2305-WW0416		
				W4	W6		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	31.7	32.2	40	17/05/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.32	7.58	5.5-9.0	17/05/23
3	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate	36	18	300	18/05/23
	Color (pH 7) *	ADMI		33	17	300	18/05/23
4	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	5.8 *	24.6	50	19/05/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	870	1,298	3,000	19/05/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	3	3	20	18-23/05/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	32	32	120	19/05/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.8	0.8	5	19/05/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	1.92	1.47	100	22/05/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	0.34	0.11	-	22/05/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	7.67	6.01	-	23/05/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.002	0.2	19/05/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	< 0.001	1	19/05/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	< 0.01	1	18/05/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	< 0.01	1	19/05/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	< 0.01	1	19/05/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	< 0.02	0.07	0.75	19/05/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	< 0.02	0.25	18/05/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	< 0.0005	0.005	18/05/23
20	As *	mg/L	} Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0014	0.0019	0.25	23/05/23
21	Se *	mg/L		< 0.0005	< 0.0005	0.02	23/05/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	< 0.05	1.0	19/05/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	< 0.02	0.03	19/05/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.07	0.33	2.0	19/05/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.12	0.15	5.0	19/05/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.09	1.0	19/05/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	< 0.04	0.2	19/05/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.05	0.57	5.0	19/05/23

continue

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## TEST REPORT

Analysis No. : R23-1468

Received Date: 18/05/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 25/07/23

Analysis Date : 17-26/05/23

Job No. : S660386/May

Sampling Date \* : 17/05/23

Sampling By \* : Mr. Chalermwut Poolsanguan

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2305-WW0414	2305-WW0416		
				W4	W6		
29	Organochlorine *						
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	Not Detected	can not found	22-23/05/23
	- Beta-BHC	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Heptachlor	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Aldrin	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Dicofol	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Heptachlor-endo-epoxide (trans-isomer A)	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Gamma-Chlordane	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- o,p'-DDE	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Alpha Endosulfan	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Alpha-Chlordane	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Dieldrin	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- p,p'-DDE	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- o,p'-DDD	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Endrin	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Beta Endosulfan	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- p,p'-DDD	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- o,p'-DDT	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- p,p'-DDT	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Endosulfan sulfate	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
30	Carbamate ***						
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	Not Detected	can not found	19-26/05/22
	- Isoproc carb	µg/L		Not Detected	Not Detected	can not found	19-26/05/22
	- Fenobucarb	µg/L		Not Detected	Not Detected	can not found	19-26/05/22
	- Promecarb	µg/L		Not Detected	Not Detected	can not found	19-26/05/22
	- Carbofuran	µg/L		Not Detected	Not Detected	can not found	19-26/05/22
	- Methiocarb	µg/L		Not Detected	Not Detected	can not found	19-26/05/22
	- Methomyl	µg/L		Not Detected	Not Detected	can not found	19-26/05/22
	- Aldicarb	µg/L		Not Detected	Not Detected	can not found	19-26/05/22
	- Oxamyl	µg/L		Not Detected	Not Detected	can not found	19-26/05/22
	- Metolcarb	µg/L		Not Detected	Not Detected	can not found	19-26/05/22
31	Organophosphate *						
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	can not found	22-24/05/23
	- Mevinphos	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Diazinon	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Dicrotophos	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Monocrotophos	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Dimethoate	µg/L		Not Detected	Not Detected	can not found	22-24/05/23

continue

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## TEST REPORT

**Analysis No. :** R23-1468  
**Received Date:** 18/05/23  
**Customer :** Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู  
**Address :** 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280  
**Contact :** Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

**Report Date :** 25/07/23  
**Analysis Date :** 17-24/05/23  
**Job No. :** S660386/May  
**Sampling Date \* :** 17/05/23  
**Sampling By \* :** Mr. Chalermwut Poolsanguan  
**Type of Sample :** Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2305-WW0414	2305-WW0416		
				W4	W6		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	can not found	22-24/05/23
	- Chlorpyrifos	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Parathion-methyl	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Pirimiphos-ethyl	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Malathion	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Fenitrothion	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Parathion	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Prothiofos	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Methidathion	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Profenofos	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Ethion	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Triazophos	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- EPN	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Phosalone	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Azinphos-ethyl	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	Pyrethroid *						
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	Not Detected	can not found	22-23/05/23
	- Bifenthrin	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Phenothrin	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Cypermethrin	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Cyfluthrin	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Fenvalerate	µg/L		Not Detected	Not Detected	can not found	22-23/05/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"  
\*\*\* Subcontractor "Not TISI Accredited"  
: W4 = น้ำเสียที่ออกจากถังตกตะกอนของระบบ RBC ในเขตอุตสาหกรรม (พื้นที่โครงการ ระยะที่ 1) ก่อนระบายลงคลองสลัด (47P 0680511 UTM 1498026)  
W6 = น้ำทิ้งที่ออกจากระบบฆ่าเชื้อโรค (ก่อนระบายผ่านระบบเส้นท่อลงทะเล) ของระบบ Extended Activated Sludge ของพื้นที่โครงการ ระยะที่ 2 (47P 0679771 UTM 1499589)  
**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017  
(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรธนะสวัสดิ์, วิทยาลัยเกษตรและเทคโนโลยีสุพรรณบุรี  
(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual  
**Standard** : Notification of the Ministry of Natural Resources and Environment (2016) (B.E. 2559)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
25/07/23



Approved by

Mrs. Porntip Pethshee  
Laboratory Manager  
25/07/23

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
- DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL





## TEST REPORT

Analysis No. : R23-1938

Received Date: 22/06/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 07/07/23

Analysis Date : 21-30/06/23

Job No. : S660386/June

Sampling Date \* : 21/06/23

Sampling By \* : TET

Type of Sample : Wastewater

Sample Conditions : 2306-WW0627 = yellow turbid/slight black sediment, Flow Rate = 1,829 m<sup>3</sup>/Day, Odor = no smell

2306-WW0629 = yellow turbid/slight black sediment, Flow Rate = 3,018 m<sup>3</sup>/Day, Odor = no smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2306-WW0627	2306-WW0629		
				W4	W6		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	31.6	33.2	40	21/06/23
2	pH *	-	Electrometric Method (SM 4500 B)	6.80	6.69	5.5-9.0	21/06/23
3	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate	33	14	300	23/06/23
	Color (pH 7) *	ADMI		31	20	300	23/06/23
4	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	7.1	14.8	50	22/06/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	762	905	3,000	23/06/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	3	3	20	22-27/06/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	34	32	120	22/06/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.8	1.2	5	23/06/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	2.20	2.32	100	27/06/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	0.98	1.04	-	27/06/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	7.61	4.98	-	23/06/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	< 0.001	0.2	23/06/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	< 0.001	1	27/06/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	< 0.01	1	23/06/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	< 0.01	1	27/06/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	< 0.01	1	23/06/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	< 0.02	0.02	0.75	26/06/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	< 0.02	0.25	22/06/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	< 0.0005	0.005	30/06/23
20	As *	mg/L	} Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0008	0.0031	0.25	28/06/23
21	Se *	mg/L		< 0.0005	< 0.0005	0.02	28/06/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	< 0.05	1.0	26/06/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	< 0.02	0.03	26/06/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.05	0.20	2.0	26/06/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.16	0.12	5.0	26/06/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.07	1.0	26/06/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	< 0.04	0.2	26/06/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.29	5.0	26/06/23

continue

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## TEST REPORT

**Analysis No. :** R23-1938  
**Received Date:** 22/06/23  
**Customer :** Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู  
**Address :** 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280  
**Contact :** Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

**Report Date :** 07/07/23  
**Analysis Date :** 21/06-05/07/23  
**Job No. :** S660386/June  
**Sampling Date \* :** 21/06/23  
**Sampling By \* :** TET  
**Type of Sample :** Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2306-WW0627	2306-WW0629		
				W4	W6		
29	Organochlorine *						
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	Not Detected	can not found	22-26/06/23
	- Beta-BHC	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Heptachlor	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Aldrin	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Dicofol	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Heptachlor-endo-epoxide (trans-isomer A)	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Gamma-Chlordane	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- o,p'-DDE	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Alpha Endosulfan	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Alpha-Chlordane	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Dieldrin	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- p,p'-DDE	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- o,p'-DDD	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Endrin	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Beta Endosulfan	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- p,p'-DDD	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- o,p'-DDT	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- p,p'-DDT	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Endosulfan sulfate	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
30	Carbamate ***						
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	Not Detected	can not found	26/06-05/07/23
	- Isoprocarb	µg/L		Not Detected	Not Detected	can not found	26/06-05/07/23
	- Fenobucarb	µg/L		Not Detected	Not Detected	can not found	26/06-05/07/23
	- Promecarb	µg/L		Not Detected	Not Detected	can not found	26/06-05/07/23
	- Carbofuran	µg/L		Not Detected	Not Detected	can not found	26/06-05/07/23
	- Methiocarb	µg/L		Not Detected	Not Detected	can not found	26/06-05/07/23
	- Methomyl	µg/L		Not Detected	Not Detected	can not found	26/06-05/07/23
	- Aldicarb	µg/L		Not Detected	Not Detected	can not found	26/06-05/07/23
	- Oxamyl	µg/L		Not Detected	Not Detected	can not found	26/06-05/07/23
	- Metolcarb	µg/L		Not Detected	Not Detected	can not found	26/06-05/07/23
31	Organophosphate *						
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	can not found	22-28/06/23
	- Mevinphos	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Diazinon	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Dicrotophos	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Monocrotophos	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Dimethoate	µg/L		Not Detected	Not Detected	can not found	22-28/06/23

continue

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## TEST REPORT

**Analysis No.** : R23-1938  
**Received Date:** 22/06/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู  
**Address** : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280  
**Contact** : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

**Report Date** : 07/07/23  
**Analysis Date** : 21-30/06/23  
**Job No.** : S660386/June  
**Sampling Date \*** : 21/06/23  
**Sampling By \*** : TET  
**Type of Sample** : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2306-WW0627	2306-WW0629		
				W4	W6		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	can not found	22-28/06/23
	- Chlorpyrifos	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Parathion-methyl	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Pirimiphos-ethyl	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Malathion	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Fenitrothion	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Parathion	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Prothiofos	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Methidathion	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Profenofos	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Ethion	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Triazophos	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- EPN	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Phosalone	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	- Azinphos-ethyl	µg/L		Not Detected	Not Detected	can not found	22-28/06/23
	Pyrethroid *						
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	Not Detected	can not found	22-26/06/23
	- Bifenthrin	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Phenothrin	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Cypermethrin	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Cyfluthrin	µg/L		Not Detected	Not Detected	can not found	22-26/06/23
	- Fenvalerate	µg/L		Not Detected	Not Detected	can not found	22-26/06/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"  
\*\*\* Subcontractor "Not TISI Accredited"  
: W4 = น้ำเสียที่ออกจากถังตกตะกอนของระบบ RBC ในเขตอุตสาหกรรม (พื้นที่โครงการ ระยะที่ 1) ก่อนระบายลงคลองสลัด (47P 0680511 UTM 1498026)  
W6 = น้ำทิ้งที่ออกจากระบบบำบัดน้ำเสีย (ก่อนระบายผ่านระบบเส้นท่อลงทะเล) ของระบบ Extended Activated Sludge ของพื้นที่โครงการ ระยะที่ 2  
(47P 0679771 UTM 1499589)  
**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017  
(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 รชชช พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิสุทธิศักดิ์  
(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual  
**Standard** : Notification of the Ministry of Natural Resources and Environment (2016) (B.E. 2559)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
07.07.23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager  
07.07.23



## TEST REPORT

Analysis No. : R23-0070

Received Date: 10/01/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Report Date : 16/01/23

Analysis Date : 09-16/01/23

Job No. : S660037/Jan

Sampling Date \* : 09/01/23

Sampling By \* : TET

Type of Sample : Wastewater

Sample Conditions : 2301-WW0139 = yellow turbid/slight white sediment, Flow Rate = 81 m<sup>3</sup>/Day, Odor = no smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2301-WW0139		
				W7		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	28.5	45	09/01/23
2	pH *	-	Electrometric Method (SM 4500 B)	8.84	5.5-9.0	09/01/23
3	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate Spectrophotometric Method (SM 2120 F)	38	600	11/01/23
	Color (pH 7) *	ADMI		34	600	11/01/23
4	TSS *	mg/L	Dried at 103-105 °C (SM 2540 D)	< 2.5	200	11/01/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,042	3,000	11/01/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	4	500	11-16/01/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	44	750	11/01/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.4	10	13/01/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	3.75	100	11/01/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	< 0.10	-	11/01/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	0.13	-	12/01/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.2	11/01/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1	12/01/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1	10/01/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1	12/01/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	1	11/01/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	< 0.02	0.75	11/01/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	10/01/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	13/01/23
20	As *	mg/L	} Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0035	0.25	10/01/23
21	Se *	mg/L		< 0.0005	0.02	10/01/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.26	1.0	11/01/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	11/01/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	2.0	11/01/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	5.0	11/01/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	1.0	11/01/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	11/01/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	5.0	11/01/23

continue

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
- DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL





## TEST REPORT

Analysis No. : R23-0070

Received Date: 10/01/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 16/01/23

Analysis Date : 09-23/01/23

Job No. : S660037/Jan

Sampling Date \* : 09/01/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2301-WW0139 W7		
29	Organochlorine *					
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	can not found	10-11/01/23
	- Beta-BHC	µg/L		Not Detected	can not found	10-11/01/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	can not found	10-11/01/23
	- Heptachlor	µg/L		Not Detected	can not found	10-11/01/23
	- Aldrin	µg/L		Not Detected	can not found	10-11/01/23
	- Dicofof	µg/L		Not Detected	can not found	10-11/01/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	can not found	10-11/01/23
	- Heptachlor-endo-epoxide (trans-isomer A)	µg/L		Not Detected	can not found	10-11/01/23
	- Gamma-Chlordane	µg/L		Not Detected	can not found	10-11/01/23
	- o,p'-DDE	µg/L		Not Detected	can not found	10-11/01/23
	- Alpha Endosulfan	µg/L		Not Detected	can not found	10-11/01/23
	- Alpha-Chlordane	µg/L		Not Detected	can not found	10-11/01/23
	- Dieldrin	µg/L		Not Detected	can not found	10-11/01/23
	- p,p'-DDE	µg/L		Not Detected	can not found	10-11/01/23
	- o,p'-DDD	µg/L		Not Detected	can not found	10-11/01/23
	- Endrin	µg/L		Not Detected	can not found	10-11/01/23
	- Beta Endosulfan	µg/L		Not Detected	can not found	10-11/01/23
	- p,p'-DDD	µg/L		Not Detected	can not found	10-11/01/23
	- o,p'-DDT	µg/L		Not Detected	can not found	10-11/01/23
	- p,p'-DDT	µg/L		Not Detected	can not found	10-11/01/23
	- Endosulfan sulfate	µg/L		Not Detected	can not found	10-11/01/23
30	Carbamate ***					
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	can not found	12-23/01/23
	- Isoprocab	µg/L		Not Detected	can not found	12-23/01/23
	- Fenobucarb	µg/L		Not Detected	can not found	12-23/01/23
	- Promecarb	µg/L		Not Detected	can not found	12-23/01/23
	- Carbofuran	µg/L		Not Detected	can not found	12-23/01/23
	- Methiocarb	µg/L		Not Detected	can not found	12-23/01/23
	- Methomyl	µg/L		Not Detected	can not found	12-23/01/23
	- Aldicarb	µg/L		Not Detected	can not found	12-23/01/23
	- Oxamyl	µg/L		Not Detected	can not found	12-23/01/23
	- Metolcarb	µg/L		Not Detected	can not found	12-23/01/23
31	Organophosphate *					
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	11-13/01/23
	- Mevinphos	µg/L		Not Detected	can not found	11-13/01/23
	- Diazinon	µg/L		Not Detected	can not found	11-13/01/23
	- Dicrotophos	µg/L		Not Detected	can not found	11-13/01/23
	- Monocrotophos	µg/L		Not Detected	can not found	11-13/01/23
	- Dimethoate	µg/L		Not Detected	can not found	11-13/01/23

continue

● REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY

● DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL



## TEST REPORT

Analysis No. : R23-0070

Received Date: 10/01/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 16/01/23

Analysis Date : 09-16/01/23

Job No. : S660037/Jan

Sampling Date \* : 09/01/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2301-WW0139		
				W7		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	11-13/01/23
	- Chlorpyrifos	µg/L		Not Detected	can not found	11-13/01/23
	- Parathion-methyl	µg/L		Not Detected	can not found	11-13/01/23
	- Pirimiphos	µg/L		Not Detected	can not found	11-13/01/23
	- Malathion	µg/L		Not Detected	can not found	11-13/01/23
	- Fenitrothion	µg/L		Not Detected	can not found	11-13/01/23
	- Parathion	µg/L		Not Detected	can not found	11-13/01/23
	- Prothiofos	µg/L		Not Detected	can not found	11-13/01/23
	- Methidathion	µg/L		Not Detected	can not found	11-13/01/23
	- Profenofos	µg/L		Not Detected	can not found	11-13/01/23
	- Ethion	µg/L		Not Detected	can not found	11-13/01/23
	- Triazophos	µg/L		Not Detected	can not found	11-13/01/23
	- EPN	µg/L		Not Detected	can not found	11-13/01/23
	- Phosalone	µg/L		Not Detected	can not found	11-13/01/23
	- Azinphos-ethyl	µg/L		Not Detected	can not found	11-13/01/23
	Pyrethroid *					
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	can not found	10-11/01/23
	- Bifenthrin	µg/L		Not Detected	can not found	10-11/01/23
	- Phenothrin	µg/L		Not Detected	can not found	10-11/01/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	can not found	10-11/01/23
	- Cypermethrin	µg/L		Not Detected	can not found	10-11/01/23
	- Cyfluthrin	µg/L		Not Detected	can not found	10-11/01/23
	- Fenvalerate	µg/L		Not Detected	can not found	10-11/01/23

Remarks : \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: W7 = บ่อพักน้ำเสียของโครงการเตาเผา Fluidized Bed ก่อนระบายลงสู่ท่อรวบรวมน้ำเสียของนิคมฯ บางปู (47P 0679135 UTM 1497148)

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 รัชชัช พรพรณสวัสดิ์, วิบูลย์ลักษณ์ วิสุมพิทักษ์

(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW-846 Manual

Standard : Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareut Prachumdaeng  
Chief of Laboratory  
.....16/01/23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager  
.....16/01/23





## TEST REPORT

Analysis No. : R23-0380

Received Date: 10/02/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 21/02/23

Analysis Date : 09-20/02/23

Job No. : S660037/Feb

Sampling Date \* : 09/02/23

Sampling By \* : TET

Type of Sample : Wastewater

Sample Conditions : 2302-WW0265 = clear/slight black sediment/covered with oil slick, Flow Rate = 29.0 m<sup>3</sup>/Day, Odor = no smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2302-WW0265		
				W7		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	29.4	45	09/02/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.45	5.5-9.0	09/02/23
3	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate Spectrophotometric Method (SM 2120 F)	4	600	10/02/23
	Color (pH 7) *	ADMI		3	600	10/02/23
4	TSS *	mg/L	Dried at 103-105 °C (SM 2540 D)	< 2.5	200	14/02/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	200	3,000	13/02/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	< 1	500	10-15/02/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	10	750	10/02/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.4	10	14/02/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	0.89	100	14/02/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	0.17	-	14/02/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	0.06	-	15/02/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN B/E)	< 0.001	0.2	13/02/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1	14/02/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1	14/02/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1	14/02/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	1	13/02/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	< 0.02	0.75	16/02/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	10/02/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	10/02/23
20	As *	mg/L	} Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0006	0.25	14/02/23
21	Se *	mg/L		< 0.0005	0.02	14/02/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.06	1.0	16/02/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	16/02/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	2.0	16/02/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	5.0	16/02/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	1.0	16/02/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	16/02/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	5.0	16/02/23

continue

● REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY

● DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL



## TEST REPORT

Analysis No. : R23-0380

Received Date: 10/02/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 21/02/23

Analysis Date : 09-20/02/23

Job No. : S660037/Feb

Sampling Date \* : 09/02/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2302-WW0265		
				W7		
29	Organochlorine *					
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	can not found	17-20/02/23
	- Beta-BHC	µg/L		Not Detected	can not found	17-20/02/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	can not found	17-20/02/23
	- Heptachlor	µg/L		Not Detected	can not found	17-20/02/23
	- Aldrin	µg/L		Not Detected	can not found	17-20/02/23
	- Dicofol	µg/L		Not Detected	can not found	17-20/02/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	can not found	17-20/02/23
	- Heptachlor-endo-epoxide (trans-isomer A)	µg/L		Not Detected	can not found	17-20/02/23
	- Gamma-Chlordane	µg/L		Not Detected	can not found	17-20/02/23
	- o,p'-DDE	µg/L		Not Detected	can not found	17-20/02/23
	- Alpha Endosulfan	µg/L		Not Detected	can not found	17-20/02/23
	- Alpha-Chlordane	µg/L		Not Detected	can not found	17-20/02/23
	- Dieldrin	µg/L		Not Detected	can not found	17-20/02/23
	- p,p'-DDE	µg/L		Not Detected	can not found	17-20/02/23
	- o,p'-DDD	µg/L		Not Detected	can not found	17-20/02/23
	- Endrin	µg/L		Not Detected	can not found	17-20/02/23
	- Beta Endosulfan	µg/L		Not Detected	can not found	17-20/02/23
	- p,p'-DDD	µg/L		Not Detected	can not found	17-20/02/23
	- o,p'-DDT	µg/L		Not Detected	can not found	17-20/02/23
	- p,p'-DDT	µg/L		Not Detected	can not found	17-20/02/23
	- Endosulfan sulfate	µg/L		Not Detected	can not found	17-20/02/23
30	Carbamate ***					
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	can not found	13-18/02/23
	- Isoprocab	µg/L		Not Detected	can not found	13-18/02/23
	- Fenobucarb	µg/L		Not Detected	can not found	13-18/02/23
	- Promecarb	µg/L		Not Detected	can not found	13-18/02/23
	- Carbofuran	µg/L		Not Detected	can not found	13-18/02/23
	- Methiocarb	µg/L		Not Detected	can not found	13-18/02/23
	- Methomyl	µg/L		Not Detected	can not found	13-18/02/23
	- Aldicarb	µg/L		Not Detected	can not found	13-18/02/23
	- Oxamyl	µg/L		Not Detected	can not found	13-18/02/23
	- Metolcarb	µg/L		Not Detected	can not found	13-18/02/23
31	Organophosphate *					
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	17-20/02/23
	- Mevinphos	µg/L		Not Detected	can not found	17-20/02/23
	- Diazinon	µg/L		Not Detected	can not found	17-20/02/23
	- Dicrotophos	µg/L		Not Detected	can not found	17-20/02/23
	- Monocrotophos	µg/L		Not Detected	can not found	17-20/02/23
	- Dimethoate	µg/L		Not Detected	can not found	17-20/02/23

continue

● REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY

● DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL





## TEST REPORT

Analysis No. : R23-0380

Report Date : 21/02/23

Received Date: 10/02/23

Analysis Date : 09-20/02/23

Customer : Technical Division of Thai Environmental Technic Limited

Job No. : S660037/Feb

For นิคมอุตสาหกรรมบางปู

Sampling Date \* : 09/02/23

โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)

Sampling By \* : TET

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

Type of Sample : Wastewater

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2302-WW0265		
				W7		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	17-20/02/23
	- Chlorpyrifos	µg/L		Not Detected	can not found	17-20/02/23
	- Parathion-methyl	µg/L		Not Detected	can not found	17-20/02/23
	- Pirimiphos	µg/L		Not Detected	can not found	17-20/02/23
	- Malathion	µg/L		Not Detected	can not found	17-20/02/23
	- Fenitrothion	µg/L		Not Detected	can not found	17-20/02/23
	- Parathion	µg/L		Not Detected	can not found	17-20/02/23
	- Prothiofos	µg/L		Not Detected	can not found	17-20/02/23
	- Methidathion	µg/L		Not Detected	can not found	17-20/02/23
	- Profenofos	µg/L		Not Detected	can not found	17-20/02/23
	- Ethion	µg/L		Not Detected	can not found	17-20/02/23
	- Triazophos	µg/L		Not Detected	can not found	17-20/02/23
	- EPN	µg/L		Not Detected	can not found	17-20/02/23
	- Phosalone	µg/L		Not Detected	can not found	17-20/02/23
	- Azinphos-ethyl	µg/L		Not Detected	can not found	17-20/02/23
	Pyrethroid *					
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	can not found	17-20/02/23
	- Bifenthrin	µg/L		Not Detected	can not found	17-20/02/23
	- Phenothrin	µg/L		Not Detected	can not found	17-20/02/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	can not found	17-20/02/23
	- Cypermethrin	µg/L		Not Detected	can not found	17-20/02/23
	- Cyfluthrin	µg/L		Not Detected	can not found	17-20/02/23
	- Fenvalerate	µg/L		Not Detected	can not found	17-20/02/23

Remarks : \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: W7 = บ่อพักน้ำเสียของโครงการเตาเผา Fluidized Bed ก่อนระบายลงสู่ท่อรวบรวมน้ำเสียของนิคมฯ บางปู (47P 0679138 UTM 1497155)

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิศุทธิ์ศักดิ์

(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW-846 Manual

Standard : Notification of the Industrial Estate Authority of Thailand No. 76 (2017) D.E. 25609

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
21/02/23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager  
21/02/23

REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY

DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL



## TEST REPORT

Analysis No. : R23-1239

Received Date: 27/04/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 19/05/23

Analysis Date : 26/04-16/05/23

Job No. : S660386/Apr

Sampling Date \* : 26/04/23

Sampling By \* : TET

Type of Sample : Wastewater

Sample Conditions : 2304-WW0488 = yellow turbid/slight black sediment, Flow Rate = 53.0 m<sup>3</sup>/Day, Odor = no smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2304-WW0488		
				W7		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	32.6	45	26/04/23
2	pH *	-	Electrometric Method (SM 4500 B)	8.77	5.5-9.0	26/04/23
3	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate	18	600	27/04/23
	Color (pH 7) *	ADMI		14	600	27/04/23
4	TSS *	mg/L	Dried at 103-105 °C (SM 2540 D)	< 2.5	200	27/04/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	974	3,000	27/04/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	4	500	27/04-02/05/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	48	750	27/04/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.6	10	27/04/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	4.47	100	28/04/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	< 0.10	-	28/04/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	< 0.01	-	28/04/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.2	28/04/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1	27/04/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1	28/04/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1	27/04/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	1	28/04/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	< 0.02	0.75	02/05/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	28/04/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	02/05/23
20	As *	mg/L	} Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0015	0.25	03/05/23
21	Se *	mg/L		< 0.0005	0.02	03/05/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.25	1.0	02/05/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	02/05/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	2.0	02/05/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	5.0	02/05/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	1.0	02/05/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	02/05/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	5.0	02/05/23

continue

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## TEST REPORT

Analysis No. : R23-1239

Received Date: 27/04/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 19/05/23

Analysis Date : 26/04-16/05/23

Job No. : S660386/Apr

Sampling Date \* : 26/04/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2304-WW0488		
				W7		
29	Organochlorine *					
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	can not found	27/04-02/05/23
	- Beta-BHC	µg/L		Not Detected	can not found	27/04-02/05/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	can not found	27/04-02/05/23
	- Heptachlor	µg/L		Not Detected	can not found	27/04-02/05/23
	- Aldrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- Dicofof	µg/L		Not Detected	can not found	27/04-02/05/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	can not found	27/04-02/05/23
	- Heptachlor-endo-epoxide (tran-isomer A)	µg/L		Not Detected	can not found	27/04-02/05/23
	- Gamma-Chlordane	µg/L		Not Detected	can not found	27/04-02/05/23
	- o,p'-DDE	µg/L		Not Detected	can not found	27/04-02/05/23
	- Alpha Endosulfan	µg/L		Not Detected	can not found	27/04-02/05/23
	- Alpha-Chlordane	µg/L		Not Detected	can not found	27/04-02/05/23
	- Dieldrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- p,p'-DDE	µg/L		Not Detected	can not found	27/04-02/05/23
	- o,p'-DDD	µg/L		Not Detected	can not found	27/04-02/05/23
	- Endrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- Beta Endosulfan	µg/L		Not Detected	can not found	27/04-02/05/23
	- p,p'-DDD	µg/L		Not Detected	can not found	27/04-02/05/23
	- o,p'-DDT	µg/L		Not Detected	can not found	27/04-02/05/23
	- p,p'-DDT	µg/L		Not Detected	can not found	27/04-02/05/23
	- Endosulfan sulfate	µg/L		Not Detected	can not found	27/04-02/05/23
30	Carbamate ***					
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	can not found	02-11/05/23
	- Isoprocarb	µg/L		Not Detected	can not found	02-11/05/23
	- Fenobucarb	µg/L		Not Detected	can not found	02-11/05/23
	- Promecarb	µg/L		Not Detected	can not found	02-11/05/23
	- Carbofuran	µg/L		Not Detected	can not found	02-11/05/23
	- Methiocarb	µg/L		Not Detected	can not found	02-11/05/23
	- Methomyl	µg/L		Not Detected	can not found	02-11/05/23
	- Aldicarb	µg/L		Not Detected	can not found	02-11/05/23
	- Oxamyl	µg/L		Not Detected	can not found	02-11/05/23
	- Metolcarb	µg/L		Not Detected	can not found	02-11/05/23
31	Organophosphate *					
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	15-16/05/23
	- Mevinphos	µg/L		Not Detected	can not found	15-16/05/23
	- Diazinon	µg/L		Not Detected	can not found	15-16/05/23
	- Dicrotophos	µg/L		Not Detected	can not found	15-16/05/23
	- Monocrotophos	µg/L		Not Detected	can not found	15-16/05/23
	- Dimethoate	µg/L		Not Detected	can not found	15-16/05/23

continue

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## TEST REPORT

Analysis No. : R23-1239

Received Date: 27/04/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 19/05/23

Analysis Date : 26/04-16/05/23

Job No. : S660386/Apr

Sampling Date \* : 26/04/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2304-WW0488		
				W7		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	15-16/05/23
	- Chlorpyrifos	µg/L		Not Detected	can not found	15-16/05/23
	- Parathion-methyl	µg/L		Not Detected	can not found	15-16/05/23
	- Pirimiphos-ethyl	µg/L		Not Detected	can not found	15-16/05/23
	- Malathion	µg/L		Not Detected	can not found	15-16/05/23
	- Fenitrothion	µg/L		Not Detected	can not found	15-16/05/23
	- Parathion	µg/L		Not Detected	can not found	15-16/05/23
	- Prothiofos	µg/L		Not Detected	can not found	15-16/05/23
	- Methidathion	µg/L		Not Detected	can not found	15-16/05/23
	- Profenofos	µg/L		Not Detected	can not found	15-16/05/23
	- Ethion	µg/L		Not Detected	can not found	15-16/05/23
	- Triazophos	µg/L		Not Detected	can not found	15-16/05/23
	- EPN	µg/L		Not Detected	can not found	15-16/05/23
	- Phosalone	µg/L		Not Detected	can not found	15-16/05/23
	- Azinphos-ethyl	µg/L		Not Detected	can not found	15-16/05/23
	Pyrethroid *					
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	can not found	27/04-02/05/23
	- Bifenthrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- Phenothrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- Cypermethrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- Cyfluthrin	µg/L		Not Detected	can not found	27/04-02/05/23
	- Fenvalerate	µg/L		Not Detected	can not found	27/04-02/05/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: W7 = บ่อกักน้ำเสียของโครงการเตาเผา Fluidized Bed ก่อนระบายลงสู่ท่อรวบรวมน้ำเสียของนิคมฯ บางปู (47P 0679135 UTM 1497148)

**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ของ พรพนสวสศ., วิทยาลัยถิ่น วิศวกรรมศาสตร์

(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual

**Standard** : Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory

Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager







## TEST REPORT

Analysis No. : R23-1468

Received Date: 18/05/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 25/07/23

Analysis Date : 17-24/05/23

Job No. : S660386/May

Sampling Date \* : 17/05/23

Sampling By \* : Mr. Chalermwut Poolsanguan

Type of Sample : Wastewater

Sample Conditions : 2305-WW0417 = clear/slight black sediment, Flow Rate = 41.0 m<sup>3</sup>/Day, Odor = no smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2305-WW0417		
				W7		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	34.0	45	17/05/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.86	5.5-9.0	17/05/23
3	Color (Original pH) *	ADMI	ADMI Weighted-Ordinate	< 2	600	18/05/23
	Color (pH 7) *	ADMI	Spectrophotometric Method (SM 2120 F)	< 2	600	18/05/23
4	TSS *	mg/L	Dried at 103-105 °C (SM 2540 D)	< 2.5	200	19/05/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	172	3,000	19/05/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	2	500	18-23/05/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	12	750	19/05/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.4	10	19/05/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	0.57	100	22/05/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	< 0.10	-	22/05/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	0.04	-	23/05/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.2	19/05/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1	19/05/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1	18/05/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1	19/05/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	1	19/05/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	< 0.02	0.75	19/05/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	18/05/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	18/05/23
20	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	0.0011	0.25	23/05/23
21	Se *	mg/L		< 0.0005	0.02	23/05/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.05	1.0	19/05/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	19/05/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	2.0	19/05/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	5.0	19/05/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	1.0	19/05/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	19/05/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	5.0	19/05/23

continue

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## TEST REPORT

Analysis No. : R23-1468

Received Date: 18/05/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 25/07/23

Analysis Date : 17-26/05/23

Job No. : S660386/May

Sampling Date \* : 17/05/23

Sampling By \* : Mr. Chalermwut Poolsanguan

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2305-WW0417 W7		
29	Organochlorine *					
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	can not found	22-23/05/23
	- Beta-BHC	µg/L		Not Detected	can not found	22-23/05/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	can not found	22-23/05/23
	- Heptachlor	µg/L		Not Detected	can not found	22-23/05/23
	- Aldrin	µg/L		Not Detected	can not found	22-23/05/23
	- Dicofof	µg/L		Not Detected	can not found	22-23/05/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	can not found	22-23/05/23
	- Heptachlor-endo-epoxide (trans-isomer A)	µg/L		Not Detected	can not found	22-23/05/23
	- Gamma-Chlordane	µg/L		Not Detected	can not found	22-23/05/23
	- o,p'-DDE	µg/L		Not Detected	can not found	22-23/05/23
	- Alpha Endosulfan	µg/L		Not Detected	can not found	22-23/05/23
	- Alpha-Chlordane	µg/L		Not Detected	can not found	22-23/05/23
	- Dieldrin	µg/L		Not Detected	can not found	22-23/05/23
	- p,p'-DDE	µg/L		Not Detected	can not found	22-23/05/23
	- o,p'-DDD	µg/L		Not Detected	can not found	22-23/05/23
	- Endrin	µg/L		Not Detected	can not found	22-23/05/23
	- Beta Endosulfan	µg/L		Not Detected	can not found	22-23/05/23
	- p,p'-DDD	µg/L		Not Detected	can not found	22-23/05/23
	- o,p'-DDT	µg/L		Not Detected	can not found	22-23/05/23
	- p,p'-DDT	µg/L		Not Detected	can not found	22-23/05/23
	- Endosulfan sulfate	µg/L		Not Detected	can not found	22-23/05/23
30	Carbamate ***					
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	can not found	19-26/05/22
	- Isoprocab	µg/L		Not Detected	can not found	19-26/05/22
	- Fenobucarb	µg/L		Not Detected	can not found	19-26/05/22
	- Promecarb	µg/L		Not Detected	can not found	19-26/05/22
	- Carbofuran	µg/L		Not Detected	can not found	19-26/05/22
	- Methiocarb	µg/L		Not Detected	can not found	19-26/05/22
	- Methomyl	µg/L		Not Detected	can not found	19-26/05/22
	- Aldicarb	µg/L		Not Detected	can not found	19-26/05/22
	- Oxamyl	µg/L		Not Detected	can not found	19-26/05/22
	- Metolcarb	µg/L		Not Detected	can not found	19-26/05/22
31	Organophosphate *					
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	22-24/05/23
	- Mevinphos	µg/L		Not Detected	can not found	22-24/05/23
	- Diazinon	µg/L		Not Detected	can not found	22-24/05/23
	- Dicrotophos	µg/L		Not Detected	can not found	22-24/05/23
	- Monocrotophos	µg/L		Not Detected	can not found	22-24/05/23
	- Dimethoate	µg/L		Not Detected	can not found	22-24/05/23

continue

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## TEST REPORT

**Analysis No. :** R23-1468  
**Received Date:** 18/05/23  
**Customer :** Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู  
**Address :** 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280  
**Contact :** Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

**Report Date :** 25/07/23  
**Analysis Date :** 17-24/05/23  
**Job No. :** S660386/May  
**Sampling Date \* :** 17/05/23  
**Sampling By \* :** Mr. Chalermwut Poolsanguan  
**Type of Sample :** Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2305-WW0417		
				W7		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	22-24/05/23
	- Chlorpyrifos	µg/L		Not Detected	can not found	22-24/05/23
	- Parathion-methyl	µg/L		Not Detected	can not found	22-24/05/23
	- Pirimiphos-ethyl	µg/L		Not Detected	can not found	22-24/05/23
	- Malathion	µg/L		Not Detected	can not found	22-24/05/23
	- Fenitrothion	µg/L		Not Detected	can not found	22-24/05/23
	- Parathion	µg/L		Not Detected	can not found	22-24/05/23
	- Prothiofos	µg/L		Not Detected	can not found	22-24/05/23
	- Methidathion	µg/L		Not Detected	can not found	22-24/05/23
	- Profenofos	µg/L		Not Detected	can not found	22-24/05/23
	- Ethion	µg/L		Not Detected	can not found	22-24/05/23
	- Triazophos	µg/L		Not Detected	can not found	22-24/05/23
	- EPN	µg/L		Not Detected	can not found	22-24/05/23
	- Phosalone	µg/L		Not Detected	can not found	22-24/05/23
	- Azinphos-ethyl	µg/L		Not Detected	can not found	22-24/05/23
	Pyrethroid *					
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	can not found	22-23/05/23
	- Bifenthrin	µg/L		Not Detected	can not found	22-23/05/23
	- Phenothrin	µg/L		Not Detected	can not found	22-23/05/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	can not found	22-23/05/23
	- Cypermethrin	µg/L		Not Detected	can not found	22-23/05/23
	- Cyfluthrin	µg/L		Not Detected	can not found	22-23/05/23
	- Fenvalerate	µg/L		Not Detected	can not found	22-23/05/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"  
\*\*\* Subcontractor "Not TISI Accredited"  
: W7 = บ่อพักน้ำเสียของโครงการเตาเผา Fluidized Bed ก่อนระบายลงสู่ท่อรวบรวมน้ำเสียของนิคมฯ บางปู (47P 0679135 UTM 1497148)  
**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017  
(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมผลสวัสดิ์, วิบูลย์ลักษณ์ วิสุมวิทย์  
(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual  
**Standard** : Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by   
Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
25/07/23



Approved by   
Mrs. Pomtip Pethshee  
Laboratory Manager  
25/07/23

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
- DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL



## TEST REPORT

Analysis No. : R23-1938

Received Date: 22/06/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 07/07/23

Analysis Date : 21-30/06/23

Job No. : S660386/June

Sampling Date \* : 21/06/23

Sampling By \* : TET

Type of Sample : Wastewater

Sample Conditions : 2306-WW0630 = light white/slight black sediment, Flow Rate = 88 m<sup>3</sup>/Day, Odor = no smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2306-WW0630		
				W7		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	33.2	45	21/06/23
2	pH *	-	Electrometric Method (SM 4500 B)	6.87	5.5-9.0	21/06/23
3	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate Spectrophotometric Method (SM 2120 F)	5	600	23/06/23
	Color (pH 7) *	ADMI		< 2	600	23/06/23
4	TSS *	mg/L	Dried at 103-105 °C (SM 2540 D)	<2.5	200	22/06/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	236	3,000	23/06/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	1	500	22-27/06/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	10	750	22/06/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.4	10	23/06/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	0.69	100	27/06/23
10	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	< 0.10	-	27/06/23
11	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	0.05	-	23/06/23
12	Cyanide *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.2	23/06/23
13	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1	27/06/23
14	Sulfide *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1	23/06/23
15	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1	27/06/23
16	Free Chlorine *	mg/L	DPD Ferrous Titrimetric (SM 4500-Cl <sub>2</sub> F)	< 0.01	1	23/06/23
17	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B); Calculation	< 0.02	0.75	26/06/23
18	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	22/06/23
19	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	30/06/23
20	As *	mg/L	} Digestion, Continuous Hydride generation/AAS Method (SM 3114C)	< 0.0005	0.25	28/06/23
21	Se *	mg/L		< 0.0005	0.02	28/06/23
22	Ba	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	1.0	26/06/23
23	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	26/06/23
24	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	2.0	26/06/23
25	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	5.0	26/06/23
26	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	1.0	26/06/23
27	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	26/06/23
28	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	5.0	26/06/23

continue





## TEST REPORT

**Analysis No. :** R23-1938

**Received Date:** 22/06/23

**Customer :** Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

**Address :** 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

**Contact :** Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

**Report Date :** 07/07/23

**Analysis Date :** 21/06-05/07/23

**Job No. :** S660386/June

**Sampling Date \* :** 21/06/23

**Sampling By \* :** TET

**Type of Sample :** Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2306-WW0630 W7		
29	Organochlorine *					
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	can not found	22-26/06/23
	- Beta-BHC	µg/L		Not Detected	can not found	22-26/06/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	can not found	22-26/06/23
	- Heptachlor	µg/L		Not Detected	can not found	22-26/06/23
	- Aldrin	µg/L		Not Detected	can not found	22-26/06/23
	- Dicofof	µg/L		Not Detected	can not found	22-26/06/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	can not found	22-26/06/23
	- Heptachlor-endo-epoxide (trans-isomer A)	µg/L		Not Detected	can not found	22-26/06/23
	- Gamma-Chlordane	µg/L		Not Detected	can not found	22-26/06/23
	- o,p'-DDE	µg/L		Not Detected	can not found	22-26/06/23
	- Alpha Endosulfan	µg/L		Not Detected	can not found	22-26/06/23
	- Alpha-Chlordane	µg/L		Not Detected	can not found	22-26/06/23
	- Dieldrin	µg/L		Not Detected	can not found	22-26/06/23
	- p,p'-DDE	µg/L		Not Detected	can not found	22-26/06/23
	- o,p'-DDD	µg/L		Not Detected	can not found	22-26/06/23
	- Endrin	µg/L		Not Detected	can not found	22-26/06/23
	- Beta Endosulfan	µg/L		Not Detected	can not found	22-26/06/23
	- p,p'-DDD	µg/L		Not Detected	can not found	22-26/06/23
	- o,p'-DDT	µg/L		Not Detected	can not found	22-26/06/23
	- p,p'-DDT	µg/L		Not Detected	can not found	22-26/06/23
	- Endosulfan sulfate	µg/L		Not Detected	can not found	22-26/06/23
30	Carbamate ***					
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 23 <sup>rd</sup> Edition, 2017. Part 6410B, 6610B, 6630B and 6630C. by LC-MS Technique.	Not Detected	can not found	26/06-05/07/23
	- Isoproc carb	µg/L		Not Detected	can not found	26/06-05/07/23
	- Fenobucarb	µg/L		Not Detected	can not found	26/06-05/07/23
	- Promecarb	µg/L		Not Detected	can not found	26/06-05/07/23
	- Carbofuran	µg/L		Not Detected	can not found	26/06-05/07/23
	- Methiocarb	µg/L		Not Detected	can not found	26/06-05/07/23
	- Methomyl	µg/L		Not Detected	can not found	26/06-05/07/23
	- Aldicarb	µg/L		Not Detected	can not found	26/06-05/07/23
	- Oxamyl	µg/L		Not Detected	can not found	26/06-05/07/23
	- Metolcarb	µg/L		Not Detected	can not found	26/06-05/07/23
31	Organophosphate *					
	- Dichlorvos (DDVP)	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	22-28/06/23
	- Mevinphos	µg/L		Not Detected	can not found	22-28/06/23
	- Diazinon	µg/L		Not Detected	can not found	22-28/06/23
	- Dicrotophos	µg/L		Not Detected	can not found	22-28/06/23
	- Monocrotophos	µg/L		Not Detected	can not found	22-28/06/23
	- Dimethoate	µg/L		Not Detected	can not found	22-28/06/23

continue

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## TEST REPORT

Analysis No. : R23-1938

Received Date: 22/06/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Report Date : 07/07/23

Analysis Date : 21-30/06/23

Job No. : S660386/June

Sampling Date \* : 21/06/23

Sampling By \* : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2306-WW0630		
				W7		
32	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	can not found	22-28/06/23
	- Chlorpyrifos	µg/L		Not Detected	can not found	22-28/06/23
	- Parathion-methyl	µg/L		Not Detected	can not found	22-28/06/23
	- Pirimiphos-ethyl	µg/L		Not Detected	can not found	22-28/06/23
	- Malathion	µg/L		Not Detected	can not found	22-28/06/23
	- Fenitrothion	µg/L		Not Detected	can not found	22-28/06/23
	- Parathion	µg/L		Not Detected	can not found	22-28/06/23
	- Prothiofos	µg/L		Not Detected	can not found	22-28/06/23
	- Methidathion	µg/L		Not Detected	can not found	22-28/06/23
	- Profenofos	µg/L		Not Detected	can not found	22-28/06/23
	- Ethion	µg/L		Not Detected	can not found	22-28/06/23
	- Triazophos	µg/L		Not Detected	can not found	22-28/06/23
	- EPN	µg/L		Not Detected	can not found	22-28/06/23
	- Phosalone	µg/L		Not Detected	can not found	22-28/06/23
	- Azinphos-ethyl	µg/L		Not Detected	can not found	22-28/06/23
	Pyrethroid *					
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	can not found	22-26/06/23
	- Bifenthrin	µg/L		Not Detected	can not found	22-26/06/23
	- Phenothrin	µg/L		Not Detected	can not found	22-26/06/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	can not found	22-26/06/23
	- Cypermethrin	µg/L		Not Detected	can not found	22-26/06/23
	- Cyfluthrin	µg/L		Not Detected	can not found	22-26/06/23
	- Fenvalerate	µg/L		Not Detected	can not found	22-26/06/23

Remarks : \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: W7 = บ่อกักน้ำเสียของโครงการเตาเผา Fluidized Bed ก่อนระบายลงสู่ท่อรวบรวมน้ำเสียของนิคมฯ บางปู (47P 0679135 UTM 1497148)

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ของ พ.ร.บ. ควบคุมมลพิษ, วิทยาลัยเทคนิค วิศวกรรมศาสตร์

(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual

Standard : Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory

07/07/23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager

07/07/23

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
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## Analysis Report BK2303026



TESTING  
No.0009

Client : Global Environmental Technology Co., Ltd.  
649/1 Moo 4, Sukhumvit Rd., Preaksa, Amphoe Mueang Samut Prakan, Samut  
Prakan, Thailand, 10280  
P/O : ----  
Project : System  
Project Location: Global Environmental Technology Co., Ltd.

Work Order : BK2303026  
Report Number : BK2303026-AA  
Date Received : Mar 13, 2023  
Date Reported : Mar 20, 2023  
Date Analysis Commenced : Mar 14, 2023  
No. of samples received : 6  
Temperature : 4.2 °C  
Sampled by : Chayanwut Chaihanit (๖-204-๑-8611)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

### Signatories

Siriluk P.

Siriluk Puengpang  
Supervisor  
๖-204-๑-4720

Kad Anek

Kanokkorn Anek  
Senior Manager  
๖-204-๑-6111



## Analysis Report BK2303026

Report Number : BK2303026-AA



TESTING  
No.0009

Sample Receipt and Conditions				Conditions
Sample ID	Sample Name	Sample Description	GPS	
BK2303026-001	I-AS1	Influent	---	1x 1L Plastic Bottle, 1x Cyanide, 2x Plastic bottle - Preserved with H <sub>2</sub> SO <sub>4</sub> , 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 1L Oil & Grease, 1x Logsheet/ data, 1x 120mL Plastic Bottle - Preserved with HNO <sub>3</sub> , 1x 120mL Plastic Bottle - Preserved with NaOH, 1x 500mL Plastic Bottle, refrigerated
BK2303026-002	E-AS1	Effluent	---	1x 1L Plastic Bottle, 1x Cyanide, 2x Plastic bottle - Preserved with H <sub>2</sub> SO <sub>4</sub> , 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 1L Oil & Grease, 1x Logsheet/ data, 1x 120mL Plastic Bottle - Preserved with HNO <sub>3</sub> , 1x Glass Vial - Preserved with BrCl, 1x 120mL Plastic Bottle - Preserved with NaOH, 1x 500mL Plastic Bottle, refrigerated
BK2303026-003	I-AS2	Influent	---	1x 1L Plastic Bottle, 1x Cyanide, 2x Plastic bottle - Preserved with H <sub>2</sub> SO <sub>4</sub> , 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 1L Oil & Grease, 1x Logsheet/ data, 1x 120mL Plastic Bottle - Preserved with HNO <sub>3</sub> , 1x 120mL Plastic Bottle - Preserved with NaOH, 1x 500mL Plastic Bottle, refrigerated
BK2303026-004	E-AS2	Effluent	---	1x Plastic Bottle, 1x Cyanide, 2x Plastic bottle - Preserved with H <sub>2</sub> SO <sub>4</sub> , 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 1L Oil & Grease, 1x Logsheet/ data, 1x 120mL Plastic Bottle - Preserved with HNO <sub>3</sub> , 1x Glass Vial - Preserved with BrCl, 1x 120mL Plastic Bottle - Preserved with NaOH, 1x 500mL Plastic Bottle, refrigerated
BK2303026-005	I-RBC	Influent	---	1x 1L Plastic Bottle, 1x Cyanide, 2x Plastic bottle - Preserved with H <sub>2</sub> SO <sub>4</sub> , 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 1L Oil & Grease, 1x Logsheet/ data, 1x 120mL Plastic Bottle - Preserved with HNO <sub>3</sub> , 1x 120mL Plastic Bottle - Preserved with NaOH, 1x 500mL Plastic Bottle, refrigerated





## Analysis Report BK2303026

Report Number : BK2303026-AA



TESTING  
No.0009

Sample Receipt and Conditions			
Sample ID	Sample Name	Sample Description	Conditions
BK2303026-006	E-RBC	Effluent	1x 1L Plastic Bottle, 1x Cyanide, 2x Plastic bottle - Preserved with H <sub>2</sub> SO <sub>4</sub> , 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 1L Oil & Grease, 1x Logsheet/ data, 1x 120mL Plastic Bottle - Preserved with HNO <sub>3</sub> , 1x Glass Vial - Preserved with BrCl, 1x 120mL Plastic Bottle - Preserved with NaOH, 1x 500mL Plastic Bottle, refrigerated

### Brief Method Summaries

The methods in the analysis report are short format - i.e. to full test methods in accordance with the ISO/IEC 17025 certificate no. specified in the analysis report

Method	Testing Lab	Method Descriptions
EN0005	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - CN C, E
EN0010	Bangkok	Wastewater Analysis
EN0021	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)
EN0026	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - Cl (F)
EN0032	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - S2 (C, F)
EN0035	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - Norg (C)
EN0044	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B and part 4500 - O (G)
EN0046	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D
EN0048	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B
EN0051	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D
EN0080	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F
EN0097	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B
EN0100	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C
EN0102	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D
ME0002	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F
ME0003	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, Calculated
ME0005	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112
ME0006	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B



# Analysis Report BK2303026

Report Number : BK2303026-AA



TESTING  
No.0009

Sub-Matrix: WASTEWATER

(Matrix: WATER)

Client Sample ID		I-AS1		E-AS1		I-AS2	
		Influent	Result	Effluent	Result	Influent	Result
Method	Testing Lab	Analytes	LOD	LOQ	Unit	Sampling Date	Guideline
Chemical Parameters							
EN0044	Bangkok	BOD (5 days at 20°C)	---	2.0	mg/L	Mar 13, 2023 09:58 AM	Mar 13, 2023 10:30 AM
EN0046	Bangkok	COD	---	25	mg/L	BK2303026-001	BK2303026-003
EN0005	Bangkok	Cyanide as CN	0.002	0.005	mg/L	Result	Result
EN0010	Bangkok	Formaldehyde	0.03	0.1	mg/L	Not Detected *	---
EN0048	Bangkok	Oil & Grease	---	3	mg/L	11	4
EN0021	Bangkok	pH at 25°C	---	1.0	pH Unit	7.8	7.7
EN0051	Bangkok	Phenol	0.0005	0.010	mg/L	0.046 *	Not Detected *
EN0026	Bangkok	Residual Free Chlorine	---	0.1	mg/L	---	---
EN0032	Bangkok	Sulfides	---	0.5	mg/L	1.8 *	<0.5 *
EN0035	Bangkok	Total Kjeldahl Nitrogen as N	0.15	1.0	mg/L	39.2 *	26.5 *
Metals and Major Cations - Total							
ME0002	Bangkok	Arsenic	0.0003	0.0005	mg/L	---	---
ME0002	Bangkok	Barium	0.0003	0.0005	mg/L	---	0.0397
ME0002	Bangkok	Cadmium	0.0003	0.0005	mg/L	0.0009	Not Detected
ME0002	Bangkok	Copper	0.0003	0.0005	mg/L	0.597	0.0372
ME0006	Bangkok	Hexavalent Chromium	0.003	0.01	mg/L	Not Detected	Not Detected
ME0002	Bangkok	Lead	0.0003	0.0005	mg/L	0.0466	0.0011
ME0002	Bangkok	Manganese	0.0003	0.0005	mg/L	0.292	0.120
ME0005	Bangkok	Mercury	0.0001	0.0005	mg/L	---	Not Detected
ME0002	Bangkok	Nickel	0.0003	0.0005	mg/L	0.911	0.168
ME0002	Bangkok	Selenium	0.0003	0.0005	mg/L	---	0.0013
ME0003	Bangkok	Trivalent Chromium	---	0.01	mg/L	0.14 *	<0.01 *
ME0002	Bangkok	Zinc	0.003	0.005	mg/L	2.21	0.357
Physical and Aggregate Properties							
Result							





## Analysis Report BK2303026

Report Number : BK2303026-AA



TESTING  
No.0009

Sub-Matrix: WASTEWATER  
(Metric: WATER)

Sub-Matrix: WASTEWATER (Matrix: WATER)									
Client Sample ID							I-AS1 Influent	E-AS1 Effluent	I-AS2 Influent



# Analysis Report BK2303026

Report Number : BK2303026-AA



TESTING  
No.0009

Sub-Matrix: WASTEWATER

(Matrix: WATER)

Client Sample ID				E-AS2 Effluent		I-RBC Influent		E-RBC Effluent	
Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline	Sampling Date	Result	Result
Chemical Parameters									
EN0044	Bangkok	BOD (5 days at 20°C)	—	2.0	mg/L	—	—	2.4	60.1
EN0046	Bangkok	COD	—	25	mg/L	—	—	<25	219
EN0005	Bangkok	Cyanide as CN	0.002	0.005	mg/L	—	—	Not Detected	<0.005
EN0010	Bangkok	Formaldehyde	0.03	0.1	mg/L	—	—	Not Detected *	—
EN0048	Bangkok	Oil & Grease	—	3	mg/L	—	—	4	8
EN0021	Bangkok	pH at 25°C	—	1.0	pH Unit	—	—	7.8	7.6
EN0051	Bangkok	Phenol	0.0005	0.010	mg/L	—	—	Not Detected *	Not Detected *
EN0026	Bangkok	Residual Free Chlorine	—	0.1	mg/L	—	—	<0.1 *	0.25 *
EN0032	Bangkok	Sulfides	—	0.5	mg/L	—	—	<0.5 *	<0.5 *
EN0035	Bangkok	Total Kjeldahl Nitrogen as N	0.15	1.0	mg/L	—	—	Not Detected *	17.1 *
Metals and Major Cations - Total									
ME0002	Bangkok	Arsenic	0.0003	0.0005	mg/L	—	—	0.0044	—
ME0002	Bangkok	Barium	0.0003	0.0005	mg/L	—	—	0.0375	—
ME0002	Bangkok	Cadmium	0.0003	0.0005	mg/L	—	—	Not Detected	Not Detected
ME0002	Bangkok	Copper	0.0003	0.0005	mg/L	—	—	0.226	0.289
ME0006	Bangkok	Hexavalent Chromium	0.003	0.01	mg/L	—	—	Not Detected	Not Detected
ME0002	Bangkok	Lead	0.0003	0.0005	mg/L	—	—	0.0018	0.0118
ME0002	Bangkok	Manganese	0.0003	0.0005	mg/L	—	—	0.0888	0.377
ME0005	Bangkok	Mercury	0.0001	0.0005	mg/L	—	—	Not Detected	—
ME0002	Bangkok	Nickel	0.0003	0.0005	mg/L	—	—	0.132	0.0146
ME0002	Bangkok	Selenium	0.0003	0.0005	mg/L	—	—	Not Detected	—
ME0003	Bangkok	Trivalent Chromium	—	0.01	mg/L	—	—	0.07 *	0.03 *
ME0002	Bangkok	Zinc	0.003	0.005	mg/L	—	—	0.439	0.463
Physical and Aggregate Properties									
Result									
4.1									
43									
Not Detected									
Not Detected *									
4									
7.6									
Not Detected *									
<0.1 *									
<0.5 *									
<1.0 *									
0.0023									
0.0558									
Not Detected									
0.131									
Not Detected									
0.0008									
0.125									
Not Detected									
0.0062									
Not Detected									
<0.01 *									
0.056									





## Analysis Report BK2303026

Report Number : BK2303026-AA



TESTING  
No.0009

Sub-Matrix: WASTEWATER  
(Matrix: WATER)

Client Sample ID				E-AS2 Effluent		I-RBC Influent		E-RBC Effluent	
Sampling Date				Mar 13, 2023 10:20 AM		Mar 13, 2023 09:32 AM		Mar 13, 2023 09:28 AM	
Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline	Result	Result	Result
Physical and Aggregate Properties									
EN0080	Bangkok	Color (at Original pH)	---	5	ADMI	---	15 *	---	28 *
EN0080	Bangkok	Color (at pH 7.0)	---	5	ADMI	---	13 *	---	28 *
EN0097	Bangkok	Temperature	---	---	°C	---	29.5 *	19.7 *	29.2 *
EN0100	Bangkok	Total Dissolved Solids at 180°C	---	5	mg/L	---	1072	932	1016
EN0102	Bangkok	Total Suspended Solids	---	5	mg/L	---	14	104	5

Guideline: ---

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

Sampling is not included in scope of accreditation ISO/IEC 17025

Key:

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

END OF REPORT



## Analysis Report BK2303026



TESTING  
No.0009

Client : Global Environmental Technology Co., Ltd.  
649/1 Moo 4, Sukhumvit Rd., Preaksa, Amphoe Mueang Samut Prakan, Samut  
Prakan, Thailand, 10280  
P/O : ----  
Project : System  
Project Location: Global Environmental Technology Co., Ltd.

Work Order : BK2303026  
Report Number : BK2303026-AB  
Date Received : Mar 13, 2023  
Date Reported : Mar 20, 2023  
Date Analysis Commenced : Mar 14, 2023  
No. of samples received : 6  
Temperature : 4.2 °C  
Sampled by : Chayanwut Chaihanit

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

Signatories

Siriluk P.

Siriluk Puengpang  
Supervisor

ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Life Sciences

104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand T +662 760 3000

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Page 1 of 5

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## Analysis Report BK2303026

Report Number : BK2303026-AB



TESTING  
No.0009

Sample Receipt and Conditions			
Sample ID	Sample Name	Sample Description	GPS
BK2303026-001	I-AS1	Influent	—
Conditions 1x 1L Plastic Bottle - Preserved with H <sub>2</sub> SO <sub>4</sub> , 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 1L Oil & Grease, 1x Logsheet/ data, 1x 120mL Plastic Bottle - Preserved with HNO <sub>3</sub> , 1x 120mL Plastic Bottle - Preserved with NaOH, 1x 500mL Plastic Bottle, refrigerated			
BK2303026-002	E-AS1	Effluent	—
Conditions 1x 1L Plastic Bottle, 1x Cyanide, 2x Plastic bottle - Preserved with H <sub>2</sub> SO <sub>4</sub> , 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 1L Oil & Grease, 1x Logsheet/ data, 1x 120mL Plastic Bottle - Preserved with HNO <sub>3</sub> , 1x Glass Vial - Preserved with BrCl, 1x 120mL Plastic Bottle - Preserved with NaOH, 1x 500mL Plastic Bottle, refrigerated			
BK2303026-003	I-AS2	Influent	—
Conditions 1x 1L Plastic Bottle, 1x Cyanide, 2x Plastic bottle - Preserved with H <sub>2</sub> SO <sub>4</sub> , 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 1L Oil & Grease, 1x Logsheet/ data, 1x 120mL Plastic Bottle - Preserved with HNO <sub>3</sub> , 1x 120mL Plastic Bottle - Preserved with NaOH, 1x 500mL Plastic Bottle, refrigerated			
BK2303026-004	E-AS2	Effluent	—
Conditions 1x Plastic Bottle, 1x Cyanide, 2x Plastic bottle - Preserved with H <sub>2</sub> SO <sub>4</sub> , 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 1L Oil & Grease, 1x Logsheet/ data, 1x 120mL Plastic Bottle - Preserved with HNO <sub>3</sub> , 1x Glass Vial - Preserved with BrCl, 1x 120mL Plastic Bottle - Preserved with NaOH, 1x 500mL Plastic Bottle, refrigerated			
BK2303026-005	I-RBC	Influent	—
Conditions 1x 1L Plastic Bottle, 1x Cyanide, 2x Plastic bottle - Preserved with H <sub>2</sub> SO <sub>4</sub> , 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 1L Oil & Grease, 1x Logsheet/ data, 1x 120mL Plastic Bottle - Preserved with HNO <sub>3</sub> , 1x 120mL Plastic Bottle - Preserved with NaOH, 1x 500mL Plastic Bottle, refrigerated			



## Analysis Report BK2303026

Report Number : BK2303026-AB



TESTING  
No.0009

### Sample Receipt and Conditions

Sample ID	Sample Name	Sample Description	GPS	Conditions
BK2303026-006	E-RBC	Effluent	---	1x 1L Plastic Bottle, 1x Cyanide, 2x Plastic bottle - Preserved with H <sub>2</sub> SO <sub>4</sub> , 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 1L Oil & Grease, 1x Logsheet/ data, 1x 120mL Plastic Bottle - Preserved with HNO <sub>3</sub> , 1x Glass Vial - Preserved with BrCl, 1x 120mL Plastic Bottle - Preserved with NaOH, 1x 500mL Plastic Bottle, refrigerated

### Brief Method Summaries

The methods in the analysis report are short format - refer to full test methods in accordance with the ISO/IEC 17025 certificate no. specified in the analysis report

Method	Testing Lab	Method Descriptions
EN0005	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - CN C, E
EN0024	Bangkok	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - Cl (G)
EN0032	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - S2 (C, F)
EN0048	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B
EN0100	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C
EN0102	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D
ME0002	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F





## Analysis Report BK2303026

Report Number : BK2303026-AB



TESTING  
No.0009

Sub-Matrix: WASTEWATER  
(Matrix: WATER)

Client Sample ID				I-AS1 Influent		E-AS1 Effluent		I-AS2 Influent	
Method		Testing Lab	Analytes	LOD	LOQ	Unit	Guideline	Sampling Date	Result
EN0024		Bangkok	Residual Chlorine	—	0.1	mg/L	—	Mar 13, 2023 09:58 AM	BK2303026-001
ME0002		Bangkok	Iron	0.003	0.005	mg/L	—	Mar 13, 2023 09:55 AM	BK2303026-002
Metals and Major Cations - Total								Mar 13, 2023 10:30 AM	BK2303026-003
Chemical Parameters									Result
EN0024		Bangkok	Residual Chlorine	—	0.1	mg/L	—	Mar 13, 2023 09:58 AM	<0.1 *
ME0002		Bangkok	Iron	0.003	0.005	mg/L	—	Mar 13, 2023 09:55 AM	0.096
									1.42



## Analysis Report BK2303026

Report Number : BK2303026-AB



TESTING  
No.0009

Sub-Matrix: WASTEWATER

(Matrix: WATER)

				Client Sample ID							
Method	Testing Lab	Analytes	LOD	LOQ	Unit	Sampling Date		E-AS2 Effluent	I-RBC Influent	E-RBC Effluent	Result
						Guideline					
ME0002	Bangkok	Iron	0.003	0.005	mg/L	---	---	Mar 13, 2023 10:20 AM BK2303026-004	Mar 13, 2023 09:32 AM BK2303026-005	Mar 13, 2023 09:28 AM BK2303026-006	0.294 2.56 0.320
Metals and Major Cations - Total											

Guideline: ---

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

Sampling is not included in scope of accreditation ISO/IEC 17025

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

----- END OF REPORT -----





## TEST REPORT

Analysis No. : R23-0070

Received Date: 10/01/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 16/01/23

Analysis Date : 09-16/01/23

Job No. : S660037/Jan

Sampling Date : 09/01/23

Sampling By : TET

Type of Sample : Wastewater

Sample Conditions : 2301-WW0140 = yellow turbid/high black sediment/covered with oil slick/smell

Item	Parameter	Unit	Method	Result	Standard	Analysis Date
				2301-WW0140		
				น้ำเสียรวมที่เข้าบ่อพักน้ำเสีย ของเขตพาณิชย์กรรมและที่พักอาศัย		
1	pH	-	Electrometric Method (SM 4500 B)	7.82	5.5-9.0	09/01/23
2	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	8.0	200	11/01/23
3	BOD	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	24	500	11-16/01/23
4	Oil & Grease	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	4.5	10	13/01/23
5	Phosphate	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	8.58	-	12/01/23

Remarks : น้ำเสียรวมที่เข้าบ่อพักน้ำเสียของเขตพาณิชย์กรรมและที่พักอาศัย = 47P 0679605 UTM 1496364

Method : SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

Standard : Reference to Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory

16/01/23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager

16/01/23



## TEST REPORT

Analysis No. : R23-0380

Received Date: 10/02/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Sample Conditions : 2302-WW0266 = black turbid/high black sediment/covered with oil slick/smell

Report Date : 21/02/23

Analysis Date : 10-15/02/23

Job No. : S660037/Feb

Sampling Date : 09/02/23

Sampling By : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method	Result	Standard	Analysis Date
				2302-WW0266		
				น้ำเสียรวมที่เข้าบ่อกักน้ำเสีย ของเขตพาณิชย์กรรมและที่พักอาศัย		
1	pH	-	Electrometric Method (SM 4500 B)	7.14	5.5-9.0	15/02/23
2	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	6.4	200	14/02/23
3	BOD	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	33	500	10-15/02/23
4	Oil & Grease	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	4.0	10	14/02/23
5	Phosphate	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	9.28	-	15/02/23

Remarks : น้ำเสียรวมที่เข้าบ่อกักน้ำเสียของเขตพาณิชย์กรรมและที่พักอาศัย = 47P 0679605 UTM 1496364

Method : SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

Standard : Reference to Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

21/2/23



Approved by

Mrs. Pomtip Pethshee

Laboratory Manager

21/2/23





## TEST REPORT

Analysis No. : R23-1239

Received Date: 27/04/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 19/05/23

Analysis Date : 26/04-02/05/23

Job No. : S660386/Apr

Sampling Date \* : 26/04/23

Sampling By \* : TET

Type of Sample : Wastewater

Sample Conditions : 2304-WW0489 = black turbid/high black sediment/covered with oil slick/smell

Item	Parameter	Unit	Method	Result	Standard	Analysis Date
				2304-WW0489		
				น้ำเสียรวมที่เข้าบ่อกักน้ำเสีย ของเขตพาณิชย์กรรมและที่พักอาศัย		
1	pH *	-	Electrometric Method (SM 4500 B)	7.32	5.5-9.0	26/04/23
2	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	110.4	200	27/04/23
3	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	44	500	27/04-02/05/23
4	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	3.0	10	27/04/23
5	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	1.37	-	28/04/23

Remarks : \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

: น้ำเสียรวมที่เข้าบ่อกักน้ำเสียของเขตพาณิชย์กรรมและที่พักอาศัย = 47P 0679605 UTM 1496364

Method : SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

Standard : Reference to Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

19/05/23



Approved by

Mrs. Pornpip Pethshee

Laboratory Manager

19/05/23



## TEST REPORT

**Analysis No.** : R23-1468

**Received Date:** 18/05/23

**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

**Address** : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

**Contact** : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

**Sample Conditions** : 2305-WW0418 = gray turbid/high black sediment/covered with oil slick/smell

**Report Date** : 25/07/23

**Analysis Date** : 17-23/05/23

**Job No.** : S660386/May

**Sampling Date** : 17/05/23

**Sampling By** : Mr. Chalermwut Poolsanguan

**Type of Sample** : Wastewater

Item	Parameter	Unit	Method	Result	Standard	Analysis Date
				2305-WW0418		
				น้ำเสียรวมที่เข้าบ่อกักน้ำเสีย ของเขตพาณิชย์กรรมและที่พักอาศัย		
1	pH	-	Electrometric Method (SM 4500 B)	7.72	5.5-9.0	17/05/23
2	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	5.0	200	19/05/23
3	BOD	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	42	500	18-23/05/23
4	Oil & Grease	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	2.0	10	19/05/23
5	Phosphate	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	6.14	-	23/05/23

**Remarks** : น้ำเสียรวมที่เข้าบ่อกักน้ำเสียของเขตพาณิชย์กรรมและที่พักอาศัย = 47P 0679605 UTM 1496364

**Method** : SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

**Standard** : Reference to Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
25/07/23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager  
25/07/23

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
- DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL





## TEST REPORT

Analysis No. : R23-1938

Received Date: 22/06/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Sample Conditions : 2306-WW0622 = yellow turbid/slight black sediment

Report Date : 07/07/23

Analysis Date : 21-27/06/23

Job No. : S660386/June

Sampling Date : 21/06/23

Sampling By : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method	Result	Standard	Analysis Date
				2306-WW0622		
				น้ำเสียรวมที่เข้าบ่อกักน้ำเสีย ของเขตพาณิชยกรรมและที่พักอาศัย		
1	pH	-	Electrometric Method (SM 4500 B)	7.42	5.5-9.0	21/06/23
2	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	3.0	200	22/06/23
3	BOD	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	4	500	22-27/06/23
4	Oil & Grease	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.8	10	23/06/23
5	Phosphate	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	3.02	-	23/06/23

Remarks : น้ำเสียรวมที่เข้าบ่อกักน้ำเสียของเขตพาณิชยกรรมและที่พักอาศัย = 47P 0679605 UTM 1496364

Method : SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

Standard : Reference to Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

07.07.23



Approved by

Mrs. Pomtip Pethshee

Laboratory Manager

07.07.23

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
- DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL



## TEST REPORT

**Analysis No.** : R23-0070  
**Received Date:** 10/01/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู  
**Address** : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280  
**Contact** : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730  
**Sample Conditions** : 2301-WW0141 = yellow turbid/slight white sediment

**Report Date** : 16/01/23  
**Analysis Date** : 09-16/01/23  
**Job No.** : S660037/Jan  
**Sampling Date \*** : 09/01/23  
**Sampling By \*** : TET  
**Type of Sample** : Wastewater

Item	Parameter	Unit	Method	Result	Standard	Analysis Date
				2301-WW0141		
				น้ำทิ้งที่ออกจากบ่อกักน้ำเสีย ของเขตพาณิชย์กรรมและที่พักอาศัย		
1	pH *	-	Electrometric Method (SM 4500 B)	7.81	5.5-9.0	09/01/23
2	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate Spectrophotometric Method (SM 2120 F)	17	600	11/01/23
	Color (pH 7) *	ADMI		14	600	11/01/23
3	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	18.8	200	11/01/23
4	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	3	500	11-16/01/23
5	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.6	10	13/01/23
6	Phosphate *	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	0.90	-	12/01/23

**Remarks** : \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"  
: น้ำทิ้งที่ออกจากบ่อกักน้ำเสียของเขตพาณิชย์กรรมและที่พักอาศัย = 47P 0679353 UTM 1496544  
**Method** : SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017  
**Standard** : Reference to Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
16/01/23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager  
16/01/23

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
- DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL





## TEST REPORT

Analysis No. : R23-0380

Received Date: 10/02/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

โครงการนิคมอุตสาหกรรมบางปู (ส่วนขยาย ครั้งที่ 3)

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Sample Conditions : 2302-WW0267 = clear/high black sediment/covered with oil slick/smell

Report Date : 21/02/23

Analysis Date : 09-15/02/23

Job No. : S660037/Feb

Sampling Date : 09/02/23

Sampling By : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method	Result	Standard	Analysis Date
				2302-WW0267		
				น้ำทิ้งที่ออกจากบ่อพักน้ำเสียของเขตพาณิชย์กรรมและที่พักอาศัย		
1	pH	-	Electrometric Method (SM 4500 B)	6.81	5.5-9.0	09/02/23
2	Color (Original pH)	ADMI	} ADMI Weighted-Ordinate	8	600	10/02/23
	Color (pH 7)	ADMI		8	600	10/02/23
3	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	3.0	200	14/02/23
4	BOD	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	1	500	10-15/02/23
5	Oil & Grease	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.4	10	14/02/23
6	Phosphate	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	0.58	-	15/02/23

Remarks : น้ำทิ้งที่ออกจากบ่อพักน้ำเสียของเขตพาณิชย์กรรมและที่พักอาศัย = 47P 0679353 UTM 1496544

Method : SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

Standard : Reference to Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

21/02/23



Approved by

Mrs. Pornpip Pethshee

Laboratory Manager

21/02/23



## TEST REPORT

Analysis No. : R23-1239

Received Date: 27/04/23

Customer : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่

อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Sample Conditions : 2304-WW0490 = yellow turbid/slight black sediment

Report Date : 19/05/23

Analysis Date : 26/04-02/05/23

Job No. : S660386/Apr

Sampling Date : 26/04/23

Sampling By : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method	Result	Standard	Analysis Date
				2304-WW0490		
				น้ำทิ้งที่ออกจากบ่อบำบัดน้ำเสีย ของเขตพาณิชย์กรรมและที่พักอาศัย		
1	pH	-	Electrometric Method (SM 4500 B)	7.57	5.5-9.0	26/04/23
2	Color (Original pH)	ADMI	} ADMI Weighted-Ordinate	8	600	27/04/23
	Color (pH 7)	ADMI		6	600	27/04/23
3	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	< 2.5	200	27/04/23
4	BOD	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	2	500	27/04-02/05/23
5	Oil & Grease	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.6	10	27/04/23
6	Phosphate	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	0.60	-	28/04/23

Remarks : น้ำทิ้งที่ออกจากบ่อบำบัดน้ำเสียของเขตพาณิชย์กรรมและที่พักอาศัย = 47P 0679353 UTM 1496544

Method : SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

Standard : Reference to Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory

19.05.23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager

19.05.23





## TEST REPORT

Analysis No. : R23-1468

Received Date: 18/05/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Sample Conditions : 2305-WW0419 = clear/slight black sediment

Report Date : 25/07/23

Analysis Date : 17-23/05/23

Job No. : S660386/May

Sampling Date : 17/05/23

Sampling By : Mr. Chalermwut Poolsanguan

Type of Sample : Wastewater

Item	Parameter	Unit	Method	Result	Standard	Analysis Date
				2305-WW0419		
				น้ำทิ้งที่ออกจากบ่อกักน้ำเสียของเขตพาณิชย์กรรมและที่พักอาศัย		
1	pH	-	Electrometric Method (SM 4500 B)	8.03	5.5-9.0	17/05/23
2	Color (Original pH)	ADMI	} ADMI Weighted-Ordinate	6	600	18/05/23
	Color (pH 7)	ADMI		5	600	18/05/23
3	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	< 2.5	200	19/05/23
4	BOD	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	3	500	18-23/05/23
5	Oil & Grease	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.6	10	19/05/23
6	Phosphate	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	0.35	-	23/05/23

Remarks : น้ำทิ้งที่ออกจากบ่อกักน้ำเสียของเขตพาณิชย์กรรมและที่พักอาศัย = 47P 0679353 UTM 1496544

Method : SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

Standard : Reference to Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

25/07/23



Approved by

Mrs. Pornpip Pethshee

Laboratory Manager

25/07/23

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
- DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL



## TEST REPORT

Analysis No. : R23-1938

Received Date: 22/06/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Sample Conditions : 2306-WW0623 = light yellow/slight black sediment

Report Date : 07/07/23

Analysis Date : 21-27/06/23

Job No. : S660386/June

Sampling Date : 21/06/23

Sampling By : TET

Type of Sample : Wastewater

Item	Parameter	Unit	Method	Result	Standard	Analysis Date
				2306-WW0623		
				น้ำทิ้งที่ออกจากบ่อพักน้ำเสีย ของเขตพาณิชย์กรรมและที่พักอาศัย		
1	pH	-	Electrometric Method (SM 4500 B)	6.90	5.5-9.0	21/06/23
2	Color (Original pH)	ADMI	} ADMI Weighted-Ordinate	8	600	23/06/23
	Color (pH 7)	ADMI		12	600	23/06/23
3	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	< 2.5	200	22/06/23
4	BOD	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	1	500	22-27/06/23
5	Oil & Grease	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.4	10	23/06/23
6	Phosphate	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	0.54	-	23/06/23

Remarks : น้ำทิ้งที่ออกจากบ่อพักน้ำเสียของเขตพาณิชย์กรรมและที่พักอาศัย = 47P 0679353 UTM 1496544

Method : SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

Standard : Reference to Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

07.07.23



Approved by

Mrs. Pornpip Pethshee

Laboratory Manager

07.07.23

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
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## TEST REPORT

Analysis No. : R23-1468

Received Date : 18/05/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Sample Conditions : 2305-WW0422 = green turbid/high green sediment

Report Date : 25/07/23

Analysis Date : 18-23/05/23

Job No. : S660386/May

Sampling Date : 17/05/23

Sampling By : Mr. Chalermwut Poolsanguan

Type of Sample : Wastewater

Item	Parameter	Unit	Method	Result	Standard	Analysis Date
				2305-WW0422		
				บ่อน้ำทิ้งโครงการ		
1	pH	-	Electrometric Method (SM 4500 B)	7.42	5.5-9.0	19/05/23
2	SS	mg/L	Volumetric, Dried at 103-105 °C (SM 2540 F)	< 2.5	50	22/05/23
3	BOD	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	6	20	18-23/05/23
4	Oil & Grease	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.6	5	19/05/23

Remarks : บ่อน้ำทิ้งโครงการ = 47P 0679849 UTM 1499689

Method : SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

Standard : Notification of the Ministry of Natural Resources and Environment (2016) (B.E. 2559)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
25.07.23



Approved by

Mrs. Porntip Pethshee  
Laboratory Manager  
25.07.23

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
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## TEST REPORT

Analysis No. : R23-1468

Received Date : 18/05/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Sample Conditions : 2305-WF0423 = yellow turbid/slight brown sediment

Report Date : 25/07/23

Analysis Date : 17-23/05/23

Job No. : S660386/May

Sampling Date : 17/05/23

Sampling By : Mr. Chalermwut Poolsanguan

Type of Sample : Surface Water

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2305-WF0423		
				คลองหกวส่วนก่อนไหลผ่านเข้าสู่พื้นที่โครงการระยะ 2A		
1	Temperature	°C	Laboratory and Field, Methods (SM 2550B)	31.6	34.0 <sup>(1)</sup>	17/05/23
2	pH	-	Electrometric Method (SM 4500 B)	7.47	5.0-9.0	17/05/23
3	SS	mg/L	Volumetric, Dried at 103-105 °C (SM 2540 F)	< 2.5	-	22/05/23
4	BOD	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	7	2.0	18-23/05/23
5	Oil & Grease	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.8	-	19/05/23
6	NH <sub>3</sub> -N	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	5.83	0.5	22/05/23
7	Phosphate	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	2.91	-	23/05/23
8	Phenol & Cresol	mg/L	LLE, GC/FID (SW-846 Method 3510C and 8041) <sup>(B)</sup>	< 0.001	0.005 <sup>(2)</sup>	22-23/05/23
9	Hg	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.002	18/05/23

Remarks : คลองหกวส่วนก่อนไหลผ่านเข้าสู่พื้นที่โครงการระยะ 2A = 47P 0679608 UTM 1499667

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual

Standard : Notification of the National Environment Board No. 8 (1994) (B.E. 2537) ; Class 3

(1) อุณหภูมิ (Temperature) ไม่สูงกว่าอุณหภูมิมาตรฐานตามธรรมชาติเกิน 3 องศาเซลเซียส  
(อ้างอิงอุณหภูมิสภาพธรรมชาติ จุดเหนือน้ำขึ้นไป 500 เมตร คลองหกวส่วนก่อนไหลผ่านเข้าสู่พื้นที่โครงการระยะ 2A ตรวจวัดเมื่อวันที่ 17 พฤษภาคม 2566 มีค่าเท่ากับ 31.0 °C ดังนั้นมาตรฐานอุณหภูมิคุณภาพน้ำผิวดิน คือ 31.0 °C + 3 °C = 34.0 °C)

(2) Standard for Phenols

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

25/07/23



Approved by

Mrs. Pomtip Pethshee

Laboratory Manager

25/07/23





## TEST REPORT

Analysis No. : R23-1468

Received Date : 18/05/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Report Date : 25/07/23

Analysis Date : 17-23/05/23

Job No. : S660386/May

Sampling Date : 17/05/23

Sampling By : Mr. Chalermwut Poolsanguan

Type of Sample : Surface Water

Sample Conditions : 2305-WF0424 = gray turbid/high black sediment/covered with oil slick/smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2305-WF0424		
				คล่องล้าบางฝืดก่อนไหลบรรจบกับคลองหกส่วน		
1	Temperature	°C	Laboratory and Field, Methods (SM 2550B)	31.1	33.7 <sup>(1)</sup>	17/05/23
2	pH	-	Electrometric Method (SM 4500 B)	7.53	5.0-9.0	17/05/23
3	SS	mg/L	Volumetric, Dried at 103-105 °C (SM 2540 F)	< 2.5	-	22/05/23
4	BOD	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	14	2.0	18-23/05/23
5	Oil & Grease	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	2.5	-	19/05/23
6	NH <sub>3</sub> -N	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	12.33	0.5	22/05/23
7	Phosphate	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	3.63	-	23/05/23
8	Phenol & Cresol	mg/L	LLE, GC/FID (SW-846 Method 3510C and 8041) <sup>(B)</sup>	< 0.001	0.005 <sup>(2)</sup>	22-23/05/23
9	Hg	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.002	18/05/23

Remarks : คล่องล้าบางฝืดก่อนไหลบรรจบกับคลองหกส่วน = 47P 0681387 UTM 1499462

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual

Standard : Notification of the National Environment Board No. 8 (1994) (B.E. 2537) ; Class 3

(1) อุณหภูมิ (Temperature) ไม่สูงกว่าอุณหภูมิตามธรรมชาติเกิน 3 องศาเซลเซียส  
(อ้างอิงอุณหภูมิสภาพธรรมชาติ จุดเหนือน้ำขึ้นไป 500 เมตร คล่องล้าบางฝืดก่อนไหลบรรจบกับคลองหกส่วน ตรวจวัดเมื่อวันที่ 17 พฤษภาคม 2566 มีค่าเท่ากับ 30.7 °C ดังนั้นมาตรฐานอุณหภูมิคุณภาพน้ำผิวดิน คือ 30.7 °C + 3 °C = 33.7 °C)

(2) Standard for Phenols

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
25/05/23



Approved by

Mrs. Pomtip Pethshee  
Laboratory Manager  
25/05/23



## TEST REPORT

Analysis No. : R23-1468

Received Date : 18/05/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Sample Conditions : 2305-WF0425 = yellow turbid/slight brown sediment

Report Date : 25/07/23

Analysis Date : 17-23/05/23

Job No. : S660386/May

Sampling Date : 17/05/23

Sampling By : Mr. Chalermwut Poolsanguan

Type of Sample : Surface Water

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2305-WF0425		
				คลองลำบางผีช่วงก่อนไหลออก จากพื้นที่โครงการระยะ 2B		
1	Temperature	°C	Laboratory and Field, Methods (SM 2550B)	29.0	32.1 <sup>(1)</sup>	17/05/23
2	pH	-	Electrometric Method (SM 4500 B)	7.36	5.0-9.0	17/05/23
3	SS	mg/L	Volumetric, Dried at 103-105 °C (SM 2540 F)	< 2.5	-	22/05/23
4	BOD	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	11	2.0	18-23/05/23
5	Oil & Grease	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.6	-	19/05/23
6	NH <sub>3</sub> -N	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	3.05	0.5	22/05/23
7	Phosphate	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	2.50	-	23/05/23
8	Phenol & Cresol	mg/L	LLE, GC/FID (SW-846 Method 3510C and 8041) <sup>(B)</sup>	< 0.001	0.005 <sup>(2)</sup>	22-23/05/23
9	Hg	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.002	18/05/23

Remarks : คลองลำบางผีช่วงก่อนไหลออกจากพื้นที่โครงการระยะ 2B = 47P 0681281 UTM 1499048

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual

Standard : Notification of the National Environment Board No. 8 (1994) (B.E. 2537) ; Class 3

(1) อุณหภูมิ (Temperature) ไม่สูงกว่าอุณหภูมิตามธรรมชาติเกิน 3 องศาเซลเซียส  
(อ้างอิงอุณหภูมิสภาพธรรมชาติ จุดเหนือน้ำขึ้นไป 500 เมตร คลองลำบางผีช่วงก่อนไหลออกจากพื้นที่โครงการระยะ 2B ตรวจวัดเมื่อวันที่ 17 พฤษภาคม 2566 มีค่าเท่ากับ 29.1 °C ดังนั้นมาตรฐานอุณหภูมิคุณภาพน้ำผิวดิน คือ 29.1 °C + 3 °C = 32.1 °C)

(2) Standard for Phenols

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
25/07/23



Approved by

Mrs. Porntip Pethshee  
Laboratory Manager  
25/07/23

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- DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL





## TEST REPORT

Analysis No. : R23-1468

Received Date : 18/05/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Report Date : 25/07/23

Analysis Date : 17-23/05/23

Job No. : S660386/May

Sampling Date : 17/05/23

Sampling By : Mr. Chalermwut Poolsanguan

Type of Sample : Surface Water

Sample Conditions : 2305-WF0426 = gray turbid/high black sediment/covered with oil slick/smell

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2305-WF0426		
				ทดลองสกัดก่อนไหลบรรจุกับ ทดลองชลประทานกันน้ำเค็ม		
1	Temperature	°C	Laboratory and Field, Methods (SM 2550B)	33.2	35.9 <sup>(1)</sup>	17/05/23
2	pH	-	Electrometric Method (SM 4500 B)	7.58	5.0-9.0	17/05/23
3	SS	mg/L	Volumetric, Dried at 103-105 °C (SM 2540 F)	< 2.5	-	22/05/23
4	BOD	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	7	2.0	18-23/05/23
5	Oil & Grease	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	2.0	-	19/05/23
6	NH <sub>3</sub> -N	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	11.48	0.5	22/05/23
7	Phosphate	mg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	3.28	-	23/05/23
8	Phenol & Cresol	mg/L	LLE, GC/FID (SW-846 Method 3510C and 8041) <sup>(B)</sup>	< 0.001	0.005 <sup>(2)</sup>	22-23/05/23
9	Hg	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.002	18/05/23

Remarks : ทดลองสกัดก่อนไหลบรรจุกับทดลองชลประทานกันน้ำเค็ม = 47P 0679513 UTM 1496389

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW: 846 Manual

Standard : Notification of the National Environment Board No. 8 (1994) (B.E. 2537) ; Class 3

(1) อุณหภูมิ (Temperature) ไม่สูงกว่าอุณหภูมิตามธรรมชาติเกิน 3 องศาเซลเซียส

(อ้างอิงอุณหภูมิสภาพธรรมชาติ จุดเหนือเขื่อนไป 500 เมตร ทดลองสกัดก่อนไหลบรรจุกับทดลองชลประทานกันน้ำเค็ม ตรวจวัดเมื่อวันที่ 17 พฤษภาคม 2566 มีค่าเท่ากับ 32.9 °C ดังนั้นมาตรฐานอุณหภูมิคุณภาพน้ำผิวดิน คือ 32.9 °C + 3 °C = 35.9 °C)

(2) Standard for Phenols

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory



Approved by

Mrs. Porntip Pethshee  
Laboratory Manager



## TEST REPORT

Analysis No. : R23-1468

Received Date : 18/05/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Report Date : 25/07/23

Analysis Date : 17/05/23

Job No. : S660386/May

Sampling Date : 17/05/23

Sampling By : Mr. Chalermwut Poolsanguan

Type of Sample : Surface Water

Item	Sampling Point	Result	Analysis Date
		Temperature (°C)	
	จุดเหื่อน้ำขึ้นไป 500 เมตร		
1	คลองหกส่วนก่อนไหลผ่านเข้าสู่พื้นที่โครงการระยะ 2A	31.0	17/05/23
2	คลองลำบางฝีก่อนไหลบรรจบกับคลองหกส่วน	30.7	17/05/23
3	คลองลำบางฝีช่วงก่อนไหลออกจากพื้นที่โครงการระยะ 2B	29.1	17/05/23
4	คลองสลัดก่อนไหลบรรจบกับคลองชลประทานกั้นน้ำเค็ม	32.9	17/05/23

Remarks : คลองหกส่วนก่อนไหลผ่านเข้าสู่พื้นที่โครงการระยะ 2A = 47P 0679156 UTM 1499882  
คลองลำบางฝีก่อนไหลบรรจบกับคลองหกส่วน = 47P 0681565 UTM 1499927  
คลองลำบางฝีช่วงก่อนไหลออกจากพื้นที่โครงการระยะ 2B = 47P 0680955 UTM 1499427  
คลองสลัดก่อนไหลบรรจบกับคลองชลประทานกั้นน้ำเค็ม = 47P 0679765 UTM 1496819

Method : Temperature - Laboratory and Field, Methods (SM 2550B)

: SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
25/7/23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager  
25/7/23

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## TEST REPORT

Analysis No. : R23-1468

Received Date: 18/05/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450 Fax. (02) 323 0730

Sample Conditions : 2305-WS0427 = brown turbid/high brown sediment, Oil & Grease = not visible  
2305-WS0428 = brown turbid/high brown and gray sediment, Oil & Grease = not visible

Report Date : 25/07/23

Analysis Date : 17/05-25/07/23

Job No. : S660386/May

Sampling Date : 17/05/23

Sampling By : Mr. Chalermwut Poolsanguan

Type of Sample : Seawater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2305-WS0427	2305-WS0428		
				จุดระบายน้ำทิ้ง ริมถนนสุขุมวิท บริเวณ กม. ที่ 34 (Mixing Zone)	คลองหัวลำภูหน้า ประตูระบายน้ำ ก่อนไหลลงสู่ทะเล ประมาณ 50 เมตร		
1	pH	-	Electrometric Method (4500 B)	7.59	7.77	7.0-8.5	17/05/23
2	SS	mg/L	Dried at 103-105 °C (2540 D)	8.7	44.4	<sup>(1)</sup>	22/05/23
3	TDS	mg/L	Dried at 180 °C (SM 2540 C)	2,032	9,110	-	19/05/23
4	BOD	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	3	4	-	18-23/05/23
5	Oil & Grease	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.8	0.8	not visible	19/05/23
6	NH <sub>3</sub> -N	µg-N/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	170	5,490	-	22/05/23
7	Phosphate	µg/L	Acid digestion/Colorimetric (SM 4500-P B/E)	4,710	8,150	-	23/05/23
8	Cyanide	µg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 1	23	7	19/05/23
9	Phenol	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	< 0.001	0.03	19/05/23
10	Cr <sup>+6</sup>	µg/L	Pre-concentration/Electrothermal AAS <sup>(B)</sup>	< 0.1	< 0.1	50	19/05/23
11	Pb	µg/L	Pre-concentration/Electrothermal AAS <sup>(B)</sup>	0.7	0.2	8.5	22/05/23
12	Cd	µg/L	Pre-concentration/Electrothermal AAS <sup>(B)</sup>	0.2	< 0.1	5	19/05/23
13	Ni	µg/L	Pre-concentration/Electrothermal AAS <sup>(B)</sup>	27.3	16.1	-	19/05/23
14	Total Cr	µg/L	Pre-concentration/Electrothermal AAS <sup>(B)</sup>	< 0.1	< 0.1	100	19/05/23
15	Cu	µg/L	Pre-concentration/Electrothermal AAS <sup>(B)</sup>	5.0	0.9	8	19/05/23
16	Hg *	µg/L	Atomic Fluorescence Spectrometry	0.18	0.25	0.1	25/07/23
17	As	µg/L	Hydride generation/Atomic Absorption Spectrometry <sup>(B)</sup>	4.7	5.4	10	23/05/23
18	Zn	µg/L	Pre-concentration/ICP-OES <sup>(B)</sup>	242	38	50	22/05/23

continue

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## TEST REPORT

Analysis No. : R23-1468

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Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 25/07/23

Analysis Date : 17/05-25/07/23

Job No. : S660386/May

Sampling Date : 17/05/23

Sampling By : Mr. Chalermwut Poolsanguan

Type of Sample : Seawater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2305-WS0427	2305-WS0428		
				จุดระบายน้ำทิ้งริมถนนสุขุมวิทบริเวณกม. ที่ 34 (Mixing Zone)	คลองห้วยลำภูหน้าประตูระบายน้ำก่อนไหลลงสู่ทะเลประมาณ 50 เมตร		
19	Organochlorine						
	- Alpha-BHC	µg/L	LLE, GC/ECD (SM 6630 B)	Not Detected	Not Detected	-	22-23/05/23
	- Beta-BHC	µg/L		Not Detected	Not Detected	-	22-23/05/23
	- Gamma-BHC (Lindane)	µg/L		Not Detected	Not Detected	0.16	22-23/05/23
	- Heptachlor	µg/L		Not Detected	Not Detected	0.0036	22-23/05/23
	- Aldrin	µg/L		Not Detected	Not Detected	1.3	22-23/05/23
	- Dicofof	µg/L		Not Detected	Not Detected	-	22-23/05/23
	- Heptachlor-exo-epoxide (cis-isomer B)	µg/L		Not Detected	Not Detected	-	22-23/05/23
	- Heptachlor-endo-epoxide (trans-isomer A)	µg/L		Not Detected	Not Detected	-	22-23/05/23
	- Gamma-Chlordane	µg/L		Not Detected	Not Detected	-	22-23/05/23
	- o,p'-DDE	µg/L		Not Detected	Not Detected	-	22-23/05/23
	- Alpha Endosulfan	µg/L		Not Detected	Not Detected	-	22-23/05/23
	- Alpha-Chlordane	µg/L		Not Detected	Not Detected	-	22-23/05/23
	- Dieldrin	µg/L		Not Detected	Not Detected	0.0019	22-23/05/23
	- p,p'-DDE	µg/L		Not Detected	Not Detected	-	22-23/05/23
	- o,p'-DDD	µg/L		Not Detected	Not Detected	-	22-23/05/23
	- Endrin	µg/L		Not Detected	Not Detected	0.0023	22-23/05/23
	- Beta Endosulfan	µg/L		Not Detected	Not Detected	-	22-23/05/23
	- p,p'-DDD	µg/L		Not Detected	Not Detected	-	22-23/05/23
	- o,p'-DDT	µg/L		Not Detected	Not Detected	-	22-23/05/23
	- p,p'-DDT	µg/L		Not Detected	Not Detected	-	22-23/05/23
	- Endosulfan sulfate	µg/L		Not Detected	Not Detected	-	22-23/05/23
20	Carbamate *						
	- Carbaryl	µg/L	In-house method TE-CH-207 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition 2017, Part 6410B, 6610B, 6630B and 6630C by LC-MS Technique.	Not Detected	Not Detected	can not found	19-26/05/22
	- Isoprocarb	µg/L		Not Detected	Not Detected	-	19-26/05/22
	- Fenobucarb	µg/L		Not Detected	Not Detected	-	19-26/05/22
	- Promecarb	µg/L		Not Detected	Not Detected	-	19-26/05/22
	- Carbofuran	µg/L		Not Detected	Not Detected	-	19-26/05/22
	- Methiocarb	µg/L		Not Detected	Not Detected	-	19-26/05/22
	- Methomyl	µg/L		Not Detected	Not Detected	-	19-26/05/22
	- Aldicarb	µg/L		Not Detected	Not Detected	-	19-26/05/22
	- Oxamyl	µg/L		Not Detected	Not Detected	-	19-26/05/22
	- Metolcarb	µg/L		Not Detected	Not Detected	-	19-26/05/22
21	Organophosphate						
	- DDVP	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	-	22-24/05/23
	- Mevinphos	µg/L		Not Detected	Not Detected	-	22-24/05/23
	- Diazinon	µg/L		Not Detected	Not Detected	-	22-24/05/23
	- Dicrotophos	µg/L		Not Detected	Not Detected	-	22-24/05/23
	- Monocrotophos	µg/L		Not Detected	Not Detected	-	22-24/05/23
	- Dimethoate	µg/L		Not Detected	Not Detected	-	22-24/05/23

continue

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## TEST REPORT

Analysis No. : R23-1468

Received Date: 18/05/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมบางปู

Address : 649 หมู่ 4 ถนนสุขุมวิท ตำบลบางปูใหม่  
อำเภอเมือง จังหวัดสมุทรปราการ 10280

Contact : Tel. (02) 324 0358, 709 3450

Fax. (02) 323 0730

Report Date : 25/07/23

Analysis Date : 17/05-25/07/23

Job No. : S660386/May

Sampling Date : 17/05/23

Sampling By : Mr. Chalermwut Poolsanguan

Type of Sample : Seawater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result		Standard	Analysis Date
				2305-WS0427 จุดระบายน้ำทิ้งริมถนนสุขุมวิทบริเวณกม. ที่ 34 (Mixing Zone)	2305-WS0428 คลองหัวลำภูหน้าประตูระบายน้ำก่อนไหลลงสู่ทะเลประมาณ 50 เมตร		
22	- Pirimiphos-methyl	µg/L	LLE, GC/MS (SW846 Method 3510C and 8270D) <sup>(C)</sup>	Not Detected	Not Detected	-	22-24/05/23
	- Chlorpyrifos	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Parathion-methyl	µg/L		Not Detected	Not Detected	-	22-24/05/23
	- Pirimiphos-ethyl	µg/L		Not Detected	Not Detected	-	22-24/05/23
	- Malathion	µg/L		Not Detected	Not Detected	can not found	22-24/05/23
	- Fenitrothion	µg/L		Not Detected	Not Detected	-	22-24/05/23
	- Parathion ethyl	µg/L		Not Detected	Not Detected	-	22-24/05/23
	- Prothiofos	µg/L		Not Detected	Not Detected	-	22-24/05/23
	- Methidathion	µg/L		Not Detected	Not Detected	-	22-24/05/23
	- Profenofos	µg/L		Not Detected	Not Detected	-	22-24/05/23
	- Ethion	µg/L		Not Detected	Not Detected	-	22-24/05/23
	- Triazophos	µg/L		Not Detected	Not Detected	-	22-24/05/23
	- EPN	µg/L		Not Detected	Not Detected	-	22-24/05/23
	- Phosalone	µg/L		Not Detected	Not Detected	-	22-24/05/23
	- Azinphos-ethyl	µg/L		Not Detected	Not Detected	-	22-24/05/23
	Pyrethroid						
	- Deltamethrin	µg/L	LLE, GC/ECD (SW-846 Method 3510C and 8081B) <sup>(C)</sup>	Not Detected	Not Detected	-	22-23/05/23
	- Bifenthrin	µg/L		Not Detected	Not Detected	-	22-23/05/23
	- Phenothrin	µg/L		Not Detected	Not Detected	-	22-23/05/23
	- Lambda-Cyhalothrin	µg/L		Not Detected	Not Detected	-	22-23/05/23
	- Cypermethrin	µg/L		Not Detected	Not Detected	can not found	22-23/05/23
	- Cyfluthrin	µg/L		Not Detected	Not Detected	-	22-23/05/23
	- Fenvalerate	µg/L		Not Detected	Not Detected	-	22-23/05/23

Remarks : \* Subcontractor  
: จุดระบายน้ำทิ้งริมถนนสุขุมวิทบริเวณ กม. ที่ 34 (Mixing Zone) = 47P 0676017 UTM 1496895  
: คลองหัวลำภูหน้าประตูระบายน้ำก่อนไหลลงสู่ทะเลประมาณ 50 เมตร = 47P 0675656 UTM 1496303  
(1) สารแขวนลอย (Suspended Solids) มีค่าเปลี่ยนแปลงเพิ่มขึ้นไม่เกินผลรวมของค่าเฉลี่ย 1 วัน หรือ 1 เดือน หรือ 1 ปี บวกกับค่าเบี่ยงเบนมาตรฐานของค่าเฉลี่ยนั้น ๆ โดยค่าเฉลี่ย 1 วัน ให้วัดทุกชั่วโมง หรืออย่างน้อย 5 ครั้ง ที่ช่วงเวลาเท่า ๆ กัน ค่าเฉลี่ย 1 เดือน ให้วัดทุกวันหรืออย่างน้อย 4 ครั้ง ที่ช่วงเวลาเท่า ๆ กัน ใน 1 เดือน ณ เวลาเดียวกัน และค่าเฉลี่ย 1 ปี ให้วัดทุกเดือน ณ วันที่และเวลาเดียวกัน

Method (A) SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24<sup>th</sup> Edition, 2023  
(B) Methods of seawater Analysis edited by K.Grasshoff, K.Kremling, M.Ehrhardt, 1999, Completely revised and extended Edition, 1999  
(C) SW 846 = U.S. Environmental Protection Agency TEST METHOD: SW-846 Manual

Standard : Notification of the National Environment Board (2021) (B.E. 2564) ; Class 5

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END OF REPORT