ภาคผนวก ค

ใบรับรองผลการตรวจวิเคราะห์

ภาคผนวก ค-1

คุณภาพอากาศในบรรยากาศโดยทั่วไป

Analysis / Test Report

TESTING
No.0009

Lot ID: 24143605
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3201157-1

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Sample Description Air Quality
Location บ้านซับมอน (GPS 47P 0728177, 1619188)
Date Analysis Commenced Apr 11, 2025
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
24143605-1	Apr 02 - Apr 03, 2025	0.172	0.074	756*	35.3*
24143605-2	Apr 03 - Apr 04, 2025	0.115	0.046	756*	35.3*
24143605-3	Apr 04 - Apr 05, 2025	0.056	0.031	756*	35.3*
24143605-4	Apr 05 - Apr 06, 2025	0.051	0.028	756*	35.3*
24143605-5	Apr 06 - Apr 07, 2025	0.062	0.036	756*	35.3*
24143605-6	Apr 07 - Apr 08, 2025	0.112	0.054	756*	35.3*
24143605-7	Apr 08 - Apr 09, 2025	0.076	0.037	756*	35.3*
Guideline		0.33	0.12	-	-

Reference Method

Total Suspended Particulate : In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling)
Particulate Metter (PM-10) : In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling)

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
Sampled By : Vanich Phanpipit

Remark : Result (s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

-

Approved by Orawan R.
Orawan Rakyong
Scientist (3)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Analysis / Test Report

Lot ID: 24143603
Date Received : Apr 10, 2025
Date Reported : Apr 18, 2025
Report Number: 3201075-1

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Sample Description Air Quality
Location บ้านซับมอน (GPS 47P 0728177, 1619188)
Parameter Nitrogen dioxide (ppm)
Measurement Date Apr 02, 2025 - Apr 09, 2025
Measurement by Vanich Phanpipit

Time	24143603-1 Apr 02, 2025	24143603-2 Apr 03, 2025	24143603-3 Apr 04, 2025	24143603-4 Apr 05, 2025	24143603-5 Apr 06, 2025	24143603-6 Apr 07, 2025	24143603-7 Apr 08, 2025
03:00 PM - 04:00 PM	0.0128	0.0651	0.0090	0.0035	0.0111	0.0191	0.0390
04:00 PM - 05:00 PM	0.0104	0.0309	0.0349	0.0026	0.0066	0.0210	0.0238
05:00 PM - 06:00 PM	0.0134	0.0303	0.0447	0.0028	0.0058	0.0199	0.0137
06:00 PM - 07:00 PM	0.0190	0.0142	0.0316	0.0027	0.0025	0.0193	0.0238
07:00 PM - 08:00 PM	0.0179	0.0140	0.0110	0.0037	0.0021	0.0246	0.0141
08:00 PM - 09:00 PM	0.0255	0.0166	0.0071	0.0049	0.0026	0.0186	0.0376
09:00 PM - 10:00 PM	0.0200	0.0203	0.0044	0.0071	0.0069	0.0301	0.0168
10:00 PM - 11:00 PM	0.0166	0.0175	0.0029	0.0073	0.0059	0.0368	0.0097
11:00 PM - 12:00 AM	0.0233	0.0062	0.0030	0.0072	0.0052	0.0234	0.0128
12:00 AM - 01:00 AM	0.0188	0.0058	0.0035	0.0080	0.0034	0.0185	0.0185
01:00 AM - 02:00 AM	0.0183	0.0115	0.0032	0.0034	0.0042	0.0270	0.0137
02:00 AM - 03:00 AM	0.0151	0.0135	0.0023	0.0035	0.0059	0.0119	0.0086
03:00 AM - 04:00 AM	0.0113	0.0062	0.0024	0.0068	0.0098	0.0151	0.0174
04:00 AM - 05:00 AM	0.0133	0.0091	0.0022	0.0090	0.0155	0.0134	0.0196
05:00 AM - 06:00 AM	0.0217	0.0144	0.0071	0.0136	0.0069	0.0069	0.0208
06:00 AM - 07:00 AM	0.0281	0.0111	0.0059	0.0056	0.0077	0.0130	0.0197
07:00 AM - 08:00 AM	0.0210	0.0143	0.0038	0.0024	0.0140	0.0114	0.0068
08:00 AM - 09:00 AM	0.0183	0.0062	0.0020	0.0025	0.0218	0.0116	0.0045
09:00 AM - 10:00 AM	0.0154	0.0194	0.0028	0.0021	0.0123	0.0153	0.0036
10:00 AM - 11:00 AM	0.0231	0.0181	0.0043	0.0043	0.0096	0.0304	0.0022
11:00 AM - 12:00 PM	0.0250	0.0108	0.0043	0.0030	0.0264	0.0192	0.0023
12:00 PM - 01:00 PM	0.0506	0.0087	0.0107	0.0061	0.0177	0.0083	0.0032
01:00 PM - 02:00 PM	0.0354	0.0141	0.0054	0.0096	0.0155	0.0292	0.0038
02:00 PM - 03:00 PM	0.0641	0.0093	0.0031	0.0086	0.0131	0.0223	0.0033
Average	0.0224	0.0162	0.0088	0.0054	0.0097	0.0194	0.0141
1hr - Maximum	0.0641	0.0651	0.0447	0.0136	0.0264	0.0368	0.0390
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).
Reference Method : US EPAMethod Part 50 App. F (Chemiluminescence)

Approved by Orawan R.
Orawan Rakyong
Scientist (3)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143604
Date Received : Apr 10, 2025
Date Reported : Apr 18, 2025
Report Number: 3201129-1

Sample Description Air Quality
Location บ้านขันมอน (GPS 47P 0728177, 1619188)
Parameter Sulfur Dioxide (ppm)
Measurement Date Apr 02, 2025 - Apr 09, 2025
Measurement by Vanich Phanpipit

Time	24143604-1 Apr 02, 2025	24143604-2 Apr 03, 2025	24143604-3 Apr 04, 2025	24143604-4 Apr 05, 2025	24143604-5 Apr 06, 2025	24143604-6 Apr 07, 2025	24143604-7 Apr 08, 2025
03:00 PM - 04:00 PM	0.0018	0.0037	0.0002	0.0006	0.0007	0.0002	0.0002
04:00 PM - 05:00 PM	0.0012	0.0018	0.0003	0.0006	0.0007	0.0004	<0.0001
05:00 PM - 06:00 PM	0.0009	0.0031	0.0013	0.0004	0.0007	<0.0001	0.0002
06:00 PM - 07:00 PM	0.0006	0.0004	0.0002	0.0001	0.0004	0.0003	0.0003
07:00 PM - 08:00 PM	0.0004	0.0002	<0.0001	0.0004	<0.0001	0.0004	0.0003
08:00 PM - 09:00 PM	0.0006	0.0002	0.0001	0.0004	<0.0001	0.0003	0.0003
09:00 PM - 10:00 PM	0.0004	0.0002	0.0003	0.0005	0.0002	0.0003	0.0003
10:00 PM - 11:00 PM	0.0003	0.0002	0.0003	0.0004	0.0003	0.0002	0.0003
11:00 PM - 12:00 AM	0.0003	0.0003	0.0003	0.0001	0.0003	0.0003	<0.0001
12:00 AM - 01:00 AM	0.0003	0.0002	0.0002	0.0002	0.0002	0.0004	<0.0001
01:00 AM - 02:00 AM	0.0002	<0.0001	0.0002	0.0002	0.0003	0.0004	0.0002
02:00 AM - 03:00 AM	0.0002	0.0005	0.0003	0.0003	0.0002	0.0002	0.0003
03:00 AM - 04:00 AM	0.0002	0.0002	0.0002	0.0003	0.0002	0.0003	0.0003
04:00 AM - 05:00 AM	0.0001	0.0002	0.0003	0.0007	0.0002	0.0004	0.0003
05:00 AM - 06:00 AM	0.0002	0.0002	0.0003	0.0008	0.0003	0.0004	0.0002
06:00 AM - 07:00 AM	0.0002	0.0003	0.0002	0.0003	0.0003	0.0005	0.0001
07:00 AM - 08:00 AM	0.0002	0.0002	0.0002	<0.0001	0.0003	0.0003	0.0002
08:00 AM - 09:00 AM	0.0005	0.0002	0.0003	<0.0001	0.0002	0.0006	0.0003
09:00 AM - 10:00 AM	0.0006	0.0011	0.0004	<0.0001	0.0003	0.0004	0.0004
10:00 AM - 11:00 AM	0.0007	0.0013	0.0002	<0.0001	0.0004	0.0008	0.0003
11:00 AM - 12:00 PM	0.0008	0.0005	0.0002	<0.0001	0.0014	0.0004	<0.0001
12:00 PM - 01:00 PM	0.0026	0.0005	0.0003	0.0002	0.0020	0.0005	0.0002
01:00 PM - 02:00 PM	0.0018	0.0008	0.0002	0.0004	0.0011	0.0084	0.0004
02:00 PM - 03:00 PM	0.0040	0.0007	0.0006	0.0007	0.0002	0.0013	0.0005
Average	0.0008	0.0007	0.0003	0.0003	0.0005	0.0007	0.0002
1hr - Maximum	0.0040	0.0037	0.0013	0.0008	0.0020	0.0084	0.0005
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).
Reference Method : US EPA Method Part 53 and 58

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by

Orawan R.
Orawan Rakyong
Scientist (3)

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143601
Date Received :Apr 10, 2025
Date Reported :Apr 22, 2025
Report Number :3201051-1

Sample Number 24143601-1 to 7
Parameter Wind Speed / Wind Direction
Location บ้านขันมอน (GPS 47P 0728177, 1619188)
Sampling Date Apr 02 - Apr 09, 2025
Sampling by Vanich Phanpipit

Time	Apr 02 - Apr 03, 2025			Apr 03 - Apr 04, 2025			Apr 04 - Apr 05, 2025			Apr 05 - Apr 06, 2025			Apr 06 - Apr 07, 2025			Apr 07 - Apr 08, 2025			Apr 08 - Apr 09, 2025		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
03:00 PM - 04:00 PM	0.5	25.0	NNE	1.4	24.0	NNE	0.0	-	-	1.2	190.0	S	1.6	239.0	WSW	0.4	56.0	NE	0.8	297.0	WNW
04:00 PM - 05:00 PM	0.4	56.0	NE	1.1	317.0	NW	0.0	-	-	2.4	224.0	SW	0.8	299.0	WNW	0.5	41.0	NE	0.4	220.0	SW
05:00 PM - 06:00 PM	1.2	134.0	SE	0.0	-	-	0.0	-	-	0.9	256.0	WSW	0.4	262.0	W	0.0	-	-	0.7	42.0	NE
06:00 PM - 07:00 PM	0.2	-	-	0.0	-	-	0.0	-	-	0.7	205.0	SSW	0.0	-	-	0.0	-	-	0.4	103.0	ESE
07:00 PM - 08:00 PM	1.4	5.0	N	0.0	-	-	1.4	178.0	S	0.8	265.0	W	0.4	170.0	S	0.3	65.0	ENE	0.5	227.0	SW
08:00 PM - 09:00 PM	0.5	27.0	NNE	0.0	-	-	1.4	182.0	S	0.9	284.0	WNW	1.1	301.0	WNW	0.0	-	-	0.0	-	-
09:00 PM - 10:00 PM	1.0	25.0	NNE	0.0	-	-	1.6	266.0	W	0.0	-	-	3.0	233.0	SW	0.0	-	-	1.2	192.0	SSW
10:00 PM - 11:00 PM	0.0	-	-	0.6	129.0	SE	2.3	251.0	WSW	0.6	230.0	SW	0.5	252.0	WSW	0.0	-	-	0.6	226.0	SW
11:00 PM - 12:00 AM	0.6	45.0	NE	0.0	-	-	2.0	163.0	SSE	0.0	-	-	1.0	229.0	SW	0.0	-	-	0.4	216.0	SW
12:00 AM - 01:00 AM	0.0	-	-	0.5	179.0	S	0.3	245.0	WSW	0.5	309.0	NW	0.5	182.0	S	0.0	-	-	1.4	291.0	WNW
01:00 AM - 02:00 AM	0.0	-	-	0.0	-	-	0.9	223.0	SW	0.3	267.0	W	0.0	-	-	0.0	-	-	0.0	-	-
02:00 AM - 03:00 AM	0.0	-	-	0.0	-	-	2.1	233.0	SW	1.3	226.0	SW	0.0	-	-	0.1	-	-	0.1	-	-
03:00 AM - 04:00 AM	0.0	-	-	0.5	81.0	E	1.2	316.0	NW	1.1	287.0	WNW	0.0	-	-	0.2	-	-	1.3	288.0	WNW
04:00 AM - 05:00 AM	0.0	-	-	0.6	81.0	E	2.5	249.0	WSW	1.2	289.0	WNW	0.0	-	-	0.2	-	-	0.2	-	-
05:00 AM - 06:00 AM	0.7	82.0	E	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
06:00 AM - 07:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.3	75.0	ENE	1.2	235.0	SW
07:00 AM - 08:00 AM	0.3	104.0	ESE	0.0	-	-	1.8	232.0	SW	0.0	-	-	0.0	-	-	0.0	-	-	0.6	233.0	SW
08:00 AM - 09:00 AM	0.0	-	-	1.7	246.0	WSW	0.5	252.0	WSW	0.3	189.0	S	0.0	-	-	0.8	294.0	WNW	0.9	237.0	WSW
09:00 AM - 10:00 AM	0.0	-	-	0.8	130.0	SE	1.2	234.0	SW	3.9	240.0	WSW	1.6	233.0	SW	2.2	273.0	W	1.8	254.0	WSW
10:00 AM - 11:00 AM	0.9	69.0	ENE	0.3	232.0	SW	1.1	301.0	WNW	1.0	221.0	SW	1.3	214.0	SW	1.7	200.0	SSW	1.1	200.0	SSW
11:00 AM - 12:00 PM	1.6	59.0	ENE	0.0	-	-	3.0	299.0	WNW	1.5	196.0	SSW	2.5	316.0	NW	0.4	219.0	SW	1.7	243.0	WSW
12:00 PM - 01:00 PM	1.0	18.0	NNE	1.4	170.0	S	1.7	176.0	S	0.8	236.0	SW	1.8	354.0	N	0.0	-	-	1.0	229.0	SW
01:00 PM - 02:00 PM	0.3	325.0	NW	1.4	200.0	SSW	3.7	244.0	WSW	1.0	280.0	W	0.7	206.0	SSW	0.5	138.0	SE	1.9	266.0	W
02:00 PM - 03:00 PM	0.2	-	-	0.9	35.0	NE	0.8	230.0	SW	1.9	195.0	SSW	0.0	-	-	0.6	300.0	WNW	1.3	358.0	N

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jittranont
Assistant General Manager

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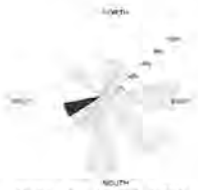
Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

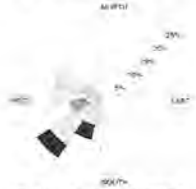
Lot ID: 24143601
Date Received :Apr 10, 2025
Date Reported :Apr 22, 2025
Report Number :3201051-1

Wind Rose

Date : Apr 02-03, 2025


Date : Apr 03-04, 2025

Date : Apr 04-05, 2025


Date : Apr 05-06, 2025

Date : Apr 06-07, 2025

Date : Apr 07-08, 2025

Date : Apr 08-09, 2025

Date : Apr 02-09, 2025

WS (m/s)		%
	≥ 10.0	0.00
	8.0-10.0	0.00
	5.5-8.0	0.00
	3.3-5.5	1.19
	1.7-3.3	10.71
	0.3-1.7	50.60
	Calms	37.50

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Approved by

Sarayuth Jittranont
Assistant General Manager

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143649
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3201159-1

Sample Description Air Quality
Location โรงเรียนอนุบาลท้นกว้าง (GPS 47P 0722982, 1616353)
Date Analysis Commenced Apr 11, 2025
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
24143649-1	Apr 02 - Apr 03, 2025	0.125	0.067	756*	35.3*
24143649-2	Apr 03 - Apr 04, 2025	0.102	0.060	756*	35.3*
24143649-3	Apr 04 - Apr 05, 2025	0.067	0.042	756*	35.3*
24143649-4	Apr 05 - Apr 06, 2025	0.058	0.036	756*	35.3*
24143649-5	Apr 06 - Apr 07, 2025	0.061	0.041	756*	35.3*
24143649-6	Apr 07 - Apr 08, 2025	0.094	0.060	756*	35.3*
24143649-7	Apr 08 - Apr 09, 2025	0.063	0.042	756*	35.3*
Guideline		0.33	0.12	-	-

Reference Method

Total Suspended Particulate : In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling)
Particulate Metter (PM-10) : In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling)

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
Sampled By : Vanich Phanpipit

Remark : Result (s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

-

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by

Orawan Rakyong
Scientist (3)

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143624
Date Received : Apr 10, 2025
Date Reported : Apr 18, 2025
Report Number: 3201077-1

Sample Description Air Quality
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 0722982, 1616353)
Parameter Nitrogen dioxide (ppm)
Measurement Date Apr 02, 2025 - Apr 09, 2025
Measurement by Vanich Phanpipit

Time	24143624-1 Apr 02, 2025	24143624-2 Apr 03, 2025	24143624-3 Apr 04, 2025	24143624-4 Apr 05, 2025	24143624-5 Apr 06, 2025	24143624-6 Apr 07, 2025	24143624-7 Apr 08, 2025
01:00 PM - 02:00 PM	0.0148	0.0170	0.0093	0.0093	0.0096	0.0064	0.0060
02:00 PM - 03:00 PM	0.0148	0.0099	0.0156	0.0175	0.0122	0.0300	0.0458
03:00 PM - 04:00 PM	0.0145	0.0145	0.0105	0.0261	0.0121	0.0227	0.0418
04:00 PM - 05:00 PM	0.0196	0.0201	0.0177	0.0312	0.0232	0.0292	0.0378
05:00 PM - 06:00 PM	0.0309	0.0254	0.0560	0.0256	0.0218	0.0308	0.0315
06:00 PM - 07:00 PM	0.0334	0.0522	0.0481	0.0434	0.0395	0.0420	0.0446
07:00 PM - 08:00 PM	0.0247	0.0301	0.0575	0.0428	0.0627	0.0583	0.0584
08:00 PM - 09:00 PM	0.0244	0.0384	0.0410	0.0444	0.0608	0.0406	0.0498
09:00 PM - 10:00 PM	0.0295	0.0477	0.0321	0.0364	0.0388	0.0309	0.0428
10:00 PM - 11:00 PM	0.0275	0.0595	0.0312	0.0328	0.0258	0.0256	0.0395
11:00 PM - 12:00 AM	0.0212	0.0390	0.0316	0.0270	0.0255	0.0322	0.0317
12:00 AM - 01:00 AM	0.0219	0.0415	0.0295	0.0208	0.0227	0.0416	0.0262
01:00 AM - 02:00 AM	0.0385	0.0270	0.0235	0.0163	0.0145	0.0411	0.0240
02:00 AM - 03:00 AM	0.0318	0.0208	0.0216	0.0214	0.0212	0.0343	0.0223
03:00 AM - 04:00 AM	0.0435	0.0227	0.0227	0.0207	0.0132	0.0237	0.0200
04:00 AM - 05:00 AM	0.0371	0.0174	0.0250	0.0207	0.0177	0.0297	0.0165
05:00 AM - 06:00 AM	0.0320	0.0322	0.0196	0.0191	0.0203	0.0365	0.0199
06:00 AM - 07:00 AM	0.0441	0.0405	0.0167	0.0170	0.0261	0.0327	0.0157
07:00 AM - 08:00 AM	0.0462	0.0346	0.0196	0.0195	0.0257	0.0295	0.0183
08:00 AM - 09:00 AM	0.0452	0.0128	0.0176	0.0151	0.0236	0.0142	0.0169
09:00 AM - 10:00 AM	0.0207	0.0093	0.0176	0.0159	0.0119	0.0127	0.0170
10:00 AM - 11:00 AM	0.0403	0.0052	0.0173	0.0132	0.0099	0.0174	0.0188
11:00 AM - 12:00 PM	0.0377	0.0065	0.0094	0.0093	0.0135	0.0187	0.0121
12:00 PM - 01:00 PM	0.0258	0.0067	0.0088	0.0093	0.0124	0.0074	0.0093
Average	0.0300	0.0263	0.0250	0.0231	0.0235	0.0287	0.0278
1hr - Maximum	0.0462	0.0595	0.0575	0.0444	0.0627	0.0583	0.0584
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).
Reference Method : US EPAMethod Part 50 App. F (Chemiluminescence)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by Orawan R.
Orawan Rakyong
Scientist (3)

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143636
Date Received : Apr 10, 2025
Date Reported : Apr 18, 2025
Report Number: 3201130-1

Sample Description Air Quality
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 0722982, 1616353)
Parameter Sulfur Dioxide (ppm)
Measurement Date Apr 02, 2025 - Apr 09, 2025
Measurement by Vanich Phanpipit

Time	24143636-1 Apr 02, 2025	24143636-2 Apr 03, 2025	24143636-3 Apr 04, 2025	24143636-4 Apr 05, 2025	24143636-5 Apr 06, 2025	24143636-6 Apr 07, 2025	24143636-7 Apr 08, 2025
01:00 PM - 02:00 PM	0.0019	0.0020	0.0026	0.0083	0.0094	0.0094	0.0073
02:00 PM - 03:00 PM	0.0007	0.0045	0.0006	0.0013	0.0051	0.0042	0.0081
03:00 PM - 04:00 PM	0.0020	0.0009	0.0014	0.0047	0.0079	0.0056	0.0085
04:00 PM - 05:00 PM	0.0045	0.0016	0.0021	0.0071	0.0095	0.0057	0.0088
05:00 PM - 06:00 PM	0.0051	0.0019	0.0027	0.0082	0.0102	0.0059	0.0089
06:00 PM - 07:00 PM	0.0043	0.0027	0.0034	0.0080	0.0100	0.0068	0.0077
07:00 PM - 08:00 PM	0.0037	0.0030	0.0034	0.0078	0.0096	0.0072	0.0078
08:00 PM - 09:00 PM	0.0028	0.0029	0.0041	0.0077	0.0097	0.0075	0.0083
09:00 PM - 10:00 PM	0.0020	0.0032	0.0044	0.0076	0.0095	0.0080	0.0087
10:00 PM - 11:00 PM	0.0015	0.0033	0.0029	0.0075	0.0095	0.0086	0.0095
11:00 PM - 12:00 AM	0.0011	0.0032	0.0031	0.0074	0.0091	0.0092	0.0097
12:00 AM - 01:00 AM	0.0002	0.0033	0.0037	0.0073	0.0090	0.0096	0.0105
01:00 AM - 02:00 AM	0.0007	0.0034	0.0040	0.0076	0.0092	0.0099	0.0109
02:00 AM - 03:00 AM	0.0011	0.0035	0.0042	0.0076	0.0097	0.0099	0.0113
03:00 AM - 04:00 AM	0.0019	0.0040	0.0046	0.0077	0.0098	0.0101	0.0119
04:00 AM - 05:00 AM	0.0023	0.0043	0.0050	0.0081	0.0104	0.0114	0.0123
05:00 AM - 06:00 AM	0.0027	0.0049	0.0054	0.0086	0.0105	0.0119	0.0130
06:00 AM - 07:00 AM	0.0034	0.0053	0.0060	0.0094	0.0107	0.0132	0.0132
07:00 AM - 08:00 AM	0.0034	0.0051	0.0068	0.0089	0.0100	0.0124	0.0132
08:00 AM - 09:00 AM	0.0058	0.0048	0.0062	0.0081	0.0095	0.0110	0.0117
09:00 AM - 10:00 AM	0.0032	0.0043	0.0058	0.0075	0.0097	0.0100	0.0107
10:00 AM - 11:00 AM	0.0032	0.0031	0.0059	0.0076	0.0092	0.0087	0.0096
11:00 AM - 12:00 PM	0.0065	0.0094	0.0065	0.0080	0.0092	0.0023	0.0087
12:00 PM - 01:00 PM	0.0041	0.0073	0.0071	0.0085	0.0092	0.0050	0.0093
Average	0.0028	0.0038	0.0042	0.0075	0.0094	0.0085	0.0100
1hr - Maximum	0.0065	0.0094	0.0071	0.0094	0.0107	0.0132	0.0132
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).
Reference Method : US EPA Method Part 53 and 58

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by Orawan R.
Orawan Rakyong
Scientist (3)

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143608
Date Received :Apr 10, 2025
Date Reported :Apr 22, 2025
Report Number :3201052-1

Sample Number 24143608-1 to 7
Parameter Wind Speed / Wind Direction
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 0722982, 1616353)
Sampling Date Apr 02 - Apr 09, 2025
Sampling by Vanich Phanpipit

Time	Apr 02 - Apr 03, 2025			Apr 03 - Apr 04, 2025			Apr 04 - Apr 05, 2025			Apr 05 - Apr 06, 2025			Apr 06 - Apr 07, 2025			Apr 07 - Apr 08, 2025			Apr 08 - Apr 09, 2025		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
12:00 PM - 01:00 PM	2.5	202.0	SSW	3.5	359.0	N	5.0	280.0	W	2.1	246.0	WSW	2.4	199.0	SSW	1.3	305.0	NW	1.2	285.0	WNW
01:00 PM - 02:00 PM	0.8	213.0	SSW	3.4	19.0	NNE	0.8	277.0	W	2.6	237.0	WSW	0.4	148.0	SSE	2.7	198.0	SSW	1.9	162.0	SSE
02:00 PM - 03:00 PM	1.6	185.0	S	2.2	344.0	NNW	2.6	177.0	S	1.1	299.0	WNW	2.5	140.0	SE	2.2	148.0	SSE	0.4	132.0	SE
03:00 PM - 04:00 PM	0.9	268.0	W	0.8	28.0	NNE	2.3	354.0	N	4.0	203.0	SSW	1.3	191.0	S	2.7	93.0	E	1.3	168.0	SSE
04:00 PM - 05:00 PM	0.8	241.0	WSW	1.4	15.0	NNE	1.8	76.0	ENE	2.9	225.0	SW	2.5	225.0	SW	2.4	92.0	E	0.8	146.0	SE
05:00 PM - 06:00 PM	2.4	72.0	ENE	1.3	205.0	SSW	0.0	-	-	2.3	206.0	SSW	0.4	233.0	SW	0.6	220.0	SW	4.9	114.0	ESE
06:00 PM - 07:00 PM	0.6	44.0	NE	0.0	-	-	0.7	188.0	S	2.1	197.0	SSW	0.8	207.0	SSW	1.2	67.0	ENE	1.1	94.0	E
07:00 PM - 08:00 PM	2.0	87.0	E	0.0	-	-	2.6	190.0	S	1.0	168.0	SSE	0.0	-	-	1.4	139.0	SE	0.5	181.0	S
08:00 PM - 09:00 PM	3.2	80.0	E	1.4	36.0	NE	1.2	189.0	S	1.2	162.0	SSE	2.0	177.0	S	0.0	-	-	0.4	177.0	S
09:00 PM - 10:00 PM	1.1	94.0	E	0.7	198.0	SSW	2.7	177.0	S	0.5	165.0	SSE	2.3	204.0	SSW	0.0	-	-	0.4	138.0	SE
10:00 PM - 11:00 PM	1.4	84.0	E	0.9	159.0	SSE	0.7	230.0	SW	0.7	158.0	SSE	0.7	195.0	SSW	0.0	-	-	0.0	-	-
11:00 PM - 12:00 AM	4.0	36.0	NE	0.0	-	-	1.1	175.0	S	1.6	196.0	SSW	0.6	217.0	SW	0.5	54.0	NE	0.7	215.0	SW
12:00 AM - 01:00 AM	1.0	131.0	SE	0.0	-	-	0.5	154.0	SSE	1.3	184.0	S	1.4	157.0	SSE	1.1	67.0	ENE	0.0	-	-
01:00 AM - 02:00 AM	0.9	64.0	ENE	0.0	-	-	0.7	172.0	S	0.7	180.0	S	0.4	154.0	SSE	0.5	76.0	ENE	0.0	-	-
02:00 AM - 03:00 AM	1.0	145.0	SE	0.0	-	-	0.9	180.0	S	1.4	162.0	SSE	0.0	-	-	0.0	-	-	0.0	-	-
03:00 AM - 04:00 AM	0.7	119.0	ESE	0.0	-	-	0.1	-	-	0.0	-	-	0.3	277.0	W	0.0	-	-	0.0	-	-
04:00 AM - 05:00 AM	0.0	-	-	1.2	60.0	ENE	0.0	-	-	0.0	-	-	0.0	-	-	0.6	120.0	ESE	0.6	179.0	S
05:00 AM - 06:00 AM	0.8	86.0	E	0.6	61.0	ENE	0.3	68.0	ENE	0.0	-	-	0.3	69.0	ENE	1.0	103.0	ESE	0.0	-	-
06:00 AM - 07:00 AM	0.9	90.0	E	0.7	56.0	NE	0.0	-	-	1.1	170.0	S	4.4	62.0	ENE	0.7	80.0	E	0.9	187.0	S
07:00 AM - 08:00 AM	2.3	64.0	ENE	1.5	208.0	SSW	1.2	210.0	SSW	0.8	190.0	S	0.9	26.0	NNE	1.2	271.0	W	2.2	194.0	SSW
08:00 AM - 09:00 AM	3.3	12.0	NNE	1.9	191.0	S	1.5	197.0	SSW	1.7	191.0	S	0.9	223.0	SW	0.0	-	-	1.1	198.0	SSW
09:00 AM - 10:00 AM	2.7	64.0	ENE	1.0	334.0	NNW	1.5	144.0	SE	0.8	176.0	S	0.9	248.0	WSW	0.2	-	-	2.2	171.0	S
10:00 AM - 11:00 AM	1.2	69.0	ENE	0.8	188.0	S	1.1	234.0	SW	2.3	198.0	SSW	0.0	-	-	1.1	214.0	SW	1.0	167.0	SSE
11:00 AM - 12:00 PM	1.8	19.0	NNE	3.0	235.0	SW	2.1	188.0	S	0.0	-	-	2.8	290.0	WNW	1.9	357.0	N	2.3	178.0	S

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143608
Date Received :Apr 10, 2025
Date Reported :Apr 22, 2025
Report Number :3201052-1

Wind Rose

Date : Apr 02-03, 2025

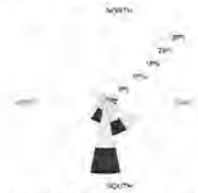
Date : Apr 03-04, 2025

Date : Apr 04-05, 2025

Date : Apr 05-06, 2025

Date : Apr 06-07, 2025

Date : Apr 07-08, 2025



Date : Apr 08-09, 2025

Date : Apr 02-09, 2025

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	4.76
1.7-3.3	22.62
0.3-1.7	52.98
Calms	19.64

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Approved by

Sarayuth Jittranont
Assistant General Manager

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143650
Date Received : Jun 27, 2025
Date Reported : Jul 04, 2025
Report Number: 3201160-1

Sample Description	Air Quality
Location	โรงเรียนมุมขนนิคมทับกวางสงเคราะห์ (GPS 47P 0725095, 1614326)
Date Analysis Commenced	Jun 27, 2025
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Sampling Condition Pressure (mm Hg)	Sampling Condition Temperature (°C)	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)
24143650-1	Jun 17 - Jun 18, 2025	750	33.7	0.033	0.018
24143650-2	Jun 18 - Jun 19, 2025	750	34.0	0.032	0.017
24143650-3	Jun 19 - Jun 20, 2025	750	33.5	0.024	0.012
24143650-4	Jun 20 - Jun 21, 2025	750	34.0	0.022	0.014
24143650-5	Jun 21 - Jun 22, 2025	750	34.8	0.023	0.015
24143650-6	Jun 22 - Jun 23, 2025	750	33.3	0.013	0.009
24143650-7	Jun 23 - Jun 24, 2025	750	34.1	0.016	0.012
Guideline		-	-	0.33	0.12

Reference Method

Total Suspended Particulate : In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling)

Particulate Metter (PM-10) : In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling)

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Teeravut Sukdee

Approved by Orawan R.
Orawan Rakyong
Scientist (3)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This report shall not be reproduced except in full without the written approval of the laboratory.

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143625
Date Received : Jun 27, 2025
Date Reported : Jul 02, 2025
Report Number: 3201079-1

Sample Description	Air Quality
Location	โรงเรียนมุมขนนิคมทับกวางสงเคราะห์ (GPS 47P 0725095, 1614326)
Parameter	Nitrogen dioxide (ppm)
Measurement Date	Jun 17, 2025 - Jun 24, 2025
Measurement by	Teeravut Sukdee

Time	24143625-1 Jun 17, 2025	24143625-2 Jun 18, 2025	24143625-3 Jun 19, 2025	24143625-4 Jun 20, 2025	24143625-5 Jun 21, 2025	24143625-6 Jun 22, 2025	24143625-7 Jun 23, 2025
12:00 PM - 01:00 PM	0.0011	0.0011	0.0010	0.0010	0.0011	0.0007	0.0009
01:00 PM - 02:00 PM	0.0009	0.0009	0.0011	0.0011	0.0012	0.0008	0.0009
02:00 PM - 03:00 PM	0.0008	0.0011	0.0011	0.0011	0.0011	0.0009	0.0009
03:00 PM - 04:00 PM	0.0009	0.0008	0.0011	0.0011	0.0012	0.0009	0.0008
04:00 PM - 05:00 PM	0.0009	0.0008	0.0009	0.0011	0.0011	0.0008	0.0009
05:00 PM - 06:00 PM	0.0010	0.0012	0.0010	0.0012	0.0011	0.0008	0.0009
06:00 PM - 07:00 PM	0.0010	0.0010	0.0010	0.0010	0.0011	0.0008	0.0009
07:00 PM - 08:00 PM	0.0009	0.0009	0.0012	0.0010	0.0010	0.0009	0.0009
08:00 PM - 09:00 PM	0.0009	0.0011	0.0011	0.0011	0.0008	0.0008	0.0009
09:00 PM - 10:00 PM	0.0009	0.0011	0.0012	0.0012	0.0009	0.0009	0.0008
10:00 PM - 11:00 PM	0.0010	0.0012	0.0011	0.0011	0.0009	0.0008	0.0009
11:00 PM - 12:00 AM	0.0010	0.0010	0.0011	0.0011	0.0008	0.0009	0.0009
12:00 AM - 01:00 AM	0.0010	0.0010	0.0012	0.0012	0.0009	0.0009	0.0009
01:00 AM - 02:00 AM	0.0010	0.0011	0.0011	0.0011	0.0008	0.0009	0.0006
02:00 AM - 03:00 AM	0.0009	0.0009	0.0010	0.0011	0.0009	0.0008	0.0008
03:00 AM - 04:00 AM	0.0009	0.0010	0.0012	0.0011	0.0008	0.0009	0.0008
04:00 AM - 05:00 AM	0.0011	0.0010	0.0012	0.0012	0.0007	0.0010	0.0011
05:00 AM - 06:00 AM	0.0010	0.0009	0.0011	0.0012	0.0009	0.0009	0.0009
06:00 AM - 07:00 AM	0.0009	0.0009	0.0011	0.0012	0.0009	0.0009	0.0009
07:00 AM - 08:00 AM	0.0010	0.0011	0.0010	0.0012	0.0008	0.0008	0.0009
08:00 AM - 09:00 AM	0.0010	0.0011	0.0010	0.0011	0.0009	0.0008	0.0008
09:00 AM - 10:00 AM	0.0010	0.0012	0.0011	0.0012	0.0009	0.0008	0.0009
10:00 AM - 11:00 AM	0.0009	0.0010	0.0011	0.0012	0.0008	0.0009	0.0009
11:00 AM - 12:00 PM	0.0009	0.0010	0.0012	0.0012	0.0009	0.0009	0.0010
Average	0.0010	0.0010	0.0011	0.0011	0.0009	0.0009	0.0009
1hr - Maximum	0.0011	0.0012	0.0012	0.0012	0.0012	0.0010	0.0011
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).
Reference Method : U.S. Environmental Protection AgencyMethod Part 50 App. F (Chemiluminescence)

Approved by Orawan R.
Orawan Rakyong
Scientist (3)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This report shall not be reproduced except in full without the written approval of the laboratory.

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143637
Date Received : Jun 27, 2025
Date Reported : Jul 02, 2025
Report Number: 3201131-1

Sample Description Air Quality
Location โรงเรียนชุมชนนิคมทับกวางสงเคราะห์ (GPS 47P 0725095, 1614326)
Parameter Sulfur Dioxide (ppm)
Measurement Date Jun 17, 2025 - Jun 24, 2025
Measurement by Teeravut Sukdee

Time	24143637-1 Jun 17, 2025	24143637-2 Jun 18, 2025	24143637-3 Jun 19, 2025	24143637-4 Jun 20, 2025	24143637-5 Jun 21, 2025	24143637-6 Jun 22, 2025	24143637-7 Jun 23, 2025
12:00 PM - 01:00 PM	0.0009	0.0014	0.0011	0.0014	0.0015	0.0015	0.0013
01:00 PM - 02:00 PM	0.0017	0.0015	0.0012	0.0014	0.0013	0.0014	0.0013
02:00 PM - 03:00 PM	0.0017	0.0015	0.0012	0.0014	0.0013	0.0015	0.0015
03:00 PM - 04:00 PM	0.0014	0.0015	0.0011	0.0014	0.0014	0.0015	0.0016
04:00 PM - 05:00 PM	0.0014	0.0015	0.0012	0.0014	0.0015	0.0016	0.0017
05:00 PM - 06:00 PM	0.0014	0.0014	0.0011	0.0014	0.0015	0.0016	0.0016
06:00 PM - 07:00 PM	0.0012	0.0012	0.0008	0.0012	0.0013	0.0014	0.0017
07:00 PM - 08:00 PM	0.0010	0.0010	0.0010	0.0009	0.0011	0.0012	0.0016
08:00 PM - 09:00 PM	0.0009	0.0010	0.0008	0.0009	0.0011	0.0016	0.0015
09:00 PM - 10:00 PM	0.0010	0.0013	0.0007	0.0012	0.0012	0.0015	0.0016
10:00 PM - 11:00 PM	0.0009	0.0011	0.0006	0.0012	0.0014	0.0013	0.0016
11:00 PM - 12:00 AM	0.0010	0.0009	0.0007	0.0014	0.0014	0.0014	0.0015
12:00 AM - 01:00 AM	0.0010	0.0009	0.0007	0.0015	0.0014	0.0015	0.0015
01:00 AM - 02:00 AM	0.0010	0.0010	0.0008	0.0021	0.0014	0.0014	0.0014
02:00 AM - 03:00 AM	0.0010	0.0009	0.0011	0.0021	0.0012	0.0014	0.0015
03:00 AM - 04:00 AM	0.0010	0.0010	0.0010	0.0018	0.0011	0.0013	0.0014
04:00 AM - 05:00 AM	0.0010	0.0010	0.0010	0.0014	0.0013	0.0013	0.0013
05:00 AM - 06:00 AM	0.0010	0.0010	0.0012	0.0017	0.0011	0.0014	0.0014
06:00 AM - 07:00 AM	0.0011	0.0010	0.0009	0.0018	0.0013	0.0014	0.0016
07:00 AM - 08:00 AM	0.0014	0.0013	0.0012	0.0021	0.0016	0.0016	0.0017
08:00 AM - 09:00 AM	0.0015	0.0014	0.0014	0.0019	0.0015	0.0016	0.0017
09:00 AM - 10:00 AM	0.0014	0.0012	0.0014	0.0019	0.0015	0.0014	0.0015
10:00 AM - 11:00 AM	0.0013	0.0011	0.0013	0.0017	0.0014	0.0014	0.0016
11:00 AM - 12:00 PM	0.0013	0.0010	0.0014	0.0016	0.0014	0.0011	0.0016
Average	0.0012	0.0012	0.0010	0.0015	0.0013	0.0014	0.0015
1hr - Maximum	0.0017	0.0015	0.0014	0.0021	0.0016	0.0016	0.0017
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).
Reference Method : U.S. Environmental Protection Agency, EPA Method Part 53 and 58

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by Orawan R.
Orawan Rakyong
Scientist (3)

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143610
Date Received :Jun 27, 2025
Date Reported :Jul 03, 2025
Report Number :3201055-1

Sample Number 24143610-1 to 7
Parameter Wind Speed / Wind Direction
Location โรงเรียนชุมชนนิคมทับกวางสงเคราะห์ (GPS 47P 0725095, 1614326)
Sampling Date Jun 17 - Jun 24, 2025
Sampling by Teeravut Sukdee

Time	Jun 17 - Jun 18, 2025			Jun 18 - Jun 19, 2025			Jun 19 - Jun 20, 2025			Jun 20 - Jun 21, 2025			Jun 21 - Jun 22, 2025			Jun 22 - Jun 23, 2025			Jun 23 - Jun 24, 2025		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
12:00 PM - 01:00 PM	1.0	280.0	W	2.0	168.0	SSE	0.8	232.0	SW	3.1	210.0	SSW	1.4	170.0	S	0.5	209.0	SSW	1.6	162.0	SSE
01:00 PM - 02:00 PM	1.2	255.0	WSW	2.3	180.0	S	1.0	132.0	SE	1.4	231.0	SW	2.1	231.0	SW	0.5	128.0	SE	1.0	202.0	SSW
02:00 PM - 03:00 PM	1.8	270.0	W	2.3	163.0	SSE	1.0	281.0	W	1.8	199.0	SSW	1.7	146.0	SE	1.6	152.0	SSE	2.4	228.0	SW
03:00 PM - 04:00 PM	3.3	244.0	WSW	1.7	188.0	S	2.0	193.0	SSW	1.5	249.0	WSW	1.9	158.0	SSE	0.0	-	-	3.7	147.0	SSE
04:00 PM - 05:00 PM	1.2	192.0	SSW	3.3	207.0	SSW	0.3	248.0	WSW	0.9	143.0	SE	4.8	163.0	SSE	1.7	154.0	SSE	2.5	164.0	SSE
05:00 PM - 06:00 PM	1.9	227.0	SW	0.7	140.0	SE	0.7	172.0	S	1.2	223.0	SW	1.0	229.0	SW	1.2	171.0	S	1.5	157.0	SSE
06:00 PM - 07:00 PM	1.0	176.0	S	0.8	164.0	SSE	1.3	125.0	SE	0.0	-	-	0.0	-	-	0.0	-	-	4.2	174.0	S
07:00 PM - 08:00 PM	0.2	-	-	0.7	169.0	S	1.0	157.0	SSE	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
08:00 PM - 09:00 PM	0.0	-	-	0.2	-	-	0.0	-	-	0.6	169.0	S	0.9	214.0	SW	1.5	176.0	S	1.0	176.0	S
09:00 PM - 10:00 PM	0.0	-	-	0.9	318.0	NW	0.0	-	-	0.7	219.0	SW	0.3	177.0	S	0.0	-	-	0.9	189.0	S
10:00 PM - 11:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.9	192.0	SSW	1.3	272.0	W	0.0	-	-	0.0	-	-
11:00 PM - 12:00 AM	0.0	-	-	0.0	-	-	0.5	194.0	SSW	1.7	196.0	SSW	0.0	-	-	0.0	-	-	0.0	-	-
12:00 AM - 01:00 AM	0.9	209.0	SSW	0.4	212.0	SSW	0.0	-	-	2.6	161.0	SSE	1.4	188.0	S	0.0	-	-	0.5	204.0	SSW
01:00 AM - 02:00 AM	0.0	-	-	0.0	-	-	0.2	-	-	2.0	172.0	S	0.0	-	-	0.0	-	-	0.0	-	-
02:00 AM - 03:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
03:00 AM - 04:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.3	181.0	S	0.0	-	-	0.0	-	-	0.0	-	-
04:00 AM - 05:00 AM	0.7	213.0	SSW	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
05:00 AM - 06:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	1.2	172.0	S	0.4	144.0	SE	0.0	-	-	0.0	-	-
06:00 AM - 07:00 AM	1.0	216.0	SW	0.0	-	-	0.0	-	-	1.6	152.0	SSE	2.4	170.0	S	0.0	-	-	1.2	246.0	WSW
07:00 AM - 08:00 AM	1.1	184.0	S	0.6	199.0	SSW	1.7	231.0	SW	2.2	195.0	SSW	1.0	172.0	S	1.5	175.0	S	1.6	286.0	WNW
08:00 AM - 09:00 AM	1.7	208.0	SSW	1.5	251.0	WSW	1.8	191.0	S	2.7	198.0	SSW	4.0	174.0	S	0.4	233.0	SW	2.1	247.0	WSW
09:00 AM - 10:00 AM	3.0	292.0	WNW	0.7	170.0	S	0.4	192.0	SSW	2.3	194.0	SSW	0.8	155.0	SSE	1.8	181.0	S	1.2	151.0	SSE
10:00 AM - 11:00 AM	1.8	352.0	N	3.2	222.0	SW	1.4	184.0	S	0.6	247.0	WSW	2.4	165.0	SSE	2.4	191.0	S	2.3	222.0	SW
11:00 AM - 12:00 PM	0.9	165.0	SSE	1.5	170.0	S	1.7	287.0	WNW	0.9	220.0	SW	0.6	162.0	SSE	1.9	190.0	S	2.1	172.0	S

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by
Sarayuth Jittranont
Assistant General Manager

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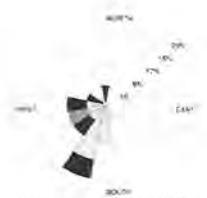
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143610
Date Received :Jun 27, 2025
Date Reported :Jul 03, 2025
Report Number :3201055-1

Wind Rose


Date : Jun 17-18, 2025

Date : Jun 18-19, 2025

Date : Jun 19-20, 2025

Date : Jun 20-21, 2025

Date : Jun 21-22, 2025

Date : Jun 22-23, 2025

Date : Jun 23-24, 2025

Date : Jun 17-24, 2025

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	3.57
1.7-3.3	21.43
0.3-1.7	39.29
Calms	35.71

Location : โรงเรียนชุมชนนิคมทับกวางสงเคราะห์ (GPS 47P 0725095, 1614326)

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

Approved by

Sarayuth Jittranont
Assistant General Manager

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

LABORATORY ACCREDITATION
ILA-DSS
TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143651
Date Received : Jun 27, 2025
Date Reported : Jul 04, 2025
Report Number: 3201161-1

Sample Description Air Quality
Location โรงเรียนป่าไม้ (GPS 47P 0720136, 1616520)
Date Analysis Commenced Jun 27, 2025
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Sampling Condition Pressure (mm Hg)	Sampling Condition Temperature (°C)	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)
24143651-1	Jun 17 - Jun 18, 2025	754	31.0	0.182	0.062
24143651-2	Jun 18 - Jun 19, 2025	754	32.2	0.152	0.052
24143651-3	Jun 19 - Jun 20, 2025	754	32.5	0.120	0.041
24143651-4	Jun 20 - Jun 21, 2025	754	32.2	0.142	0.046
24143651-5	Jun 21 - Jun 22, 2025	754	32.2	0.104	0.036
24143651-6	Jun 22 - Jun 23, 2025	754	32.1	0.066	0.025
24143651-7	Jun 23 - Jun 24, 2025	754	32.7	0.110	0.035
Guideline		-	-	0.33	0.12

Reference Method
Total Suspended Particulate : In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling)
Particulate Metter (PM-10) : In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling)

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
Sampled By : Teeravut Sukdee

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by Orawan R.

Orawan Rakyong
Scientist (3)

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143626
Date Received : Jun 27, 2025
Date Reported : Jul 02, 2025
Report Number: 3201081-1

Sample Description Air Quality
Location โรงเรียนป่าไผ่ (GPS 47P 0720136, 1616520)
Parameter Nitrogen dioxide (ppm)
Measurement Date Jun 17, 2025 - Jun 24, 2025
Measurement by Teeravut Sukdee

Time	24143626-1 Jun 17, 2025	24143626-2 Jun 18, 2025	24143626-3 Jun 19, 2025	24143626-4 Jun 20, 2025	24143626-5 Jun 21, 2025	24143626-6 Jun 22, 2025	24143626-7 Jun 23, 2025
09:00 AM - 10:00 AM	0.0078	0.0098	0.0134	0.0067	0.0076	0.0065	0.0081
10:00 AM - 11:00 AM	0.0092	0.0095	0.0108	0.0080	0.0097	0.0062	0.0081
11:00 AM - 12:00 PM	0.0093	0.0096	0.0132	0.0091	0.0120	0.0068	0.0098
12:00 PM - 01:00 PM	0.0081	0.0086	0.0107	0.0110	0.0110	0.0067	0.0089
01:00 PM - 02:00 PM	0.0096	0.0091	0.0122	0.0129	0.0107	0.0064	0.0105
02:00 PM - 03:00 PM	0.0077	0.0099	0.0112	0.0122	0.0091	0.0064	0.0115
03:00 PM - 04:00 PM	0.0083	0.0111	0.0140	0.0114	0.0111	0.0068	0.0142
04:00 PM - 05:00 PM	0.0111	0.0136	0.0183	0.0131	0.0114	0.0080	0.0131
05:00 PM - 06:00 PM	0.0128	0.0130	0.0197	0.0162	0.0119	0.0085	0.0179
06:00 PM - 07:00 PM	0.0152	0.0168	0.0262	0.0182	0.0136	0.0076	0.0165
07:00 PM - 08:00 PM	0.0220	0.0142	0.0123	0.0186	0.0155	0.0074	0.0174
08:00 PM - 09:00 PM	0.0169	0.0144	0.0083	0.0147	0.0171	0.0085	0.0108
09:00 PM - 10:00 PM	0.0144	0.0132	0.0103	0.0175	0.0162	0.0049	0.0083
10:00 PM - 11:00 PM	0.0147	0.0063	0.0105	0.0147	0.0165	0.0037	0.0095
11:00 PM - 12:00 AM	0.0147	0.0063	0.0110	0.0143	0.0094	0.0044	0.0099
12:00 AM - 01:00 AM	0.0144	0.0058	0.0105	0.0102	0.0085	0.0039	0.0091
01:00 AM - 02:00 AM	0.0136	0.0056	0.0098	0.0084	0.0062	0.0036	0.0089
02:00 AM - 03:00 AM	0.0127	0.0068	0.0096	0.0099	0.0044	0.0044	0.0099
03:00 AM - 04:00 AM	0.0114	0.0112	0.0079	0.0084	0.0049	0.0042	0.0102
04:00 AM - 05:00 AM	0.0115	0.0158	0.0087	0.0088	0.0043	0.0047	0.0125
05:00 AM - 06:00 AM	0.0115	0.0126	0.0091	0.0094	0.0049	0.0055	0.0124
06:00 AM - 07:00 AM	0.0138	0.0114	0.0108	0.0101	0.0075	0.0066	0.0146
07:00 AM - 08:00 AM	0.0129	0.0123	0.0104	0.0102	0.0112	0.0319	0.0132
08:00 AM - 09:00 AM	0.0113	0.0125	0.0097	0.0083	0.0065	0.0142	0.0098
Average	0.0123	0.0108	0.0120	0.0118	0.0100	0.0074	0.0115
1hr - Maximum	0.0220	0.0168	0.0262	0.0186	0.0171	0.0319	0.0179
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).
Reference Method : U.S. Environmental Protection AgencyMethod Part 50 App. F (Chemiluminescence)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by *Orawan R.*
Orawan Rakyong
Scientist (3)

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143638
Date Received : Jun 27, 2025
Date Reported : Jul 02, 2025
Report Number: 3201132-1

Sample Description Air Quality
Location โรงเรียนป่าไผ่ (GPS 47P 0720136, 1616520)
Parameter Sulfur Dioxide (ppm)
Measurement Date Jun 17, 2025 - Jun 24, 2025
Measurement by Teeravut Sukdee

Time	24143638-1 Jun 17, 2025	24143638-2 Jun 18, 2025	24143638-3 Jun 19, 2025	24143638-4 Jun 20, 2025	24143638-5 Jun 21, 2025	24143638-6 Jun 22, 2025	24143638-7 Jun 23, 2025
09:00 AM - 10:00 AM	0.0028	0.0026	0.0025	0.0030	0.0030	0.0025	0.0031
10:00 AM - 11:00 AM	0.0024	0.0024	0.0020	0.0022	0.0023	0.0025	0.0023
11:00 AM - 12:00 PM	0.0029	0.0027	0.0024	0.0021	0.0030	0.0031	0.0022
12:00 PM - 01:00 PM	0.0026	0.0024	0.0031	0.0018	0.0027	0.0021	0.0031
01:00 PM - 02:00 PM	0.0025	0.0024	0.0028	0.0020	0.0031	0.0026	0.0022
02:00 PM - 03:00 PM	0.0024	0.0024	0.0029	0.0027	0.0023	0.0021	0.0031
03:00 PM - 04:00 PM	0.0024	0.0023	0.0029	0.0020	0.0027	0.0028	0.0027
04:00 PM - 05:00 PM	0.0022	0.0024	0.0022	0.0030	0.0019	0.0021	0.0029
05:00 PM - 06:00 PM	0.0022	0.0027	0.0030	0.0020	0.0021	0.0028	0.0029
06:00 PM - 07:00 PM	0.0021	0.0026	0.0024	0.0020	0.0025	0.0020	0.0030
07:00 PM - 08:00 PM	0.0022	0.0027	0.0027	0.0026	0.0028	0.0029	0.0025
08:00 PM - 09:00 PM	0.0021	0.0026	0.0023	0.0031	0.0020	0.0029	0.0028
09:00 PM - 10:00 PM	0.0020	0.0027	0.0020	0.0026	0.0026	0.0018	0.0019
10:00 PM - 11:00 PM	0.0022	0.0027	0.0018	0.0023	0.0030	0.0026	0.0030
11:00 PM - 12:00 AM	0.0020	0.0026	0.0026	0.0028	0.0020	0.0021	0.0028
12:00 AM - 01:00 AM	0.0020	0.0024	0.0019	0.0027	0.0024	0.0023	0.0027
01:00 AM - 02:00 AM	0.0020	0.0024	0.0025	0.0028	0.0027	0.0031	0.0019
02:00 AM - 03:00 AM	0.0023	0.0024	0.0022	0.0025	0.0025	0.0029	0.0018
03:00 AM - 04:00 AM	0.0027	0.0025	0.0026	0.0024	0.0022	0.0018	0.0031
04:00 AM - 05:00 AM	0.0026	0.0023	0.0018	0.0018	0.0019	0.0022	0.0031
05:00 AM - 06:00 AM	0.0026	0.0020	0.0027	0.0021	0.0019	0.0023	0.0021
06:00 AM - 07:00 AM	0.0027	0.0021	0.0031	0.0021	0.0029	0.0018	0.0024
07:00 AM - 08:00 AM	0.0026	0.0024	0.0026	0.0026	0.0021	0.0023	0.0027
08:00 AM - 09:00 AM	0.0027	0.0026	0.0023	0.0021	0.0029	0.0026	0.0021
Average	0.0024	0.0025	0.0025	0.0024	0.0025	0.0024	0.0026
1hr - Maximum	0.0029	0.0027	0.0031	0.0031	0.0031	0.0031	0.0031
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).
Reference Method : U.S. Environmental Protection Agency, EPA Method Part 53 and 58

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by *Orawan R.*
Orawan Rakyong
Scientist (3)

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143613
Date Received :Jun 27, 2025
Date Reported :Jul 03, 2025
Report Number :3201056-1

Sample Number 24143613-1 to 7
Parameter Wind Speed / Wind Direction
Location โรงเรียนป่าไผ่ (GPS 47P 0720136, 1616520)
Sampling Date Jun 17 - Jun 24, 2025
Sampling by Teeravut Sukdee

Time	Jun 17 - Jun 18, 2025			Jun 18 - Jun 19, 2025			Jun 19 - Jun 20, 2025			Jun 20 - Jun 21, 2025			Jun 21 - Jun 22, 2025			Jun 22 - Jun 23, 2025			Jun 23 - Jun 24, 2025		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
09:00 AM - 10:00 AM	0.7	218.0	SW	0.0	-	-	0.0	-	-	0.6	82.0	E	0.4	202.0	SSW	0.0	-	-	0.0	-	-
10:00 AM - 11:00 AM	0.9	90.0	E	0.0	-	-	0.0	-	-	0.0	-	-	0.5	172.0	S	0.6	171.0	S	0.0	-	-
11:00 AM - 12:00 PM	0.4	81.0	E	0.3	176.0	S	0.0	-	-	0.0	-	-	0.7	178.0	S	1.5	189.0	S	0.0	-	-
12:00 PM - 01:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	1.3	184.0	S	2.4	179.0	S	0.0	-	-
01:00 PM - 02:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.1	-	-	0.0	-	-	0.0	-	-	0.0	-	-
02:00 PM - 03:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
03:00 PM - 04:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.7	211.0	SSW	0.0	-	-	0.0	-	-
04:00 PM - 05:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
05:00 PM - 06:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
06:00 PM - 07:00 PM	0.0	-	-	1.0	204.0	SSW	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
07:00 PM - 08:00 PM	1.8	190.0	S	0.0	-	-	0.0	-	-	0.2	-	-	0.5	252.0	WSW	1.6	223.0	SW	2.8	226.0	SW
08:00 PM - 09:00 PM	2.7	184.0	S	0.5	182.0	S	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
09:00 PM - 10:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.4	225.0	SW	1.1	104.0	ESE	3.4	213.0	SSW
10:00 PM - 11:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	1.2	183.0	S	3.5	193.0	SSW
11:00 PM - 12:00 AM	1.0	223.0	SW	2.4	207.0	SSW	1.4	205.0	SSW	0.0	-	-	0.0	-	-	0.1	-	-	3.2	175.0	S
12:00 AM - 01:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.7	239.0	WSW	0.0	-	-	0.6	235.0	SW
01:00 AM - 02:00 AM	4.2	194.0	SSW	0.0	-	-	0.0	-	-	0.0	-	-	0.3	193.0	SSW	0.0	-	-	0.0	-	-
02:00 AM - 03:00 AM	0.9	105.0	ESE	2.7	219.0	SW	0.0	-	-	1.7	300.0	WNW	0.3	235.0	SW	0.2	-	-	0.0	-	-
03:00 AM - 04:00 AM	1.9	199.0	SSW	2.5	216.0	SW	0.0	-	-	0.0	-	-	0.5	149.0	SSE	0.0	-	-	0.0	-	-
04:00 AM - 05:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
05:00 AM - 06:00 AM	0.2	-	-	0.0	-	-	0.5	206.0	SSW	0.0	-	-	0.0	-	-	0.9	85.0	E	0.9	150.0	SSE
06:00 AM - 07:00 AM	0.0	-	-	0.0	-	-	2.2	11.0	N	0.2	-	-	0.0	-	-	0.0	-	-	0.7	211.0	SSW
07:00 AM - 08:00 AM	0.0	-	-	0.0	-	-	1.7	162.0	SSE	0.0	-	-	0.9	208.0	SSW	0.2	-	-	0.4	83.0	E
08:00 AM - 09:00 AM	0.0	-	-	1.1	224.0	SW	0.0	-	-	0.0	-	-	0.0	-	-	0.6	158.0	SSE	0.4	84.0	E

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

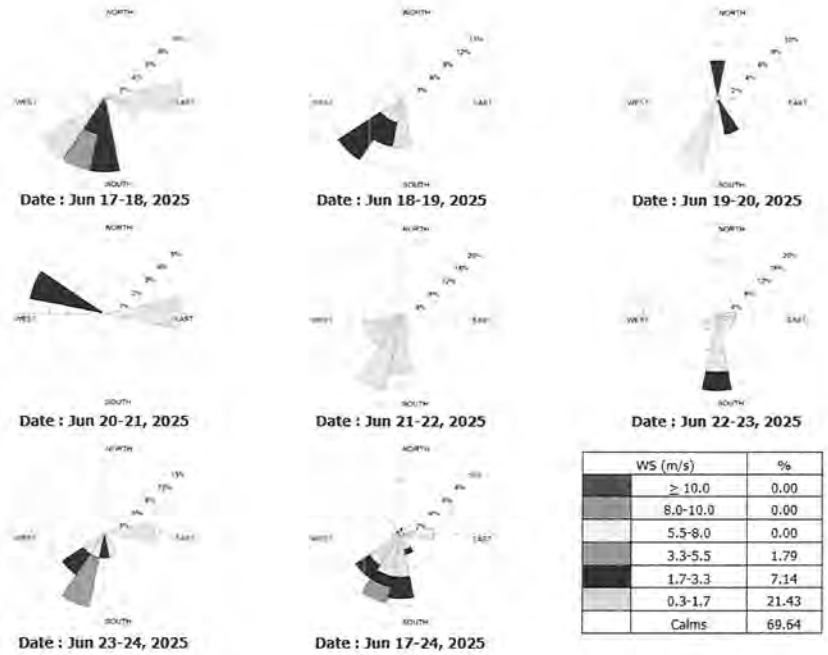
Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143613
Date Received :Jun 27, 2025
Date Reported :Jul 03, 2025
Report Number :3201056-1

Wind Rose



	WS (m/s)	%
	≥ 10.0	0.00
	8.0-10.0	0.00
	5.5-8.0	0.00
	3.3-5.5	1.79
	1.7-3.3	7.14
	0.3-1.7	21.43
	Calms	69.64

Location : โรงเรียนป่าไผ่ (GPS 47P 0720136, 1616520)

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

Approved by

Sarayuth Jittranont
Assistant General Manager

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Analysis / Test Report

TESTING
No.0009

Lot ID: 24143652
Date Received : Jun 27, 2025
Date Reported : Jul 04, 2025
Report Number: 3201162-1

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Sample Description Air Quality
Location วัดวาลุการาม (วัดหนองผักบุ้ง) (GPS 47P 0720392, 1613911)
Date Analysis Commenced Jun 30, 2025
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Sampling Condition Pressure (mm Hg)	Sampling Condition Temperature (°C)	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)
24143652-1	Jun 17 - Jun 18, 2025	753	34.2	0.029	0.015
24143652-2	Jun 18 - Jun 19, 2025	753	34.5	0.032	0.017
24143652-3	Jun 19 - Jun 20, 2025	753	34.5	0.028	0.013
24143652-4	Jun 20 - Jun 21, 2025	753	34.5	0.025	0.014
24143652-5	Jun 21 - Jun 22, 2025	753	35.2	0.024	0.014
24143652-6	Jun 22 - Jun 23, 2025	753	34.0	0.016	0.013
24143652-7	Jun 23 - Jun 24, 2025	753	35.0	0.020	0.016
Guideline		-	-	0.33	0.12

Reference Method
Total Suspended Particulate : In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling)
Particulate Metter (PM-10) : In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling)

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
Sampled By : Teeravut Sukdee

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by Saranya C.
Saranya Chalermthamrong
Scientist (4)

Analysis / Test Report

Lot ID: 24143627
Date Received : Jun 27, 2025
Date Reported : Jul 02, 2025
Report Number: 3201082-1

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Sample Description Air Quality
Location วัดวาลุการาม (วัดหนองผักบุ้ง) (GPS 47P 0720392, 1613911)
Parameter Nitrogen dioxide (ppm)
Measurement Date Jun 17, 2025 - Jun 24, 2025
Measurement by Teeravut Sukdee

Time	24143627-1 Jun 17, 2025	24143627-2 Jun 18, 2025	24143627-3 Jun 19, 2025	24143627-4 Jun 20, 2025	24143627-5 Jun 21, 2025	24143627-6 Jun 22, 2025	24143627-7 Jun 23, 2025
01:00 PM - 02:00 PM	0.0020	0.0008	0.0029	0.0001	0.0009	0.0009	0.0009
02:00 PM - 03:00 PM	0.0021	0.0018	0.0045	0.0003	0.0008	0.0006	0.0008
03:00 PM - 04:00 PM	0.0041	0.0024	0.0026	0.0002	0.0010	0.0009	0.0009
04:00 PM - 05:00 PM	0.0039	0.0040	0.0012	0.0010	0.0008	0.0008	0.0009
05:00 PM - 06:00 PM	0.0027	0.0006	0.0024	0.0005	0.0008	0.0008	0.0009
06:00 PM - 07:00 PM	0.0020	0.0007	0.0028	0.0005	0.0009	0.0009	0.0008
07:00 PM - 08:00 PM	0.0004	0.0016	0.0020	0.0005	0.0009	0.0008	0.0009
08:00 PM - 09:00 PM	0.0005	0.0009	0.0002	0.0010	0.0010	0.0009	0.0008
09:00 PM - 10:00 PM	0.0010	0.0001	0.0003	0.0006	0.0009	0.0010	0.0009
10:00 PM - 11:00 PM	0.0007	0.0006	0.0010	0.0009	0.0008	0.0008	0.0009
11:00 PM - 12:00 AM	0.0001	0.0030	0.0016	0.0019	0.0009	0.0008	0.0009
12:00 AM - 01:00 AM	0.0001	0.0009	0.0009	0.0009	0.0008	0.0009	0.0009
01:00 AM - 02:00 AM	0.0008	0.0011	0.0002	0.0011	0.0008	0.0009	0.0009
02:00 AM - 03:00 AM	0.0018	0.0006	0.0012	0.0010	0.0007	0.0008	0.0008
03:00 AM - 04:00 AM	0.0018	0.0009	0.0005	0.0037	0.0009	0.0008	0.0008
04:00 AM - 05:00 AM	0.0045	0.0008	0.0056	0.0013	0.0009	0.0009	0.0009
05:00 AM - 06:00 AM	0.0050	0.0012	0.0064	0.0011	0.0009	0.0009	0.0009
06:00 AM - 07:00 AM	0.0018	0.0011	0.0022	0.0008	0.0008	0.0008	0.0009
07:00 AM - 08:00 AM	0.0010	0.0009	0.0003	0.0009	0.0009	0.0009	0.0009
08:00 AM - 09:00 AM	0.0014	0.0007	0.0004	0.0009	0.0009	0.0009	0.0007
09:00 AM - 10:00 AM	0.0016	0.0013	0.0002	0.0008	0.0009	0.0008	0.0007
10:00 AM - 11:00 AM	0.0014	0.0040	0.0006	0.0009	0.0009	0.0008	0.0008
11:00 AM - 12:00 PM	0.0004	0.0024	0.0010	0.0009	0.0008	0.0008	0.0009
12:00 PM - 01:00 PM	0.0002	0.0026	0.0002	0.0008	0.0008	0.0009	0.0008
Average	0.0017	0.0015	0.0017	0.0009	0.0009	0.0008	0.0009
1hr - Maximum	0.0050	0.0040	0.0064	0.0037	0.0010	0.0010	0.0009
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).
Reference Method : U.S. Environmental Protection AgencyMethod Part 50 App. F (Chemiluminescence)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by Orawan R.
Orawan Rakyong
Scientist (3)

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143639
Date Received : Jun 27, 2025
Date Reported : Jul 02, 2025
Report Number: 3201133-1

Sample Description Air Quality
Location วัดวาลุการาม (วัดหนองผักบุ้ง) (GPS 47P 0720392, 1613911)
Parameter Sulfur Dioxide (ppm)
Measurement Date Jun 17, 2025 - Jun 24, 2025
Measurement by Teeravut Sukdee

Time	24143639-1 Jun 17, 2025	24143639-2 Jun 18, 2025	24143639-3 Jun 19, 2025	24143639-4 Jun 20, 2025	24143639-5 Jun 21, 2025	24143639-6 Jun 22, 2025	24143639-7 Jun 23, 2025
01:00 PM - 02:00 PM	0.0020	0.0029	0.0026	0.0032	0.0025	0.0024	0.0025
02:00 PM - 03:00 PM	0.0023	0.0028	0.0027	0.0033	0.0026	0.0024	0.0025
03:00 PM - 04:00 PM	0.0024	0.0027	0.0027	0.0031	0.0026	0.0024	0.0025
04:00 PM - 05:00 PM	0.0024	0.0026	0.0028	0.0032	0.0026	0.0024	0.0025
05:00 PM - 06:00 PM	0.0025	0.0027	0.0027	0.0039	0.0026	0.0024	0.0025
06:00 PM - 07:00 PM	0.0025	0.0027	0.0026	0.0036	0.0025	0.0025	0.0025
07:00 PM - 08:00 PM	0.0025	0.0028	0.0025	0.0032	0.0025	0.0024	0.0025
08:00 PM - 09:00 PM	0.0024	0.0026	0.0025	0.0027	0.0025	0.0025	0.0026
09:00 PM - 10:00 PM	0.0026	0.0026	0.0025	0.0026	0.0025	0.0025	0.0025
10:00 PM - 11:00 PM	0.0026	0.0026	0.0025	0.0026	0.0025	0.0025	0.0025
11:00 PM - 12:00 AM	0.0025	0.0025	0.0025	0.0027	0.0025	0.0025	0.0025
12:00 AM - 01:00 AM	0.0025	0.0025	0.0025	0.0026	0.0024	0.0025	0.0025
01:00 AM - 02:00 AM	0.0025	0.0025	0.0025	0.0027	0.0024	0.0026	0.0025
02:00 AM - 03:00 AM	0.0026	0.0025	0.0024	0.0025	0.0025	0.0025	0.0025
03:00 AM - 04:00 AM	0.0025	0.0025	0.0025	0.0025	0.0024	0.0025	0.0025
04:00 AM - 05:00 AM	0.0026	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
05:00 AM - 06:00 AM	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
06:00 AM - 07:00 AM	0.0025	0.0025	0.0026	0.0026	0.0025	0.0025	0.0025
07:00 AM - 08:00 AM	0.0026	0.0025	0.0026	0.0025	0.0026	0.0025	0.0025
08:00 AM - 09:00 AM	0.0029	0.0025	0.0027	0.0026	0.0025	0.0025	0.0028
09:00 AM - 10:00 AM	0.0029	0.0025	0.0027	0.0026	0.0025	0.0026	0.0027
10:00 AM - 11:00 AM	0.0034	0.0027	0.0027	0.0026	0.0025	0.0025	0.0026
11:00 AM - 12:00 PM	0.0040	0.0026	0.0027	0.0026	0.0024	0.0025	0.0026
12:00 PM - 01:00 PM	0.0033	0.0026	0.0031	0.0026	0.0024	0.0025	0.0025
Average	0.0026	0.0026	0.0026	0.0028	0.0025	0.0025	0.0025
1hr - Maximum	0.0040	0.0029	0.0031	0.0039	0.0026	0.0026	0.0028
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).
Reference Method : U.S. Environmental Protection Agency, EPA Method Part 53 and 58

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by
Orawan R.
Orawan Rakyong
Scientist (3)

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143615
Date Received :Jun 27, 2025
Date Reported :Jul 03, 2025
Report Number :3201059-1

Sample Number 24143615-1 to 7
Parameter Wind Speed / Wind Direction
Location วัดวาลุการาม (วัดหนองผักบุ้ง) (GPS 47P 0720392, 1613911)
Sampling Date Jun 17 - Jun 24, 2025
Sampling by Teeravut Sukdee

Time	Jun 17 - Jun 18, 2025			Jun 18 - Jun 19, 2025			Jun 19 - Jun 20, 2025			Jun 20 - Jun 21, 2025			Jun 21 - Jun 22, 2025			Jun 22 - Jun 23, 2025			Jun 23 - Jun 24, 2025		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
01:00 PM - 02:00 PM	1.0	249.0	WSW	1.4	196.0	SSW	1.5	204.0	SSW	0.9	10.0	N	1.9	174.0	S	3.3	181.0	S	0.7	219.0	SW
02:00 PM - 03:00 PM	2.0	155.0	SSE	3.4	204.0	SSW	2.2	217.0	SW	0.7	264.0	W	3.2	207.0	SSW	2.2	155.0	SSE	1.2	185.0	S
03:00 PM - 04:00 PM	0.7	160.0	SSE	0.5	137.0	SE	1.3	183.0	S	1.3	229.0	SW	2.0	202.0	SSW	1.7	135.0	SE	1.4	197.0	SSW
04:00 PM - 05:00 PM	1.1	69.0	ENE	1.4	185.0	S	0.9	182.0	S	2.4	183.0	S	2.0	140.0	SE	0.8	197.0	SSW	1.0	191.0	S
05:00 PM - 06:00 PM	2.2	193.0	SSW	1.0	188.0	S	0.9	182.0	S	0.5	286.0	WNW	1.6	179.0	S	2.8	177.0	S	1.7	230.0	SW
06:00 PM - 07:00 PM	1.5	190.0	S	0.5	157.0	SSE	1.5	197.0	SSW	0.9	218.0	SW	0.3	226.0	SW	0.8	211.0	SSW	4.9	213.0	SSW
07:00 PM - 08:00 PM	0.4	217.0	SW	1.0	199.0	SSW	1.6	202.0	SSW	0.3	174.0	S	2.0	233.0	SW	0.6	189.0	S	0.9	124.0	SE
08:00 PM - 09:00 PM	0.0	-	-	3.2	208.0	SSW	1.2	101.0	E	0.0	-	-	0.0	-	-	2.0	226.0	SW	0.0	-	-
09:00 PM - 10:00 PM	0.5	162.0	SSE	1.8	88.0	E	0.2	-	-	1.2	189.0	S	0.5	204.0	SSW	0.8	166.0	SSE	0.8	227.0	SW
10:00 PM - 11:00 PM	0.8	201.0	SSW	0.0	-	-	0.0	-	-	1.2	176.0	S	1.4	208.0	SSW	0.6	193.0	SSW	0.0	-	-
11:00 PM - 12:00 AM	0.6	199.0	SSW	0.0	-	-	0.0	-	-	0.8	196.0	SSW	2.2	224.0	SW	0.3	184.0	S	1.3	203.0	SSW
12:00 AM - 01:00 AM	0.9	223.0	SW	0.0	-	-	0.0	-	-	1.9	197.0	SSW	1.9	229.0	SW	0.6	174.0	S	1.2	171.0	S
01:00 AM - 02:00 AM	0.9	199.0	SSW	0.0	-	-	0.0	-	-	1.2	215.0	SW	1.3	152.0	SSE	0.0	-	-	0.7	193.0	SSW
02:00 AM - 03:00 AM	0.0	-	-	0.0	-	-	0.2	-	-	0.9	182.0	S	0.3	185.0	S	0.0	-	-	0.7	167.0	SSE
03:00 AM - 04:00 AM	0.0	-	-	0.0	-	-	0.7	168.0	SSE	0.6	165.0	SSE	0.6	162.0	SSE	0.0	-	-	0.0	-	-
04:00 AM - 05:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.2	-	-
05:00 AM - 06:00 AM	0.6	210.0	SSW	0.0	-	-	0.0	-	-	0.5	184.0	S	0.0	-	-	0.0	-	-	0.0	-	-
06:00 AM - 07:00 AM	0.8	152.0	SSE	0.0	-	-	0.0	-	-	2.0	149.0	SSE	0.0	-	-	0.0	-	-	0.0	-	-
07:00 AM - 08:00 AM	1.0	181.0	S	0.4	206.0	SSW	0.5	193.0	SSW	1.3	172.0	S	1.1	196.0	SSW	0.6	193.0	SSW	1.8	172.0	S
08:00 AM - 09:00 AM	1.9	201.0	SSW	2.0	186.0	S	1.5	185.0	S	2.1	136.0	SE	1.1	187.0	S	2.4	221.0	SW	2.8	190.0	S
09:00 AM - 10:00 AM	0.5	195.0	SSW	1.1	214.0	SW	0.8	183.0	S	2.7	189.0	S	1.4	210.0	SSW	1.5	203.0	SSW	4.5	203.0	SSW
10:00 AM - 11:00 AM	1.7	171.0	S	0.5	206.0	SSW	2.1	223.0	SW	0.3	208.0	SSW	1.3	187.0	S	3.8	176.0	S	3.1	199.0	SSW
11:00 AM - 12:00 PM	1.1	164.0	SSE	2.4	206.0	SSW	1.2	170.0	S	1.3	338.0	NNW	0.9	181.0	S	1.9	201.0	SSW	3.2	224.0	SW
12:00 PM - 01:00 PM	2.1	207.0	SSW	1.5	253.0	WSW	1.0	186.0	S	3.2	182.0	S	1.7	203.0	SSW	2.5	242.0	WSW	1.3	161.0	SSE

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by
Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143615
Date Received :Jun 27, 2025
Date Reported :Jul 03, 2025
Report Number :3201059-1

Wind Rose

Date : Jun 17-18, 2025

Date : Jun 18-19, 2025

Date : Jun 19-20, 2025

Date : Jun 20-21, 2025

Date : Jun 21-22, 2025

Date : Jun 22-23, 2025

Date : Jun 23-24, 2025

Date : Jun 17-24, 2025

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	2.98
1.7-3.3	22.02
0.3-1.7	51.19
Calms	23.81

Location : วัดวาลุการาม (วัดหนองผักบุ้ง) (GPS 47P 0720392, 1613911)

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

Approved by

Sarayuth Jittranont
Assistant General Manager

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

LABORATORY ACCREDITATION BLA-DSS
TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143653
Date Received : May 13, 2025
Date Reported : May 20, 2025
Report Number: 3201163-1

Sample Description Air Quality
Location วัดทับกวาง (GPS 47P 0721959, 1616035)
Date Analysis Commenced May 14, 2025
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
24143653-1	May 02 - May 03, 2025	0.119	0.064	753*	33.8*
24143653-2	May 03 - May 04, 2025	0.067	0.036	753*	30.1*
24143653-3	May 04 - May 05, 2025	0.065	0.031	753*	32.4*
24143653-4	May 05 - May 06, 2025	0.076	0.034	753*	33.5*
24143653-5	May 06 - May 07, 2025	0.093	0.039	753*	32.5*
24143653-6	May 07 - May 08, 2025	0.057	0.026	753*	34.5*
24143653-7	May 08 - May 09, 2025	0.054	0.028	753*	34.2*
Guideline		0.33	0.12	-	-

Reference Method

Total Suspended Particulate : In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling)
Particulate Metter (PM-10) : In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling)

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
Sampled By : Teeravut Sukdee

Remark : Result (s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by

Orawan Rakyong
Scientist (3)

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143628
Date Received : May 13, 2025
Date Reported : May 15, 2025
Report Number: 3201084-1

Sample Description Air Quality
Location วัดพันกวาง (GPS 47P 0721959, 1616035)
Parameter Nitrogen dioxide (ppm)
Measurement Date May 02, 2025 - May 09, 2025
Measurement by Teeravut Sukdee

Time	24143628-1 May 02, 2025	24143628-2 May 03, 2025	24143628-3 May 04, 2025	24143628-4 May 05, 2025	24143628-5 May 06, 2025	24143628-6 May 07, 2025	24143628-7 May 08, 2025
10:00 AM - 11:00 AM	0.0087	0.0085	0.0088	0.0085	0.0070	0.0044	0.0054
11:00 AM - 12:00 PM	0.0083	0.0078	0.0107	0.0060	0.0073	0.0041	0.0054
12:00 PM - 01:00 PM	0.0065	0.0048	0.0075	0.0081	0.0061	0.0051	0.0053
01:00 PM - 02:00 PM	0.0058	0.0042	0.0079	0.0104	0.0059	0.0061	0.0047
02:00 PM - 03:00 PM	0.0070	0.0056	0.0059	0.0104	0.0063	0.0088	0.0073
03:00 PM - 04:00 PM	0.0081	0.0063	0.0050	0.0099	0.0059	0.0069	0.0098
04:00 PM - 05:00 PM	0.0096	0.0068	0.0066	0.0100	0.0061	0.0070	0.0053
05:00 PM - 06:00 PM	0.0077	0.0063	0.0063	0.0097	0.0070	0.0050	0.0049
06:00 PM - 07:00 PM	0.0048	0.0079	0.0074	0.0088	0.0080	0.0085	0.0054
07:00 PM - 08:00 PM	0.0098	0.0094	0.0058	0.0095	0.0096	0.0073	0.0057
08:00 PM - 09:00 PM	0.0097	0.0096	0.0070	0.0084	0.0085	0.0059	0.0053
09:00 PM - 10:00 PM	0.0079	0.0097	0.0105	0.0104	0.0080	0.0056	0.0044
10:00 PM - 11:00 PM	0.0093	0.0091	0.0084	0.0092	0.0055	0.0083	0.0076
11:00 PM - 12:00 AM	0.0090	0.0048	0.0084	0.0080	0.0057	0.0075	0.0051
12:00 AM - 01:00 AM	0.0078	0.0066	0.0073	0.0073	0.0045	0.0040	0.0045
01:00 AM - 02:00 AM	0.0088	0.0049	0.0088	0.0079	0.0078	0.0045	0.0045
02:00 AM - 03:00 AM	0.0062	0.0057	0.0081	0.0091	0.0094	0.0046	0.0058
03:00 AM - 04:00 AM	0.0058	0.0068	0.0095	0.0077	0.0037	0.0056	0.0053
04:00 AM - 05:00 AM	0.0068	0.0076	0.0100	0.0075	0.0053	0.0047	0.0052
05:00 AM - 06:00 AM	0.0076	0.0108	0.0099	0.0066	0.0063	0.0064	0.0050
06:00 AM - 07:00 AM	0.0054	0.0063	0.0079	0.0071	0.0047	0.0078	0.0072
07:00 AM - 08:00 AM	0.0058	0.0076	0.0090	0.0075	0.0067	0.0090	0.0080
08:00 AM - 09:00 AM	0.0075	0.0090	0.0059	0.0064	0.0057	0.0055	0.0078
09:00 AM - 10:00 AM	0.0064	0.0085	0.0088	0.0070	0.0048	0.0065	0.0062
Average	0.0075	0.0073	0.0080	0.0084	0.0065	0.0062	0.0059
1hr - Maximum	0.0098	0.0108	0.0107	0.0104	0.0096	0.0090	0.0098
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).
Reference Method : U.S. Environmental Protection AgencyMethod Part 50 App. F (Chemiluminescence)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by Orawan R.
Orawan Rakyong
Scientist (3)

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143640
Date Received : May 13, 2025
Date Reported : May 15, 2025
Report Number: 3201136-1

Sample Description Air Quality
Location วัดพันกวาง (GPS 47P 0721959, 1616035)
Parameter Sulfur Dioxide (ppm)
Measurement Date May 02, 2025 - May 09, 2025
Measurement by Teeravut Sukdee

Time	24143640-1 May 02, 2025	24143640-2 May 03, 2025	24143640-3 May 04, 2025	24143640-4 May 05, 2025	24143640-5 May 06, 2025	24143640-6 May 07, 2025	24143640-7 May 08, 2025
10:00 AM - 11:00 AM	0.0016	0.0010	0.0012	0.0012	0.0010	0.0015	0.0010
11:00 AM - 12:00 PM	0.0018	0.0010	0.0011	0.0011	0.0010	0.0012	0.0008
12:00 PM - 01:00 PM	0.0017	0.0010	0.0014	0.0010	0.0009	0.0011	0.0009
01:00 PM - 02:00 PM	0.0009	0.0010	0.0013	0.0010	0.0009	0.0010	0.0009
02:00 PM - 03:00 PM	0.0009	0.0010	0.0012	0.0010	0.0035	0.0010	0.0009
03:00 PM - 04:00 PM	0.0010	0.0011	0.0012	0.0009	0.0020	0.0010	0.0009
04:00 PM - 05:00 PM	0.0010	0.0012	0.0011	0.0010	0.0024	0.0010	0.0010
05:00 PM - 06:00 PM	0.0009	0.0011	0.0010	0.0010	0.0017	0.0009	0.0010
06:00 PM - 07:00 PM	0.0009	0.0010	0.0011	0.0009	0.0013	0.0009	0.0010
07:00 PM - 08:00 PM	0.0009	0.0010	0.0010	0.0008	0.0011	0.0010	0.0010
08:00 PM - 09:00 PM	0.0008	0.0011	0.0010	0.0009	0.0010	0.0009	0.0010
09:00 PM - 10:00 PM	0.0009	0.0011	0.0010	0.0009	0.0010	0.0009	0.0010
10:00 PM - 11:00 PM	0.0009	0.0011	0.0010	0.0010	0.0011	0.0010	0.0011
11:00 PM - 12:00 AM	0.0009	0.0012	0.0011	0.0010	0.0011	0.0010	0.0011
12:00 AM - 01:00 AM	0.0009	0.0011	0.0010	0.0010	0.0010	0.0010	0.0010
01:00 AM - 02:00 AM	0.0009	0.0011	0.0010	0.0010	0.0009	0.0010	0.0010
02:00 AM - 03:00 AM	0.0009	0.0010	0.0011	0.0010	0.0010	0.0011	0.0010
03:00 AM - 04:00 AM	0.0010	0.0011	0.0011	0.0010	0.0011	0.0010	0.0010
04:00 AM - 05:00 AM	0.0011	0.0010	0.0011	0.0010	0.0011	0.0011	0.0011
05:00 AM - 06:00 AM	0.0010	0.0011	0.0010	0.0010	0.0011	0.0011	0.0011
06:00 AM - 07:00 AM	0.0010	0.0011	0.0011	0.0010	0.0011	0.0010	0.0010
07:00 AM - 08:00 AM	0.0010	0.0012	0.0012	0.0010	0.0011	0.0010	0.0010
08:00 AM - 09:00 AM	0.0010	0.0012	0.0012	0.0010	0.0013	0.0010	0.0010
09:00 AM - 10:00 AM	0.0010	0.0013	0.0012	0.0010	0.0014	0.0009	0.0009
Average	0.0010	0.0011	0.0011	0.0010	0.0013	0.0010	0.0010
1hr - Maximum	0.0018	0.0013	0.0014	0.0012	0.0035	0.0015	0.0011
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).
Reference Method : U.S. Environmental Protection Agency, EPA Method Part 53 and 58

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by Orawan R.
Orawan Rakyong
Scientist (3)

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143616
Date Received :May 13, 2025
Date Reported :May 16, 2025
Report Number :3201060-1

Sample Number 24143616-1 to 7
Parameter Wind Speed / Wind Direction
Location วัดทับกวาง (GPS 47P 0721959, 1616035)
Sampling Date May 02 - May 09, 2025
Sampling by Teeravut Sukdee

Time	May 02 - May 03, 2025			May 03 - May 04, 2025			May 04 - May 05, 2025			May 05 - May 06, 2025			May 06 - May 07, 2025			May 07 - May 08, 2025			May 08 - May 09, 2025		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
10:00 AM - 11:00 AM	0.6	264.0	W	1.5	71.0	ENE	0.0	-	-	0.4	102.0	ESE	0.6	80.0	E	0.4	211.0	SSW	0.3	97.0	E
11:00 AM - 12:00 PM	0.3	235.0	SW	0.9	110.0	ESE	0.0	-	-	0.0	-	-	1.2	74.0	ENE	2.7	83.0	E	0.3	112.0	ESE
12:00 PM - 01:00 PM	1.9	265.0	W	0.0	-	-	1.0	268.0	W	0.4	255.0	WSW	1.1	66.0	ENE	0.7	180.0	S	0.6	89.0	E
01:00 PM - 02:00 PM	2.0	268.0	W	0.1	-	-	0.9	167.0	SSE	1.2	58.0	ENE	0.5	359.0	N	2.7	30.0	NNE	0.3	162.0	SSE
02:00 PM - 03:00 PM	0.8	79.0	E	0.4	147.0	SSE	1.7	102.0	ESE	1.9	91.0	E	1.1	32.0	NNE	2.1	108.0	ESE	1.2	75.0	ENE
03:00 PM - 04:00 PM	1.7	132.0	SE	0.5	301.0	WNW	1.4	267.0	W	0.6	101.0	E	0.0	-	-	1.0	37.0	NE	1.3	83.0	E
04:00 PM - 05:00 PM	0.0	-	-	0.6	54.0	NE	0.5	48.0	NE	0.8	130.0	SE	0.5	310.0	NW	3.0	81.0	E	2.0	122.0	ESE
05:00 PM - 06:00 PM	0.5	59.0	ENE	0.2	-	-	0.6	158.0	SSE	0.2	-	-	0.0	-	-	0.8	102.0	ESE	0.6	121.0	ESE
06:00 PM - 07:00 PM	0.0	-	-	0.0	-	-	1.4	263.0	W	0.4	48.0	NE	0.0	-	-	0.6	82.0	E	1.1	61.0	ENE
07:00 PM - 08:00 PM	0.5	81.0	E	0.5	99.0	E	0.3	113.0	ESE	1.2	127.0	SE	0.7	64.0	E	1.2	86.0	E	0.5	113.0	ESE
08:00 PM - 09:00 PM	0.0	-	-	0.0	-	-	0.3	31.0	NNE	0.7	97.0	E	0.0	-	-	0.0	-	-	0.5	107.0	ESE
09:00 PM - 10:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.2	-	-	0.0	-	-	0.0	-	-	1.1	106.0	ESE
10:00 PM - 11:00 PM	0.0	-	-	0.0	-	-	0.4	49.0	NE	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
11:00 PM - 12:00 AM	0.1	-	-	0.9	292.0	WNW	0.0	-	-	0.0	-	-	0.5	50.0	NE	0.0	-	-	1.0	86.0	E
12:00 AM - 01:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.6	91.0	E	0.0	-	-	1.3	107.0	ESE	0.7	103.0	ESE
01:00 AM - 02:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.3	84.0	E	0.0	-	-	0.3	40.0	NE	2.5	98.0	E
02:00 AM - 03:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.4	105.0	ESE	0.1	-	-
03:00 AM - 04:00 AM	0.3	71.0	ENE	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.2	-	-	0.2	-	-
04:00 AM - 05:00 AM	0.0	-	-	0.1	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.2	-	-	0.0	-	-
05:00 AM - 06:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
06:00 AM - 07:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.2	-	-
07:00 AM - 08:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.6	111.0	ESE	0.4	106.0	ESE	0.5	80.0	E
08:00 AM - 09:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.8	356.0	N	0.4	152.0	SSE
09:00 AM - 10:00 AM	0.3	108.0	ESE	0.0	-	-	0.6	81.0	E	0.8	93.0	E	0.0	-	-	0.8	103.0	ESE	1.2	123.0	ESE

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jittranont
Assistant General Manager

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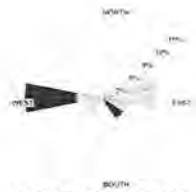
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143616
Date Received :May 13, 2025
Date Reported :May 16, 2025
Report Number :3201060-1

Wind Rose



Date : May 02-03, 2025

Date : May 03-04, 2025

Date : May 04-05, 2025

Date : May 05-06, 2025

Date : May 06-07, 2025

Date : May 07-08, 2025

Date : May 08-09, 2025

Date : May 02-09, 2025

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.00
1.7-3.3	6.55
0.3-1.7	42.86
Calms	50.60

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Approved by

Sarayuth Jittranont
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143654
Date Received : Jun 27, 2025
Date Reported : Jul 04, 2025
Report Number: 3201166-1

Sample Description	Air Quality
Location	สถานีบำรุงพันธ์สัตว์ (GPS 47P 0722144, 1617155)
Date Analysis Commenced	Jun 27, 2025
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Sampling Condition Pressure (mm Hg)	Sampling Condition Temperature (°C)	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)
24143654-1	Jun 17 - Jun 18, 2025	751	32.0	0.032	0.015
24143654-2	Jun 18 - Jun 19, 2025	751	32.8	0.032	0.017
24143654-3	Jun 19 - Jun 20, 2025	751	33.0	0.020	0.011
24143654-4	Jun 20 - Jun 21, 2025	751	32.9	0.024	0.015
24143654-5	Jun 21 - Jun 22, 2025	751	33.2	0.025	0.017
24143654-6	Jun 22 - Jun 23, 2025	751	32.4	0.015	0.012
24143654-7	Jun 23 - Jun 24, 2025	751	33.0	0.017	0.011
Guideline		-	-	0.33	0.12

Reference Method

Total Suspended Particulate : In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling)

Particulate Metter (PM-10) : In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling)

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Teeravut Sukdee

Approved by Orawan R.
Orawan Rakyong
Scientist (3)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143629
Date Received : Jun 27, 2025
Date Reported : Jul 02, 2025
Report Number: 3201086-1

Sample Description	Air Quality
Location	สถานีบำรุงพันธ์สัตว์ (GPS 47P 0722144, 1617155)
Parameter	Nitrogen dioxide (ppm)
Measurement Date	Jun 17, 2025 - Jun 24, 2025
Measurement by	Teeravut Sukdee

Time	24143629-1 Jun 17, 2025	24143629-2 Jun 18, 2025	24143629-3 Jun 19, 2025	24143629-4 Jun 20, 2025	24143629-5 Jun 21, 2025	24143629-6 Jun 22, 2025	24143629-7 Jun 23, 2025
09:00 AM - 10:00 AM	0.0078	0.0076	0.0085	0.0030	0.0036	0.0025	0.0028
10:00 AM - 11:00 AM	0.0063	0.0047	0.0059	0.0030	0.0021	0.0021	0.0028
11:00 AM - 12:00 PM	0.0056	0.0043	0.0054	0.0036	0.0021	0.0025	0.0032
12:00 PM - 01:00 PM	0.0051	0.0031	0.0044	0.0014	0.0023	0.0039	0.0031
01:00 PM - 02:00 PM	0.0032	0.0021	0.0039	0.0001	0.0025	0.0050	0.0045
02:00 PM - 03:00 PM	0.0025	0.0024	0.0029	0.0016	0.0039	0.0055	0.0057
03:00 PM - 04:00 PM	0.0023	0.0020	0.0020	0.0024	0.0054	0.0060	0.0050
04:00 PM - 05:00 PM	0.0024	0.0026	0.0026	0.0049	0.0054	0.0079	0.0051
05:00 PM - 06:00 PM	0.0018	0.0025	0.0053	0.0098	0.0081	0.0090	0.0065
06:00 PM - 07:00 PM	0.0025	0.0032	0.0087	0.0175	0.0126	0.0086	0.0085
07:00 PM - 08:00 PM	0.0032	0.0046	0.0027	0.0185	0.0197	0.0045	0.0093
08:00 PM - 09:00 PM	0.0054	0.0092	0.0070	0.0173	0.0139	0.0073	0.0116
09:00 PM - 10:00 PM	0.0095	0.0145	0.0139	0.0150	0.0081	0.0072	0.0097
10:00 PM - 11:00 PM	0.0111	0.0160	0.0108	0.0084	0.0064	0.0045	0.0095
11:00 PM - 12:00 AM	0.0101	0.0094	0.0117	0.0079	0.0042	0.0041	0.0080
12:00 AM - 01:00 AM	0.0190	0.0159	0.0124	0.0075	0.0038	0.0054	0.0069
01:00 AM - 02:00 AM	0.0141	0.0151	0.0098	0.0064	0.0053	0.0057	0.0081
02:00 AM - 03:00 AM	0.0144	0.0113	0.0098	0.0067	0.0054	0.0071	0.0083
03:00 AM - 04:00 AM	0.0124	0.0069	0.0076	0.0094	0.0073	0.0056	0.0086
04:00 AM - 05:00 AM	0.0110	0.0054	0.0058	0.0094	0.0079	0.0096	0.0079
05:00 AM - 06:00 AM	0.0097	0.0044	0.0084	0.0061	0.0056	0.0067	0.0063
06:00 AM - 07:00 AM	0.0100	0.0062	0.0105	0.0035	0.0032	0.0027	0.0034
07:00 AM - 08:00 AM	0.0097	0.0090	0.0076	0.0025	0.0024	0.0021	0.0034
08:00 AM - 09:00 AM	0.0078	0.0087	0.0055	0.0046	0.0027	0.0029	0.0031
Average	0.0078	0.0071	0.0072	0.0071	0.0060	0.0054	0.0063
1hr - Maximum	0.0190	0.0160	0.0139	0.0185	0.0197	0.0096	0.0116
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).
Reference Method : U.S. Environmental Protection AgencyMethod Part 50 App. F (Chemiluminescence)

Approved by Orawan R.
Orawan Rakyong
Scientist (3)

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143641
Date Received : Jun 27, 2025
Date Reported : Jul 02, 2025
Report Number: 3201141-1

Sample Description Air Quality
Location สถานีบำรุงพันธ์สัตว์ (GPS 47P 0722144, 1617155)
Parameter Sulfur Dioxide (ppm)
Measurement Date Jun 17, 2025 - Jun 24, 2025
Measurement by Teeravut Sukdee

Time	24143641-1 Jun 17, 2025	24143641-2 Jun 18, 2025	24143641-3 Jun 19, 2025	24143641-4 Jun 20, 2025	24143641-5 Jun 21, 2025	24143641-6 Jun 22, 2025	24143641-7 Jun 23, 2025
10:00 AM - 11:00 AM	0.0012	0.0015	0.0014	0.0017	0.0033	0.0016	0.0023
11:00 AM - 12:00 PM	0.0013	0.0018	0.0016	0.0019	0.0024	0.0018	0.0025
12:00 PM - 01:00 PM	0.0013	0.0020	0.0017	0.0039	0.0018	0.0020	0.0029
01:00 PM - 02:00 PM	0.0021	0.0019	0.0026	0.0018	0.0024	0.0017	0.0026
02:00 PM - 03:00 PM	0.0025	0.0024	0.0019	0.0007	0.0024	0.0018	0.0025
03:00 PM - 04:00 PM	0.0021	0.0022	0.0020	0.0025	0.0026	0.0018	0.0022
04:00 PM - 05:00 PM	0.0018	0.0019	0.0021	0.0020	0.0019	0.0017	0.0022
05:00 PM - 06:00 PM	0.0021	0.0015	0.0026	0.0020	0.0016	0.0018	0.0022
06:00 PM - 07:00 PM	0.0016	0.0018	0.0023	0.0018	0.0016	0.0017	0.0021
07:00 PM - 08:00 PM	0.0016	0.0014	0.0017	0.0018	0.0025	0.0017	0.0020
08:00 PM - 09:00 PM	0.0015	0.0012	0.0015	0.0017	0.0021	0.0016	0.0020
09:00 PM - 10:00 PM	0.0016	0.0013	0.0016	0.0019	0.0018	0.0016	0.0020
10:00 PM - 11:00 PM	0.0015	0.0014	0.0015	0.0021	0.0017	0.0015	0.0019
11:00 PM - 12:00 AM	0.0014	0.0012	0.0015	0.0017	0.0016	0.0015	0.0020
12:00 AM - 01:00 AM	0.0015	0.0012	0.0016	0.0017	0.0016	0.0015	0.0020
01:00 AM - 02:00 AM	0.0018	0.0011	0.0016	0.0016	0.0016	0.0015	0.0019
02:00 AM - 03:00 AM	0.0015	0.0011	0.0016	0.0017	0.0015	0.0017	0.0019
03:00 AM - 04:00 AM	0.0014	0.0011	0.0016	0.0017	0.0015	0.0017	0.0019
04:00 AM - 05:00 AM	0.0015	0.0012	0.0017	0.0016	0.0015	0.0018	0.0019
05:00 AM - 06:00 AM	0.0016	0.0011	0.0016	0.0017	0.0015	0.0018	0.0021
06:00 AM - 07:00 AM	0.0020	0.0012	0.0015	0.0018	0.0017	0.0019	0.0022
07:00 AM - 08:00 AM	0.0016	0.0010	0.0016	0.0018	0.0016	0.0019	0.0024
08:00 AM - 09:00 AM	0.0015	0.0011	0.0016	0.0015	0.0016	0.0019	0.0025
09:00 AM - 10:00 AM	0.0014	0.0012	0.0016	0.0021	0.0016	0.0020	0.0025
Average	0.0016	0.0014	0.0018	0.0019	0.0019	0.0017	0.0022
1hr - Maximum	0.0025	0.0024	0.0026	0.0039	0.0033	0.0020	0.0029
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).
Reference Method : U.S. Environmental Protection Agency, EPA Method Part 53 and 58

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143617
Date Received :Jun 27, 2025
Date Reported :Jul 03, 2025
Report Number :3201062-1

Sample Number 24143617-1 to 7
Parameter Wind Speed / Wind Direction
Location สถานีบำรุงพันธ์สัตว์ (GPS 47P 0722144, 1617155)
Sampling Date Jun 17 - Jun 24, 2025
Sampling by Teeravut Sukdee

Time	Jun 17 - Jun 18, 2025		Jun 18 - Jun 19, 2025		Jun 19 - Jun 20, 2025		Jun 20 - Jun 21, 2025		Jun 21 - Jun 22, 2025		Jun 22 - Jun 23, 2025		Jun 23 - Jun 24, 2025	
	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)
10:00 AM - 11:00 AM	1.5	270.0 W	0.9	309.0 NW	0.7	306.0 NW	0.6	164.0 SSE	1.1	347.0 NNW	2.0	181.0 S	1.6	146.0 SE
11:00 AM - 12:00 PM	2.7	195.0 SSW	1.9	219.0 SW	1.7	214.0 SW	0.8	214.0 SW	1.6	241.0 WSW	1.6	159.0 SSE	3.3	173.0 S
12:00 PM - 01:00 PM	1.1	355.0 N	3.0	171.0 S	1.2	229.0 SW	0.8	258.0 WSW	2.1	185.0 S	1.8	164.0 SSE	2.4	185.0 S
01:00 PM - 02:00 PM	0.5	200.0 SSW	1.9	216.0 SW	2.8	197.0 SSW	0.7	197.0 SSW	3.6	200.0 SSW	5.0	233.0 SW	0.9	230.0 SW
02:00 PM - 03:00 PM	3.8	157.0 SSE	2.3	179.0 S	0.3	225.0 SW	1.6	219.0 SW	0.4	174.0 S	3.3	99.0 E	1.1	188.0 S
03:00 PM - 04:00 PM	1.8	200.0 SSW	2.4	245.0 WSW	0.4	241.0 WSW	1.5	202.0 SSW	1.4	198.0 SSW	2.9	156.0 SSE	2.7	163.0 SSE
04:00 PM - 05:00 PM	2.1	196.0 SSW	4.5	209.0 SSW	0.1	- -	0.5	278.0 W	2.0	163.0 SSE	1.7	156.0 SSE	2.2	148.0 SSE
05:00 PM - 06:00 PM	1.6	130.0 SE	1.9	161.0 SSE	1.5	143.0 SE	0.1	- -	2.8	193.0 SSW	2.0	159.0 SSE	2.5	116.0 ESE
06:00 PM - 07:00 PM	2.3	184.0 S	2.3	183.0 S	1.9	219.0 SW	0.0	- -	0.3	154.0 SSE	3.0	119.0 ESE	2.9	172.0 S
07:00 PM - 08:00 PM	0.0	- -	1.1	128.0 SE	2.0	240.0 WSW	0.0	- -	0.7	138.0 SE	1.3	102.0 ESE	2.3	216.0 SW
08:00 PM - 09:00 PM	0.4	38.0 NE	1.8	125.0 SE	1.1	149.0 SSE	0.9	124.0 SE	0.5	184.0 S	2.1	147.0 SSE	1.8	131.0 SE
09:00 PM - 10:00 PM	0.0	- -	2.1	184.0 S	0.5	84.0 E	0.4	113.0 ESE	0.6	144.0 SE	1.8	132.0 SE	0.6	147.0 SSE
10:00 PM - 11:00 PM	0.5	84.0 E	1.6	338.0 NNW	0.3	103.0 ESE	1.0	169.0 S	1.6	172.0 S	1.0	68.0 ENE	0.5	70.0 ENE
11:00 PM - 12:00 AM	0.0	- -	0.6	76.0 ENE	1.1	114.0 ESE	1.8	154.0 SSE	0.8	165.0 SSE	0.2	- -	0.4	65.0 ENE
12:00 AM - 01:00 AM	0.0	- -	0.7	66.0 ENE	1.0	99.0 E	1.1	170.0 S	1.3	140.0 SE	0.0	- -	2.5	126.0 SE
01:00 AM - 02:00 AM	0.1	- -	0.3	90.0 E	0.7	112.0 ESE	2.0	192.0 SSW	4.2	177.0 S	0.8	71.0 ENE	0.7	113.0 ESE
02:00 AM - 03:00 AM	0.8	172.0 S	0.6	81.0 E	1.0	111.0 ESE	2.4	194.0 SSW	0.9	138.0 SE	0.9	94.0 E	0.9	90.0 E
03:00 AM - 04:00 AM	0.6	61.0 ENE	0.2	- -	0.0	- -	1.5	205.0 SSW	0.2	- -	0.6	60.0 ENE	0.0	- -
04:00 AM - 05:00 AM	0.0	- -	0.0	- -	0.8	114.0 ESE	0.4	159.0 SSE	1.6	157.0 SSE	0.5	95.0 E	0.7	92.0 E
05:00 AM - 06:00 AM	0.1	- -	0.9	108.0 ESE	0.8	88.0 E	0.6	131.0 SE	0.0	- -	0.7	70.0 ENE	0.6	90.0 E
06:00 AM - 07:00 AM	0.0	- -	0.8	93.0 E	0.3	115.0 ESE	0.7	195.0 SSW	1.2	114.0 ESE	0.7	115.0 ESE	0.6	78.0 ENE
07:00 AM - 08:00 AM	0.9	159.0 SSE	0.2	- -	0.9	128.0 SE	1.2	164.0 SSE	0.9	150.0 SSE	0.8	138.0 SE	0.8	153.0 SSE
08:00 AM - 09:00 AM	1.6	161.0 SSE	0.7	177.0 S	1.1	148.0 SSE	2.7	191.0 S	2.0	128.0 SE	1.3	158.0 SSE	1.9	153.0 SSE
09:00 AM - 10:00 AM	2.0	158.0 SSE	1.4	228.0 SW	1.5	185.0 S	0.8	242.0 WSW	2.5	136.0 SE	1.7	171.0 S	1.7	197.0 SSW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jittranont
Assistant General Manager

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143617
Date Received :Jun 27, 2025
Date Reported :Jul 03, 2025
Report Number :3201062-1

Wind Rose

Date : Jun 17-18, 2025

Date : Jun 18-19, 2025

Date : Jun 19-20, 2025

Date : Jun 20-21, 2025

Date : Jun 21-22, 2025

Date : Jun 22-23, 2025

Date : Jun 23-24, 2025

Date : Jun 17-24, 2025

	WS (m/s)	%
	≥ 10.0	0.00
	8.0-10.0	0.00
	5.5-8.0	0.00
	3.3-5.5	4.17
	1.7-3.3	27.38
	0.3-1.7	55.95
	Calms	12.50

Location : สถานีปารุงพันธ์สัตว์ (GPS 47P 0722144, 1617155)

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

Approved by

Sarayuth Jittranont
Assistant General Manager

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143655
Date Received : May 13, 2025
Date Reported : May 20, 2025
Report Number: 3201169-1

Sample Description Air Quality
Location สถานีไฟฟ้าแรงสูง (สระบุรี) (GPS 47P 0724357, 1616658)
Date Analysis Commenced May 14, 2025
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
24143655-1	May 02 - May 03, 2025	0.088	0.049	749*	34.1*
24143655-2	May 03 - May 04, 2025	0.059	0.031	749*	30.8*
24143655-3	May 04 - May 05, 2025	0.044	0.025	749*	33.1*
24143655-4	May 05 - May 06, 2025	0.036	0.021	749*	34.0*
24143655-5	May 06 - May 07, 2025	0.058	0.029	749*	33.0*
24143655-6	May 07 - May 08, 2025	0.020	0.015	749*	35.6*
24143655-7	May 08 - May 09, 2025	0.028	0.017	749*	35.5*
Guideline		0.33	0.12	-	-

Reference Method
Total Suspended Particulate : In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling)
Particulate Metter (PM-10) : In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling)

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
Sampled By : Teeravut Sukdee

Remark : Result (s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by Orawan R.

Orawan Rakyong
Scientist (3)

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143630
Date Received : May 13, 2025
Date Reported : May 15, 2025
Report Number: 3201091-1

Sample Description Air Quality
Location สถานีไฟฟ้าแรงสูง (สระบุรี) (GPS 47P 0724357, 1616658)
Parameter Nitrogen dioxide (ppm)
Measurement Date May 02, 2025 - May 09, 2025
Measurement by Teeravut Sukdee

Time	24143630-1 May 02, 2025	24143630-2 May 03, 2025	24143630-3 May 04, 2025	24143630-4 May 05, 2025	24143630-5 May 06, 2025	24143630-6 May 07, 2025	24143630-7 May 08, 2025
01:00 PM - 02:00 PM	0.0097	0.0027	0.0062	0.0061	0.0066	0.0063	0.0057
02:00 PM - 03:00 PM	0.0091	0.0082	0.0068	0.0069	0.0060	0.0064	0.0059
03:00 PM - 04:00 PM	0.0068	0.0085	0.0057	0.0064	0.0061	0.0056	0.0057
04:00 PM - 05:00 PM	0.0054	0.0064	0.0055	0.0070	0.0057	0.0054	0.0053
05:00 PM - 06:00 PM	0.0029	0.0066	0.0088	0.0063	0.0052	0.0062	0.0054
06:00 PM - 07:00 PM	0.0031	0.0071	0.0071	0.0060	0.0029	0.0057	0.0054
07:00 PM - 08:00 PM	0.0058	0.0064	0.0079	0.0058	0.0035	0.0054	0.0057
08:00 PM - 09:00 PM	0.0060	0.0035	0.0067	0.0060	0.0068	0.0059	0.0052
09:00 PM - 10:00 PM	0.0059	0.0056	0.0066	0.0064	0.0065	0.0056	0.0050
10:00 PM - 11:00 PM	0.0033	0.0062	0.0060	0.0054	0.0056	0.0069	0.0048
11:00 PM - 12:00 AM	0.0047	0.0054	0.0072	0.0059	0.0056	0.0060	0.0053
12:00 AM - 01:00 AM	0.0066	0.0052	0.0073	0.0064	0.0056	0.0058	0.0056
01:00 AM - 02:00 AM	0.0072	0.0067	0.0067	0.0053	0.0065	0.0066	0.0061
02:00 AM - 03:00 AM	0.0076	0.0069	0.0062	0.0055	0.0065	0.0061	0.0059
03:00 AM - 04:00 AM	0.0084	0.0062	0.0060	0.0060	0.0057	0.0062	0.0055
04:00 AM - 05:00 AM	0.0071	0.0062	0.0084	0.0054	0.0067	0.0066	0.0062
05:00 AM - 06:00 AM	0.0075	0.0058	0.0065	0.0053	0.0069	0.0066	0.0068
06:00 AM - 07:00 AM	0.0088	0.0063	0.0060	0.0054	0.0065	0.0069	0.0055
07:00 AM - 08:00 AM	0.0084	0.0077	0.0057	0.0058	0.0067	0.0063	0.0058
08:00 AM - 09:00 AM	0.0075	0.0091	0.0063	0.0058	0.0060	0.0061	0.0063
09:00 AM - 10:00 AM	0.0065	0.0087	0.0084	0.0069	0.0060	0.0065	0.0059
10:00 AM - 11:00 AM	0.0068	0.0065	0.0067	0.0061	0.0064	0.0063	0.0060
11:00 AM - 12:00 PM	0.0068	0.0074	0.0063	0.0049	0.0063	0.0056	0.0055
12:00 PM - 01:00 PM	0.0034	0.0079	0.0068	0.0065	0.0062	0.0059	0.0065
Average	0.0065	0.0066	0.0067	0.0060	0.0059	0.0061	0.0057
1hr - Maximum	0.0097	0.0091	0.0088	0.0070	0.0069	0.0069	0.0068
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).
Reference Method : U.S. Environmental Protection AgencyMethod Part 50 App. F (Chemiluminescence)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by Orawan R.
Orawan Rakyong
Scientist (3)

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143642
Date Received : May 13, 2025
Date Reported : May 15, 2025
Report Number: 3201144-1

Sample Description Air Quality
Location สถานีไฟฟ้าแรงสูง (สระบุรี) (GPS 47P 0724357, 1616658)
Parameter Sulfur Dioxide (ppm)
Measurement Date May 02, 2025 - May 09, 2025
Measurement by Teeravut Sukdee

Time	24143642-1 May 02, 2025	24143642-2 May 03, 2025	24143642-3 May 04, 2025	24143642-4 May 05, 2025	24143642-5 May 06, 2025	24143642-6 May 07, 2025	24143642-7 May 08, 2025
01:00 PM - 02:00 PM	0.0034	0.0086	0.0050	0.0085	0.0097	0.0091	0.0097
02:00 PM - 03:00 PM	0.0017	0.0079	0.0085	0.0100	0.0115	0.0106	0.0146
03:00 PM - 04:00 PM	0.0019	0.0078	0.0096	0.0102	0.0193	0.0110	0.0134
04:00 PM - 05:00 PM	0.0015	0.0102	0.0096	0.0101	0.0121	0.0122	0.0143
05:00 PM - 06:00 PM	0.0032	0.0050	0.0115	0.0110	0.0098	0.0114	0.0154
06:00 PM - 07:00 PM	0.0044	0.0073	0.0071	0.0109	0.0096	0.0082	0.0116
07:00 PM - 08:00 PM	0.0060	0.0090	0.0106	0.0080	0.0087	0.0099	0.0109
08:00 PM - 09:00 PM	0.0077	0.0032	0.0103	0.0070	0.0085	0.0031	0.0094
09:00 PM - 10:00 PM	0.0121	0.0053	0.0028	0.0101	0.0094	0.0112	0.0115
10:00 PM - 11:00 PM	0.0051	0.0073	0.0042	0.0021	0.0099	0.0017	0.0028
11:00 PM - 12:00 AM	0.0076	0.0037	0.0070	0.0085	0.0025	0.0033	0.0138
12:00 AM - 01:00 AM	0.0098	0.0102	0.0089	0.0025	0.0100	0.0114	0.0014
01:00 AM - 02:00 AM	0.0098	0.0033	0.0031	0.0090	0.0019	0.0013	0.0032
02:00 AM - 03:00 AM	0.0113	0.0075	0.0072	0.0028	0.0107	0.0028	0.0086
03:00 AM - 04:00 AM	0.0094	0.0072	0.0026	0.0088	0.0014	0.0107	0.0023
04:00 AM - 05:00 AM	0.0087	0.0017	0.0044	0.0027	0.0028	0.0012	0.0106
05:00 AM - 06:00 AM	0.0073	0.0032	0.0094	0.0104	0.0104	0.0027	0.0027
06:00 AM - 07:00 AM	0.0099	0.0094	0.0030	0.0020	0.0014	0.0076	0.0023
07:00 AM - 08:00 AM	0.0037	0.0011	0.0113	0.0044	0.0133	0.0025	0.0108
08:00 AM - 09:00 AM	0.0057	0.0031	0.0021	0.0111	0.0034	0.0122	0.0029
09:00 AM - 10:00 AM	0.0098	0.0090	0.0058	0.0020	0.0023	0.0015	0.0020
10:00 AM - 11:00 AM	0.0061	0.0024	0.0085	0.0045	0.0049	0.0030	0.0039
11:00 AM - 12:00 PM	0.0092	0.0043	0.0041	0.0073	0.0062	0.0055	0.0068
12:00 PM - 01:00 PM	0.0075	0.0083	0.0073	0.0095	0.0086	0.0101	0.0095
Average	0.0068	0.0061	0.0068	0.0072	0.0078	0.0068	0.0081
1hr - Maximum	0.0121	0.0102	0.0115	0.0111	0.0193	0.0122	0.0154
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).
Reference Method : U.S. Environmental Protection Agency, EPA Method Part 53 and 58

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Approved by Orawan R.
Orawan Rakyong
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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143618
Date Received :May 13, 2025
Date Reported :May 16, 2025
Report Number :3201065-1

Sample Number 24143618-1 to 7
Parameter Wind Speed / Wind Direction
Location สถานีไฟฟ้าแรงสูง (สระบุรี) (GPS 47P 0724357, 1616658)
Sampling Date May 02 – May 09, 2025
Sampling by Teeravut Sukdee

Time	May 02 - May 03, 2025			May 03 - May 04, 2025			May 04 - May 05, 2025			May 05 - May 06, 2025			May 06 - May 07, 2025			May 07 - May 08, 2025			May 08 - May 09, 2025		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
01:00 PM - 02:00 PM	1.4	95.0	E	1.7	103.0	ESE	0.6	329.0	NNW	0.6	329.0	NNW	2.0	187.0	S	2.4	233.0	SW	3.4	204.0	SSW
02:00 PM - 03:00 PM	0.8	122.0	ESE	0.8	40.0	NE	3.5	190.0	S	3.5	190.0	S	3.0	20.0	NNE	3.3	196.0	SSW	3.9	202.0	SSW
03:00 PM - 04:00 PM	0.5	79.0	E	0.5	279.0	W	1.3	193.0	SSW	1.3	193.0	SSW	0.9	18.0	NNE	4.5	120.0	ESE	5.5	208.0	SSW
04:00 PM - 05:00 PM	0.7	104.0	ESE	1.5	265.0	W	1.0	166.0	SSE	1.0	166.0	SSE	0.9	61.0	ENE	2.1	171.0	S	2.4	172.0	S
05:00 PM - 06:00 PM	1.6	170.0	S	0.7	154.0	SSE	2.4	191.0	S	2.4	191.0	S	1.5	161.0	SSE	1.2	208.0	SSW	2.5	204.0	SSW
06:00 PM - 07:00 PM	0.8	156.0	SSE	3.6	137.0	SE	1.2	314.0	NW	1.2	314.0	NW	0.9	170.0	S	2.0	158.0	SSE	1.6	172.0	S
07:00 PM - 08:00 PM	0.0	-	-	0.1	-	-	1.5	238.0	WSW	1.5	238.0	WSW	2.0	190.0	S	0.6	95.0	E	1.4	196.0	SSW
08:00 PM - 09:00 PM	0.4	249.0	WSW	1.0	203.0	SSW	0.0	-	-	0.0	-	-	1.6	190.0	S	0.8	181.0	S	0.8	221.0	SW
09:00 PM - 10:00 PM	0.3	179.0	S	0.0	-	-	0.9	270.0	W	0.9	270.0	W	2.1	222.0	SW	0.0	-	-	0.6	181.0	S
10:00 PM - 11:00 PM	1.4	275.0	W	1.4	306.0	NW	0.8	259.0	W	0.8	259.0	W	1.6	179.0	S	1.2	216.0	SW	1.2	232.0	SW
11:00 PM - 12:00 AM	0.0	-	-	0.1	-	-	1.0	223.0	SW	1.0	223.0	SW	0.5	157.0	SSE	1.0	230.0	SW	1.2	222.0	SW
12:00 AM - 01:00 AM	0.4	81.0	E	1.0	311.0	NW	1.0	311.0	NW	1.4	189.0	S	0.7	232.0	SW	2.1	176.0	S	2.3	169.0	S
01:00 AM - 02:00 AM	0.0	-	-	0.3	81.0	E	0.3	81.0	E	1.0	190.0	S	1.2	181.0	S	1.4	221.0	SW	1.4	173.0	S
02:00 AM - 03:00 AM	1.1	41.0	NE	0.0	-	-	0.0	-	-	0.0	-	-	1.7	198.0	SSW	1.4	221.0	SW	3.4	173.0	S
03:00 AM - 04:00 AM	0.0	-	-	0.6	276.0	W	0.6	276.0	W	0.8	180.0	S	0.0	-	-	1.9	224.0	SW	2.9	203.0	SSW
04:00 AM - 05:00 AM	0.2	-	-	0.0	-	-	0.0	-	-	0.0	-	-	1.2	215.0	SW	1.4	209.0	SSW	1.6	193.0	SSW
05:00 AM - 06:00 AM	0.9	184.0	S	0.0	-	-	0.0	-	-	0.0	-	-	1.4	232.0	SW	1.3	167.0	SSE	1.6	184.0	S
06:00 AM - 07:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.7	268.0	W	0.7	191.0	S	1.4	228.0	SW	1.1	185.0	S
07:00 AM - 08:00 AM	0.7	237.0	WSW	0.3	180.0	S	0.3	180.0	S	0.6	180.0	S	1.5	222.0	SW	1.7	183.0	S	2.3	150.0	SSE
08:00 AM - 09:00 AM	1.1	206.0	SSW	1.9	113.0	ESE	1.9	113.0	ESE	1.1	162.0	SSE	2.8	217.0	SW	2.5	204.0	SSW	1.8	179.0	S
09:00 AM - 10:00 AM	1.5	164.0	SSE	2.3	206.0	SSW	2.3	206.0	SSW	2.3	151.0	SSE	3.6	176.0	S	4.8	239.0	WSW	3.2	167.0	SSE
10:00 AM - 11:00 AM	1.7	159.0	SSE	1.8	172.0	S	1.8	172.0	S	2.6	182.0	S	3.8	212.0	SSW	2.3	177.0	S	1.5	156.0	SSE
11:00 AM - 12:00 PM	1.9	200.0	SSW	2.6	352.0	N	2.6	352.0	N	2.4	206.0	SSW	3.6	233.0	SW	2.0	194.0	SSW	0.9	262.0	W
12:00 PM - 01:00 PM	1.1	145.0	SE	1.7	277.0	W	1.7	277.0	W	1.0	189.0	S	4.1	202.0	SSW	3.4	208.0	SSW	2.7	175.0	S

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jittranont
Assistant General Manager

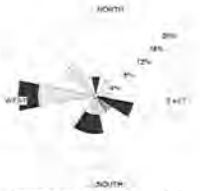
Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143618
Date Received :May 13, 2025
Date Reported :May 16, 2025
Report Number :3201065-1

Wind Rose

Date : May 02-03, 2025



Date : May 03-04, 2025

Date : May 04-05, 2025

Date : May 05-06, 2025

Date : May 06-07, 2025

Date : May 07-08, 2025

Date : May 08-09, 2025

Date : May 02-09, 2025

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.60
3.3-5.5	8.33
1.7-3.3	24.41
0.3-1.7	52.38
Calms	14.29

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Approved by

Sarayuth Jittranont
Assistant General Manager

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Analysis / Test Report

TESTING
No.0009

Lot ID: 24143656
Date Received : May 13, 2025
Date Reported : May 20, 2025
Report Number: 3201170-1

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Sample Description Air Quality
Location บ้านผาเสด็จ (GPS 47P 0726598, 1619844)
Date Analysis Commenced May 14, 2025
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
24143656-1	May 02 - May 03, 2025	0.105	0.064	744*	33.4*
24143656-2	May 03 - May 04, 2025	0.098	0.045	744*	30.5*
24143656-3	May 04 - May 05, 2025	0.069	0.034	744*	32.8*
24143656-4	May 05 - May 06, 2025	0.070	0.031	744*	33.6*
24143656-5	May 06 - May 07, 2025	0.084	0.042	744*	32.6*
24143656-6	May 07 - May 08, 2025	0.046	0.028	744*	34.9*
24143656-7	May 08 - May 09, 2025	0.050	0.028	744*	34.5*
Guideline		0.33	0.12	-	-

Reference Method
Total Suspended Particulate : In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling)
Particulate Metter (PM-10) : In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling)

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
Sampled By : Teeravut Sukdee

Remark : Result (s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by Orawan R.
Orawan Rakyong
Scientist (3)

Analysis / Test Report

Lot ID: 24143631
Date Received : May 13, 2025
Date Reported : May 15, 2025
Report Number: 3201093-1

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Sample Description Air Quality
Location บ้านผาเสด็จ (GPS 47P 0726598, 1619844)
Parameter Nitrogen dioxide (ppm)
Measurement Date May 02, 2025 - May 09, 2025
Measurement by Teeravut Sukdee

Time	24143631-1 May 02, 2025	24143631-2 May 03, 2025	24143631-3 May 04, 2025	24143631-4 May 05, 2025	24143631-5 May 06, 2025	24143631-6 May 07, 2025	24143631-7 May 08, 2025
11:00 AM - 12:00 PM	0.0072	0.0115	0.0075	0.0135	0.0134	0.0146	0.0143
12:00 PM - 01:00 PM	0.0073	0.0160	0.0140	0.0120	0.0110	0.0104	0.0127
01:00 PM - 02:00 PM	0.0067	0.0131	0.0181	0.0165	0.0064	0.0035	0.0143
02:00 PM - 03:00 PM	0.0091	0.0034	0.0098	0.0194	0.0081	0.0171	0.0183
03:00 PM - 04:00 PM	0.0049	0.0041	0.0108	0.0270	0.0111	0.0091	0.0137
04:00 PM - 05:00 PM	0.0116	0.0134	0.0155	0.0148	0.0235	0.0121	0.0100
05:00 PM - 06:00 PM	0.0111	0.0148	0.0123	0.0041	0.0241	0.0198	0.0112
06:00 PM - 07:00 PM	0.0047	0.0149	0.0093	0.0061	0.0141	0.0206	0.0136
07:00 PM - 08:00 PM	0.0048	0.0177	0.0083	0.0059	0.0091	0.0184	0.0136
08:00 PM - 09:00 PM	0.0055	0.0199	0.0118	0.0072	0.0098	0.0270	0.0156
09:00 PM - 10:00 PM	0.0051	0.0164	0.0274	0.0115	0.0100	0.0212	0.0148
10:00 PM - 11:00 PM	0.0079	0.0165	0.0107	0.0102	0.0200	0.0244	0.0160
11:00 PM - 12:00 AM	0.0102	0.0074	0.0122	0.0212	0.0247	0.0106	0.0152
12:00 AM - 01:00 AM	0.0136	0.0112	0.0042	0.0282	0.0268	0.0158	0.0230
01:00 AM - 02:00 AM	0.0217	0.0177	0.0049	0.0105	0.0188	0.0165	0.0201
02:00 AM - 03:00 AM	0.0244	0.0183	0.0087	0.0171	0.0234	0.0216	0.0181
03:00 AM - 04:00 AM	0.0221	0.0123	0.0056	0.0162	0.0194	0.0193	0.0195
04:00 AM - 05:00 AM	0.0178	0.0122	0.0211	0.0193	0.0168	0.0189	0.0189
05:00 AM - 06:00 AM	0.0186	0.0096	0.0152	0.0161	0.0155	0.0175	0.0165
06:00 AM - 07:00 AM	0.0116	0.0091	0.0139	0.0146	0.0075	0.0164	0.0166
07:00 AM - 08:00 AM	0.0117	0.0077	0.0155	0.0172	0.0084	0.0094	0.0104
08:00 AM - 09:00 AM	0.0098	0.0099	0.0140	0.0135	0.0085	0.0151	0.0048
09:00 AM - 10:00 AM	0.0155	0.0167	0.0158	0.0100	0.0114	0.0096	0.0110
10:00 AM - 11:00 AM	0.0084	0.0159	0.0111	0.0098	0.0134	0.0085	0.0157
Average	0.0113	0.0129	0.0124	0.0142	0.0148	0.0157	0.0149
1hr - Maximum	0.0244	0.0199	0.0274	0.0282	0.0268	0.0270	0.0230
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).
Reference Method : U.S. Environmental Protection AgencyMethod Part 50 App. F (Chemiluminescence)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by Orawan R.
Orawan Rakyong
Scientist (3)

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143644
Date Received : May 13, 2025
Date Reported : May 15, 2025
Report Number: 3201145-1

Sample Description Air Quality
Location บ้านผาเสด็จ (GPS 47P 0726598, 1619844)
Parameter Sulfur Dioxide (ppm)
Measurement Date May 02, 2025 - May 09, 2025
Measurement by Teeravut Sukdee

Time	24143644-1 May 02, 2025	24143644-2 May 03, 2025	24143644-3 May 04, 2025	24143644-4 May 05, 2025	24143644-5 May 06, 2025	24143644-6 May 07, 2025	24143644-7 May 08, 2025
11:00 AM - 12:00 PM	0.0020	0.0012	0.0013	0.0018	0.0019	0.0021	0.0017
12:00 PM - 01:00 PM	0.0019	0.0013	0.0015	0.0021	0.0018	0.0019	0.0017
01:00 PM - 02:00 PM	0.0021	0.0014	0.0014	0.0021	0.0019	0.0017	0.0014
02:00 PM - 03:00 PM	0.0025	0.0018	0.0015	0.0019	0.0017	0.0013	0.0016
03:00 PM - 04:00 PM	0.0033	0.0013	0.0015	0.0020	0.0018	0.0015	0.0017
04:00 PM - 05:00 PM	0.0030	0.0007	0.0018	0.0016	0.0009	0.0017	0.0017
05:00 PM - 06:00 PM	0.0030	0.0012	0.0019	0.0015	0.0013	0.0014	0.0017
06:00 PM - 07:00 PM	0.0025	0.0013	0.0020	0.0015	0.0013	0.0013	0.0018
07:00 PM - 08:00 PM	0.0027	0.0012	0.0022	0.0018	0.0015	0.0015	0.0017
08:00 PM - 09:00 PM	0.0030	0.0011	0.0021	0.0015	0.0016	0.0016	0.0016
09:00 PM - 10:00 PM	0.0030	0.0012	0.0017	0.0013	0.0017	0.0017	0.0016
10:00 PM - 11:00 PM	0.0031	0.0013	0.0019	0.0015	0.0016	0.0018	0.0018
11:00 PM - 12:00 AM	0.0036	0.0012	0.0019	0.0015	0.0018	0.0019	0.0017
12:00 AM - 01:00 AM	0.0035	0.0010	0.0021	0.0014	0.0019	0.0019	0.0018
01:00 AM - 02:00 AM	0.0036	0.0009	0.0022	0.0016	0.0022	0.0020	0.0012
02:00 AM - 03:00 AM	0.0013	0.0010	0.0020	0.0015	0.0020	0.0024	0.0020
03:00 AM - 04:00 AM	0.0013	0.0011	0.0018	0.0013	0.0019	0.0022	0.0010
04:00 AM - 05:00 AM	0.0013	0.0012	0.0019	0.0014	0.0018	0.0016	0.0011
05:00 AM - 06:00 AM	0.0013	0.0013	0.0020	0.0016	0.0019	0.0017	0.0012
06:00 AM - 07:00 AM	0.0011	0.0013	0.0019	0.0018	0.0021	0.0019	0.0012
07:00 AM - 08:00 AM	0.0012	0.0012	0.0017	0.0017	0.0020	0.0012	0.0014
08:00 AM - 09:00 AM	0.0011	0.0013	0.0018	0.0018	0.0020	0.0016	0.0020
09:00 AM - 10:00 AM	0.0012	0.0019	0.0018	0.0017	0.0024	0.0018	0.0016
10:00 AM - 11:00 AM	0.0013	0.0013	0.0019	0.0018	0.0026	0.0020	0.0017
Average	0.0022	0.0012	0.0018	0.0017	0.0018	0.0017	0.0016
1hr - Maximum	0.0036	0.0019	0.0022	0.0021	0.0026	0.0024	0.0020
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).
Reference Method : U.S. Environmental Protection Agency, EPA Method Part 53 and 58

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by
Orawan R.
Orawan Rakyong
Scientist (3)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143619
Date Received :May 13, 2025
Date Reported :May 16, 2025
Report Number :3201069-1

Sample Number 24143619-1 to 7
Parameter Wind Speed / Wind Direction
Location บ้านผาเสด็จ (GPS 47P 0726598, 1619844)
Sampling Date May 02 - May 09, 2025
Sampling by Teeravut Sukdee

Time	May 02 - May 03, 2025		May 03 - May 04, 2025		May 04 - May 05, 2025		May 05 - May 06, 2025		May 06 - May 07, 2025		May 07 - May 08, 2025		May 08 - May 09, 2025	
	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)
11:00 AM - 12:00 PM	0.5	304.0 NW	0.2	- -	1.2	216.0 SW	0.3	144.0 SE	0.0	- -	0.9	21.0 NNE	0.0	- -
12:00 PM - 01:00 PM	0.0	- -	0.2	- -	2.0	155.0 SSE	0.8	232.0 SW	1.6	268.0 W	1.6	187.0 S	0.2	- -
01:00 PM - 02:00 PM	0.4	222.0 SW	3.1	89.0 E	0.7	68.0 ENE	1.5	255.0 WSW	0.3	274.0 W	0.5	56.0 NE	0.7	111.0 ESE
02:00 PM - 03:00 PM	0.9	330.0 NNW	0.2	- -	0.6	215.0 SW	2.4	57.0 ENE	1.1	306.0 NW	1.4	27.0 NNE	0.3	24.0 NNE
03:00 PM - 04:00 PM	0.7	286.0 WNW	0.5	58.0 ENE	0.0	- -	3.4	78.0 ENE	0.1	- -	4.2	187.0 S	2.2	74.0 ENE
04:00 PM - 05:00 PM	1.7	323.0 NW	1.9	101.0 E	0.2	- -	3.2	115.0 ESE	0.0	- -	1.2	220.0 SW	1.0	331.0 NNW
05:00 PM - 06:00 PM	0.5	223.0 SW	1.3	26.0 NNE	0.5	58.0 ENE	1.8	95.0 E	0.6	32.0 NNE	2.6	10.0 N	0.5	357.0 N
06:00 PM - 07:00 PM	0.4	260.0 W	1.5	337.0 NNW	2.6	40.0 NE	1.8	106.0 ESE	0.3	184.0 S	0.6	91.0 E	1.1	286.0 WNW
07:00 PM - 08:00 PM	0.2	- -	0.5	309.0 NW	0.7	298.0 WNW	1.1	15.0 NNE	0.0	- -	1.3	58.0 ENE	0.6	343.0 NNW
08:00 PM - 09:00 PM	0.0	- -	0.8	284.0 WNW	0.5	232.0 SW	2.9	114.0 ESE	0.2	- -	3.9	99.0 E	0.1	- -
09:00 PM - 10:00 PM	0.6	161.0 SSE	0.5	330.0 NNW	0.0	- -	1.7	130.0 SE	0.5	247.0 WSW	2.2	128.0 SE	0.6	178.0 S
10:00 PM - 11:00 PM	0.3	4.0 N	1.4	140.0 SE	0.0	- -	0.9	30.0 NNE	0.0	- -	1.7	127.0 SE	1.4	156.0 SSE
11:00 PM - 12:00 AM	0.0	- -	0.7	130.0 SE	0.0	- -	0.0	- -	0.0	- -	0.8	38.0 NE	0.0	- -
12:00 AM - 01:00 AM	0.0	- -	0.0	- -	0.0	- -	0.3	221.0 SW	1.0	260.0 W	0.2	- -	0.4	133.0 SE
01:00 AM - 02:00 AM	0.1	- -	0.0	- -	0.0	- -	0.6	249.0 WSW	0.1	- -	1.0	73.0 ENE	0.5	278.0 W
02:00 AM - 03:00 AM	0.0	- -	0.0	- -	0.0	- -	0.4	248.0 WSW	1.0	293.0 WNW	0.5	86.0 E	0.4	15.0 NNE
03:00 AM - 04:00 AM	0.3	344.0 NNW	0.0	- -	0.4	270.0 W	0.5	275.0 W	1.2	94.0 E	0.4	155.0 SSE	1.1	86.0 E
04:00 AM - 05:00 AM	0.0	- -	0.9	359.0 N	0.6	112.0 ESE	0.0	- -	1.7	101.0 E	0.4	111.0 ESE	0.5	70.0 ENE
05:00 AM - 06:00 AM	0.0	- -	0.0	- -	0.0	- -	0.0	- -	2.5	117.0 ESE	0.2	- -	1.1	91.0 E
06:00 AM - 07:00 AM	0.0	- -	2.9	101.0 E	0.6	152.0 SSE	0.9	274.0 W	3.5	88.0 E	1.0	84.0 E	0.5	333.0 NNW
07:00 AM - 08:00 AM	0.0	- -	0.7	126.0 SE	0.4	50.0 NE	0.1	- -	2.2	107.0 ESE	1.3	270.0 W	0.5	6.0 N
08:00 AM - 09:00 AM	0.3	132.0 SE	0.8	332.0 NNW	0.8	67.0 ENE	0.0	- -	0.7	306.0 NW	0.0	- -	0.6	268.0 W
09:00 AM - 10:00 AM	0.0	- -	0.0	- -	0.6	3.0 N	0.2	- -	1.0	76.0 ENE	0.0	- -	3.5	82.0 E
10:00 AM - 11:00 AM	0.9	325.0 NW	1.5	217.0 SW	0.6	74.0 ENE	0.0	- -	2.5	56.0 NE	1.1	227.0 SW	0.9	294.0 WNW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by
Sarayuth Jittranont
Assistant General Manager

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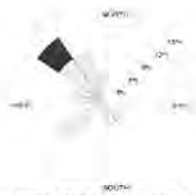
Analysis / Test Report

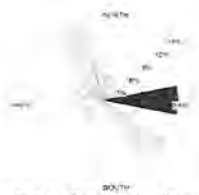
Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143619
Date Received :May 13, 2025
Date Reported :May 16, 2025
Report Number :3201069-1

Wind Rose



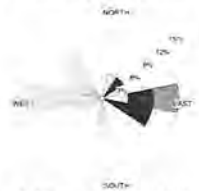
Date : May 02-03, 2025



Date : May 03-04, 2025

Date : May 04-05, 2025

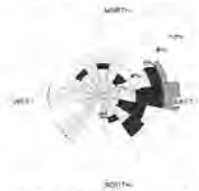
Date : May 05-06, 2025



Date : May 06-07, 2025

Date : May 07-08, 2025

Date : May 08-09, 2025



Date : May 02-09, 2025

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	2.98
1.7-3.3	11.91
0.3-1.7	53.57
Calms	31.55

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

Approved by

Sarayuth Jittranont
Assistant General Manager

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

LABORATORY ACCREDITATION BLA-DSS
TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143658
Date Received : May 13, 2025
Date Reported : May 20, 2025
Report Number: 3201175-1

Sample Description Air Quality
Location วัดพันลัน (GPS 47P 0729470, 1622879)
Date Analysis Commenced May 14, 2025
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
24143658-1	May 02 - May 03, 2025	0.106	0.045	741*	34.5*
24143658-2	May 03 - May 04, 2025	0.129	0.061	741*	30.7*
24143658-3	May 04 - May 05, 2025	0.143	0.060	741*	32.4*
24143658-4	May 05 - May 06, 2025	0.190	0.070	741*	33.3*
24143658-5	May 06 - May 07, 2025	0.098	0.042	741*	32.2*
24143658-6	May 07 - May 08, 2025	0.168	0.066	741*	35.0*
24143658-7	May 08 - May 09, 2025	0.180	0.067	741*	34.3*
Guideline		0.33	0.12	-	-

Reference Method

Total Suspended Particulate : In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling)
Particulate Metter (PM-10) : In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling)

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
Sampled By : Teeravut Sukdee

Remark : Result (s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

-

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by

Orawan Rakyong
Scientist (3)

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143632
Date Received : May 13, 2025
Date Reported : May 15, 2025
Report Number: 3201095-1

Sample Description Air Quality
Location วัดหินลับ (GPS 47P 0729470, 1622879)
Parameter Nitrogen dioxide (ppm)
Measurement Date May 02, 2025 - May 09, 2025
Measurement by Teeravut Sukdee

Time	24143632-1 May 02, 2025	24143632-2 May 03, 2025	24143632-3 May 04, 2025	24143632-4 May 05, 2025	24143632-5 May 06, 2025	24143632-6 May 07, 2025	24143632-7 May 08, 2025
12:00 PM - 01:00 PM	0.0064	0.0211	0.0075	0.0170	0.0173	0.0129	0.0102
01:00 PM - 02:00 PM	0.0055	0.0125	0.0092	0.0195	0.0104	0.0067	0.0065
02:00 PM - 03:00 PM	0.0066	0.0061	0.0083	0.0197	0.0171	0.0078	0.0031
03:00 PM - 04:00 PM	0.0111	0.0038	0.0085	0.0243	0.0190	0.0030	0.0128
04:00 PM - 05:00 PM	0.0206	0.0025	0.0095	0.0050	0.0226	0.0056	0.0238
05:00 PM - 06:00 PM	0.0145	0.0035	0.0085	0.0032	0.0218	0.0023	0.0232
06:00 PM - 07:00 PM	0.0158	0.0016	0.0065	0.0018	0.0259	0.0036	0.0167
07:00 PM - 08:00 PM	0.0120	0.0022	0.0042	0.0074	0.0201	0.0040	0.0123
08:00 PM - 09:00 PM	0.0048	0.0029	0.0026	0.0299	0.0118	0.0035	0.0153
09:00 PM - 10:00 PM	0.0078	0.0113	0.0024	0.0258	0.0032	0.0128	0.0124
10:00 PM - 11:00 PM	0.0096	0.0165	0.0216	0.0287	0.0032	0.0053	0.0040
11:00 PM - 12:00 AM	0.0061	0.0150	0.0280	0.0274	0.0031	0.0170	0.0053
12:00 AM - 01:00 AM	0.0051	0.0265	0.0298	0.0269	0.0026	0.0173	0.0040
01:00 AM - 02:00 AM	0.0060	0.0204	0.0222	0.0219	0.0033	0.0177	0.0060
02:00 AM - 03:00 AM	0.0066	0.0135	0.0041	0.0181	0.0030	0.0154	0.0016
03:00 AM - 04:00 AM	0.0056	0.0062	0.0044	0.0179	0.0183	0.0154	0.0104
04:00 AM - 05:00 AM	0.0051	0.0035	0.0067	0.0140	0.0133	0.0143	0.0097
05:00 AM - 06:00 AM	0.0032	0.0025	0.0082	0.0124	0.0062	0.0083	0.0184
06:00 AM - 07:00 AM	0.0064	0.0020	0.0221	0.0222	0.0197	0.0100	0.0156
07:00 AM - 08:00 AM	0.0054	0.0060	0.0253	0.0118	0.0227	0.0045	0.0160
08:00 AM - 09:00 AM	0.0136	0.0058	0.0148	0.0094	0.0198	0.0049	0.0171
09:00 AM - 10:00 AM	0.0229	0.0058	0.0230	0.0043	0.0224	0.0097	0.0040
10:00 AM - 11:00 AM	0.0203	0.0108	0.0137	0.0072	0.0173	0.0142	0.0130
11:00 AM - 12:00 PM	0.0080	0.0084	0.0201	0.0075	0.0097	0.0119	0.0028
Average	0.0095	0.0088	0.0130	0.0160	0.0139	0.0095	0.0110
1hr - Maximum	0.0229	0.0265	0.0298	0.0299	0.0259	0.0177	0.0238
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).
Reference Method : U.S. Environmental Protection AgencyMethod Part 50 App. F (Chemiluminescence)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by Orawan R.
Orawan Rakyong
Scientist (3)

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143645
Date Received : May 13, 2025
Date Reported : May 15, 2025
Report Number: 3201149-1

Sample Description Air Quality
Location วัดหินลับ (GPS 47P 0729470, 1622879)
Parameter Sulfur Dioxide (ppm)
Measurement Date May 02, 2025 - May 09, 2025
Measurement by Teeravut Sukdee

Time	24143645-1 May 02, 2025	24143645-2 May 03, 2025	24143645-3 May 04, 2025	24143645-4 May 05, 2025	24143645-5 May 06, 2025	24143645-6 May 07, 2025	24143645-7 May 08, 2025
12:00 PM - 01:00 PM	0.0019	0.0024	0.0029	0.0006	0.0033	0.0004	0.0020
01:00 PM - 02:00 PM	0.0020	0.0012	0.0021	0.0010	0.0047	0.0004	0.0019
02:00 PM - 03:00 PM	0.0021	0.0034	0.0010	0.0011	0.0021	0.0002	0.0016
03:00 PM - 04:00 PM	0.0021	0.0019	0.0012	0.0013	0.0029	0.0003	0.0014
04:00 PM - 05:00 PM	0.0021	0.0031	0.0018	0.0010	0.0031	0.0005	0.0015
05:00 PM - 06:00 PM	0.0020	0.0022	0.0014	0.0012	0.0015	0.0013	0.0013
06:00 PM - 07:00 PM	0.0020	0.0024	0.0006	0.0013	0.0009	0.0018	0.0010
07:00 PM - 08:00 PM	0.0010	0.0029	0.0015	0.0014	0.0005	0.0022	0.0012
08:00 PM - 09:00 PM	0.0008	0.0029	0.0013	0.0014	0.0007	0.0012	0.0008
09:00 PM - 10:00 PM	0.0019	0.0029	0.0010	0.0014	0.0004	0.0022	0.0006
10:00 PM - 11:00 PM	0.0015	0.0028	0.0011	0.0014	0.0005	0.0028	0.0006
11:00 PM - 12:00 AM	0.0025	0.0029	0.0010	0.0012	0.0004	0.0026	0.0014
12:00 AM - 01:00 AM	0.0026	0.0029	0.0012	0.0013	0.0009	0.0016	0.0016
01:00 AM - 02:00 AM	0.0028	0.0029	0.0015	0.0011	0.0005	0.0025	0.0040
02:00 AM - 03:00 AM	0.0030	0.0029	0.0018	0.0019	0.0014	0.0021	0.0028
03:00 AM - 04:00 AM	0.0036	0.0031	0.0016	0.0011	0.0031	0.0013	0.0039
04:00 AM - 05:00 AM	0.0033	0.0033	0.0024	0.0009	0.0050	0.0017	0.0050
05:00 AM - 06:00 AM	0.0031	0.0032	0.0023	0.0006	0.0051	0.0028	0.0010
06:00 AM - 07:00 AM	0.0031	0.0026	0.0025	0.0007	0.0034	0.0015	0.0014
07:00 AM - 08:00 AM	0.0030	0.0024	0.0037	0.0014	0.0020	0.0012	0.0020
08:00 AM - 09:00 AM	0.0029	0.0030	0.0027	0.0005	0.0027	0.0006	0.0020
09:00 AM - 10:00 AM	0.0030	0.0018	0.0016	0.0010	0.0008	0.0015	0.0012
10:00 AM - 11:00 AM	0.0029	0.0003	0.0008	0.0008	0.0024	0.0010	0.0010
11:00 AM - 12:00 PM	0.0017	0.0014	0.0009	0.0020	0.0004	0.0011	0.0006
Average	0.0024	0.0025	0.0017	0.0012	0.0020	0.0014	0.0017
1hr - Maximum	0.0036	0.0034	0.0037	0.0020	0.0051	0.0028	0.0050
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).
Reference Method : U.S. Environmental Protection Agency, EPA Method Part 53 and 58

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by Orawan R.
Orawan Rakyong
Scientist (3)

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143620
Date Received :May 13, 2025
Date Reported :May 16, 2025
Report Number :3201071-1

Sample Number 24143620-1 to 7
Parameter Wind Speed / Wind Direction
Location วัดหินลับ (GPS 47P 0729470, 1622879)
Sampling Date May 02 - May 09, 2025
Sampling by Teeravut Sukdee

Time	May 02 - May 03, 2025			May 03 - May 04, 2025			May 04 - May 05, 2025			May 05 - May 06, 2025			May 06 - May 07, 2025			May 07 - May 08, 2025			May 08 - May 09, 2025		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
12:00 PM - 01:00 PM	0.8	96.0	E	0.6	257.0	WSW	2.4	307.0	NW	1.1	277.0	W	0.7	262.0	W	1.4	293.0	WNW	0.2	-	-
01:00 PM - 02:00 PM	0.0	-	-	0.1	-	-	1.4	285.0	WNW	0.8	219.0	SW	0.6	268.0	W	1.4	281.0	W	0.6	239.0	WSW
02:00 PM - 03:00 PM	1.8	277.0	W	1.4	66.0	ENE	0.3	268.0	W	0.7	206.0	SSW	2.1	178.0	S	0.0	-	-	0.9	278.0	W
03:00 PM - 04:00 PM	0.0	-	-	0.5	204.0	SSW	0.4	255.0	WSW	0.7	247.0	WSW	0.0	-	-	2.5	93.0	E	0.7	246.0	WSW
04:00 PM - 05:00 PM	0.2	-	-	0.8	248.0	WSW	0.1	-	-	0.6	302.0	WNW	0.0	-	-	0.1	-	-	0.7	250.0	WSW
05:00 PM - 06:00 PM	0.0	-	-	0.6	303.0	WNW	0.0	-	-	3.2	61.0	ENE	0.0	-	-	1.1	245.0	WSW	0.1	-	-
06:00 PM - 07:00 PM	0.2	-	-	0.0	-	-	0.0	-	-	2.1	63.0	ENE	0.0	-	-	1.0	232.0	SW	0.9	240.0	WSW
07:00 PM - 08:00 PM	0.0	-	-	0.0	-	-	0.3	256.0	WSW	0.1	-	-	0.5	77.0	ENE	1.2	192.0	SSW	0.0	-	-
08:00 PM - 09:00 PM	0.0	-	-	0.0	-	-	1.0	270.0	W	0.3	162.0	SSE	0.1	-	-	0.1	-	-	1.3	272.0	W
09:00 PM - 10:00 PM	0.0	-	-	0.0	-	-	0.1	-	-	0.0	-	-	0.1	-	-	0.0	-	-	0.3	214.0	SW
10:00 PM - 11:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.4	221.0	SW	0.5	161.0	SSE	0.6	213.0	SSW
11:00 PM - 12:00 AM	0.4	198.0	SSW	0.0	-	-	0.6	243.0	WSW	0.5	191.0	S	0.3	230.0	SW	0.7	181.0	S	0.3	211.0	SSW
12:00 AM - 01:00 AM	0.0	-	-	0.0	-	-	0.9	247.0	WSW	0.7	251.0	WSW	0.5	232.0	SW	0.2	-	-	1.6	242.0	WSW
01:00 AM - 02:00 AM	0.6	119.0	ESE	0.0	-	-	1.0	247.0	WSW	0.0	-	-	0.2	-	-	0.0	-	-	0.5	240.0	WSW
02:00 AM - 03:00 AM	0.6	84.0	E	0.0	-	-	0.3	243.0	WSW	0.6	273.0	W	0.6	208.0	SSW	0.0	-	-	0.8	217.0	SW
03:00 AM - 04:00 AM	0.3	62.0	ENE	0.0	-	-	0.2	-	-	0.0	-	-	0.7	225.0	SW	0.4	200.0	SSW	0.3	204.0	SSW
04:00 AM - 05:00 AM	0.0	-	-	0.0	-	-	0.2	-	-	0.0	-	-	0.0	-	-	0.3	205.0	SSW	0.6	239.0	WSW
05:00 AM - 06:00 AM	0.2	-	-	0.0	-	-	0.6	237.0	WSW	0.0	-	-	0.3	152.0	SSE	0.0	-	-	1.0	250.0	WSW
06:00 AM - 07:00 AM	0.0	-	-	0.0	-	-	0.1	-	-	0.1	-	-	0.0	-	-	0.4	179.0	S	0.4	232.0	SW
07:00 AM - 08:00 AM	0.4	259.0	W	0.2	-	-	0.0	-	-	0.0	-	-	0.4	171.0	S	0.5	206.0	SSW	0.0	-	-
08:00 AM - 09:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.3	49.0	NE	0.0	-	-	0.0	-	-
09:00 AM - 10:00 AM	0.8	234.0	SW	0.1	-	-	0.4	279.0	W	0.0	-	-	0.0	-	-	1.1	271.0	W	0.9	264.0	W
10:00 AM - 11:00 AM	1.4	256.0	WSW	1.2	255.0	WSW	0.7	253.0	WSW	0.8	255.0	WSW	0.9	248.0	WSW	0.9	253.0	WSW	0.7	256.0	WSW
11:00 AM - 12:00 PM	0.4	202.0	SSW	0.5	234.0	SW	0.8	251.0	WSW	0.4	253.0	WSW	2.4	261.0	W	0.2	-	-	0.7	287.0	WNW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jittranont
Assistant General Manager

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143620
Date Received :May 13, 2025
Date Reported :May 16, 2025
Report Number :3201071-1

Wind Rose

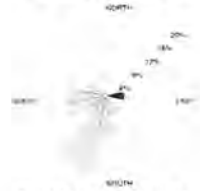
Date : May 02-03, 2025

Date : May 03-04, 2025

Date : May 04-05, 2025

Date : May 05-06, 2025

Date : May 06-07, 2025



Date : May 07-08, 2025

Date : May 08-09, 2025

Date : May 02-09, 2025

	WS (m/s)	%
	≥ 10.0	0.00
	8.0-10.0	0.00
	5.5-8.0	0.00
	3.3-5.5	0.00
	1.7-3.3	4.17
	0.3-1.7	50.00
	Calms	45.83

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Assistant General Manager

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143659
Date Received : Jun 27, 2025
Date Reported : Jul 04, 2025
Report Number: 3201176-1

Sample Description Air Quality
Location วัดชันประสุ (GPS 47P 0731396, 1624428)
Date Analysis Commenced Jun 27, 2025
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Sampling Condition		Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)
		Pressure (mm Hg)	Temperature (°C)		
24143659-1	Jun 17 - Jun 18, 2025	747	32.2	0.063	0.029
24143659-2	Jun 18 - Jun 19, 2025	747	33.1	0.129	0.053
24143659-3	Jun 19 - Jun 20, 2025	747	33.4	0.079	0.033
24143659-4	Jun 20 - Jun 21, 2025	747	33.4	0.076	0.031
24143659-5	Jun 21 - Jun 22, 2025	747	33.7	0.073	0.032
24143659-6	Jun 22 - Jun 23, 2025	747	33.1	0.095	0.036
24143659-7	Jun 23 - Jun 24, 2025	747	33.2	0.097	0.038
Guideline		-	-	0.33	0.12

Reference Method
Total Suspended Particulate : In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling)
Particulate Metter (PM-10) : In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling)

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
Sampled By : Teeravut Sukdee

Approved by Orawan R.
Orawan Rakyong
Scientist (3)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143633
Date Received : Jun 27, 2025
Date Reported : Jul 02, 2025
Report Number: 3201096-1

Sample Description Air Quality
Location วัดชันประสุ (GPS 47P 0731396, 1624428)
Parameter Nitrogen dioxide (ppm)
Measurement Date Jun 17, 2025 - Jun 24, 2025
Measurement by Teeravut Sukdee

Time	24143633-1 Jun 17, 2025	24143633-2 Jun 18, 2025	24143633-3 Jun 19, 2025	24143633-4 Jun 20, 2025	24143633-5 Jun 21, 2025	24143633-6 Jun 22, 2025	24143633-7 Jun 23, 2025
11:00 AM - 12:00 PM	0.0068	0.0103	0.0098	0.0175	0.0133	0.0108	0.0103
12:00 PM - 01:00 PM	0.0066	0.0099	0.0122	0.0109	0.0104	0.0083	0.0157
01:00 PM - 02:00 PM	0.0083	0.0061	0.0150	0.0107	0.0149	0.0129	0.0200
02:00 PM - 03:00 PM	0.0083	0.0070	0.0171	0.0173	0.0135	0.0092	0.0151
03:00 PM - 04:00 PM	0.0083	0.0103	0.0190	0.0164	0.0208	0.0117	0.0084
04:00 PM - 05:00 PM	0.0084	0.0089	0.0164	0.0103	0.0153	0.0114	0.0216
05:00 PM - 06:00 PM	0.0061	0.0123	0.0173	0.0152	0.0127	0.0227	0.0130
06:00 PM - 07:00 PM	0.0060	0.0104	0.0113	0.0120	0.0111	0.0202	0.0082
07:00 PM - 08:00 PM	0.0071	0.0095	0.0119	0.0128	0.0113	0.0149	0.0114
08:00 PM - 09:00 PM	0.0106	0.0096	0.0155	0.0095	0.0073	0.0105	0.0124
09:00 PM - 10:00 PM	0.0110	0.0119	0.0171	0.0092	0.0119	0.0108	0.0116
10:00 PM - 11:00 PM	0.0106	0.0104	0.0083	0.0118	0.0122	0.0072	0.0087
11:00 PM - 12:00 AM	0.0056	0.0115	0.0098	0.0109	0.0081	0.0060	0.0071
12:00 AM - 01:00 AM	0.0023	0.0129	0.0141	0.0154	0.0183	0.0031	0.0094
01:00 AM - 02:00 AM	0.0007	0.0117	0.0180	0.0216	0.0144	0.0023	0.0100
02:00 AM - 03:00 AM	0.0011	0.0085	0.0118	0.0156	0.0156	0.0023	0.0166
03:00 AM - 04:00 AM	0.0029	0.0092	0.0153	0.0130	0.0081	0.0120	0.0199
04:00 AM - 05:00 AM	0.0233	0.0093	0.0159	0.0132	0.0116	0.0091	0.0223
05:00 AM - 06:00 AM	0.0205	0.0105	0.0144	0.0178	0.0128	0.0070	0.0067
06:00 AM - 07:00 AM	0.0341	0.0070	0.0156	0.0156	0.0128	0.0078	0.0069
07:00 AM - 08:00 AM	0.0298	0.0082	0.0181	0.0168	0.0143	0.0123	0.0151
08:00 AM - 09:00 AM	0.0304	0.0062	0.0195	0.0181	0.0120	0.0159	0.0127
09:00 AM - 10:00 AM	0.0132	0.0068	0.0175	0.0150	0.0074	0.0204	0.0098
10:00 AM - 11:00 AM	0.0111	0.0090	0.0205	0.0141	0.0095	0.0093	0.0105
Average	0.0114	0.0095	0.0151	0.0142	0.0125	0.0108	0.0126
1hr - Maximum	0.0341	0.0129	0.0205	0.0216	0.0208	0.0227	0.0223
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).
Reference Method : U.S. Environmental Protection AgencyMethod Part 50 App. F (Chemiluminescence)

Approved by Orawan R.
Orawan Rakyong
Scientist (3)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143646
Date Received : Jun 27, 2025
Date Reported : Jul 02, 2025
Report Number: 3201150-1

Sample Description Air Quality
Location วัดชั้นประตู (GPS 47P 0731396, 1624428)
Parameter Sulfur Dioxide (ppm)
Measurement Date Jun 17, 2025 - Jun 24, 2025
Measurement by Teeravut Sukdee

Time	24143646-1 Jun 17, 2025	24143646-2 Jun 18, 2025	24143646-3 Jun 19, 2025	24143646-4 Jun 20, 2025	24143646-5 Jun 21, 2025	24143646-6 Jun 22, 2025	24143646-7 Jun 23, 2025
11:00 AM - 12:00 PM	0.0027	0.0027	0.0007	0.0014	0.0014	0.0030	0.0025
12:00 PM - 01:00 PM	0.0032	0.0039	0.0013	0.0015	0.0013	0.0032	0.0012
01:00 PM - 02:00 PM	0.0027	0.0040	0.0014	0.0011	0.0019	0.0035	0.0012
02:00 PM - 03:00 PM	0.0026	0.0010	0.0012	0.0015	0.0020	0.0037	0.0014
03:00 PM - 04:00 PM	0.0037	0.0020	0.0014	0.0013	0.0008	0.0021	0.0016
04:00 PM - 05:00 PM	0.0032	0.0011	0.0020	0.0021	0.0009	0.0022	0.0019
05:00 PM - 06:00 PM	0.0046	0.0023	0.0015	0.0011	0.0017	0.0025	0.0021
06:00 PM - 07:00 PM	0.0012	0.0023	0.0014	0.0012	0.0015	0.0028	0.0024
07:00 PM - 08:00 PM	0.0013	0.0016	0.0013	0.0008	0.0015	0.0031	0.0014
08:00 PM - 09:00 PM	0.0027	0.0017	0.0014	0.0012	0.0014	0.0015	0.0016
09:00 PM - 10:00 PM	0.0016	0.0012	0.0022	0.0014	0.0015	0.0016	0.0018
10:00 PM - 11:00 PM	0.0016	0.0015	0.0010	0.0012	0.0016	0.0016	0.0019
11:00 PM - 12:00 AM	0.0012	0.0016	0.0012	0.0018	0.0018	0.0019	0.0024
12:00 AM - 01:00 AM	0.0014	0.0015	0.0014	0.0020	0.0021	0.0024	0.0024
01:00 AM - 02:00 AM	0.0016	0.0010	0.0012	0.0023	0.0022	0.0028	0.0012
02:00 AM - 03:00 AM	0.0039	0.0012	0.0015	0.0011	0.0024	0.0015	0.0014
03:00 AM - 04:00 AM	0.0011	0.0018	0.0020	0.0015	0.0028	0.0019	0.0014
04:00 AM - 05:00 AM	0.0009	0.0012	0.0015	0.0014	0.0030	0.0023	0.0015
05:00 AM - 06:00 AM	0.0009	0.0009	0.0012	0.0015	0.0029	0.0025	0.0021
06:00 AM - 07:00 AM	0.0010	0.0008	0.0011	0.0012	0.0025	0.0016	0.0024
07:00 AM - 08:00 AM	0.0027	0.0010	0.0016	0.0006	0.0019	0.0016	0.0010
08:00 AM - 09:00 AM	0.0040	0.0019	0.0015	0.0005	0.0019	0.0014	0.0012
09:00 AM - 10:00 AM	0.0030	0.0009	0.0016	0.0014	0.0019	0.0016	0.0015
10:00 AM - 11:00 AM	0.0027	0.0018	0.0014	0.0020	0.0028	0.0020	0.0016
Average	0.0023	0.0017	0.0014	0.0014	0.0019	0.0023	0.0017
1hr - Maximum	0.0046	0.0040	0.0022	0.0023	0.0030	0.0037	0.0025
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).
Reference Method : U.S. Environmental Protection Agency, EPA Method Part 53 and 58

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143621
Date Received :Jun 27, 2025
Date Reported :Jul 03, 2025
Report Number :3201073-1

Sample Number 24143621-1 to 7
Parameter Wind Speed / Wind Direction
Location วัดชั้นประตู (GPS 47P 0731396, 1624428)
Sampling Date Jun 17 - Jun 24, 2025
Sampling by Teeravut Sukdee

Time	Jun 17 - Jun 18, 2025		Jun 18 - Jun 19, 2025		Jun 19 - Jun 20, 2025		Jun 20 - Jun 21, 2025		Jun 21 - Jun 22, 2025		Jun 22 - Jun 23, 2025		Jun 23 - Jun 24, 2025	
	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)
11:00 AM - 12:00 PM	2.4	268.0 W	1.0	268.0 W	2.1	261.0 W	0.7	299.0 WNW	1.3	279.0 W	1.1	257.0 WSW	1.4	292.0 WNW
12:00 PM - 01:00 PM	1.1	272.0 W	0.3	275.0 W	1.3	274.0 W	0.4	292.0 WNW	1.9	226.0 SW	1.7	267.0 W	1.3	266.0 W
01:00 PM - 02:00 PM	0.9	279.0 W	5.3	227.0 SW	3.8	229.0 SW	1.2	84.0 E	0.4	284.0 WNW	1.4	259.0 W	1.6	246.0 WSW
02:00 PM - 03:00 PM	0.5	279.0 W	0.8	274.0 W	1.4	268.0 W	1.0	263.0 W	0.9	291.0 WNW	1.8	255.0 WSW	0.6	261.0 W
03:00 PM - 04:00 PM	2.6	283.0 WNW	3.9	229.0 SW	2.5	278.0 W	0.5	335.0 NNW	0.4	246.0 WSW	2.0	219.0 SW	1.8	235.0 SW
04:00 PM - 05:00 PM	2.3	265.0 W	0.6	248.0 WSW	2.2	279.0 W	1.0	286.0 WNW	0.8	258.0 WSW	0.8	93.0 E	1.7	284.0 WNW
05:00 PM - 06:00 PM	1.4	269.0 W	0.7	277.0 W	1.8	235.0 SW	0.1	- -	1.7	250.0 WSW	0.6	157.0 SSE	0.5	122.0 ESE
06:00 PM - 07:00 PM	0.5	255.0 WSW	0.7	247.0 WSW	2.6	250.0 WSW	0.9	228.0 SW	0.2	- -	1.5	138.0 SE	1.8	228.0 SW
07:00 PM - 08:00 PM	0.2	- -	1.6	251.0 WSW	1.9	254.0 WSW	0.0	- -	0.0	- -	0.6	134.0 SE	1.2	221.0 SW
08:00 PM - 09:00 PM	0.0	- -	0.3	238.0 WSW	0.0	- -	0.0	- -	1.0	267.0 W	0.0	- -	0.2	- -
09:00 PM - 10:00 PM	0.0	- -	0.6	306.0 NW	0.7	68.0 ENE	0.0	- -	0.0	- -	1.1	288.0 WNW	0.2	- -
10:00 PM - 11:00 PM	0.0	- -	0.0	- -	0.0	- -	1.2	264.0 W	0.6	29.0 NNE	0.3	234.0 SW	0.9	279.0 W
11:00 PM - 12:00 AM	0.6	263.0 W	0.5	308.0 NW	0.0	- -	1.6	271.0 W	0.5	231.0 SW	0.0	- -	0.6	262.0 W
12:00 AM - 01:00 AM	1.4	266.0 W	0.0	- -	1.2	262.0 W	3.9	253.0 WSW	0.1	- -	0.3	35.0 NE	0.6	247.0 WSW
01:00 AM - 02:00 AM	0.6	267.0 W	0.0	- -	1.0	255.0 WSW	1.1	255.0 WSW	1.3	249.0 WSW	0.7	216.0 SW	0.0	- -
02:00 AM - 03:00 AM	1.9	248.0 WSW	0.0	- -	0.7	359.0 N	0.7	248.0 WSW	1.0	260.0 W	2.8	251.0 WSW	0.5	318.0 NW
03:00 AM - 04:00 AM	1.5	261.0 W	0.4	242.0 WSW	0.4	220.0 SW	0.8	232.0 SW	0.0	- -	0.0	- -	0.5	241.0 WSW
04:00 AM - 05:00 AM	1.3	263.0 W	0.0	- -	0.0	- -	0.3	345.0 NNW	0.9	349.0 N	0.9	293.0 WNW	0.3	223.0 SW
05:00 AM - 06:00 AM	1.3	274.0 W	0.6	233.0 SW	1.5	262.0 W	0.9	262.0 W	0.2	- -	0.6	277.0 W	0.0	- -
06:00 AM - 07:00 AM	2.8	215.0 SW	0.0	- -	0.4	268.0 W	0.5	260.0 W	2.1	258.0 WSW	0.3	45.0 NE	0.0	- -
07:00 AM - 08:00 AM	0.8	248.0 WSW	0.9	259.0 W	0.5	250.0 WSW	0.9	350.0 N	2.1	123.0 ESE	0.8	248.0 WSW	1.2	248.0 WSW
08:00 AM - 09:00 AM	0.6	250.0 WSW	0.7	282.0 WNW	0.4	307.0 NW	1.9	260.0 W	1.4	225.0 SW	1.8	273.0 W	1.9	283.0 WNW
09:00 AM - 10:00 AM	0.5	324.0 NW	2.8	279.0 W	1.4	271.0 W	4.3	229.0 SW	1.5	249.0 WSW	1.6	223.0 SW	1.6	255.0 WSW
10:00 AM - 11:00 AM	0.4	277.0 W	4.2	239.0 WSW	2.0	230.0 SW	1.3	285.0 WNW	1.4	257.0 WSW	2.5	255.0 WSW	1.0	266.0 W

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jittranont
Assistant General Manager

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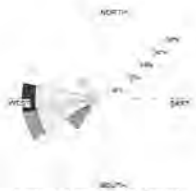
Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143621
Date Received :Jun 27, 2025
Date Reported :Jul 03, 2025
Report Number :3201073-1

Wind Rose

Date : Jun 17-18, 2025



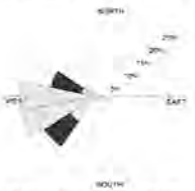
Date : Jun 18-19, 2025

Date : Jun 19-20, 2025

Date : Jun 20-21, 2025

Date : Jun 21-22, 2025

Date : Jun 22-23, 2025



Date : Jun 23-24, 2025

Date : Jun 17-24, 2025

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	3.57
1.7-3.3	16.67
0.3-1.7	60.71
Calms	19.05

Location : วัดขันประดู่ (GPS 47P 0731396, 1624428)

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

Approved by

Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

LABORATORY ACCREDITATION
ILA-DSS
TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143660
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3201177-1

Sample Description Air Quality
Location วัดท่าเสา (GPS 47P 0725385, 1625968)
Date Analysis Commenced Apr 11, 2025
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
24143660-1	Apr 02 - Apr 03, 2025	0.082	0.048	756*	35.3*
24143660-2	Apr 03 - Apr 04, 2025	0.107	0.059	756*	35.3*
24143660-3	Apr 04 - Apr 05, 2025	0.091	0.048	756*	35.3*
24143660-4	Apr 05 - Apr 06, 2025	0.055	0.050	756*	35.3*
24143660-5	Apr 06 - Apr 07, 2025	0.077	0.042	756*	35.3*
24143660-6	Apr 07 - Apr 08, 2025	0.104	0.051	756*	35.3*
24143660-7	Apr 08 - Apr 09, 2025	0.103	0.058	756*	35.3*
Guideline		0.33	0.12	-	-

Reference Method
Total Suspended Particulate : In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling)
Particulate Metter (PM-10) : In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling)

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
Sampled By : Vanich Phanpipit

Remark : Result (s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by

Orawan Rakyong
Scientist (3)

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143634
Date Received : Apr 10, 2025
Date Reported : Apr 18, 2025
Report Number: 3201116-1

Sample Description Air Quality
Location วัดท่าเสา (GPS 47P 0725385, 1625968)
Parameter Nitrogen dioxide (ppm)
Measurement Date Apr 02, 2025 - Apr 09, 2025
Measurement by Vanich Phanpipit

Time	24143634-1 Apr 02, 2025	24143634-2 Apr 03, 2025	24143634-3 Apr 04, 2025	24143634-4 Apr 05, 2025	24143634-5 Apr 06, 2025	24143634-6 Apr 07, 2025	24143634-7 Apr 08, 2025
02:00 PM - 03:00 PM	0.0054	0.0054	0.0081	0.0053	0.0058	0.0059	0.0055
03:00 PM - 04:00 PM	0.0052	0.0049	0.0109	0.0064	0.0053	0.0103	0.0085
04:00 PM - 05:00 PM	0.0050	0.0059	0.0054	0.0074	0.0057	0.0095	0.0068
05:00 PM - 06:00 PM	0.0059	0.0050	0.0079	0.0059	0.0054	0.0071	0.0075
06:00 PM - 07:00 PM	0.0052	0.0060	0.0081	0.0113	0.0055	0.0066	0.0055
07:00 PM - 08:00 PM	0.0056	0.0055	0.0101	0.0164	0.0061	0.0053	0.0060
08:00 PM - 09:00 PM	0.0064	0.0057	0.0107	0.0126	0.0130	0.0066	0.0079
09:00 PM - 10:00 PM	0.0071	0.0060	0.0083	0.0072	0.0097	0.0071	0.0042
10:00 PM - 11:00 PM	0.0064	0.0066	0.0091	0.0068	0.0064	0.0076	0.0057
11:00 PM - 12:00 AM	0.0062	0.0071	0.0077	0.0053	0.0063	0.0075	0.0023
12:00 AM - 01:00 AM	0.0064	0.0071	0.0078	0.0060	0.0060	0.0075	0.0025
01:00 AM - 02:00 AM	0.0057	0.0083	0.0064	0.0076	0.0059	0.0057	0.0051
02:00 AM - 03:00 AM	0.0053	0.0062	0.0075	0.0071	0.0067	0.0058	0.0045
03:00 AM - 04:00 AM	0.0061	0.0064	0.0072	0.0068	0.0059	0.0057	0.0042
04:00 AM - 05:00 AM	0.0072	0.0065	0.0060	0.0074	0.0048	0.0055	0.0068
05:00 AM - 06:00 AM	0.0070	0.0062	0.0051	0.0068	0.0049	0.0050	0.0074
06:00 AM - 07:00 AM	0.0069	0.0073	0.0058	0.0055	0.0049	0.0061	0.0068
07:00 AM - 08:00 AM	0.0074	0.0081	0.0051	0.0061	0.0051	0.0053	0.0055
08:00 AM - 09:00 AM	0.0062	0.0082	0.0003	0.0067	0.0052	0.0063	0.0017
09:00 AM - 10:00 AM	0.0065	0.0099	0.0072	0.0062	0.0062	0.0068	0.0075
10:00 AM - 11:00 AM	0.0053	0.0096	0.0086	0.0054	0.0084	0.0055	0.0070
11:00 AM - 12:00 PM	0.0053	0.0114	0.0071	0.0051	0.0079	0.0044	0.0059
12:00 PM - 01:00 PM	0.0052	0.0084	0.0065	0.0067	0.0054	0.0053	0.0058
01:00 PM - 02:00 PM	0.0058	0.0082	0.0063	0.0062	0.0063	0.0044	0.0064
Average	0.0060	0.0071	0.0072	0.0073	0.0064	0.0064	0.0057
1hr - Maximum	0.0074	0.0114	0.0109	0.0164	0.0130	0.0103	0.0085
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).
Reference Method : US EPAMethod Part 50 App. F (Chemiluminescence)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by Orawan R.
Orawan Rakyong
Scientist (3)

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143647
Date Received : Apr 10, 2025
Date Reported : Apr 18, 2025
Report Number: 3201153-1

Sample Description Air Quality
Location วัดท่าเสา (GPS 47P 0725385, 1625968)
Parameter Sulfur Dioxide (ppm)
Measurement Date Apr 02, 2025 - Apr 09, 2025
Measurement by Vanich Phanpipit

Time	24143647-1 Apr 02, 2025	24143647-2 Apr 03, 2025	24143647-3 Apr 04, 2025	24143647-4 Apr 05, 2025	24143647-5 Apr 06, 2025	24143647-6 Apr 07, 2025	24143647-7 Apr 08, 2025
02:00 PM - 03:00 PM	0.0053	0.0044	0.0010	0.0022	0.0023	0.0077	0.0013
03:00 PM - 04:00 PM	0.0062	0.0007	0.0028	0.0007	0.0111	0.0022	0.0017
04:00 PM - 05:00 PM	0.0058	0.0003	0.0053	0.0017	0.0007	0.0041	0.0096
05:00 PM - 06:00 PM	0.0130	0.0011	0.0016	0.0022	0.0007	0.0025	0.0006
06:00 PM - 07:00 PM	0.0012	0.0079	0.0013	0.0079	0.0010	0.0019	0.0005
07:00 PM - 08:00 PM	<0.0001	0.0015	0.0006	0.0029	0.0015	0.0017	0.0009
08:00 PM - 09:00 PM	0.0012	0.0010	0.0066	0.0029	0.0029	0.0026	0.0012
09:00 PM - 10:00 PM	0.0028	0.0002	0.0016	0.0022	0.0021	0.0085	0.0020
10:00 PM - 11:00 PM	0.0029	0.0005	0.0005	0.0023	0.0027	0.0012	0.0078
11:00 PM - 12:00 AM	0.0029	0.0053	0.0001	0.0027	0.0018	0.0011	0.0006
12:00 AM - 01:00 AM	0.0041	0.0018	0.0017	0.0028	0.0010	0.0015	0.0008
01:00 AM - 02:00 AM	0.0091	0.0011	0.0044	0.0020	0.0010	0.0019	0.0008
02:00 AM - 03:00 AM	0.0006	0.0004	0.0018	0.0011	0.0017	0.0041	0.0010
03:00 AM - 04:00 AM	0.0013	0.0052	0.0014	0.0012	0.0094	0.0002	0.0014
04:00 AM - 05:00 AM	0.0093	0.0019	0.0010	0.0020	0.0005	0.0004	0.0024
05:00 AM - 06:00 AM	0.0007	0.0017	0.0003	0.0028	0.0006	0.0005	0.0084
06:00 AM - 07:00 AM	0.0007	0.0015	0.0074	0.0096	0.0007	0.0007	0.0008
07:00 AM - 08:00 AM	0.0096	0.0006	0.0017	0.0018	0.0010	0.0009	0.0012
08:00 AM - 09:00 AM	0.0012	0.0057	0.0007	0.0020	0.0014	0.0014	0.0015
09:00 AM - 10:00 AM	0.0005	0.0001	0.0007	0.0040	0.0096	0.0022	0.0012
10:00 AM - 11:00 AM	0.0008	0.0001	0.0003	0.0028	0.0039	0.0088	0.0018
11:00 AM - 12:00 PM	0.0017	0.0007	0.0002	0.0080	0.0014	0.0006	0.0018
12:00 PM - 01:00 PM	0.0025	0.0006	0.0002	0.0013	0.0014	0.0008	0.0085
01:00 PM - 02:00 PM	0.0046	0.0008	0.0064	0.0015	0.0017	0.0010	0.0075
Average	0.0037	0.0019	0.0021	0.0029	0.0026	0.0024	0.0027
1hr - Maximum	0.0130	0.0079	0.0074	0.0096	0.0111	0.0088	0.0096
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).
Reference Method : US EPA Method Part 53 and 58

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by Orawan R.
Orawan Rakyong
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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143622
Date Received :Apr 10, 2025
Date Reported :Apr 22, 2025
Report Number :3201074-1

Sample Number 24143622-1 to 7
Parameter Wind Speed / Wind Direction
Location วัดท่าเสา (GPS 47P 0725385, 1625968)
Sampling Date Apr 02 - Apr 09, 2025
Sampling by Vanich Phanpipit

Time	Apr 02 - Apr 03, 2025			Apr 03 - Apr 04, 2025			Apr 04 - Apr 05, 2025			Apr 05 - Apr 06, 2025			Apr 06 - Apr 07, 2025			Apr 07 - Apr 08, 2025			Apr 08 - Apr 09, 2025		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
02:00 PM - 03:00 PM	1.8	200.0	SSW	1.4	86.0	E	4.7	197.0	SSW	3.7	143.0	SE	2.7	268.0	W	1.3	59.0	ENE	0.8	222.0	SW
03:00 PM - 04:00 PM	0.0	-	-	0.8	30.0	NNE	0.8	2.0	N	2.5	170.0	S	3.4	247.0	WSW	1.6	180.0	S	1.6	153.0	SSE
04:00 PM - 05:00 PM	0.3	165.0	SSE	0.9	68.0	ENE	2.6	184.0	S	4.5	232.0	SW	1.8	180.0	S	2.4	108.0	ESE	2.3	99.0	E
05:00 PM - 06:00 PM	0.6	81.0	E	1.0	84.0	E	1.5	290.0	WNW	4.4	210.0	SSW	2.0	213.0	SSW	1.1	94.0	E	1.3	106.0	ESE
06:00 PM - 07:00 PM	0.8	75.0	ENE	0.0	-	-	4.1	215.0	SW	2.9	177.0	S	4.1	210.0	SSW	0.7	98.0	E	1.0	91.0	E
07:00 PM - 08:00 PM	0.6	113.0	ESE	0.3	113.0	ESE	3.8	167.0	SSE	3.0	166.0	SSE	1.6	196.0	SSW	0.0	-	-	2.6	208.0	SSW
08:00 PM - 09:00 PM	1.5	147.0	SSE	0.5	42.0	NE	6.0	204.0	SSW	2.4	207.0	SSW	3.3	217.0	SW	1.1	178.0	S	2.1	226.0	SW
09:00 PM - 10:00 PM	1.1	139.0	SE	3.0	207.0	SSW	4.3	221.0	SW	1.0	162.0	SSE	4.3	174.0	S	0.0	-	-	2.5	229.0	SW
10:00 PM - 11:00 PM	1.3	104.0	ESE	2.1	169.0	S	3.3	246.0	WSW	3.2	193.0	SSW	2.2	202.0	SSW	2.6	109.0	ESE	6.0	170.0	S
11:00 PM - 12:00 AM	1.5	126.0	SE	1.2	127.0	SE	6.4	197.0	SSW	3.7	190.0	S	1.9	170.0	S	0.5	94.0	E	4.1	179.0	S
12:00 AM - 01:00 AM	1.5	122.0	ESE	0.2	-	-	2.0	212.0	SSW	5.4	211.0	SSW	4.2	214.0	SW	0.0	-	-	1.8	179.0	S
01:00 AM - 02:00 AM	0.8	119.0	ESE	0.5	91.0	E	1.8	228.0	SW	2.0	181.0	S	0.0	-	-	0.6	87.0	E	3.0	209.0	SSW
02:00 AM - 03:00 AM	1.4	103.0	ESE	0.8	89.0	E	2.2	202.0	SSW	2.0	193.0	SSW	0.0	-	-	0.7	106.0	ESE	4.0	220.0	SW
03:00 AM - 04:00 AM	0.3	90.0	E	0.7	106.0	ESE	2.0	191.0	S	4.6	194.0	SSW	0.1	-	-	1.0	87.0	E	1.5	207.0	SSW
04:00 AM - 05:00 AM	0.0	-	-	0.7	119.0	ESE	1.4	206.0	SSW	3.3	196.0	SSW	0.6	119.0	ESE	0.6	130.0	SE	3.4	230.0	SW
05:00 AM - 06:00 AM	0.6	108.0	ESE	1.1	74.0	ENE	1.6	265.0	W	1.8	109.0	ESE	0.6	97.0	E	0.9	89.0	E	2.6	208.0	SSW
06:00 AM - 07:00 AM	1.2	75.0	ENE	0.7	73.0	ENE	3.2	219.0	SW	0.8	175.0	S	0.3	119.0	ESE	1.0	107.0	ESE	4.2	185.0	S
07:00 AM - 08:00 AM	0.6	94.0	E	0.0	-	-	2.8	171.0	S	2.0	224.0	SW	0.2	-	-	2.5	291.0	WNW	3.6	293.0	WNW
08:00 AM - 09:00 AM	2.4	112.0	ESE	2.1	184.0	S	1.4	203.0	SSW	4.6	263.0	W	0.5	238.0	WSW	1.8	349.0	N	1.7	186.0	S
09:00 AM - 10:00 AM	0.9	113.0	ESE	2.6	321.0	NW	2.9	284.0	WNW	3.4	283.0	WNW	2.9	300.0	WNW	2.2	275.0	W	2.9	326.0	NW
10:00 AM - 11:00 AM	1.4	100.0	E	0.9	11.0	N	1.0	200.0	SSW	3.5	226.0	SW	2.7	321.0	NW	4.2	359.0	N	4.0	306.0	NW
11:00 AM - 12:00 PM	0.5	62.0	ENE	1.1	140.0	SE	3.8	269.0	W	1.5	208.0	SSW	2.5	240.0	WSW	2.3	323.0	NW	1.5	257.0	WSW
12:00 PM - 01:00 PM	1.4	169.0	S	1.7	244.0	WSW	3.2	268.0	W	1.5	252.0	WSW	0.7	284.0	WNW	2.3	184.0	S	2.2	296.0	WNW
01:00 PM - 02:00 PM	1.4	96.0	E	1.8	92.0	E	6.1	262.0	W	2.6	231.0	SW	1.0	125.0	SE	2.8	174.0	S	1.2	120.0	ESE

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24143622
Date Received :Apr 10, 2025
Date Reported :Apr 22, 2025
Report Number :3201074-1

Wind Rose

Date : Apr 02-03, 2025

Date : Apr 03-04, 2025

Date : Apr 04-05, 2025

Date : Apr 05-06, 2025

Date : Apr 06-07, 2025

Date : Apr 07-08, 2025

Date : Apr 08-09, 2025

Date : Apr 02-09, 2025

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	2.38
3.3-5.5	16.67
1.7-3.3	31.55
0.3-1.7	42.26
Calms	7.14

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Sarayuth Jittranont
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ภาคผนวก ค-2

ระดับเสียงโดยทั่วไป

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286828-1

Sample Number	24144508-1
Parameter	Noise (Leq 24 hrs.)
Location	บ้านขันบอน (GPS 47P 728147, 1619150)
Measurement Date	Apr 02 - Apr 03, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 597159

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	65.7	90.6	57.9
11:00 AM - 12:00 PM	61.9	83.4	58.2
12:00 PM - 01:00 PM	61.1	85.5	59.0
01:00 PM - 02:00 PM	62.5	87.3	56.6
02:00 PM - 03:00 PM	61.9	85.2	57.1
03:00 PM - 04:00 PM	63.9	84.2	56.8
04:00 PM - 05:00 PM	61.8	82.6	57.6
05:00 PM - 06:00 PM	58.8	75.3	57.6
06:00 PM - 07:00 PM	59.4	74.4	58.1
07:00 PM - 08:00 PM	58.8	73.7	57.3
08:00 PM - 09:00 PM	58.7	68.3	57.7
09:00 PM - 10:00 PM	58.6	80.7	57.4
10:00 PM - 11:00 PM	58.6	78.0	57.1
11:00 PM - 12:00 AM	58.2	76.6	56.9
12:00 AM - 01:00 AM	57.8	75.5	56.5
01:00 AM - 02:00 AM	57.5	70.3	56.4
02:00 AM - 03:00 AM	57.7	75.9	56.5
03:00 AM - 04:00 AM	57.6	75.9	56.5
04:00 AM - 05:00 AM	57.7	71.1	56.6
05:00 AM - 06:00 AM	60.0	74.1	58.2
06:00 AM - 07:00 AM	60.3	74.2	57.6
07:00 AM - 08:00 AM	60.8	72.7	58.3
08:00 AM - 09:00 AM	59.6	79.3	56.6
09:00 AM - 10:00 AM	62.6	81.9	57.3
Leq Average 24 hrs. (dB(A))	60.7		
Lmax (dB(A))		90.6	
L90 (dB(A))			57.3
Ldn (dB(A))	65.5		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management Orawan R.
Orawan Rakyong
Scientist (3)

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Supot Salamteh
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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286829-1

Sample Number	24144508-2
Parameter	Noise (Leq 24 hrs.)
Location	บ้านขันบอน (GPS 47P 728147, 1619150)
Measurement Date	Apr 03 - Apr 04, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 597159

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	60.8	79.6	57.6
11:00 AM - 12:00 PM	59.9	79.7	57.9
12:00 PM - 01:00 PM	58.8	86.8	57.4
01:00 PM - 02:00 PM	59.9	78.5	57.6
02:00 PM - 03:00 PM	60.2	81.9	58.4
03:00 PM - 04:00 PM	58.6	71.1	57.0
04:00 PM - 05:00 PM	60.0	77.1	57.7
05:00 PM - 06:00 PM	59.4	71.3	57.8
06:00 PM - 07:00 PM	60.6	77.0	59.0
07:00 PM - 08:00 PM	58.8	72.2	57.5
08:00 PM - 09:00 PM	58.8	74.3	57.4
09:00 PM - 10:00 PM	58.5	70.6	57.3
10:00 PM - 11:00 PM	57.9	68.5	56.6
11:00 PM - 12:00 AM	57.4	71.5	55.9
12:00 AM - 01:00 AM	57.3	75.0	56.1
01:00 AM - 02:00 AM	57.3	76.6	55.9
02:00 AM - 03:00 AM	57.4	69.7	56.2
03:00 AM - 04:00 AM	57.5	71.8	56.4
04:00 AM - 05:00 AM	66.5	83.2	56.5
05:00 AM - 06:00 AM	61.5	74.5	59.2
06:00 AM - 07:00 AM	60.2	76.4	57.3
07:00 AM - 08:00 AM	65.5	81.7	58.1
08:00 AM - 09:00 AM	58.9	78.6	56.8
09:00 AM - 10:00 AM	59.5	75.5	56.3
Leq Average 24 hrs. (dB(A))	60.4		
Lmax (dB(A))		86.8	
L90 (dB(A))			57.3
Ldn (dB(A))	67.0		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management Orawan R.
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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286830-1

Sample Number	24144508-3
Parameter	Noise (Leq 24 hrs.)
Location	บ้านชับมอน (GPS 47P 728147, 1619150)
Measurement Date	Apr 04 - Apr 05, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 597159

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	59.3	83.5	56.3
11:00 AM - 12:00 PM	60.5	81.5	56.1
12:00 PM - 01:00 PM	58.9	68.9	57.1
01:00 PM - 02:00 PM	58.3	78.4	56.7
02:00 PM - 03:00 PM	61.0	84.6	57.4
03:00 PM - 04:00 PM	71.9	83.1	68.7
04:00 PM - 05:00 PM	60.4	74.8	59.0
05:00 PM - 06:00 PM	60.1	79.3	58.8
06:00 PM - 07:00 PM	60.7	75.0	59.5
07:00 PM - 08:00 PM	58.5	76.7	57.0
08:00 PM - 09:00 PM	58.0	69.2	56.9
09:00 PM - 10:00 PM	59.1	77.8	56.7
10:00 PM - 11:00 PM	59.0	71.9	56.9
11:00 PM - 12:00 AM	57.6	71.4	56.4
12:00 AM - 01:00 AM	57.5	71.1	56.2
01:00 AM - 02:00 AM	57.2	73.9	55.8
02:00 AM - 03:00 AM	56.8	74.0	55.5
03:00 AM - 04:00 AM	56.9	73.6	55.7
04:00 AM - 05:00 AM	56.7	71.6	55.4
05:00 AM - 06:00 AM	58.9	72.9	56.9
06:00 AM - 07:00 AM	59.9	74.2	57.4
07:00 AM - 08:00 AM	58.9	75.8	56.7
08:00 AM - 09:00 AM	58.8	74.7	56.5
09:00 AM - 10:00 AM	58.5	73.9	56.6
Leq Average 24 hrs. (dB(A))	61.4		
Lmax (dB(A))		84.6	
L90 (dB(A))			56.7
Ldn (dB(A))	65.5		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
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Technical Management Orawan R.
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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286831-1

Sample Number	24144508-4
Parameter	Noise (Leq 24 hrs.)
Location	บ้านชับมอน (GPS 47P 728147, 1619150)
Measurement Date	Apr 05 - Apr 06, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 597159

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	60.6	84.5	56.8
11:00 AM - 12:00 PM	58.5	71.0	56.4
12:00 PM - 01:00 PM	57.8	76.5	56.3
01:00 PM - 02:00 PM	59.3	76.7	55.8
02:00 PM - 03:00 PM	57.5	69.6	55.9
03:00 PM - 04:00 PM	58.8	74.1	56.4
04:00 PM - 05:00 PM	57.6	81.3	56.0
05:00 PM - 06:00 PM	57.8	75.6	56.1
06:00 PM - 07:00 PM	58.9	75.3	57.2
07:00 PM - 08:00 PM	58.4	74.5	56.1
08:00 PM - 09:00 PM	57.2	74.6	55.7
09:00 PM - 10:00 PM	57.7	75.6	56.0
10:00 PM - 11:00 PM	60.3	78.1	56.0
11:00 PM - 12:00 AM	56.9	74.5	55.7
12:00 AM - 01:00 AM	57.2	74.5	55.6
01:00 AM - 02:00 AM	56.3	69.0	55.0
02:00 AM - 03:00 AM	56.5	74.7	55.1
03:00 AM - 04:00 AM	56.6	73.5	55.2
04:00 AM - 05:00 AM	56.6	72.2	55.1
05:00 AM - 06:00 AM	57.9	72.9	56.1
06:00 AM - 07:00 AM	59.5	73.8	57.1
07:00 AM - 08:00 AM	58.5	72.4	56.2
08:00 AM - 09:00 AM	58.4	77.6	56.3
09:00 AM - 10:00 AM	58.5	81.9	55.9
Leq Average 24 hrs. (dB(A))	58.2		
Lmax (dB(A))		84.5	
L90 (dB(A))			56.0
Ldn (dB(A))	64.3		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management Orawan R.
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Scientist (3)

Approved by Supot S.
Supot Salamteh
Section Head

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286832-1

Sample Number	24144508-5
Parameter	Noise (Leq 24 hrs.)
Location	บ้านซับมอน (GPS 47P 728147, 1619150)
Measurement Date	Apr 06 - Apr 07, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 597159

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	58.9	76.0	56.1
11:00 AM - 12:00 PM	57.8	75.1	55.6
12:00 PM - 01:00 PM	57.9	74.0	55.8
01:00 PM - 02:00 PM	57.6	71.9	56.0
02:00 PM - 03:00 PM	57.7	70.2	56.2
03:00 PM - 04:00 PM	57.7	71.2	56.3
04:00 PM - 05:00 PM	57.5	70.3	56.0
05:00 PM - 06:00 PM	57.7	73.1	56.0
06:00 PM - 07:00 PM	60.4	76.5	57.2
07:00 PM - 08:00 PM	56.9	73.4	55.1
08:00 PM - 09:00 PM	56.4	71.6	55.1
09:00 PM - 10:00 PM	56.7	76.1	55.2
10:00 PM - 11:00 PM	56.4	73.9	55.0
11:00 PM - 12:00 AM	58.4	75.7	55.1
12:00 AM - 01:00 AM	63.3	79.9	55.0
01:00 AM - 02:00 AM	56.2	68.3	55.0
02:00 AM - 03:00 AM	57.3	86.6	55.6
03:00 AM - 04:00 AM	57.7	72.1	56.7
04:00 AM - 05:00 AM	60.0	75.1	59.1
05:00 AM - 06:00 AM	59.6	74.6	58.5
06:00 AM - 07:00 AM	63.8	83.0	60.8
07:00 AM - 08:00 AM	61.3	77.4	59.9
08:00 AM - 09:00 AM	59.9	71.8	58.3
09:00 AM - 10:00 AM	59.4	74.9	57.8
Leq Average 24 hrs. (dB(A))	59.1		
Lmax (dB(A))		86.6	
L90 (dB(A))			56.0
Ldn (dB(A))	66.2		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
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Technical Management Orawan R.
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Scientist (3)

Approved by Supt S.
Supot Salamteh
Section Head

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286833-1

Sample Number	24144508-6
Parameter	Noise (Leq 24 hrs.)
Location	บ้านซับมอน (GPS 47P 728147, 1619150)
Measurement Date	Apr 07 - Apr 08, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 597159

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	57.7	73.9	56.1
11:00 AM - 12:00 PM	58.8	80.7	56.3
12:00 PM - 01:00 PM	57.5	71.7	56.1
01:00 PM - 02:00 PM	59.7	85.9	58.0
02:00 PM - 03:00 PM	60.0	77.9	58.5
03:00 PM - 04:00 PM	58.6	70.3	57.1
04:00 PM - 05:00 PM	59.0	78.5	57.2
05:00 PM - 06:00 PM	58.8	76.1	57.2
06:00 PM - 07:00 PM	59.1	72.3	57.6
07:00 PM - 08:00 PM	58.6	74.9	57.3
08:00 PM - 09:00 PM	58.5	76.9	56.9
09:00 PM - 10:00 PM	58.1	76.6	56.6
10:00 PM - 11:00 PM	57.8	72.2	56.6
11:00 PM - 12:00 AM	58.4	77.0	56.7
12:00 AM - 01:00 AM	57.9	81.8	56.2
01:00 AM - 02:00 AM	57.4	74.9	56.2
02:00 AM - 03:00 AM	57.4	75.4	56.2
03:00 AM - 04:00 AM	57.2	80.7	56.0
04:00 AM - 05:00 AM	57.4	68.7	56.3
05:00 AM - 06:00 AM	58.3	70.7	56.9
06:00 AM - 07:00 AM	63.2	93.8	58.5
07:00 AM - 08:00 AM	61.7	80.3	57.3
08:00 AM - 09:00 AM	59.8	76.8	57.7
09:00 AM - 10:00 AM	59.5	80.3	57.2
Leq Average 24 hrs. (dB(A))	59.0		
Lmax (dB(A))		93.8	
L90 (dB(A))			56.9
Ldn (dB(A))	65.3		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
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Technical Management Orawan R.
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Scientist (3)

Approved by Supt S.
Supot Salamteh
Section Head

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286834-1

Sample Number	24144508-7
Parameter	Noise (Leq 24 hrs.)
Location	บ้านซับมอน (GPS 47P 728147, 1619150)
Measurement Date	Apr 08 - Apr 09, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 597159

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	58.3	74.2	56.4
11:00 AM - 12:00 PM	61.2	84.4	56.6
12:00 PM - 01:00 PM	58.6	78.8	56.7
01:00 PM - 02:00 PM	59.3	71.9	57.0
02:00 PM - 03:00 PM	58.9	81.8	57.1
03:00 PM - 04:00 PM	59.0	71.4	57.7
04:00 PM - 05:00 PM	60.4	75.8	57.6
05:00 PM - 06:00 PM	62.1	77.6	59.5
06:00 PM - 07:00 PM	59.9	70.7	58.6
07:00 PM - 08:00 PM	59.3	77.1	58.2
08:00 PM - 09:00 PM	58.6	70.8	57.3
09:00 PM - 10:00 PM	59.0	76.8	57.4
10:00 PM - 11:00 PM	58.1	77.5	56.7
11:00 PM - 12:00 AM	58.3	86.6	56.4
12:00 AM - 01:00 AM	57.6	68.9	56.4
01:00 AM - 02:00 AM	57.6	74.7	56.2
02:00 AM - 03:00 AM	57.2	74.8	56.1
03:00 AM - 04:00 AM	57.6	79.2	56.3
04:00 AM - 05:00 AM	57.2	78.0	56.0
05:00 AM - 06:00 AM	59.2	71.4	56.6
06:00 AM - 07:00 AM	61.8	76.3	59.1
07:00 AM - 08:00 AM	61.7	77.2	57.8
08:00 AM - 09:00 AM	60.3	80.4	58.2
09:00 AM - 10:00 AM	59.3	83.0	57.7
Leq Average 24 hrs. (dB(A))	59.4		
Lmax (dB(A))		86.6	
L90 (dB(A))			57.0
Ldn (dB(A))	65.2		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286835-1

Sample Number	24144508-8
Parameter	Noise (Leq 24 hrs.)
Location	โรงเรียนอนุบาลกับกวาง (GPS 47P 723029, 1616344)
Measurement Date	Apr 02 - Apr 03, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 672789

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	53.1	62.3	51.9
11:00 AM - 12:00 PM	52.8	75.6	51.3
12:00 PM - 01:00 PM	52.2	62.1	51.1
01:00 PM - 02:00 PM	52.3	77.7	51.0
02:00 PM - 03:00 PM	53.1	85.7	51.7
03:00 PM - 04:00 PM	54.4	86.3	51.9
04:00 PM - 05:00 PM	52.7	61.0	52.1
05:00 PM - 06:00 PM	54.1	65.6	53.2
06:00 PM - 07:00 PM	54.9	69.5	53.8
07:00 PM - 08:00 PM	55.1	69.6	54.0
08:00 PM - 09:00 PM	55.0	65.3	54.0
09:00 PM - 10:00 PM	55.7	72.4	54.1
10:00 PM - 11:00 PM	55.1	65.3	54.1
11:00 PM - 12:00 AM	54.7	63.2	53.8
12:00 AM - 01:00 AM	54.4	61.7	53.6
01:00 AM - 02:00 AM	55.2	71.2	53.9
02:00 AM - 03:00 AM	54.1	67.8	53.3
03:00 AM - 04:00 AM	53.0	58.3	52.6
04:00 AM - 05:00 AM	53.6	58.0	53.0
05:00 AM - 06:00 AM	53.8	64.3	53.1
06:00 AM - 07:00 AM	55.2	71.1	53.7
07:00 AM - 08:00 AM	55.3	86.7	54.2
08:00 AM - 09:00 AM	54.9	66.8	53.8
09:00 AM - 10:00 AM	55.3	77.9	54.1
Leq Average 24 hrs. (dB(A))	54.3		
Lmax (dB(A))		86.7	
L90 (dB(A))			53.3
Ldn (dB(A))	60.8		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
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Scientist (3)

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286836-1

Sample Number	24144508-9
Parameter	Noise (Leq 24 hrs.)
Location	โรงเรียนอนุบาลทับกวาง (GPS 47P 723029, 1616344)
Measurement Date	Apr 03 - Apr 04, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 672789

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	54.7	66.2	53.9
11:00 AM - 12:00 PM	54.6	72.3	53.5
12:00 PM - 01:00 PM	57.7	78.4	53.6
01:00 PM - 02:00 PM	53.9	64.8	53.1
02:00 PM - 03:00 PM	54.1	77.9	52.8
03:00 PM - 04:00 PM	53.5	67.4	52.5
04:00 PM - 05:00 PM	54.4	68.2	53.2
05:00 PM - 06:00 PM	54.6	76.0	53.3
06:00 PM - 07:00 PM	53.7	69.8	52.5
07:00 PM - 08:00 PM	54.0	62.2	53.3
08:00 PM - 09:00 PM	54.2	66.3	53.3
09:00 PM - 10:00 PM	54.5	79.1	53.0
10:00 PM - 11:00 PM	52.2	61.8	51.5
11:00 PM - 12:00 AM	51.6	58.3	51.1
12:00 AM - 01:00 AM	51.4	56.4	50.9
01:00 AM - 02:00 AM	51.5	59.8	50.8
02:00 AM - 03:00 AM	51.4	60.5	50.7
03:00 AM - 04:00 AM	51.3	59.5	50.7
04:00 AM - 05:00 AM	52.4	61.9	51.1
05:00 AM - 06:00 AM	52.9	64.1	51.6
06:00 AM - 07:00 AM	53.8	66.3	52.6
07:00 AM - 08:00 AM	52.6	82.3	51.4
08:00 AM - 09:00 AM	52.8	66.1	51.6
09:00 AM - 10:00 AM	52.8	66.7	52.0
Leq Average 24 hrs. (dB(A))	53.6		
Lmax (dB(A))		82.3	
L90 (dB(A))			52.5
Ldn (dB(A))	58.9		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286837-1

Sample Number	24144508-10
Parameter	Noise (Leq 24 hrs.)
Location	โรงเรียนอนุบาลทับกวาง (GPS 47P 723029, 1616344)
Measurement Date	Apr 04 - Apr 05, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 672789

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	52.0	71.8	51.1
11:00 AM - 12:00 PM	51.7	72.0	50.7
12:00 PM - 01:00 PM	51.1	68.7	49.9
01:00 PM - 02:00 PM	50.5	62.7	49.8
02:00 PM - 03:00 PM	52.5	76.6	49.2
03:00 PM - 04:00 PM	64.5	97.7	60.3
04:00 PM - 05:00 PM	54.8	72.4	54.1
05:00 PM - 06:00 PM	56.0	67.2	55.3
06:00 PM - 07:00 PM	54.8	62.5	54.3
07:00 PM - 08:00 PM	53.9	68.0	53.5
08:00 PM - 09:00 PM	54.5	66.5	54.1
09:00 PM - 10:00 PM	54.9	64.3	54.4
10:00 PM - 11:00 PM	54.8	60.2	54.4
11:00 PM - 12:00 AM	54.5	63.9	54.0
12:00 AM - 01:00 AM	54.2	58.0	53.8
01:00 AM - 02:00 AM	54.8	72.6	53.5
02:00 AM - 03:00 AM	57.0	71.5	54.8
03:00 AM - 04:00 AM	56.8	62.2	55.1
04:00 AM - 05:00 AM	54.1	69.4	52.8
05:00 AM - 06:00 AM	53.2	62.3	52.4
06:00 AM - 07:00 AM	53.6	64.7	52.9
07:00 AM - 08:00 AM	52.4	64.3	51.8
08:00 AM - 09:00 AM	52.6	65.2	51.9
09:00 AM - 10:00 AM	53.1	61.7	52.5
Leq Average 24 hrs. (dB(A))	55.6		
Lmax (dB(A))		97.7	
L90 (dB(A))			53.5
Ldn (dB(A))	61.5		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286838-1

Sample Number	24144508-11
Parameter	Noise (Leq 24 hrs.)
Location	โรงเรียนอนุบาลทับกวาง (GPS 47P 723029, 1616344)
Measurement Date	Apr 05 - Apr 06, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 672789

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	53.4	67.5	52.7
11:00 AM - 12:00 PM	52.8	60.8	52.3
12:00 PM - 01:00 PM	52.6	60.4	52.0
01:00 PM - 02:00 PM	52.0	67.6	51.4
02:00 PM - 03:00 PM	51.6	68.7	50.9
03:00 PM - 04:00 PM	52.0	69.3	50.7
04:00 PM - 05:00 PM	51.8	62.4	51.0
05:00 PM - 06:00 PM	52.2	64.6	51.5
06:00 PM - 07:00 PM	51.8	67.6	51.0
07:00 PM - 08:00 PM	55.1	69.5	51.7
08:00 PM - 09:00 PM	60.7	71.3	52.5
09:00 PM - 10:00 PM	66.8	73.3	60.0
10:00 PM - 11:00 PM	66.9	72.7	60.1
11:00 PM - 12:00 AM	66.1	72.3	60.3
12:00 AM - 01:00 AM	61.2	68.9	59.0
01:00 AM - 02:00 AM	58.7	63.8	57.2
02:00 AM - 03:00 AM	55.6	68.5	53.7
03:00 AM - 04:00 AM	52.8	59.3	50.9
04:00 AM - 05:00 AM	51.7	61.8	50.7
05:00 AM - 06:00 AM	52.3	65.8	51.0
06:00 AM - 07:00 AM	52.5	64.0	51.7
07:00 AM - 08:00 AM	66.9	95.3	51.9
08:00 AM - 09:00 AM	52.6	81.0	51.0
09:00 AM - 10:00 AM	51.8	63.3	50.6
Leq Average 24 hrs. (dB(A))	60.2		
Lmax (dB(A))		95.3	
L90 (dB(A))			51.7
Ldn (dB(A))	67.5		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management Orawan R.
Orawan Rakyong
Scientist (3)

Approved by Supt S.
Supot Salamteh
Section Head

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286839-1

Sample Number	24144508-12
Parameter	Noise (Leq 24 hrs.)
Location	โรงเรียนอนุบาลทับกวาง (GPS 47P 723029, 1616344)
Measurement Date	Apr 06 - Apr 07, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 672789

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	51.8	68.3	50.3
11:00 AM - 12:00 PM	51.4	77.8	50.2
12:00 PM - 01:00 PM	50.7	63.3	49.9
01:00 PM - 02:00 PM	50.6	67.0	49.7
02:00 PM - 03:00 PM	50.9	72.6	49.9
03:00 PM - 04:00 PM	50.3	59.2	49.6
04:00 PM - 05:00 PM	50.9	82.1	49.6
05:00 PM - 06:00 PM	50.7	64.0	50.0
06:00 PM - 07:00 PM	50.7	69.2	50.0
07:00 PM - 08:00 PM	51.0	61.4	50.5
08:00 PM - 09:00 PM	51.6	59.7	50.7
09:00 PM - 10:00 PM	53.2	63.1	51.1
10:00 PM - 11:00 PM	56.4	66.9	52.1
11:00 PM - 12:00 AM	56.3	62.4	53.9
12:00 AM - 01:00 AM	53.3	60.9	49.9
01:00 AM - 02:00 AM	52.6	73.3	48.8
02:00 AM - 03:00 AM	49.6	59.2	48.9
03:00 AM - 04:00 AM	49.5	58.2	48.9
04:00 AM - 05:00 AM	49.7	63.5	48.6
05:00 AM - 06:00 AM	52.6	65.1	50.6
06:00 AM - 07:00 AM	54.5	80.3	52.4
07:00 AM - 08:00 AM	54.4	72.6	52.8
08:00 AM - 09:00 AM	52.9	76.9	51.6
09:00 AM - 10:00 AM	52.9	86.9	50.3
Leq Average 24 hrs. (dB(A))	52.5		
Lmax (dB(A))		86.9	
L90 (dB(A))			50.0
Ldn (dB(A))	59.7		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management Orawan R.
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2995-71/ EMAIL S:\Reports_Air Noise.rpt (5:00PM)

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286840-1

Sample Number	24144508-13
Parameter	Noise (Leq 24 hrs.)
Location	โรงเรียนอนุบาลท้บกวาง (GPS 47P 723029, 1616344)
Measurement Date	Apr 07 - Apr 08, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 672789

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	50.4	66.7	49.7
11:00 AM - 12:00 PM	50.9	71.1	49.4
12:00 PM - 01:00 PM	50.0	64.4	48.7
01:00 PM - 02:00 PM	49.9	66.5	48.7
02:00 PM - 03:00 PM	51.0	73.3	49.5
03:00 PM - 04:00 PM	50.3	66.0	49.3
04:00 PM - 05:00 PM	52.8	65.3	51.4
05:00 PM - 06:00 PM	51.9	76.8	50.1
06:00 PM - 07:00 PM	52.3	63.7	51.1
07:00 PM - 08:00 PM	52.9	61.5	51.9
08:00 PM - 09:00 PM	51.5	70.4	50.5
09:00 PM - 10:00 PM	50.2	60.2	49.7
10:00 PM - 11:00 PM	50.5	55.1	50.0
11:00 PM - 12:00 AM	51.3	59.9	50.3
12:00 AM - 01:00 AM	52.1	58.8	51.0
01:00 AM - 02:00 AM	53.1	73.1	50.5
02:00 AM - 03:00 AM	50.4	59.6	49.5
03:00 AM - 04:00 AM	50.9	59.7	49.8
04:00 AM - 05:00 AM	52.0	72.7	50.4
05:00 AM - 06:00 AM	53.3	64.5	51.9
06:00 AM - 07:00 AM	53.9	66.9	52.3
07:00 AM - 08:00 AM	51.7	63.6	50.6
08:00 AM - 09:00 AM	50.3	66.7	49.1
09:00 AM - 10:00 AM	49.9	67.1	48.6
Leq Average 24 hrs. (dB(A))	51.6		
Lmax (dB(A))		76.8	
L90 (dB(A))			50.0
Ldn (dB(A))	58.4		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management Orawan R.
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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286841-1

Sample Number	24144508-14
Parameter	Noise (Leq 24 hrs.)
Location	โรงเรียนอนุบาลท้บกวาง (GPS 47P 723029, 1616344)
Measurement Date	Apr 08 - Apr 09, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 672789

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	49.5	70.0	48.3
11:00 AM - 12:00 PM	53.8	94.8	48.0
12:00 PM - 01:00 PM	48.4	59.9	47.7
01:00 PM - 02:00 PM	48.2	57.8	47.7
02:00 PM - 03:00 PM	53.8	77.8	50.5
03:00 PM - 04:00 PM	50.8	67.1	49.8
04:00 PM - 05:00 PM	49.9	59.9	49.3
05:00 PM - 06:00 PM	52.5	72.7	50.8
06:00 PM - 07:00 PM	54.0	66.6	52.4
07:00 PM - 08:00 PM	54.5	74.0	52.3
08:00 PM - 09:00 PM	51.3	66.9	50.6
09:00 PM - 10:00 PM	51.1	64.2	50.5
10:00 PM - 11:00 PM	52.3	64.9	51.1
11:00 PM - 12:00 AM	54.2	62.2	51.8
12:00 AM - 01:00 AM	54.9	61.2	52.3
01:00 AM - 02:00 AM	53.0	71.4	51.7
02:00 AM - 03:00 AM	54.2	75.2	51.8
03:00 AM - 04:00 AM	52.2	62.2	51.8
04:00 AM - 05:00 AM	52.6	61.9	51.9
05:00 AM - 06:00 AM	53.3	62.9	52.7
06:00 AM - 07:00 AM	53.1	69.8	52.4
07:00 AM - 08:00 AM	52.7	65.5	51.9
08:00 AM - 09:00 AM	52.2	63.4	51.5
09:00 AM - 10:00 AM	51.8	60.0	51.2
Leq Average 24 hrs. (dB(A))	52.6		
Lmax (dB(A))		94.8	
L90 (dB(A))			51.2
Ldn (dB(A))	59.7		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
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Technical Management Orawan R.
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Scientist (3)

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286842-1

Sample Number	24144508-15
Parameter	Noise (Leq 24 hrs.)
Location	บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date	Apr 02 - Apr 03, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 584983

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	50.4	68.1	41.5
11:00 AM - 12:00 PM	48.2	70.8	40.3
12:00 PM - 01:00 PM	46.0	69.4	38.7
01:00 PM - 02:00 PM	44.2	65.6	38.2
02:00 PM - 03:00 PM	52.4	89.3	36.2
03:00 PM - 04:00 PM	57.9	84.7	44.5
04:00 PM - 05:00 PM	55.2	82.5	45.9
05:00 PM - 06:00 PM	47.1	65.9	40.5
06:00 PM - 07:00 PM	49.7	72.0	42.3
07:00 PM - 08:00 PM	43.9	64.4	41.7
08:00 PM - 09:00 PM	43.9	60.9	42.0
09:00 PM - 10:00 PM	43.6	54.1	41.8
10:00 PM - 11:00 PM	44.2	63.4	41.9
11:00 PM - 12:00 AM	44.3	51.8	40.9
12:00 AM - 01:00 AM	45.7	57.8	41.4
01:00 AM - 02:00 AM	46.4	78.1	40.0
02:00 AM - 03:00 AM	42.2	67.5	38.6
03:00 AM - 04:00 AM	41.3	66.7	37.8
04:00 AM - 05:00 AM	47.1	62.1	34.7
05:00 AM - 06:00 AM	52.9	65.6	45.3
06:00 AM - 07:00 AM	51.1	68.5	47.2
07:00 AM - 08:00 AM	50.0	69.0	46.3
08:00 AM - 09:00 AM	58.5	86.8	39.7
09:00 AM - 10:00 AM	54.9	79.7	39.8
Leq Average 24 hrs. (dB(A))	51.3		
Lmax (dB(A))		89.3	
L90 (dB(A))			40.9
Ldn (dB(A))	55.3		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management Orawan R.
Orawan Rakyong
Scientist (3)

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286843-1

Sample Number	24144508-16
Parameter	Noise (Leq 24 hrs.)
Location	บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date	Apr 03 - Apr 04, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 584983

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	52.1	79.6	41.3
11:00 AM - 12:00 PM	47.6	70.6	40.5
12:00 PM - 01:00 PM	47.5	73.2	40.1
01:00 PM - 02:00 PM	47.9	73.0	40.1
02:00 PM - 03:00 PM	51.7	82.6	39.8
03:00 PM - 04:00 PM	56.7	81.6	44.5
04:00 PM - 05:00 PM	49.9	65.7	46.0
05:00 PM - 06:00 PM	49.8	72.9	44.0
06:00 PM - 07:00 PM	48.0	69.9	39.7
07:00 PM - 08:00 PM	43.1	66.1	40.7
08:00 PM - 09:00 PM	42.8	60.1	40.0
09:00 PM - 10:00 PM	43.7	76.0	39.1
10:00 PM - 11:00 PM	40.9	62.2	37.7
11:00 PM - 12:00 AM	42.4	62.6	37.7
12:00 AM - 01:00 AM	44.9	64.6	38.2
01:00 AM - 02:00 AM	44.8	75.6	36.1
02:00 AM - 03:00 AM	40.4	67.1	34.0
03:00 AM - 04:00 AM	38.6	61.7	33.8
04:00 AM - 05:00 AM	46.6	62.7	34.7
05:00 AM - 06:00 AM	52.7	64.9	47.6
06:00 AM - 07:00 AM	51.8	65.6	48.2
07:00 AM - 08:00 AM	54.8	72.3	46.5
08:00 AM - 09:00 AM	50.9	72.9	39.4
09:00 AM - 10:00 AM	58.0	85.9	36.5
Leq Average 24 hrs. (dB(A))	50.7		
Lmax (dB(A))		85.9	
L90 (dB(A))			39.8
Ldn (dB(A))	54.8		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management Orawan R.
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2995-71/ EMAIL S:\Reports_Air Noise.rpt (5:01PM)

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286844-1

Sample Number	24144508-17
Parameter	Noise (Leq 24 hrs.)
Location	บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date	Apr 04 - Apr 05, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 584983

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	52.5	78.5	38.3
11:00 AM - 12:00 PM	51.1	74.7	37.7
12:00 PM - 01:00 PM	50.2	74.9	39.0
01:00 PM - 02:00 PM	48.7	76.2	37.4
02:00 PM - 03:00 PM	54.9	82.5	41.2
03:00 PM - 04:00 PM	62.0	88.3	54.7
04:00 PM - 05:00 PM	51.2	74.7	47.0
05:00 PM - 06:00 PM	48.0	78.9	39.1
06:00 PM - 07:00 PM	52.9	83.7	46.3
07:00 PM - 08:00 PM	54.5	70.3	51.7
08:00 PM - 09:00 PM	54.2	87.1	42.0
09:00 PM - 10:00 PM	47.1	64.5	41.9
10:00 PM - 11:00 PM	60.0	88.1	42.4
11:00 PM - 12:00 AM	48.4	57.0	44.5
12:00 AM - 01:00 AM	55.9	75.7	52.7
01:00 AM - 02:00 AM	59.4	77.4	57.2
02:00 AM - 03:00 AM	60.0	65.4	58.2
03:00 AM - 04:00 AM	59.6	65.3	57.3
04:00 AM - 05:00 AM	60.8	85.8	56.2
05:00 AM - 06:00 AM	57.5	67.4	54.2
06:00 AM - 07:00 AM	56.7	79.7	48.3
07:00 AM - 08:00 AM	52.5	82.9	46.1
08:00 AM - 09:00 AM	51.5	72.7	37.8
09:00 AM - 10:00 AM	53.2	78.5	38.5
Leq Average 24 hrs. (dB(A))	56.4		
Lmax (dB(A))		88.3	
L90 (dB(A))			44.5
Ldn (dB(A))	64.6		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management Orawan R.
Orawan Rakyong
Scientist (3)

Approved by Supt S.
Supot Salamteh
Section Head

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286845-1

Sample Number	24144508-18
Parameter	Noise (Leq 24 hrs.)
Location	บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date	Apr 05 - Apr 06, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 584983

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	49.3	71.9	39.3
11:00 AM - 12:00 PM	53.2	79.8	40.9
12:00 PM - 01:00 PM	47.6	70.5	37.9
01:00 PM - 02:00 PM	52.7	85.9	39.0
02:00 PM - 03:00 PM	49.7	66.5	40.8
03:00 PM - 04:00 PM	49.5	69.3	43.8
04:00 PM - 05:00 PM	50.8	76.7	45.5
05:00 PM - 06:00 PM	47.9	70.1	44.0
06:00 PM - 07:00 PM	51.0	84.3	40.4
07:00 PM - 08:00 PM	53.5	79.3	42.3
08:00 PM - 09:00 PM	44.3	57.1	42.4
09:00 PM - 10:00 PM	49.6	76.9	41.1
10:00 PM - 11:00 PM	50.1	74.7	43.1
11:00 PM - 12:00 AM	54.2	62.7	50.6
12:00 AM - 01:00 AM	56.3	61.9	53.5
01:00 AM - 02:00 AM	55.8	65.3	52.2
02:00 AM - 03:00 AM	50.7	59.6	44.4
03:00 AM - 04:00 AM	46.4	58.8	37.3
04:00 AM - 05:00 AM	47.4	61.5	36.7
05:00 AM - 06:00 AM	52.2	64.4	46.4
06:00 AM - 07:00 AM	52.7	67.4	48.1
07:00 AM - 08:00 AM	53.7	80.8	45.5
08:00 AM - 09:00 AM	53.4	82.2	39.6
09:00 AM - 10:00 AM	48.8	82.1	38.7
Leq Average 24 hrs. (dB(A))	51.8		
Lmax (dB(A))		85.9	
L90 (dB(A))			42.3
Ldn (dB(A))	59.1		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
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Technical Management Orawan R.
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Scientist (3)

Approved by Supt S.
Supot Salamteh
Section Head

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286846-1

Sample Number	24144508-19
Parameter	Noise (Leq 24 hrs.)
Location	บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date	Apr 06 - Apr 07, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 584983

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	52.2	77.3	38.9
11:00 AM - 12:00 PM	49.3	74.5	39.7
12:00 PM - 01:00 PM	45.5	66.2	37.7
01:00 PM - 02:00 PM	45.2	66.2	37.6
02:00 PM - 03:00 PM	47.4	73.8	38.0
03:00 PM - 04:00 PM	49.3	73.6	44.4
04:00 PM - 05:00 PM	49.6	69.7	45.2
05:00 PM - 06:00 PM	48.0	65.2	37.8
06:00 PM - 07:00 PM	47.2	66.3	39.4
07:00 PM - 08:00 PM	42.2	63.5	40.8
08:00 PM - 09:00 PM	42.8	56.5	40.7
09:00 PM - 10:00 PM	42.9	58.6	40.4
10:00 PM - 11:00 PM	42.9	56.4	39.5
11:00 PM - 12:00 AM	46.1	65.1	39.6
12:00 AM - 01:00 AM	49.9	65.5	38.6
01:00 AM - 02:00 AM	40.8	69.0	36.4
02:00 AM - 03:00 AM	43.4	60.4	36.6
03:00 AM - 04:00 AM	41.7	58.5	34.6
04:00 AM - 05:00 AM	49.4	67.2	38.5
05:00 AM - 06:00 AM	52.1	63.8	45.2
06:00 AM - 07:00 AM	53.4	68.7	48.6
07:00 AM - 08:00 AM	52.0	70.1	48.4
08:00 AM - 09:00 AM	53.3	77.1	43.5
09:00 AM - 10:00 AM	49.7	74.0	36.7
Leq Average 24 hrs. (dB(A))	48.9		
Lmax (dB(A))		77.3	
L90 (dB(A))			39.4
Ldn (dB(A))	55.2		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
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Technical Management Orawan R.
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Scientist (3)

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286847-1

Sample Number	24144508-20
Parameter	Noise (Leq 24 hrs.)
Location	บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date	Apr 07 - Apr 08, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 584983

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	44.3	66.4	37.4
11:00 AM - 12:00 PM	55.1	81.0	36.3
12:00 PM - 01:00 PM	46.3	74.3	35.4
01:00 PM - 02:00 PM	48.9	71.4	41.6
02:00 PM - 03:00 PM	54.7	79.1	42.4
03:00 PM - 04:00 PM	48.6	63.0	45.7
04:00 PM - 05:00 PM	49.6	72.8	45.9
05:00 PM - 06:00 PM	47.8	65.0	42.2
06:00 PM - 07:00 PM	51.3	64.0	44.1
07:00 PM - 08:00 PM	55.3	68.2	52.5
08:00 PM - 09:00 PM	54.7	62.2	50.0
09:00 PM - 10:00 PM	61.8	93.0	45.4
10:00 PM - 11:00 PM	48.5	63.8	43.3
11:00 PM - 12:00 AM	43.9	61.9	38.5
12:00 AM - 01:00 AM	44.4	63.0	38.1
01:00 AM - 02:00 AM	43.7	58.3	38.7
02:00 AM - 03:00 AM	43.8	62.1	34.5
03:00 AM - 04:00 AM	60.8	90.7	33.1
04:00 AM - 05:00 AM	45.3	61.4	35.2
05:00 AM - 06:00 AM	51.4	63.5	44.2
06:00 AM - 07:00 AM	51.5	71.7	46.7
07:00 AM - 08:00 AM	51.1	75.2	44.8
08:00 AM - 09:00 AM	61.1	95.4	35.9
09:00 AM - 10:00 AM	49.9	68.8	38.4
Leq Average 24 hrs. (dB(A))	54.3		
Lmax (dB(A))		95.4	
L90 (dB(A))			41.6
Ldn (dB(A))	59.6		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management Orawan R.
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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286848-1

Sample Number	24144508-21
Parameter	Noise (Leq 24 hrs.)
Location	บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date	Apr 08 - Apr 09, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 584983

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	48.5	70.6	35.6
11:00 AM - 12:00 PM	46.8	72.6	36.5
12:00 PM - 01:00 PM	45.8	68.9	37.1
01:00 PM - 02:00 PM	42.4	65.4	36.4
02:00 PM - 03:00 PM	48.4	72.5	42.0
03:00 PM - 04:00 PM	58.7	83.3	46.4
04:00 PM - 05:00 PM	58.6	88.9	45.2
05:00 PM - 06:00 PM	54.5	82.2	44.8
06:00 PM - 07:00 PM	47.5	70.3	41.1
07:00 PM - 08:00 PM	45.9	68.1	41.1
08:00 PM - 09:00 PM	43.6	63.8	39.8
09:00 PM - 10:00 PM	43.3	56.6	39.2
10:00 PM - 11:00 PM	62.7	97.5	38.8
11:00 PM - 12:00 AM	40.6	63.2	36.9
12:00 AM - 01:00 AM	43.1	71.9	37.0
01:00 AM - 02:00 AM	42.1	62.4	35.8
02:00 AM - 03:00 AM	40.2	56.4	34.6
03:00 AM - 04:00 AM	55.7	80.6	35.5
04:00 AM - 05:00 AM	47.0	82.1	35.4
05:00 AM - 06:00 AM	51.6	65.4	45.7
06:00 AM - 07:00 AM	51.7	74.5	46.6
07:00 AM - 08:00 AM	50.8	73.6	45.9
08:00 AM - 09:00 AM	56.3	81.0	40.9
09:00 AM - 10:00 AM	49.3	75.3	38.7
Leq Average 24 hrs. (dB(A))	53.5		
Lmax (dB(A))		97.5	
L90 (dB(A))			38.8
Ldn (dB(A))	60.8		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management Orawan R.
Orawan Rakyong
Scientist (3)

Approved by Supot S.
Supot Salamteh
Section Head

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286849-1

Sample Number	24144508-22
Parameter	Noise (Leq 24 hrs.)
Location	รั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 161959)
Measurement Date	Apr 02 - Apr 03, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 858525

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	62.1	84.7	59.2
11:00 AM - 12:00 PM	61.2	81.4	58.9
12:00 PM - 01:00 PM	61.0	81.3	58.9
01:00 PM - 02:00 PM	61.3	84.7	58.9
02:00 PM - 03:00 PM	61.3	79.8	59.0
03:00 PM - 04:00 PM	60.9	82.0	58.9
04:00 PM - 05:00 PM	62.1	83.6	58.8
05:00 PM - 06:00 PM	62.9	84.1	60.3
06:00 PM - 07:00 PM	64.7	85.4	61.4
07:00 PM - 08:00 PM	62.7	83.2	60.1
08:00 PM - 09:00 PM	62.9	83.7	60.3
09:00 PM - 10:00 PM	62.9	89.0	59.8
10:00 PM - 11:00 PM	62.6	88.1	59.9
11:00 PM - 12:00 AM	60.6	83.1	58.2
12:00 AM - 01:00 AM	60.4	79.0	57.9
01:00 AM - 02:00 AM	61.5	81.6	58.0
02:00 AM - 03:00 AM	61.6	79.3	58.4
03:00 AM - 04:00 AM	61.3	80.2	58.6
04:00 AM - 05:00 AM	60.6	76.9	58.9
05:00 AM - 06:00 AM	61.4	77.6	59.6
06:00 AM - 07:00 AM	62.1	79.2	60.2
07:00 AM - 08:00 AM	61.5	76.6	59.8
08:00 AM - 09:00 AM	61.3	80.4	59.0
09:00 AM - 10:00 AM	61.4	80.5	59.4
Leq Average 24 hrs. (dB(A))	61.9		
Lmax (dB(A))		89.0	
L90 (dB(A))			59.0
Ldn (dB(A))	67.9		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
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Technical Management Orawan R.
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2995-71/ EMAIL S:\Reports_Air Noise.rpt (5:04PM)

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286850-1

Sample Number	24144508-23
Parameter	Noise (Leq 24 hrs.)
Location	รั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 161959)
Measurement Date	Apr 03 - Apr 04, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 858525

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	61.1	77.7	58.9
11:00 AM - 12:00 PM	60.0	73.6	58.4
12:00 PM - 01:00 PM	61.5	81.2	58.3
01:00 PM - 02:00 PM	61.0	78.9	58.9
02:00 PM - 03:00 PM	61.8	80.3	59.2
03:00 PM - 04:00 PM	60.7	79.4	58.2
04:00 PM - 05:00 PM	63.4	81.1	59.9
05:00 PM - 06:00 PM	64.6	85.0	61.3
06:00 PM - 07:00 PM	64.5	81.4	61.7
07:00 PM - 08:00 PM	62.7	86.1	59.9
08:00 PM - 09:00 PM	62.8	86.6	60.1
09:00 PM - 10:00 PM	62.2	84.8	60.0
10:00 PM - 11:00 PM	62.5	79.5	60.3
11:00 PM - 12:00 AM	61.3	85.8	58.7
12:00 AM - 01:00 AM	61.4	82.8	58.5
01:00 AM - 02:00 AM	62.8	82.8	59.0
02:00 AM - 03:00 AM	60.9	79.2	59.2
03:00 AM - 04:00 AM	61.6	76.3	59.6
04:00 AM - 05:00 AM	61.0	78.5	59.4
05:00 AM - 06:00 AM	62.2	89.0	60.0
06:00 AM - 07:00 AM	62.2	75.7	60.2
07:00 AM - 08:00 AM	61.9	79.4	59.8
08:00 AM - 09:00 AM	61.4	79.3	59.2
09:00 AM - 10:00 AM	62.8	82.3	60.6
Leq Average 24 hrs. (dB(A))	62.2		
Lmax (dB(A))		89.0	
L90 (dB(A))			59.4
Ldn (dB(A))	68.3		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
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Technical Management Orawan R.
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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286851-1

Sample Number	24144508-24
Parameter	Noise (Leq 24 hrs.)
Location	รั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 161959)
Measurement Date	Apr 04 - Apr 05, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 858525

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	62.1	82.2	59.9
11:00 AM - 12:00 PM	62.9	83.5	60.1
12:00 PM - 01:00 PM	62.3	79.4	60.3
01:00 PM - 02:00 PM	62.6	83.5	60.7
02:00 PM - 03:00 PM	62.3	80.9	60.5
03:00 PM - 04:00 PM	65.7	82.8	62.6
04:00 PM - 05:00 PM	63.9	87.3	61.6
05:00 PM - 06:00 PM	64.2	84.4	61.6
06:00 PM - 07:00 PM	65.6	84.3	63.2
07:00 PM - 08:00 PM	65.2	85.3	61.5
08:00 PM - 09:00 PM	64.2	83.2	61.2
09:00 PM - 10:00 PM	64.4	84.7	61.3
10:00 PM - 11:00 PM	64.2	85.5	61.0
11:00 PM - 12:00 AM	61.6	78.7	59.5
12:00 AM - 01:00 AM	62.4	83.1	59.4
01:00 AM - 02:00 AM	62.8	83.3	59.0
02:00 AM - 03:00 AM	62.6	84.3	58.5
03:00 AM - 04:00 AM	61.2	83.5	58.7
04:00 AM - 05:00 AM	60.8	89.4	58.5
05:00 AM - 06:00 AM	61.9	76.6	60.0
06:00 AM - 07:00 AM	61.9	78.3	60.2
07:00 AM - 08:00 AM	62.2	75.3	60.3
08:00 AM - 09:00 AM	64.1	83.3	61.5
09:00 AM - 10:00 AM	63.0	83.0	61.1
Leq Average 24 hrs. (dB(A))	63.3		
Lmax (dB(A))		89.4	
L90 (dB(A))			60.3
Ldn (dB(A))	68.9		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management Orawan R.
Orawan Rakyong
Scientist (3)

Approved by Supt S.
Supot Salamteh
Section Head

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286852-1

Sample Number	24144508-25
Parameter	Noise (Leq 24 hrs.)
Location	รั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 161959)
Measurement Date	Apr 05 - Apr 06, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 858525

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	63.3	86.9	61.0
11:00 AM - 12:00 PM	63.4	83.3	61.1
12:00 PM - 01:00 PM	63.2	82.4	61.0
01:00 PM - 02:00 PM	63.4	77.6	60.9
02:00 PM - 03:00 PM	63.8	88.3	61.0
03:00 PM - 04:00 PM	62.9	82.6	60.9
04:00 PM - 05:00 PM	63.6	81.1	61.3
05:00 PM - 06:00 PM	63.9	87.8	61.4
06:00 PM - 07:00 PM	63.6	82.7	61.7
07:00 PM - 08:00 PM	63.6	83.6	61.0
08:00 PM - 09:00 PM	62.7	83.4	60.6
09:00 PM - 10:00 PM	62.1	76.1	60.0
10:00 PM - 11:00 PM	62.4	81.5	60.2
11:00 PM - 12:00 AM	61.6	76.9	59.4
12:00 AM - 01:00 AM	61.6	83.7	58.3
01:00 AM - 02:00 AM	63.2	84.7	58.3
02:00 AM - 03:00 AM	60.6	81.0	57.7
03:00 AM - 04:00 AM	60.4	76.2	57.8
04:00 AM - 05:00 AM	59.7	76.8	57.5
05:00 AM - 06:00 AM	61.0	76.4	58.8
06:00 AM - 07:00 AM	61.0	79.4	59.2
07:00 AM - 08:00 AM	61.5	76.2	59.4
08:00 AM - 09:00 AM	62.0	80.7	59.5
09:00 AM - 10:00 AM	62.9	82.4	60.6
Leq Average 24 hrs. (dB(A))	62.5		
Lmax (dB(A))		88.3	
L90 (dB(A))			60.2
Ldn (dB(A))	68.1		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management Orawan R.
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Scientist (3)

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Supot Salamteh
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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286853-1

Sample Number	24144508-26
Parameter	Noise (Leq 24 hrs.)
Location	รั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 161959)
Measurement Date	Apr 06 - Apr 07, 2025
Measurement by	Vanich Phanpipit
Sound Level meter	Serial No. 858525

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	62.7	85.4	60.4
11:00 AM - 12:00 PM	62.8	82.5	60.6
12:00 PM - 01:00 PM	62.6	82.4	60.5
01:00 PM - 02:00 PM	62.5	80.3	60.3
02:00 PM - 03:00 PM	62.6	82.7	60.4
03:00 PM - 04:00 PM	62.1	77.2	60.3
04:00 PM - 05:00 PM	62.4	81.5	59.7
05:00 PM - 06:00 PM	63.1	81.5	60.5
06:00 PM - 07:00 PM	63.2	85.4	60.9
07:00 PM - 08:00 PM	61.5	85.7	58.8
08:00 PM - 09:00 PM	60.9	76.4	58.9
09:00 PM - 10:00 PM	61.1	73.9	59.0
10:00 PM - 11:00 PM	60.3	72.0	58.2
11:00 PM - 12:00 AM	60.7	72.1	58.3
12:00 AM - 01:00 AM	60.5	70.8	58.5
01:00 AM - 02:00 AM	61.6	79.9	58.7
02:00 AM - 03:00 AM	59.8	80.3	57.4
03:00 AM - 04:00 AM	59.6	78.8	57.5
04:00 AM - 05:00 AM	59.6	77.8	57.3
05:00 AM - 06:00 AM	60.8	75.4	58.1
06:00 AM - 07:00 AM	62.4	78.9	60.1
07:00 AM - 08:00 AM	61.1	73.8	59.4
08:00 AM - 09:00 AM	63.2	76.9	60.9
09:00 AM - 10:00 AM	64.2	78.2	62.1
Leq Average 24 hrs. (dB(A))	61.9		
Lmax (dB(A))		85.7	
L90 (dB(A))			59.4
Ldn (dB(A))	67.4		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management Orawan R.
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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286854-1

Sample Number	24144508-27
Parameter	Noise (Leq 24 hrs.)
Location	รั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 161959)
Measurement Date	Apr 07 - Apr 08, 2025
Measurement by	
Sound Level meter	Serial No. 858525

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	63.2	81.7	61.2
11:00 AM - 12:00 PM	62.0	76.8	59.9
12:00 PM - 01:00 PM	62.2	87.0	59.9
01:00 PM - 02:00 PM	62.5	75.3	60.5
02:00 PM - 03:00 PM	62.2	83.3	60.2
03:00 PM - 04:00 PM	62.9	77.3	60.9
04:00 PM - 05:00 PM	62.5	81.6	60.3
05:00 PM - 06:00 PM	63.9	87.7	61.1
06:00 PM - 07:00 PM	64.6	84.7	62.2
07:00 PM - 08:00 PM	63.3	85.9	60.6
08:00 PM - 09:00 PM	63.2	82.5	60.1
09:00 PM - 10:00 PM	62.8	81.8	60.2
10:00 PM - 11:00 PM	62.8	81.7	60.4
11:00 PM - 12:00 AM	61.1	76.6	59.4
12:00 AM - 01:00 AM	61.4	80.8	58.7
01:00 AM - 02:00 AM	62.9	81.8	59.6
02:00 AM - 03:00 AM	62.4	82.1	59.6
03:00 AM - 04:00 AM	62.2	81.3	59.3
04:00 AM - 05:00 AM	61.5	89.7	59.5
05:00 AM - 06:00 AM	62.3	85.3	60.3
06:00 AM - 07:00 AM	62.8	76.6	60.4
07:00 AM - 08:00 AM	60.6	73.1	59.1
08:00 AM - 09:00 AM	62.0	81.2	58.8
09:00 AM - 10:00 AM	65.0	82.5	63.3
Leq Average 24 hrs. (dB(A))	62.7		
Lmax (dB(A))		89.7	
L90 (dB(A))			60.2
Ldn (dB(A))	68.7		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management Orawan R.
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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144508
Date Received : Apr 10, 2025
Date Reported : Apr 21, 2025
Report Number: 3286855-1

Sample Number	24144508-28
Parameter	Noise (Leq 24 hrs.)
Location	รั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 161959)
Measurement Date	Apr 08 - Apr 09, 2025
Measurement by	
Sound Level meter	Serial No. 858525

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	60.5	76.8	58.0
11:00 AM - 12:00 PM	62.8	83.6	60.2
12:00 PM - 01:00 PM	62.3	84.3	59.9
01:00 PM - 02:00 PM	62.4	81.4	59.9
02:00 PM - 03:00 PM	60.6	76.8	58.5
03:00 PM - 04:00 PM	60.3	83.6	57.7
04:00 PM - 05:00 PM	62.1	84.9	59.0
05:00 PM - 06:00 PM	62.5	82.3	60.2
06:00 PM - 07:00 PM	64.9	82.1	62.5
07:00 PM - 08:00 PM	63.5	87.8	60.1
08:00 PM - 09:00 PM	63.0	86.1	59.9
09:00 PM - 10:00 PM	63.0	83.5	59.7
10:00 PM - 11:00 PM	61.8	85.2	59.1
11:00 PM - 12:00 AM	60.6	80.5	58.2
12:00 AM - 01:00 AM	61.3	81.5	58.8
01:00 AM - 02:00 AM	62.7	82.3	58.4
02:00 AM - 03:00 AM	60.7	78.9	58.6
03:00 AM - 04:00 AM	60.8	86.0	58.6
04:00 AM - 05:00 AM	60.6	81.0	58.7
05:00 AM - 06:00 AM	62.4	75.8	60.1
06:00 AM - 07:00 AM	62.3	76.8	60.5
07:00 AM - 08:00 AM	61.4	79.5	59.7
08:00 AM - 09:00 AM	63.1	82.5	60.4
09:00 AM - 10:00 AM	65.5	87.3	63.2
Leq Average 24 hrs. (dB(A))	62.3		
Lmax (dB(A))		87.8	
L90 (dB(A))			59.7
Ldn (dB(A))	68.1		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management Orawan R.
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284516-1

Sample No. 24144513-1
Parameter เสียงรบกวน
Location บ้านซับมอน (GPS 47P 728147, 1619150)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 597159

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	65.7	67.3	n/a	-	57.5	-
11:00 AM - 12:00 PM	61.9	62.7	n/a	-	59.5	-
12:00 PM - 01:00 PM	61.1	58.6	57.5	-	56.4	1.1
01:00 PM - 02:00 PM	62.5	59.4	59.6	-	55.6	4.0
02:00 PM - 03:00 PM	61.9	57.9	59.7	-	55.6	4.1
03:00 PM - 04:00 PM	63.9	60.3	61.4	-	57.1	4.3
04:00 PM - 05:00 PM	61.8	61.3	52.2	-	57.5	-5.3
05:00 PM - 06:00 PM	58.8	59.2	n/a	-	57.3	-
06:00 PM - 07:00 PM	59.4	60.1	n/a	-	57.3	-
07:00 PM - 08:00 PM	58.8	59.4	n/a	-	57.3	-
08:00 PM - 09:00 PM	58.7	58.7	n/a	-	56.9	-
09:00 PM - 10:00 PM	58.6	58.9	n/a	-	56.7	-
10:00 PM - 10:05 PM	58.5	58.6	-	n/a	56.7	-
10:05 PM - 10:10 PM	58.0	59.2	-	n/a	56.8	-
10:10 PM - 10:15 PM	58.9	58.0	-	54.6	56.2	-1.6
10:15 PM - 10:20 PM	57.5	60.3	-	n/a	56.9	-
10:20 PM - 10:25 PM	58.7	59.2	-	n/a	56.6	-
10:25 PM - 10:30 PM	58.2	66.7	-	n/a	56.8	-
10:30 PM - 10:35 PM	58.2	59.3	-	n/a	56.7	-
10:35 PM - 10:40 PM	58.5	66.9	-	n/a	56.3	-
10:40 PM - 10:45 PM	57.6	58.8	-	n/a	56.6	-
10:45 PM - 10:50 PM	59.4	58.6	-	54.7	56.1	-1.4
10:50 PM - 10:55 PM	58.2	58.3	-	n/a	56.3	-
10:55 PM - 11:00 PM	60.6	59.9	-	55.3	56.9	-1.6
11:00 PM - 11:05 PM	58.0	58.8	-	n/a	56.9	-
11:05 PM - 11:10 PM	60.4	59.2	-	57.2	56.4	0.8
11:10 PM - 11:15 PM	57.9	58.5	-	n/a	56.2	-
11:15 PM - 11:20 PM	58.3	57.4	-	54.0	55.9	-1.9
11:20 PM - 11:25 PM	58.7	58.0	-	53.4	56.0	-2.6
11:25 PM - 11:30 PM	58.2	58.1	-	44.8	56.3	-11.5
11:30 PM - 11:35 PM	57.9	59.2	-	n/a	56.3	-
11:35 PM - 11:40 PM	58.1	58.7	-	n/a	56.5	-
11:40 PM - 11:45 PM	57.4	58.5	-	n/a	56.3	-
11:45 PM - 11:50 PM	57.5	58.3	-	n/a	55.7	-
11:50 PM - 11:55 PM	57.5	63.2	-	n/a	56.4	-
11:55 PM - 12:00 AM	58.0	62.7	-	n/a	56.1	-
12:00 AM - 12:05 AM	58.0	58.1	-	n/a	56.1	-
12:05 AM - 12:10 AM	57.8	57.8	-	n/a	56.0	-
12:10 AM - 12:15 AM	57.6	57.6	-	n/a	55.8	-
12:15 AM - 12:20 AM	57.6	58.1	-	n/a	56.5	-

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

Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284516-1

Sample No. 24144513-1
Parameter เสียงรบกวน
Location บ้านซับมอน (GPS 47P 728147, 1619150)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 597159

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	59.3	57.7	-	57.2	56.2	1.0
12:25 AM - 12:30 AM	58.2	57.7	-	51.6	55.9	-4.3
12:30 AM - 12:35 AM	57.6	57.1	-	51.0	55.9	-4.9
12:35 AM - 12:40 AM	57.3	58.0	-	n/a	55.4	-
12:40 AM - 12:45 AM	57.3	57.8	-	n/a	56.1	-
12:45 AM - 12:50 AM	57.5	57.9	-	n/a	55.8	-
12:50 AM - 12:55 AM	57.4	58.3	-	n/a	56.4	-
12:55 AM - 01:00 AM	57.2	58.8	-	n/a	55.8	-
01:00 AM - 01:05 AM	57.4	57.2	-	46.9	55.4	-8.5
01:05 AM - 01:10 AM	57.2	58.7	-	n/a	56.4	-
01:10 AM - 01:15 AM	57.7	57.8	-	n/a	56.0	-
01:15 AM - 01:20 AM	57.8	57.3	-	51.2	55.4	-4.2
01:20 AM - 01:25 AM	57.4	56.8	-	51.5	55.4	-3.9
01:25 AM - 01:30 AM	58.2	57.6	-	52.3	55.5	-3.2
01:30 AM - 01:35 AM	57.3	57.4	-	n/a	56.0	-
01:35 AM - 01:40 AM	57.7	64.5	-	n/a	56.6	-
01:40 AM - 01:45 AM	57.4	57.5	-	n/a	56.1	-
01:45 AM - 01:50 AM	57.0	57.7	-	n/a	55.9	-
01:50 AM - 01:55 AM	57.0	58.2	-	n/a	56.0	-
01:55 AM - 02:00 AM	57.6	58.7	-	n/a	56.3	-
02:00 AM - 02:05 AM	58.9	57.7	-	55.7	56.0	-0.3
02:05 AM - 02:10 AM	58.0	58.6	-	n/a	55.9	-
02:10 AM - 02:15 AM	57.5	57.7	-	n/a	55.4	-
02:15 AM - 02:20 AM	57.3	58.4	-	n/a	56.2	-
02:20 AM - 02:25 AM	58.0	57.4	-	52.1	55.5	-3.4
02:25 AM - 02:30 AM	57.7	57.9	-	n/a	55.9	-
02:30 AM - 02:35 AM	57.8	57.7	-	44.4	55.9	-11.5
02:35 AM - 02:40 AM	57.8	58.3	-	n/a	56.5	-
02:40 AM - 02:45 AM	57.3	58.2	-	n/a	56.2	-
02:45 AM - 02:50 AM	57.5	57.3	-	47.0	55.8	-8.8
02:50 AM - 02:55 AM	57.4	57.5	-	n/a	55.7	-
02:55 AM - 03:00 AM	57.3	57.6	-	n/a	56.1	-
03:00 AM - 03:05 AM	57.5	57.5	-	n/a	55.8	-
03:05 AM - 03:10 AM	58.0	57.4	-	52.1	55.9	-3.8
03:10 AM - 03:15 AM	57.3	59.2	-	n/a	56.2	-
03:15 AM - 03:20 AM	57.2	60.0	-	n/a	56.1	-
03:20 AM - 03:25 AM	57.3	57.9	-	n/a	55.8	-
03:25 AM - 03:30 AM	57.3	57.8	-	n/a	55.8	-
03:30 AM - 03:35 AM	57.3	58.0	-	n/a	55.7	-
03:35 AM - 03:40 AM	57.2	57.4	-	n/a	55.8	-

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Approved by
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Senior Manager

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284516-1

Sample No. 24144513-1
Parameter เสียงรบกวน
Location บ้านขันมอน (GPS 47P 728147, 1619150)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 597159

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	57.9	57.5	-	50.3	55.7	-5.4
03:45 AM - 03:50 AM	58.0	57.4	-	52.1	55.9	-3.8
03:50 AM - 03:55 AM	58.0	57.9	-	44.6	55.2	-10.6
03:55 AM - 04:00 AM	57.7	57.1	-	51.8	55.3	-3.5
04:00 AM - 04:05 AM	57.2	58.5	-	n/a	55.1	-
04:05 AM - 04:10 AM	57.6	57.8	-	n/a	55.6	-
04:10 AM - 04:15 AM	57.7	58.7	-	n/a	56.9	-
04:15 AM - 04:20 AM	57.6	58.4	-	n/a	56.1	-
04:20 AM - 04:25 AM	57.6	57.1	-	51.0	55.8	-4.8
04:25 AM - 04:30 AM	57.0	57.2	-	n/a	55.7	-
04:30 AM - 04:35 AM	57.6	57.1	-	51.0	55.3	-4.3
04:35 AM - 04:40 AM	58.4	58.0	-	50.8	55.7	-4.9
04:40 AM - 04:45 AM	58.3	57.6	-	53.0	56.0	-3.0
04:45 AM - 04:50 AM	57.7	57.7	-	n/a	56.1	-
04:50 AM - 04:55 AM	58.3	57.9	-	50.7	55.8	-5.1
04:55 AM - 05:00 AM	57.7	58.0	-	n/a	56.2	-
05:00 AM - 05:05 AM	58.1	58.7	-	n/a	56.3	-
05:05 AM - 05:10 AM	57.7	58.2	-	n/a	56.4	-
05:10 AM - 05:15 AM	57.7	59.5	-	n/a	57.0	-
05:15 AM - 05:20 AM	57.6	58.8	-	n/a	56.7	-
05:20 AM - 05:25 AM	58.0	66.5	-	n/a	59.9	-
05:25 AM - 05:30 AM	57.8	63.4	-	n/a	60.0	-
05:30 AM - 05:35 AM	58.3	59.2	-	n/a	57.1	-
05:35 AM - 05:40 AM	58.3	59.7	-	n/a	56.9	-
05:40 AM - 05:45 AM	58.7	58.8	-	n/a	56.6	-
05:45 AM - 05:50 AM	59.9	58.7	-	56.7	57.0	-0.3
05:50 AM - 05:55 AM	64.9	59.0	-	66.6	57.1	9.5
05:55 AM - 06:00 AM	63.2	59.7	-	63.6	57.2	6.4
06:00 AM - 07:00 AM	60.3	63.0	n/a	-	59.0	-
07:00 AM - 08:00 AM	60.8	62.6	n/a	-	57.8	-
08:00 AM - 09:00 AM	59.6	59.0	50.7	-	56.1	-5.4
09:00 AM - 10:00 AM	62.6	62.0	53.7	-	56.8	-3.1
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 02-03 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-1 วันที่ตรวจวัด 02-03 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284517-1

Sample No. 24144513-2
Parameter เสียงรบกวน
Location บ้านขันมอน (GPS 47P 728147, 1619150)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 597159

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	60.8	63.0	n/a	-	57.2	-
11:00 AM - 12:00 PM	59.9	59.4	50.3	-	57.3	-7.0
12:00 PM - 01:00 PM	58.8	58.4	48.2	-	56.4	-8.2
01:00 PM - 02:00 PM	59.9	60.3	n/a	-	57.5	-
02:00 PM - 03:00 PM	60.2	59.0	54.0	-	56.8	-2.8
03:00 PM - 04:00 PM	58.6	63.1	n/a	-	56.8	-
04:00 PM - 05:00 PM	60.0	63.3	n/a	-	59.1	-
05:00 PM - 06:00 PM	59.4	59.2	45.9	-	57.2	-11.3
06:00 PM - 07:00 PM	60.6	60.4	47.1	-	57.9	-10.8
07:00 PM - 08:00 PM	58.8	59.4	n/a	-	57.2	-
08:00 PM - 09:00 PM	58.8	60.1	n/a	-	57.1	-
09:00 PM - 10:00 PM	58.5	59.2	n/a	-	57.3	-
10:00 PM - 10:05 PM	58.3	58.1	-	47.8	56.3	-8.5
10:05 PM - 10:10 PM	58.9	58.0	-	54.6	56.3	-1.7
10:10 PM - 10:15 PM	58.4	57.6	-	53.7	55.8	-2.1
10:15 PM - 10:20 PM	58.1	58.8	-	n/a	56.4	-
10:20 PM - 10:25 PM	58.1	58.6	-	n/a	56.3	-
10:25 PM - 10:30 PM	57.8	58.3	-	n/a	56.0	-
10:30 PM - 10:35 PM	57.4	57.9	-	n/a	55.3	-
10:35 PM - 10:40 PM	56.9	59.8	-	n/a	56.6	-
10:40 PM - 10:45 PM	57.4	58.9	-	n/a	56.2	-
10:45 PM - 10:50 PM	58.0	59.4	-	n/a	55.7	-
10:50 PM - 10:55 PM	57.6	56.7	-	53.3	54.9	-1.6
10:55 PM - 11:00 PM	57.2	59.2	-	n/a	56.1	-
11:00 PM - 11:05 PM	57.7	58.2	-	n/a	55.9	-
11:05 PM - 11:10 PM	57.5	58.3	-	n/a	55.5	-
11:10 PM - 11:15 PM	57.8	56.8	-	53.9	54.9	-1.0
11:15 PM - 11:20 PM	56.7	59.3	-	n/a	55.3	-
11:20 PM - 11:25 PM	56.5	58.8	-	n/a	56.4	-
11:25 PM - 11:30 PM	58.5	60.6	-	n/a	55.4	-
11:30 PM - 11:35 PM	56.9	58.2	-	n/a	56.2	-
11:35 PM - 11:40 PM	56.8	58.0	-	n/a	56.1	-
11:40 PM - 11:45 PM	56.7	58.1	-	n/a	55.9	-
11:45 PM - 11:50 PM	58.0	63.4	-	n/a	55.6	-
11:50 PM - 11:55 PM	57.8	58.6	-	n/a	56.4	-
11:55 PM - 12:00 AM	57.8	56.9	-	53.5	54.9	-1.4
12:00 AM - 12:05 AM	57.4	59.9	-	n/a	54.8	-
12:05 AM - 12:10 AM	57.5	57.5	-	n/a	55.9	-
12:10 AM - 12:15 AM	57.3	57.0	-	48.5	55.5	-7.0
12:15 AM - 12:20 AM	58.0	58.6	-	n/a	56.5	-

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284517-1

Sample No. 24144513-2
Parameter เสียงรบกวน
Location บ้านซับมอน (GPS 47P 728147, 1619150)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 597159

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	57.3	57.4	-	n/a	55.9	-
12:25 AM - 12:30 AM	56.4	57.4	-	n/a	55.5	-
12:30 AM - 12:35 AM	57.4	57.8	-	n/a	55.9	-
12:35 AM - 12:40 AM	56.8	56.6	-	46.3	54.4	-8.1
12:40 AM - 12:45 AM	57.5	60.5	-	n/a	55.9	-
12:45 AM - 12:50 AM	57.5	58.4	-	n/a	56.2	-
12:50 AM - 12:55 AM	57.3	57.4	-	n/a	55.9	-
12:55 AM - 01:00 AM	56.9	57.8	-	n/a	55.3	-
01:00 AM - 01:05 AM	56.7	57.7	-	n/a	55.7	-
01:05 AM - 01:10 AM	57.9	57.4	-	51.3	55.6	-4.3
01:10 AM - 01:15 AM	58.7	58.6	-	45.3	56.4	-11.1
01:15 AM - 01:20 AM	57.2	58.0	-	n/a	55.5	-
01:20 AM - 01:25 AM	56.6	57.9	-	n/a	55.6	-
01:25 AM - 01:30 AM	57.1	57.6	-	n/a	55.7	-
01:30 AM - 01:35 AM	57.1	57.4	-	n/a	55.4	-
01:35 AM - 01:40 AM	57.1	57.8	-	n/a	55.7	-
01:40 AM - 01:45 AM	57.4	58.8	-	n/a	56.8	-
01:45 AM - 01:50 AM	57.4	57.7	-	n/a	55.7	-
01:50 AM - 01:55 AM	57.1	58.3	-	n/a	56.3	-
01:55 AM - 02:00 AM	56.7	57.8	-	n/a	55.6	-
02:00 AM - 02:05 AM	57.0	58.1	-	n/a	56.0	-
02:05 AM - 02:10 AM	57.2	58.5	-	n/a	56.6	-
02:10 AM - 02:15 AM	57.5	58.2	-	n/a	56.5	-
02:15 AM - 02:20 AM	57.1	58.3	-	n/a	56.1	-
02:20 AM - 02:25 AM	57.6	57.7	-	n/a	56.1	-
02:25 AM - 02:30 AM	57.2	58.5	-	n/a	56.4	-
02:30 AM - 02:35 AM	57.3	57.2	-	43.9	55.8	-11.9
02:35 AM - 02:40 AM	57.5	57.7	-	n/a	56.1	-
02:40 AM - 02:45 AM	57.5	57.6	-	n/a	56.0	-
02:45 AM - 02:50 AM	57.2	57.8	-	n/a	56.2	-
02:50 AM - 02:55 AM	57.5	57.2	-	48.7	55.7	-7.0
02:55 AM - 03:00 AM	57.9	58.5	-	n/a	55.7	-
03:00 AM - 03:05 AM	57.3	57.7	-	n/a	55.9	-
03:05 AM - 03:10 AM	57.8	57.5	-	49.0	55.9	-6.9
03:10 AM - 03:15 AM	57.6	57.4	-	47.1	55.4	-8.3
03:15 AM - 03:20 AM	57.3	58.1	-	n/a	56.2	-
03:20 AM - 03:25 AM	57.1	58.6	-	n/a	56.4	-
03:25 AM - 03:30 AM	57.9	58.0	-	n/a	56.2	-
03:30 AM - 03:35 AM	57.4	59.3	-	n/a	56.6	-
03:35 AM - 03:40 AM	57.0	57.5	-	n/a	55.7	-

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Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284517-1

Sample No. 24144513-2
Parameter เสียงรบกวน
Location บ้านซับมอน (GPS 47P 728147, 1619150)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 597159

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	57.3	57.7	-	n/a	55.8	-
03:45 AM - 03:50 AM	57.6	57.7	-	n/a	55.9	-
03:50 AM - 03:55 AM	57.6	57.9	-	n/a	56.0	-
03:55 AM - 04:00 AM	57.6	70.2	-	n/a	55.3	-
04:00 AM - 04:05 AM	58.4	73.8	-	n/a	57.3	-
04:05 AM - 04:10 AM	57.2	68.6	-	n/a	56.4	-
04:10 AM - 04:15 AM	57.1	70.7	-	n/a	56.1	-
04:15 AM - 04:20 AM	57.1	63.3	-	n/a	56.5	-
04:20 AM - 04:25 AM	56.7	59.2	-	n/a	57.0	-
04:25 AM - 04:30 AM	73.0	58.4	-	75.8	56.6	19.2
04:30 AM - 04:35 AM	70.7	59.1	-	73.4	57.1	16.3
04:35 AM - 04:40 AM	71.8	58.4	-	74.6	56.4	18.2
04:40 AM - 04:45 AM	63.2	58.8	-	64.2	56.7	7.5
04:45 AM - 04:50 AM	58.1	59.1	-	n/a	57.2	-
04:50 AM - 04:55 AM	58.0	58.4	-	n/a	56.8	-
04:55 AM - 05:00 AM	58.3	57.9	-	50.7	56.1	-5.4
05:00 AM - 05:05 AM	58.3	57.9	-	50.7	56.3	-5.6
05:05 AM - 05:10 AM	58.4	58.8	-	n/a	56.3	-
05:10 AM - 05:15 AM	58.1	59.8	-	n/a	56.9	-
05:15 AM - 05:20 AM	58.1	60.6	-	n/a	57.8	-
05:20 AM - 05:25 AM	57.8	62.5	-	n/a	60.6	-
05:25 AM - 05:30 AM	58.0	61.8	-	n/a	58.9	-
05:30 AM - 05:35 AM	57.7	59.7	-	n/a	57.6	-
05:35 AM - 05:40 AM	58.3	62.7	-	n/a	57.4	-
05:40 AM - 05:45 AM	59.6	60.2	-	n/a	57.5	-
05:45 AM - 05:50 AM	64.5	59.3	-	65.9	57.0	8.9
05:50 AM - 05:55 AM	67.5	61.8	-	69.1	57.2	11.9
05:55 AM - 06:00 AM	64.2	64.6	-	n/a	57.4	-
06:00 AM - 07:00 AM	60.2	65.0	n/a	-	59.6	-
07:00 AM - 08:00 AM	65.5	67.7	n/a	-	58.1	-
08:00 AM - 09:00 AM	58.9	60.5	n/a	-	55.8	-
09:00 AM - 10:00 AM	59.5	58.1	53.9	-	55.5	-1.6
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 03-04 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-2 วันที่ตรวจวัด 03-04 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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Life Sciences www.alsglobal.com
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284518-1

Sample No. 24144513-3
Parameter เสียงรบกวน
Location บ้านซับมอบ (GPS 47P 728147, 1619150)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 597159

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	59.3	65.7	n/a	-	55.0	-
11:00 AM - 12:00 PM	60.5	62.0	n/a	-	57.9	-
12:00 PM - 01:00 PM	58.9	58.2	50.6	-	55.6	-5.0
01:00 PM - 02:00 PM	58.3	60.9	n/a	-	55.5	-
02:00 PM - 03:00 PM	61.0	76.5	n/a	-	72.7	-
03:00 PM - 04:00 PM	71.9	60.9	71.5	-	58.9	12.6
04:00 PM - 05:00 PM	60.4	60.7	n/a	-	58.6	-
05:00 PM - 06:00 PM	60.1	60.9	n/a	-	58.8	-
06:00 PM - 07:00 PM	60.7	60.7	n/a	-	58.6	-
07:00 PM - 08:00 PM	58.5	59.4	n/a	-	56.7	-
08:00 PM - 09:00 PM	58.0	60.4	n/a	-	56.9	-
09:00 PM - 10:00 PM	59.1	59.9	n/a	-	56.7	-
10:00 PM - 10:05 PM	58.3	57.8	-	51.7	56.0	-4.3
10:05 PM - 10:10 PM	57.9	58.2	-	n/a	56.4	-
10:10 PM - 10:15 PM	58.0	63.3	-	n/a	57.3	-
10:15 PM - 10:20 PM	58.3	60.1	-	n/a	56.6	-
10:20 PM - 10:25 PM	58.5	59.5	-	n/a	56.9	-
10:25 PM - 10:30 PM	57.8	57.8	-	n/a	56.4	-
10:30 PM - 10:35 PM	57.5	58.5	-	n/a	56.5	-
10:35 PM - 10:40 PM	57.6	57.7	-	n/a	56.2	-
10:40 PM - 10:45 PM	63.7	58.0	-	65.3	56.4	8.9
10:45 PM - 10:50 PM	59.7	58.4	-	56.8	56.4	0.4
10:50 PM - 10:55 PM	58.5	57.2	-	55.6	55.6	0.0
10:55 PM - 11:00 PM	57.6	59.3	-	n/a	56.8	-
11:00 PM - 11:05 PM	58.0	58.3	-	n/a	56.1	-
11:05 PM - 11:10 PM	57.0	57.9	-	n/a	56.1	-
11:10 PM - 11:15 PM	57.7	58.0	-	n/a	55.7	-
11:15 PM - 11:20 PM	57.7	59.3	-	n/a	57.3	-
11:20 PM - 11:25 PM	57.6	57.6	-	n/a	56.1	-
11:25 PM - 11:30 PM	58.3	57.9	-	50.7	56.0	-5.3
11:30 PM - 11:35 PM	57.3	58.4	-	n/a	56.0	-
11:35 PM - 11:40 PM	57.1	58.1	-	n/a	55.8	-
11:40 PM - 11:45 PM	57.3	58.1	-	n/a	56.0	-
11:45 PM - 11:50 PM	58.1	59.2	-	n/a	57.0	-
11:50 PM - 11:55 PM	56.9	58.3	-	n/a	56.6	-
11:55 PM - 12:00 AM	57.6	57.4	-	47.1	55.8	-8.7
12:00 AM - 12:05 AM	58.2	57.6	-	52.3	54.6	-2.3
12:05 AM - 12:10 AM	57.6	56.8	-	52.9	55.3	-2.4
12:10 AM - 12:15 AM	57.6	57.0	-	51.7	55.2	-3.5
12:15 AM - 12:20 AM	58.1	58.1	-	n/a	55.3	-

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284518-1

Sample No. 24144513-3
Parameter เสียงรบกวน
Location บ้านซับมอบ (GPS 47P 728147, 1619150)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 597159

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	57.9	58.4	-	n/a	55.9	-
12:25 AM - 12:30 AM	57.3	57.3	-	n/a	55.3	-
12:30 AM - 12:35 AM	57.4	56.7	-	52.1	54.8	-2.7
12:35 AM - 12:40 AM	56.7	57.7	-	n/a	55.6	-
12:40 AM - 12:45 AM	56.9	57.9	-	n/a	55.3	-
12:45 AM - 12:50 AM	57.3	57.9	-	n/a	55.9	-
12:50 AM - 12:55 AM	57.6	58.9	-	n/a	55.3	-
12:55 AM - 01:00 AM	56.7	57.5	-	n/a	55.6	-
01:00 AM - 01:05 AM	56.5	58.0	-	n/a	56.1	-
01:05 AM - 01:10 AM	57.5	57.7	-	n/a	55.1	-
01:10 AM - 01:15 AM	57.6	57.3	-	48.8	54.8	-6.0
01:15 AM - 01:20 AM	57.6	57.9	-	n/a	55.9	-
01:20 AM - 01:25 AM	57.8	58.6	-	n/a	55.0	-
01:25 AM - 01:30 AM	56.8	57.5	-	n/a	55.3	-
01:30 AM - 01:35 AM	57.5	58.2	-	n/a	54.8	-
01:35 AM - 01:40 AM	56.9	58.8	-	n/a	55.8	-
01:40 AM - 01:45 AM	56.9	57.4	-	n/a	54.6	-
01:45 AM - 01:50 AM	57.1	57.1	-	n/a	55.3	-
01:50 AM - 01:55 AM	57.0	57.6	-	n/a	55.9	-
01:55 AM - 02:00 AM	56.6	57.3	-	n/a	55.3	-
02:00 AM - 02:05 AM	57.3	57.5	-	n/a	55.5	-
02:05 AM - 02:10 AM	57.9	56.8	-	54.4	55.0	-0.6
02:10 AM - 02:15 AM	56.9	56.9	-	n/a	54.9	-
02:15 AM - 02:20 AM	56.7	57.5	-	n/a	55.8	-
02:20 AM - 02:25 AM	57.1	57.3	-	n/a	55.4	-
02:25 AM - 02:30 AM	56.7	56.7	-	n/a	54.9	-
02:30 AM - 02:35 AM	56.8	56.8	-	n/a	55.0	-
02:35 AM - 02:40 AM	56.4	58.0	-	n/a	55.8	-
02:40 AM - 02:45 AM	56.4	57.7	-	n/a	55.6	-
02:45 AM - 02:50 AM	56.7	58.0	-	n/a	55.4	-
02:50 AM - 02:55 AM	56.6	57.2	-	n/a	55.3	-
02:55 AM - 03:00 AM	56.4	58.4	-	n/a	56.0	-
03:00 AM - 03:05 AM	56.5	57.9	-	n/a	55.6	-
03:05 AM - 03:10 AM	57.3	58.0	-	n/a	56.3	-
03:10 AM - 03:15 AM	57.1	56.1	-	53.2	54.5	-1.3
03:15 AM - 03:20 AM	56.9	57.5	-	n/a	54.7	-
03:20 AM - 03:25 AM	56.8	56.9	-	n/a	55.0	-
03:25 AM - 03:30 AM	57.5	57.7	-	n/a	55.5	-
03:30 AM - 03:35 AM	57.1	57.1	-	n/a	54.3	-
03:35 AM - 03:40 AM	57.1	57.2	-	n/a	54.7	-

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284518-1

Sample No. 24144513-3
Parameter เสียงรบกวน
Location บ้านซับบอน (GPS 47P 728147, 1619150)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 597159

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	56.2	57.6	-	n/a	55.6	-
03:45 AM - 03:50 AM	56.8	57.7	-	n/a	55.4	-
03:50 AM - 03:55 AM	56.3	57.0	-	n/a	55.4	-
03:55 AM - 04:00 AM	57.0	57.6	-	n/a	55.7	-
04:00 AM - 04:05 AM	56.5	57.4	-	n/a	55.4	-
04:05 AM - 04:10 AM	56.6	56.9	-	n/a	55.3	-
04:10 AM - 04:15 AM	56.6	57.4	-	n/a	55.4	-
04:15 AM - 04:20 AM	57.2	59.2	-	n/a	55.9	-
04:20 AM - 04:25 AM	56.4	58.4	-	n/a	54.6	-
04:25 AM - 04:30 AM	56.8	57.7	-	n/a	55.2	-
04:30 AM - 04:35 AM	56.7	57.0	-	n/a	54.9	-
04:35 AM - 04:40 AM	56.4	58.0	-	n/a	55.9	-
04:40 AM - 04:45 AM	56.6	57.8	-	n/a	55.9	-
04:45 AM - 04:50 AM	57.7	57.9	-	n/a	56.0	-
04:50 AM - 04:55 AM	56.4	57.9	-	n/a	55.3	-
04:55 AM - 05:00 AM	56.7	58.8	-	n/a	56.5	-
05:00 AM - 05:05 AM	56.5	60.4	-	n/a	56.1	-
05:05 AM - 05:10 AM	57.3	58.6	-	n/a	56.2	-
05:10 AM - 05:15 AM	57.4	60.4	-	n/a	56.6	-
05:15 AM - 05:20 AM	57.2	60.1	-	n/a	57.6	-
05:20 AM - 05:25 AM	57.0	60.4	-	n/a	58.8	-
05:25 AM - 05:30 AM	57.7	60.7	-	n/a	57.9	-
05:30 AM - 05:35 AM	59.1	59.6	-	n/a	57.5	-
05:35 AM - 05:40 AM	57.7	59.1	-	n/a	57.3	-
05:40 AM - 05:45 AM	58.0	59.5	-	n/a	57.5	-
05:45 AM - 05:50 AM	60.6	59.0	-	58.5	57.3	1.2
05:50 AM - 05:55 AM	61.7	59.9	-	60.0	57.8	2.2
05:55 AM - 06:00 AM	61.6	59.7	-	60.1	57.7	2.4
06:00 AM - 07:00 AM	59.9	60.1	n/a	-	57.5	-
07:00 AM - 08:00 AM	58.9	60.5	n/a	-	57.0	-
08:00 AM - 09:00 AM	58.8	62.0	n/a	-	58.1	-
09:00 AM - 10:00 AM	58.5	65.1	n/a	-	58.5	-
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 04-05 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-3 วันที่ตรวจวัด 04-05 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284519-1

Sample No. 24144513-4
Parameter เสียงรบกวน
Location บ้านซับบอน (GPS 47P 728147, 1619150)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 597159

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	60.6	65.8	n/a	-	55.0	-
11:00 AM - 12:00 PM	58.5	62.8	n/a	-	58.3	-
12:00 PM - 01:00 PM	57.8	59.1	n/a	-	55.8	-
01:00 PM - 02:00 PM	59.3	59.4	n/a	-	55.4	-
02:00 PM - 03:00 PM	57.5	57.5	n/a	-	55.6	-
03:00 PM - 04:00 PM	58.8	59.0	n/a	-	55.7	-
04:00 PM - 05:00 PM	57.6	58.1	n/a	-	55.8	-
05:00 PM - 06:00 PM	57.8	59.2	n/a	-	56.2	-
06:00 PM - 07:00 PM	58.9	60.5	n/a	-	56.5	-
07:00 PM - 08:00 PM	58.4	58.1	46.6	-	55.5	-8.9
08:00 PM - 09:00 PM	57.2	60.6	n/a	-	55.8	-
09:00 PM - 10:00 PM	57.7	58.9	n/a	-	55.7	-
10:00 PM - 10:05 PM	58.2	57.4	-	53.5	55.8	-2.3
10:05 PM - 10:10 PM	57.7	67.3	-	n/a	56.6	-
10:10 PM - 10:15 PM	57.6	65.1	-	n/a	56.4	-
10:15 PM - 10:20 PM	57.3	59.6	-	n/a	56.4	-
10:20 PM - 10:25 PM	57.6	57.9	-	n/a	56.1	-
10:25 PM - 10:30 PM	57.0	58.1	-	n/a	55.5	-
10:30 PM - 10:35 PM	56.9	57.2	-	n/a	55.4	-
10:35 PM - 10:40 PM	66.7	56.7	-	69.2	54.6	14.6
10:40 PM - 10:45 PM	63.9	57.7	-	65.7	55.8	9.9
10:45 PM - 10:50 PM	57.8	58.7	-	n/a	55.5	-
10:50 PM - 10:55 PM	57.2	57.3	-	n/a	55.2	-
10:55 PM - 11:00 PM	57.2	58.0	-	n/a	55.4	-
11:00 PM - 11:05 PM	56.5	57.1	-	n/a	55.0	-
11:05 PM - 11:10 PM	56.3	59.1	-	n/a	55.3	-
11:10 PM - 11:15 PM	56.7	58.8	-	n/a	55.9	-
11:15 PM - 11:20 PM	57.6	57.4	-	47.1	55.9	-8.8
11:20 PM - 11:25 PM	56.7	57.2	-	n/a	55.4	-
11:25 PM - 11:30 PM	57.2	57.6	-	n/a	55.2	-
11:30 PM - 11:35 PM	56.8	57.3	-	n/a	55.1	-
11:35 PM - 11:40 PM	57.4	57.9	-	n/a	55.6	-
11:40 PM - 11:45 PM	57.5	60.7	-	n/a	56.2	-
11:45 PM - 11:50 PM	56.8	61.7	-	n/a	56.0	-
11:50 PM - 11:55 PM	56.6	57.2	-	n/a	55.1	-
11:55 PM - 12:00 AM	56.8	59.2	-	n/a	54.9	-
12:00 AM - 12:05 AM	56.6	59.2	-	n/a	56.5	-
12:05 AM - 12:10 AM	57.6	57.1	-	51.0	54.8	-3.8
12:10 AM - 12:15 AM	58.8	57.5	-	55.9	55.0	0.9
12:15 AM - 12:20 AM	57.6	58.1	-	n/a	54.9	-

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284519-1

Sample No. 24144513-4
Parameter เสียงรบกวน
Location บ้านซับบอน (GPS 47P 728147, 1619150)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 597159

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	56.6	57.7	-	n/a	54.9	-
12:25 AM - 12:30 AM	57.0	56.6	-	49.4	54.6	-5.2
12:30 AM - 12:35 AM	57.8	56.4	-	55.2	54.7	0.5
12:35 AM - 12:40 AM	56.6	56.5	-	43.2	54.8	-11.6
12:40 AM - 12:45 AM	57.0	58.0	-	n/a	54.8	-
12:45 AM - 12:50 AM	57.0	56.2	-	52.3	54.0	-1.7
12:50 AM - 12:55 AM	57.1	56.8	-	48.3	54.8	-6.5
12:55 AM - 01:00 AM	56.4	56.8	-	n/a	54.1	-
01:00 AM - 01:05 AM	56.2	57.0	-	n/a	54.5	-
01:05 AM - 01:10 AM	56.2	57.5	-	n/a	54.4	-
01:10 AM - 01:15 AM	57.2	55.8	-	54.6	54.2	0.4
01:15 AM - 01:20 AM	56.0	56.6	-	n/a	54.2	-
01:20 AM - 01:25 AM	56.4	56.4	-	n/a	54.0	-
01:25 AM - 01:30 AM	56.3	57.2	-	n/a	54.8	-
01:30 AM - 01:35 AM	56.4	56.2	-	45.9	54.2	-8.3
01:35 AM - 01:40 AM	56.7	57.1	-	n/a	54.4	-
01:40 AM - 01:45 AM	55.7	56.2	-	n/a	54.5	-
01:45 AM - 01:50 AM	56.1	56.8	-	n/a	55.3	-
01:50 AM - 01:55 AM	56.0	56.8	-	n/a	54.0	-
01:55 AM - 02:00 AM	56.4	56.6	-	n/a	54.2	-
02:00 AM - 02:05 AM	55.7	56.7	-	n/a	55.0	-
02:05 AM - 02:10 AM	56.2	56.9	-	n/a	54.6	-
02:10 AM - 02:15 AM	55.9	62.1	-	n/a	54.2	-
02:15 AM - 02:20 AM	56.5	57.2	-	n/a	55.0	-
02:20 AM - 02:25 AM	56.3	57.9	-	n/a	55.4	-
02:25 AM - 02:30 AM	56.3	57.4	-	n/a	55.2	-
02:30 AM - 02:35 AM	56.3	56.7	-	n/a	54.0	-
02:35 AM - 02:40 AM	56.5	56.7	-	n/a	54.7	-
02:40 AM - 02:45 AM	57.9	56.3	-	55.8	53.8	2.0
02:45 AM - 02:50 AM	56.5	57.3	-	n/a	55.3	-
02:50 AM - 02:55 AM	57.0	57.6	-	n/a	55.1	-
02:55 AM - 03:00 AM	56.7	57.2	-	n/a	54.7	-
03:00 AM - 03:05 AM	56.3	57.6	-	n/a	55.2	-
03:05 AM - 03:10 AM	56.6	56.3	-	47.8	54.4	-6.6
03:10 AM - 03:15 AM	56.0	57.7	-	n/a	54.9	-
03:15 AM - 03:20 AM	56.8	56.8	-	n/a	54.4	-
03:20 AM - 03:25 AM	57.2	58.6	-	n/a	54.3	-
03:25 AM - 03:30 AM	56.2	58.1	-	n/a	55.1	-
03:30 AM - 03:35 AM	56.7	56.9	-	n/a	54.2	-
03:35 AM - 03:40 AM	56.0	58.3	-	n/a	55.4	-

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Approved by

Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284519-1

Sample No. 24144513-4
Parameter เสียงรบกวน
Location บ้านซับบอน (GPS 47P 728147, 1619150)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 597159

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	57.1	56.8	-	48.3	54.0	-5.7
03:45 AM - 03:50 AM	56.2	57.7	-	n/a	54.6	-
03:50 AM - 03:55 AM	56.8	57.1	-	n/a	54.7	-
03:55 AM - 04:00 AM	57.2	56.4	-	52.5	54.4	-1.9
04:00 AM - 04:05 AM	56.4	57.5	-	n/a	55.3	-
04:05 AM - 04:10 AM	57.2	57.1	-	43.8	54.7	-10.9
04:10 AM - 04:15 AM	56.3	56.6	-	n/a	54.4	-
04:15 AM - 04:20 AM	57.1	56.3	-	52.4	54.6	-2.2
04:20 AM - 04:25 AM	56.7	57.2	-	n/a	54.4	-
04:25 AM - 04:30 AM	56.0	56.5	-	n/a	54.5	-
04:30 AM - 04:35 AM	56.7	57.0	-	n/a	54.9	-
04:35 AM - 04:40 AM	56.9	56.7	-	46.4	54.8	-8.4
04:40 AM - 04:45 AM	56.1	60.5	-	n/a	55.5	-
04:45 AM - 04:50 AM	56.1	56.8	-	n/a	54.5	-
04:50 AM - 04:55 AM	56.9	57.8	-	n/a	54.6	-
04:55 AM - 05:00 AM	56.2	57.6	-	n/a	55.5	-
05:00 AM - 05:05 AM	56.9	57.6	-	n/a	54.6	-
05:05 AM - 05:10 AM	56.5	58.3	-	n/a	55.3	-
05:10 AM - 05:15 AM	57.3	57.2	-	43.9	55.6	-11.7
05:15 AM - 05:20 AM	56.6	57.6	-	n/a	55.3	-
05:20 AM - 05:25 AM	57.1	59.6	-	n/a	56.0	-
05:25 AM - 05:30 AM	57.0	61.7	-	n/a	59.9	-
05:30 AM - 05:35 AM	57.2	60.7	-	n/a	58.1	-
05:35 AM - 05:40 AM	57.5	59.1	-	n/a	57.6	-
05:40 AM - 05:45 AM	56.8	59.3	-	n/a	57.1	-
05:45 AM - 05:50 AM	58.3	58.3	-	n/a	56.6	-
05:50 AM - 05:55 AM	59.2	58.7	-	52.6	56.7	-4.1
05:55 AM - 06:00 AM	61.6	58.2	-	61.9	56.5	5.4
06:00 AM - 07:00 AM	59.5	59.3	46.0	-	56.7	-10.7
07:00 AM - 08:00 AM	58.5	58.4	42.1	-	55.8	-13.7
08:00 AM - 09:00 AM	58.4	58.0	47.8	-	55.7	-7.9
09:00 AM - 10:00 AM	58.5	60.4	n/a	-	55.5	-
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 05-06 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-4 วันที่ตรวจวัด 05-06 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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Approved by

Kanokkorn Anek
Senior Manager

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Life Solutions www.alsglobal.com
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284520-1

Sample No. 24144513-5
Parameter เสียงรบกวน
Location บ้านซับมอน (GPS 47P 728147, 1619150)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 597159

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	58.9	59.4	n/a	-	55.5	-
11:00 AM - 12:00 PM	57.8	58.1	n/a	-	55.1	-
12:00 PM - 01:00 PM	57.9	57.8	41.5	-	55.3	-13.8
01:00 PM - 02:00 PM	57.6	57.6	n/a	-	55.4	-
02:00 PM - 03:00 PM	57.7	57.4	45.9	-	55.4	-9.5
03:00 PM - 04:00 PM	57.7	58.6	n/a	-	56.5	-
04:00 PM - 05:00 PM	57.5	57.8	n/a	-	55.7	-
05:00 PM - 06:00 PM	57.7	60.2	n/a	-	56.2	-
06:00 PM - 07:00 PM	60.4	59.9	50.8	-	55.8	-5.0
07:00 PM - 08:00 PM	56.9	57.4	n/a	-	54.8	-
08:00 PM - 09:00 PM	56.4	57.7	n/a	-	55.1	-
09:00 PM - 10:00 PM	56.7	57.9	n/a	-	54.6	-
10:00 PM - 10:05 PM	56.0	55.6	-	48.4	53.7	-5.3
10:05 PM - 10:10 PM	56.1	56.7	-	n/a	54.9	-
10:10 PM - 10:15 PM	56.3	58.7	-	n/a	54.9	-
10:15 PM - 10:20 PM	56.2	56.7	-	n/a	54.9	-
10:20 PM - 10:25 PM	56.4	57.3	-	n/a	55.1	-
10:25 PM - 10:30 PM	56.7	59.9	-	n/a	55.9	-
10:30 PM - 10:35 PM	55.6	59.4	-	n/a	54.4	-
10:35 PM - 10:40 PM	56.2	57.1	-	n/a	54.5	-
10:40 PM - 10:45 PM	56.3	57.1	-	n/a	55.0	-
10:45 PM - 10:50 PM	56.2	58.4	-	n/a	54.8	-
10:50 PM - 10:55 PM	56.8	56.7	-	43.4	54.7	-11.3
10:55 PM - 11:00 PM	57.5	57.3	-	47.0	54.0	-7.0
11:00 PM - 11:05 PM	56.6	57.3	-	n/a	55.4	-
11:05 PM - 11:10 PM	56.4	66.7	-	n/a	55.5	-
11:10 PM - 11:15 PM	56.5	57.5	-	n/a	54.8	-
11:15 PM - 11:20 PM	57.1	57.1	-	n/a	54.7	-
11:20 PM - 11:25 PM	56.4	56.4	-	n/a	54.2	-
11:25 PM - 11:30 PM	56.6	55.9	-	51.3	54.4	-3.1
11:30 PM - 11:35 PM	56.7	55.9	-	52.0	53.4	-1.4
11:35 PM - 11:40 PM	65.2	56.5	-	67.6	54.5	13.1
11:40 PM - 11:45 PM	56.8	67.6	-	n/a	54.7	-
11:45 PM - 11:50 PM	56.4	56.4	-	n/a	54.2	-
11:50 PM - 11:55 PM	56.0	57.0	-	n/a	54.4	-
11:55 PM - 12:00 AM	55.7	58.0	-	n/a	54.2	-
12:00 AM - 12:05 AM	55.8	58.5	-	n/a	54.6	-
12:05 AM - 12:10 AM	56.1	68.1	-	n/a	54.4	-
12:10 AM - 12:15 AM	59.4	68.4	-	n/a	54.8	-
12:15 AM - 12:20 AM	56.5	69.2	-	n/a	55.2	-

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284520-1

Sample No. 24144513-5
Parameter เสียงรบกวน
Location บ้านซับมอน (GPS 47P 728147, 1619150)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 597159

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	55.9	62.0	-	n/a	54.4	-
12:25 AM - 12:30 AM	56.8	57.8	-	n/a	54.8	-
12:30 AM - 12:35 AM	56.7	59.1	-	n/a	54.8	-
12:35 AM - 12:40 AM	67.4	56.2	-	70.1	54.7	15.4
12:40 AM - 12:45 AM	68.5	55.9	-	71.3	53.7	17.6
12:45 AM - 12:50 AM	69.2	56.1	-	72.0	54.2	17.8
12:50 AM - 12:55 AM	58.5	55.8	-	58.2	53.8	4.4
12:55 AM - 01:00 AM	56.5	56.7	-	n/a	54.7	-
01:00 AM - 01:05 AM	58.2	56.1	-	57.0	54.6	2.4
01:05 AM - 01:10 AM	56.0	56.1	-	n/a	54.6	-
01:10 AM - 01:15 AM	55.9	55.4	-	49.3	54.0	-4.7
01:15 AM - 01:20 AM	56.0	56.0	-	n/a	54.1	-
01:20 AM - 01:25 AM	55.7	55.8	-	n/a	54.4	-
01:25 AM - 01:30 AM	56.2	56.8	-	n/a	54.9	-
01:30 AM - 01:35 AM	55.9	57.2	-	n/a	55.3	-
01:35 AM - 01:40 AM	55.9	56.5	-	n/a	54.7	-
01:40 AM - 01:45 AM	55.4	59.0	-	n/a	55.2	-
01:45 AM - 01:50 AM	55.9	61.2	-	n/a	54.9	-
01:50 AM - 01:55 AM	55.9	57.3	-	n/a	54.9	-
01:55 AM - 02:00 AM	56.3	57.7	-	n/a	55.6	-
02:00 AM - 02:05 AM	56.5	60.4	-	n/a	56.1	-
02:05 AM - 02:10 AM	56.2	58.6	-	n/a	55.2	-
02:10 AM - 02:15 AM	57.9	57.3	-	52.0	55.5	-3.5
02:15 AM - 02:20 AM	56.9	57.4	-	n/a	55.7	-
02:20 AM - 02:25 AM	56.6	57.8	-	n/a	56.2	-
02:25 AM - 02:30 AM	56.8	57.5	-	n/a	55.6	-
02:30 AM - 02:35 AM	60.1	59.1	-	56.2	55.9	0.3
02:35 AM - 02:40 AM	56.8	56.5	-	48.0	55.1	-7.1
02:40 AM - 02:45 AM	56.5	58.1	-	n/a	55.5	-
02:45 AM - 02:50 AM	57.0	57.8	-	n/a	55.9	-
02:50 AM - 02:55 AM	57.4	57.5	-	n/a	55.7	-
02:55 AM - 03:00 AM	57.0	57.1	-	n/a	55.6	-
03:00 AM - 03:05 AM	58.2	58.2	-	n/a	55.9	-
03:05 AM - 03:10 AM	56.5	57.6	-	n/a	55.9	-
03:10 AM - 03:15 AM	57.4	57.9	-	n/a	56.2	-
03:15 AM - 03:20 AM	57.3	58.7	-	n/a	56.7	-
03:20 AM - 03:25 AM	57.1	58.6	-	n/a	57.4	-
03:25 AM - 03:30 AM	56.9	59.3	-	n/a	57.8	-
03:30 AM - 03:35 AM	57.5	59.4	-	n/a	57.6	-
03:35 AM - 03:40 AM	57.2	59.9	-	n/a	58.0	-

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Kanokkorn Anek
Senior Manager

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284520-1

Sample No. 24144513-5
Parameter เสียงรบกวน
Location บ้านขับบอน (GPS 47P 728147, 1619150)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 597159

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	57.5	59.4	-	n/a	58.3	-
03:45 AM - 03:50 AM	58.3	60.0	-	n/a	58.8	-
03:50 AM - 03:55 AM	58.7	59.6	-	n/a	58.1	-
03:55 AM - 04:00 AM	59.1	61.2	-	n/a	58.0	-
04:00 AM - 04:05 AM	59.2	59.9	-	n/a	57.9	-
04:05 AM - 04:10 AM	59.9	59.5	-	52.3	58.8	-6.5
04:10 AM - 04:15 AM	59.8	59.8	-	n/a	58.4	-
04:15 AM - 04:20 AM	60.4	59.7	-	55.1	58.7	-3.6
04:20 AM - 04:25 AM	60.1	59.5	-	54.2	58.5	-4.3
04:25 AM - 04:30 AM	60.8	59.9	-	56.5	58.9	-2.4
04:30 AM - 04:35 AM	59.8	59.4	-	52.2	58.3	-6.1
04:35 AM - 04:40 AM	60.2	60.6	-	n/a	58.2	-
04:40 AM - 04:45 AM	59.8	58.9	-	55.5	57.9	-2.4
04:45 AM - 04:50 AM	59.7	59.1	-	53.8	57.9	-4.1
04:50 AM - 04:55 AM	59.7	58.7	-	55.8	57.4	-1.6
04:55 AM - 05:00 AM	60.0	58.7	-	57.1	57.3	-0.2
05:00 AM - 05:05 AM	59.9	58.7	-	56.7	57.2	-0.5
05:05 AM - 05:10 AM	60.3	58.8	-	58.0	57.1	0.9
05:10 AM - 05:15 AM	59.4	60.0	-	n/a	58.0	-
05:15 AM - 05:20 AM	59.4	59.3	-	46.0	57.6	-11.6
05:20 AM - 05:25 AM	58.9	59.2	-	n/a	57.8	-
05:25 AM - 05:30 AM	59.0	59.6	-	n/a	57.9	-
05:30 AM - 05:35 AM	58.9	61.0	-	n/a	59.8	-
05:35 AM - 05:40 AM	59.1	60.8	-	n/a	59.3	-
05:40 AM - 05:45 AM	59.5	61.3	-	n/a	59.7	-
05:45 AM - 05:50 AM	60.1	60.2	-	n/a	58.9	-
05:50 AM - 05:55 AM	59.6	68.3	-	n/a	59.1	-
05:55 AM - 06:00 AM	60.4	71.7	-	n/a	59.2	-
06:00 AM - 07:00 AM	63.8	62.5	57.9	-	60.6	-2.7
07:00 AM - 08:00 AM	61.3	60.5	53.6	-	58.9	-5.3
08:00 AM - 09:00 AM	59.9	59.8	43.5	-	57.2	-13.7
09:00 AM - 10:00 AM	59.4	58.2	53.2	-	55.7	-2.5
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานเสถียรภาพทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด หาการตรวจวัด วันที่ 06-07 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-5 วันที่ตรวจวัด 06-07 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดปกติกว่าระดับเสียงขณะไม่มีการรบกวน

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

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284521-1

Sample No. 24144513-6
Parameter เสียงรบกวน
Location บ้านขับบอน (GPS 47P 728147, 1619150)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 597159

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	57.7	57.6	41.3	-	55.5	-14.2
11:00 AM - 12:00 PM	58.8	57.6	52.6	-	55.6	-3.0
12:00 PM - 01:00 PM	57.5	58.4	n/a	-	56.2	-
01:00 PM - 02:00 PM	59.7	63.5	n/a	-	61.1	-
02:00 PM - 03:00 PM	60.0	59.2	52.3	-	57.2	-4.9
03:00 PM - 04:00 PM	58.6	59.2	n/a	-	57.1	-
04:00 PM - 05:00 PM	59.0	59.9	n/a	-	57.4	-
05:00 PM - 06:00 PM	58.8	59.3	n/a	-	57.3	-
06:00 PM - 07:00 PM	59.1	59.8	n/a	-	57.6	-
07:00 PM - 08:00 PM	58.6	59.3	n/a	-	57.3	-
08:00 PM - 09:00 PM	58.5	61.8	n/a	-	56.7	-
09:00 PM - 10:00 PM	58.1	59.1	n/a	-	56.6	-
10:00 PM - 10:05 PM	57.5	58.9	-	n/a	57.0	-
10:05 PM - 10:10 PM	57.6	58.8	-	n/a	57.1	-
10:10 PM - 10:15 PM	57.1	58.9	-	n/a	57.1	-
10:15 PM - 10:20 PM	57.3	59.8	-	n/a	57.0	-
10:20 PM - 10:25 PM	57.5	59.2	-	n/a	56.8	-
10:25 PM - 10:30 PM	58.1	59.1	-	n/a	56.8	-
10:30 PM - 10:35 PM	58.5	61.7	-	n/a	56.9	-
10:35 PM - 10:40 PM	57.9	58.6	-	n/a	56.8	-
10:40 PM - 10:45 PM	57.9	58.6	-	n/a	57.1	-
10:45 PM - 10:50 PM	57.9	58.9	-	n/a	56.6	-
10:50 PM - 10:55 PM	58.6	59.0	-	n/a	57.1	-
10:55 PM - 11:00 PM	58.0	58.9	-	n/a	56.8	-
11:00 PM - 11:05 PM	58.2	58.0	-	47.7	56.3	-8.6
11:05 PM - 11:10 PM	58.6	58.1	-	52.0	56.7	-4.7
11:10 PM - 11:15 PM	57.7	62.7	-	n/a	56.6	-
11:15 PM - 11:20 PM	57.8	70.1	-	n/a	56.7	-
11:20 PM - 11:25 PM	57.8	59.8	-	n/a	57.0	-
11:25 PM - 11:30 PM	58.0	59.2	-	n/a	56.9	-
11:30 PM - 11:35 PM	57.5	58.0	-	n/a	56.0	-
11:35 PM - 11:40 PM	57.5	57.8	-	n/a	56.2	-
11:40 PM - 11:45 PM	57.8	58.1	-	n/a	56.1	-
11:45 PM - 11:50 PM	59.7	64.4	-	n/a	56.1	-
11:50 PM - 11:55 PM	60.6	66.1	-	n/a	55.9	-
11:55 PM - 12:00 AM	58.2	64.1	-	n/a	55.4	-
12:00 AM - 12:05 AM	58.3	60.4	-	n/a	54.9	-
12:05 AM - 12:10 AM	57.2	58.3	-	n/a	55.6	-
12:10 AM - 12:15 AM	57.0	57.1	-	n/a	55.2	-
12:15 AM - 12:20 AM	57.3	59.4	-	n/a	55.8	-

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284521-1

Sample No. 24144513-6
Parameter เสียงรบกวน
Location บ้านซับบอน (GPS 47P 728147, 1619150)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 597159

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	58.6	58.0	-	52.7	56.2	-3.5
12:25 AM - 12:30 AM	58.1	56.7	-	55.5	54.9	0.6
12:30 AM - 12:35 AM	58.7	56.9	-	57.0	55.0	2.0
12:35 AM - 12:40 AM	57.2	56.7	-	50.6	54.7	-4.1
12:40 AM - 12:45 AM	58.0	58.0	-	n/a	56.0	-
12:45 AM - 12:50 AM	56.9	57.7	-	n/a	55.3	-
12:50 AM - 12:55 AM	59.0	58.4	-	53.1	56.4	-3.3
12:55 AM - 01:00 AM	57.3	58.3	-	n/a	56.0	-
01:00 AM - 01:05 AM	56.6	58.8	-	n/a	56.6	-
01:05 AM - 01:10 AM	56.8	57.8	-	n/a	55.9	-
01:10 AM - 01:15 AM	56.9	59.0	-	n/a	56.2	-
01:15 AM - 01:20 AM	57.3	57.4	-	n/a	55.7	-
01:20 AM - 01:25 AM	57.1	58.3	-	n/a	56.0	-
01:25 AM - 01:30 AM	57.7	58.3	-	n/a	56.0	-
01:30 AM - 01:35 AM	57.4	58.1	-	n/a	56.1	-
01:35 AM - 01:40 AM	58.1	59.5	-	n/a	56.1	-
01:40 AM - 01:45 AM	57.4	63.1	-	n/a	56.4	-
01:45 AM - 01:50 AM	57.9	57.5	-	50.3	55.4	-5.1
01:50 AM - 01:55 AM	57.2	57.9	-	n/a	55.9	-
01:55 AM - 02:00 AM	57.7	57.8	-	n/a	55.8	-
02:00 AM - 02:05 AM	57.1	57.3	-	n/a	55.6	-
02:05 AM - 02:10 AM	57.3	58.0	-	n/a	56.2	-
02:10 AM - 02:15 AM	57.7	59.7	-	n/a	55.7	-
02:15 AM - 02:20 AM	58.3	59.2	-	n/a	55.9	-
02:20 AM - 02:25 AM	57.0	58.2	-	n/a	56.2	-
02:25 AM - 02:30 AM	57.3	57.9	-	n/a	55.6	-
02:30 AM - 02:35 AM	57.1	59.4	-	n/a	56.5	-
02:35 AM - 02:40 AM	56.8	57.9	-	n/a	55.7	-
02:40 AM - 02:45 AM	57.3	58.9	-	n/a	55.8	-
02:45 AM - 02:50 AM	57.8	58.0	-	n/a	56.2	-
02:50 AM - 02:55 AM	57.8	57.1	-	52.5	55.2	-2.7
02:55 AM - 03:00 AM	57.5	57.4	-	44.1	55.7	-11.6
03:00 AM - 03:05 AM	57.2	57.1	-	43.8	55.4	-11.6
03:05 AM - 03:10 AM	57.8	57.5	-	49.0	55.8	-6.8
03:10 AM - 03:15 AM	57.8	58.1	-	n/a	56.0	-
03:15 AM - 03:20 AM	57.9	58.0	-	n/a	55.7	-
03:20 AM - 03:25 AM	57.1	57.3	-	n/a	55.5	-
03:25 AM - 03:30 AM	56.6	57.5	-	n/a	55.2	-
03:30 AM - 03:35 AM	57.0	58.5	-	n/a	55.8	-
03:35 AM - 03:40 AM	56.6	57.9	-	n/a	55.8	-

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Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284521-1

Sample No. 24144513-6
Parameter เสียงรบกวน
Location บ้านซับบอน (GPS 47P 728147, 1619150)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 597159

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	56.9	57.9	-	n/a	55.6	-
03:45 AM - 03:50 AM	57.3	57.1	-	46.8	55.2	-8.4
03:50 AM - 03:55 AM	57.0	57.7	-	n/a	55.4	-
03:55 AM - 04:00 AM	57.0	58.4	-	n/a	56.2	-
04:00 AM - 04:05 AM	57.0	58.1	-	n/a	56.1	-
04:05 AM - 04:10 AM	57.3	57.6	-	n/a	55.6	-
04:10 AM - 04:15 AM	57.1	58.4	-	n/a	56.1	-
04:15 AM - 04:20 AM	57.3	58.1	-	n/a	56.0	-
04:20 AM - 04:25 AM	57.3	59.0	-	n/a	56.9	-
04:25 AM - 04:30 AM	57.3	58.2	-	n/a	55.9	-
04:30 AM - 04:35 AM	58.0	57.7	-	49.2	56.2	-7.0
04:35 AM - 04:40 AM	57.4	57.5	-	n/a	56.1	-
04:40 AM - 04:45 AM	57.1	58.3	-	n/a	56.6	-
04:45 AM - 04:50 AM	57.4	58.3	-	n/a	56.7	-
04:50 AM - 04:55 AM	57.7	58.7	-	n/a	56.6	-
04:55 AM - 05:00 AM	57.9	58.6	-	n/a	57.1	-
05:00 AM - 05:05 AM	57.9	58.6	-	n/a	56.8	-
05:05 AM - 05:10 AM	57.3	57.8	-	n/a	56.6	-
05:10 AM - 05:15 AM	57.3	59.1	-	n/a	56.9	-
05:15 AM - 05:20 AM	57.7	58.0	-	n/a	56.2	-
05:20 AM - 05:25 AM	57.7	61.3	-	n/a	57.3	-
05:25 AM - 05:30 AM	58.1	63.7	-	n/a	59.5	-
05:30 AM - 05:35 AM	58.3	59.9	-	n/a	57.8	-
05:35 AM - 05:40 AM	58.0	60.4	-	n/a	57.9	-
05:40 AM - 05:45 AM	57.6	60.3	-	n/a	57.9	-
05:45 AM - 05:50 AM	58.3	60.1	-	n/a	57.4	-
05:50 AM - 05:55 AM	58.1	67.3	-	n/a	58.3	-
05:55 AM - 06:00 AM	61.3	59.4	-	59.8	57.5	2.3
06:00 AM - 07:00 AM	63.2	61.2	58.9	-	57.4	1.5
07:00 AM - 08:00 AM	61.7	63.3	n/a	-	56.8	-
08:00 AM - 09:00 AM	59.8	59.3	50.2	-	56.0	-5.8
09:00 AM - 10:00 AM	59.5	59.5	n/a	-	55.6	-
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 07-08 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-6 วันที่ตรวจวัด 07-08 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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Approved by
Kanokkorn Anek
Senior Manager

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284522-1

Sample No. 24144513-7
Parameter เสียงรบกวน
Location บ้านขับมอน (GPS 47P 728147, 1619150)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 597159

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	58.3	62.3	n/a	-	55.5	-
11:00 AM - 12:00 PM	61.2	64.9	n/a	-	55.6	-
12:00 PM - 01:00 PM	58.6	58.4	45.1	-	56.2	-11.1
01:00 PM - 02:00 PM	59.3	58.8	49.7	-	61.1	-11.4
02:00 PM - 03:00 PM	58.9	59.0	n/a	-	57.2	-
03:00 PM - 04:00 PM	59.0	59.3	n/a	-	57.1	-
04:00 PM - 05:00 PM	60.4	68.7	n/a	-	57.4	-
05:00 PM - 06:00 PM	62.1	64.0	n/a	-	57.3	-
06:00 PM - 07:00 PM	59.9	60.2	n/a	-	57.6	-
07:00 PM - 08:00 PM	59.3	59.9	n/a	-	57.3	-
08:00 PM - 09:00 PM	58.6	61.5	n/a	-	56.7	-
09:00 PM - 10:00 PM	59.0	61.6	n/a	-	56.6	-
10:00 PM - 10:05 PM	58.1	58.6	-	n/a	57.0	-
10:05 PM - 10:10 PM	59.3	58.3	-	55.4	57.1	-1.7
10:10 PM - 10:15 PM	57.7	59.0	-	n/a	57.1	-
10:15 PM - 10:20 PM	58.0	58.7	-	n/a	57.0	-
10:20 PM - 10:25 PM	58.0	58.2	-	n/a	56.8	-
10:25 PM - 10:30 PM	59.1	61.7	-	n/a	56.8	-
10:30 PM - 10:35 PM	57.4	59.0	-	n/a	56.9	-
10:35 PM - 10:40 PM	58.3	58.0	-	49.5	56.8	-7.3
10:40 PM - 10:45 PM	57.9	58.0	-	n/a	57.1	-
10:45 PM - 10:50 PM	57.9	58.1	-	n/a	56.6	-
10:50 PM - 10:55 PM	57.7	59.0	-	n/a	57.1	-
10:55 PM - 11:00 PM	57.6	57.8	-	n/a	56.8	-
11:00 PM - 11:05 PM	61.6	57.6	-	62.4	56.3	6.1
11:05 PM - 11:10 PM	58.2	59.2	-	n/a	56.7	-
11:10 PM - 11:15 PM	57.8	60.6	-	n/a	56.6	-
11:15 PM - 11:20 PM	57.6	57.7	-	n/a	56.7	-
11:20 PM - 11:25 PM	57.9	57.9	-	n/a	57.0	-
11:25 PM - 11:30 PM	57.6	57.3	-	48.8	56.9	-8.1
11:30 PM - 11:35 PM	57.3	58.1	-	n/a	56.0	-
11:35 PM - 11:40 PM	57.7	58.7	-	n/a	56.2	-
11:40 PM - 11:45 PM	58.1	57.6	-	51.5	56.1	-4.6
11:45 PM - 11:50 PM	59.1	59.2	-	n/a	56.1	-
11:50 PM - 11:55 PM	57.4	58.4	-	n/a	55.9	-
11:55 PM - 12:00 AM	57.6	58.3	-	n/a	55.4	-
12:00 AM - 12:05 AM	57.1	57.7	-	n/a	54.9	-
12:05 AM - 12:10 AM	57.9	57.9	-	n/a	55.6	-
12:10 AM - 12:15 AM	57.5	58.2	-	n/a	55.2	-
12:15 AM - 12:20 AM	57.3	57.5	-	n/a	55.8	-

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284522-1

Sample No. 24144513-7
Parameter เสียงรบกวน
Location บ้านขับมอน (GPS 47P 728147, 1619150)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 597159

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	58.0	58.4	-	n/a	56.2	-
12:25 AM - 12:30 AM	57.6	57.5	-	44.2	54.9	-10.7
12:30 AM - 12:35 AM	57.5	57.3	-	47.0	55.0	-8.0
12:35 AM - 12:40 AM	57.5	62.1	-	n/a	54.7	-
12:40 AM - 12:45 AM	57.6	58.5	-	n/a	56.0	-
12:45 AM - 12:50 AM	57.6	58.5	-	n/a	55.3	-
12:50 AM - 12:55 AM	57.2	58.5	-	n/a	56.4	-
12:55 AM - 01:00 AM	57.9	57.6	-	49.1	56.0	-6.9
01:00 AM - 01:05 AM	57.4	57.9	-	n/a	56.6	-
01:05 AM - 01:10 AM	56.9	58.9	-	n/a	55.9	-
01:10 AM - 01:15 AM	58.3	57.2	-	54.8	56.2	-1.4
01:15 AM - 01:20 AM	57.3	60.0	-	n/a	55.7	-
01:20 AM - 01:25 AM	58.1	62.5	-	n/a	56.0	-
01:25 AM - 01:30 AM	57.7	57.9	-	n/a	56.0	-
01:30 AM - 01:35 AM	57.2	59.2	-	n/a	56.1	-
01:35 AM - 01:40 AM	57.8	57.9	-	n/a	56.1	-
01:40 AM - 01:45 AM	57.9	57.2	-	52.6	56.4	-3.8
01:45 AM - 01:50 AM	57.2	61.1	-	n/a	55.4	-
01:50 AM - 01:55 AM	57.9	57.3	-	52.0	55.9	-3.9
01:55 AM - 02:00 AM	57.5	56.6	-	53.2	55.8	-2.6
02:00 AM - 02:05 AM	57.2	57.3	-	n/a	55.6	-
02:05 AM - 02:10 AM	57.9	57.2	-	52.6	56.2	-3.6
02:10 AM - 02:15 AM	56.9	57.2	-	n/a	55.7	-
02:15 AM - 02:20 AM	57.7	57.3	-	50.1	55.9	-5.8
02:20 AM - 02:25 AM	57.6	58.6	-	n/a	56.2	-
02:25 AM - 02:30 AM	56.8	56.7	-	43.4	55.6	-12.2
02:30 AM - 02:35 AM	56.8	58.8	-	n/a	56.5	-
02:35 AM - 02:40 AM	56.9	57.4	-	n/a	55.7	-
02:40 AM - 02:45 AM	57.0	56.8	-	46.5	55.8	-9.3
02:45 AM - 02:50 AM	57.0	57.4	-	n/a	56.2	-
02:50 AM - 02:55 AM	56.9	58.9	-	n/a	55.2	-
02:55 AM - 03:00 AM	57.7	57.7	-	n/a	55.7	-
03:00 AM - 03:05 AM	57.0	58.8	-	n/a	55.4	-
03:05 AM - 03:10 AM	57.9	58.9	-	n/a	55.8	-
03:10 AM - 03:15 AM	57.3	59.0	-	n/a	56.0	-
03:15 AM - 03:20 AM	56.9	58.0	-	n/a	55.7	-
03:20 AM - 03:25 AM	57.1	59.1	-	n/a	55.5	-
03:25 AM - 03:30 AM	58.0	58.6	-	n/a	55.2	-
03:30 AM - 03:35 AM	57.6	56.6	-	53.7	55.8	-2.1
03:35 AM - 03:40 AM	57.9	57.7	-	47.4	55.8	-8.4

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Kanokkorn Anek
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284522-1

Sample No. 24144513-7
Parameter เสียงรบกวน
Location บ้านขับมอน (GPS 47P 728147, 1619150)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 597159

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	58.9	57.7	-	55.7	55.6	0.1
03:45 AM - 03:50 AM	57.5	58.1	-	n/a	55.2	-
03:50 AM - 03:55 AM	57.4	58.7	-	n/a	55.4	-
03:55 AM - 04:00 AM	57.6	58.2	-	n/a	56.2	-
04:00 AM - 04:05 AM	57.2	59.1	-	n/a	56.1	-
04:05 AM - 04:10 AM	56.4	56.7	-	n/a	55.6	-
04:10 AM - 04:15 AM	57.5	57.1	-	49.9	56.1	-6.2
04:15 AM - 04:20 AM	56.9	57.4	-	n/a	56.0	-
04:20 AM - 04:25 AM	57.5	57.6	-	n/a	56.9	-
04:25 AM - 04:30 AM	57.8	57.0	-	53.1	55.9	-2.8
04:30 AM - 04:35 AM	57.6	58.3	-	n/a	56.2	-
04:35 AM - 04:40 AM	57.5	57.9	-	n/a	56.1	-
04:40 AM - 04:45 AM	56.5	57.1	-	n/a	56.6	-
04:45 AM - 04:50 AM	57.0	57.5	-	n/a	56.7	-
04:50 AM - 04:55 AM	57.5	57.8	-	n/a	56.6	-
04:55 AM - 05:00 AM	57.1	58.1	-	n/a	57.1	-
05:00 AM - 05:05 AM	57.4	59.2	-	n/a	56.8	-
05:05 AM - 05:10 AM	57.7	58.0	-	n/a	56.6	-
05:10 AM - 05:15 AM	57.4	58.1	-	n/a	56.9	-
05:15 AM - 05:20 AM	57.2	59.6	-	n/a	56.2	-
05:20 AM - 05:25 AM	57.5	59.3	-	n/a	57.3	-
05:25 AM - 05:30 AM	57.6	59.4	-	n/a	59.5	-
05:30 AM - 05:35 AM	58.0	59.8	-	n/a	57.8	-
05:35 AM - 05:40 AM	58.5	59.8	-	n/a	57.9	-
05:40 AM - 05:45 AM	57.6	59.9	-	n/a	57.9	-
05:45 AM - 05:50 AM	58.4	60.1	-	n/a	57.4	-
05:50 AM - 05:55 AM	58.0	59.3	-	n/a	58.3	-
05:55 AM - 06:00 AM	65.3	58.9	-	67.2	57.5	9.7
06:00 AM - 07:00 AM	61.8	69.2	n/a	-	57.4	-
07:00 AM - 08:00 AM	61.7	61.9	n/a	-	56.8	-
08:00 AM - 09:00 AM	60.3	61.5	n/a	-	56.0	-
09:00 AM - 10:00 AM	59.3	57.6	54.4	-	55.6	-1.2
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 08-09 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-7 วันที่ตรวจวัด 08-09 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284523-1

Sample No. 24144513-8
Parameter เสียงรบกวน
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 723024, 1616344)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00672789

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	53.1	50.8	49.2	-	48.8	0.4
11:00 AM - 12:00 PM	52.8	50.8	48.5	-	47.1	1.4
12:00 PM - 01:00 PM	52.2	49.3	49.1	-	47.2	1.9
01:00 PM - 02:00 PM	52.3	49.3	49.3	-	47.0	2.3
02:00 PM - 03:00 PM	53.1	50.5	49.6	-	47.1	2.5
03:00 PM - 04:00 PM	54.4	49.1	52.9	-	47.0	5.9
04:00 PM - 05:00 PM	52.7	50.3	49.0	-	47.8	1.2
05:00 PM - 06:00 PM	54.1	51.3	50.9	-	49.7	1.2
06:00 PM - 07:00 PM	54.9	52.5	51.2	-	50.9	0.3
07:00 PM - 08:00 PM	55.1	52.9	51.1	-	51.0	0.1
08:00 PM - 09:00 PM	55.0	54.4	46.1	-	53.0	-6.9
09:00 PM - 10:00 PM	55.7	56.3	n/a	-	53.0	-
10:00 PM - 10:05 PM	54.7	53.0	-	52.8	51.9	0.9
10:05 PM - 10:10 PM	55.3	53.2	-	54.1	51.9	2.2
10:10 PM - 10:15 PM	55.1	53.5	-	53.0	52.2	0.8
10:15 PM - 10:20 PM	54.8	52.5	-	53.9	51.3	2.6
10:20 PM - 10:25 PM	55.3	53.4	-	53.8	51.7	2.1
10:25 PM - 10:30 PM	55.1	52.6	-	54.5	51.4	3.1
10:30 PM - 10:35 PM	55.2	52.7	-	54.6	51.3	3.3
10:35 PM - 10:40 PM	55.9	53.5	-	55.2	52.1	3.1
10:40 PM - 10:45 PM	55.6	53.6	-	54.3	51.7	2.6
10:45 PM - 10:50 PM	54.8	53.0	-	53.1	51.3	1.8
10:50 PM - 10:55 PM	55.0	52.1	-	54.9	50.7	4.2
10:55 PM - 11:00 PM	54.8	52.0	-	54.6	50.3	4.3
11:00 PM - 11:05 PM	55.1	52.2	-	55.0	50.8	4.2
11:05 PM - 11:10 PM	55.4	54.1	-	52.5	51.7	0.8
11:10 PM - 11:15 PM	54.6	52.1	-	54.0	50.3	3.7
11:15 PM - 11:20 PM	54.7	51.5	-	54.9	50.1	4.8
11:20 PM - 11:25 PM	54.4	51.3	-	54.5	49.6	4.9
11:25 PM - 11:30 PM	54.4	51.5	-	54.3	50.2	4.1
11:30 PM - 11:35 PM	54.6	50.7	-	55.3	49.5	5.8
11:35 PM - 11:40 PM	54.7	51.6	-	54.8	49.8	5.0
11:40 PM - 11:45 PM	54.7	51.1	-	55.2	49.5	5.7
11:45 PM - 11:50 PM	54.7	51.8	-	54.6	50.2	4.4
11:50 PM - 11:55 PM	54.6	50.9	-	55.2	49.6	5.6
11:55 PM - 12:00 AM	54.5	51.2	-	54.8	49.6	5.2
12:00 AM - 12:05 AM	54.8	51.4	-	55.1	49.8	5.3
12:05 AM - 12:10 AM	54.5	50.9	-	55.0	49.5	5.5
12:10 AM - 12:15 AM	54.8	51.3	-	55.2	49.5	5.7
12:15 AM - 12:20 AM	54.8	52.3	-	54.2	50.7	3.5

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284523-1

Sample No. 24144513-8
Parameter เสียงรบกวน
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 723024, 1616344)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00672789

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	54.5	51.3	-	54.7	49.7	5.0
12:25 AM - 12:30 AM	54.4	50.9	-	54.8	49.2	5.6
12:30 AM - 12:35 AM	54.4	51.0	-	54.7	49.1	5.6
12:35 AM - 12:40 AM	54.2	50.2	-	55.0	48.5	6.5
12:40 AM - 12:45 AM	54.3	50.5	-	55.0	49.1	5.9
12:45 AM - 12:50 AM	54.0	50.2	-	54.7	48.8	5.9
12:50 AM - 12:55 AM	54.3	50.7	-	54.8	48.4	6.4
12:55 AM - 01:00 AM	54.0	50.4	-	54.5	48.9	5.6
01:00 AM - 01:05 AM	53.6	49.3	-	54.6	48.3	6.3
01:05 AM - 01:10 AM	54.4	49.2	-	55.8	48.0	7.8
01:10 AM - 01:15 AM	54.5	48.7	-	56.2	47.8	8.4
01:15 AM - 01:20 AM	56.1	49.9	-	57.9	48.7	9.2
01:20 AM - 01:25 AM	58.9	62.6	-	n/a	48.6	-
01:25 AM - 01:30 AM	55.4	49.4	-	57.1	47.8	9.3
01:30 AM - 01:35 AM	55.7	49.2	-	57.6	48.3	9.3
01:35 AM - 01:40 AM	55.3	49.7	-	56.9	48.3	8.6
01:40 AM - 01:45 AM	53.9	49.6	-	54.9	48.4	6.5
01:45 AM - 01:50 AM	53.8	49.6	-	54.7	48.5	6.2
01:50 AM - 01:55 AM	53.6	49.4	-	54.5	48.6	5.9
01:55 AM - 02:00 AM	53.9	48.4	-	55.5	47.6	7.9
02:00 AM - 02:05 AM	53.7	48.3	-	55.2	47.3	7.9
02:05 AM - 02:10 AM	54.4	51.0	-	54.7	47.4	7.3
02:10 AM - 02:15 AM	53.8	47.9	-	55.5	47.1	8.4
02:15 AM - 02:20 AM	53.4	49.0	-	54.4	48.3	6.1
02:20 AM - 02:25 AM	55.4	50.2	-	56.8	48.5	8.3
02:25 AM - 02:30 AM	54.5	52.1	-	53.8	47.9	5.9
02:30 AM - 02:35 AM	54.2	50.3	-	54.9	48.4	6.5
02:35 AM - 02:40 AM	54.7	51.2	-	55.1	49.4	5.7
02:40 AM - 02:45 AM	54.4	50.4	-	55.2	48.2	7.0
02:45 AM - 02:50 AM	54.1	49.9	-	55.0	48.8	6.2
02:50 AM - 02:55 AM	53.4	49.0	-	54.4	48.4	6.0
02:55 AM - 03:00 AM	53.1	49.1	-	53.9	47.8	6.1
03:00 AM - 03:05 AM	53.2	49.2	-	54.0	48.0	6.0
03:05 AM - 03:10 AM	52.9	49.3	-	53.4	48.2	5.2
03:10 AM - 03:15 AM	52.9	48.7	-	53.8	47.6	6.2
03:15 AM - 03:20 AM	52.8	50.3	-	52.2	49.0	3.2
03:20 AM - 03:25 AM	53.2	50.0	-	53.4	49.0	4.4
03:25 AM - 03:30 AM	53.0	50.0	-	53.0	48.9	4.1
03:30 AM - 03:35 AM	53.0	49.8	-	53.2	48.8	4.4
03:35 AM - 03:40 AM	53.0	49.5	-	53.4	48.6	4.8

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284523-1

Sample No. 24144513-8
Parameter เสียงรบกวน
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 723024, 1616344)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00672789

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	53.0	49.3	-	53.6	48.2	5.4
03:45 AM - 03:50 AM	53.2	50.3	-	53.1	49.1	4.0
03:50 AM - 03:55 AM	53.0	49.4	-	53.5	48.4	5.1
03:55 AM - 04:00 AM	53.2	49.5	-	53.8	48.1	5.7
04:00 AM - 04:05 AM	53.2	49.7	-	53.6	48.6	5.0
04:05 AM - 04:10 AM	53.6	49.8	-	54.3	48.7	5.6
04:10 AM - 04:15 AM	53.9	51.2	-	53.6	48.3	5.3
04:15 AM - 04:20 AM	53.7	49.5	-	54.6	48.3	6.3
04:20 AM - 04:25 AM	53.9	49.8	-	54.8	48.5	6.3
04:25 AM - 04:30 AM	53.7	49.7	-	54.5	48.3	6.2
04:30 AM - 04:35 AM	53.8	49.6	-	54.7	48.2	6.5
04:35 AM - 04:40 AM	53.8	49.8	-	54.6	48.6	6.0
04:40 AM - 04:45 AM	53.5	49.9	-	54.0	48.6	5.4
04:45 AM - 04:50 AM	53.3	49.9	-	53.6	48.8	4.8
04:50 AM - 04:55 AM	53.5	50.0	-	53.9	48.9	5.0
04:55 AM - 05:00 AM	53.6	50.1	-	54.0	48.9	5.1
05:00 AM - 05:05 AM	53.6	50.7	-	53.5	49.5	4.0
05:05 AM - 05:10 AM	54.6	54.9	-	n/a	49.5	-
05:10 AM - 05:15 AM	53.6	50.8	-	53.4	49.6	3.8
05:15 AM - 05:20 AM	53.4	50.3	-	53.5	49.2	4.3
05:20 AM - 05:25 AM	53.7	50.6	-	53.8	49.1	4.7
05:25 AM - 05:30 AM	53.6	50.3	-	53.9	49.1	4.8
05:30 AM - 05:35 AM	53.7	51.1	-	53.2	49.7	3.5
05:35 AM - 05:40 AM	53.7	50.4	-	54.0	49.3	4.7
05:40 AM - 05:45 AM	53.7	50.9	-	53.5	49.9	3.6
05:45 AM - 05:50 AM	54.2	52.8	-	51.6	49.9	1.7
05:50 AM - 05:55 AM	53.9	51.2	-	53.6	49.9	3.7
05:55 AM - 06:00 AM	54.1	52.0	-	52.9	50.0	2.9
06:00 AM - 07:00 AM	55.2	55.0	41.7	-	50.0	-8.3
07:00 AM - 08:00 AM	55.3	52.6	52.0	-	50.3	1.7
08:00 AM - 09:00 AM	54.9	52.2	51.6	-	49.3	2.3
09:00 AM - 10:00 AM	55.3	54.6	47.0	-	49.8	-2.8
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 02-03 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-8 วันที่ตรวจวัด 02-03 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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Approved by
Kanokkorn Anek
Senior Manager

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284524-1

Sample No. 24144513-9
Parameter เสียงรบกวน
Location โรงเรียนอนุบาลทับกาง (GPS 47P 723024, 1616344)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00672789

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	54.7	51.5	51.9	-	49.8	2.1
11:00 AM - 12:00 PM	54.6	51.7	51.5	-	48.8	2.7
12:00 PM - 01:00 PM	57.7	58.8	n/a	-	49.4	-
01:00 PM - 02:00 PM	53.9	50.1	51.6	-	48.5	3.1
02:00 PM - 03:00 PM	54.1	53.1	47.2	-	47.8	-0.6
03:00 PM - 04:00 PM	53.5	51.4	49.3	-	48.2	1.1
04:00 PM - 05:00 PM	54.4	52.0	50.7	-	50.1	0.6
05:00 PM - 06:00 PM	54.6	53.8	46.9	-	50.6	-3.7
06:00 PM - 07:00 PM	53.7	51.6	49.5	-	49.1	0.4
07:00 PM - 08:00 PM	54.0	51.7	50.1	-	50.5	-0.4
08:00 PM - 09:00 PM	54.2	52.6	49.1	-	51.4	-2.3
09:00 PM - 10:00 PM	54.5	55.1	n/a	-	52.5	-
10:00 PM - 10:05 PM	53.2	52.8	-	45.6	51.8	-6.2
10:05 PM - 10:10 PM	52.1	52.8	-	n/a	51.5	-
10:10 PM - 10:15 PM	51.9	52.4	-	n/a	51.0	-
10:15 PM - 10:20 PM	51.7	52.6	-	n/a	51.8	-
10:20 PM - 10:25 PM	51.6	51.5	-	38.2	49.8	-11.6
10:25 PM - 10:30 PM	52.2	52.0	-	41.7	50.4	-8.7
10:30 PM - 10:35 PM	52.2	52.3	-	n/a	51.3	-
10:35 PM - 10:40 PM	52.3	52.1	-	41.8	50.8	-9.0
10:40 PM - 10:45 PM	52.2	51.3	-	47.9	50.2	-2.3
10:45 PM - 10:50 PM	52.6	51.8	-	47.9	50.5	-2.6
10:50 PM - 10:55 PM	52.2	51.9	-	43.4	51.0	-7.6
10:55 PM - 11:00 PM	52.3	51.3	-	48.4	50.3	-1.9
11:00 PM - 11:05 PM	52.2	51.6	-	46.3	50.7	-4.4
11:05 PM - 11:10 PM	51.9	51.5	-	44.3	50.4	-6.1
11:10 PM - 11:15 PM	51.5	50.8	-	46.2	49.6	-3.4
11:15 PM - 11:20 PM	52.0	51.9	-	38.6	49.6	-11.0
11:20 PM - 11:25 PM	51.9	50.4	-	49.6	49.1	0.5
11:25 PM - 11:30 PM	51.7	51.3	-	44.1	50.3	-6.2
11:30 PM - 11:35 PM	51.7	50.0	-	49.8	49.0	0.8
11:35 PM - 11:40 PM	51.9	51.0	-	47.6	49.7	-2.1
11:40 PM - 11:45 PM	51.5	50.0	-	49.2	48.8	0.4
11:45 PM - 11:50 PM	51.2	48.6	-	50.7	47.4	3.3
11:50 PM - 11:55 PM	51.0	48.5	-	50.4	47.5	2.9
11:55 PM - 12:00 AM	51.1	48.6	-	50.5	47.2	3.3
12:00 AM - 12:05 AM	51.0	48.0	-	51.0	47.2	3.8
12:05 AM - 12:10 AM	51.0	47.9	-	51.1	47.1	4.0
12:10 AM - 12:15 AM	51.0	48.0	-	51.0	47.0	4.0
12:15 AM - 12:20 AM	51.2	48.9	-	50.3	47.5	2.8

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284524-1

Sample No. 24144513-9
Parameter เสียงรบกวน
Location โรงเรียนอนุบาลทับกาง (GPS 47P 723024, 1616344)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00672789

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	51.4	48.4	-	51.4	47.1	4.3
12:25 AM - 12:30 AM	51.5	48.5	-	51.5	47.3	4.2
12:30 AM - 12:35 AM	51.2	47.8	-	51.5	46.8	4.7
12:35 AM - 12:40 AM	51.6	49.0	-	51.1	48.0	3.1
12:40 AM - 12:45 AM	51.4	48.2	-	51.6	47.2	4.4
12:45 AM - 12:50 AM	51.6	48.6	-	51.6	47.1	4.5
12:50 AM - 12:55 AM	51.7	48.9	-	51.5	47.5	4.0
12:55 AM - 01:00 AM	51.7	48.7	-	51.7	47.8	3.9
01:00 AM - 01:05 AM	51.6	48.6	-	51.6	47.8	3.8
01:05 AM - 01:10 AM	51.8	48.8	-	51.8	47.6	4.2
01:10 AM - 01:15 AM	51.6	48.3	-	51.9	47.2	4.7
01:15 AM - 01:20 AM	51.2	48.2	-	51.2	46.6	4.6
01:20 AM - 01:25 AM	51.7	51.9	-	n/a	46.3	-
01:25 AM - 01:30 AM	50.8	47.0	-	51.5	46.2	5.3
01:30 AM - 01:35 AM	50.8	46.8	-	51.6	46.0	5.6
01:35 AM - 01:40 AM	51.0	47.3	-	51.6	46.5	5.1
01:40 AM - 01:45 AM	51.5	47.9	-	52.0	46.8	5.2
01:45 AM - 01:50 AM	52.0	49.4	-	51.5	47.7	3.8
01:50 AM - 01:55 AM	51.8	49.0	-	51.6	47.6	4.0
01:55 AM - 02:00 AM	51.8	49.0	-	51.6	47.8	3.8
02:00 AM - 02:05 AM	51.8	49.5	-	50.9	47.9	3.0
02:05 AM - 02:10 AM	52.8	52.5	-	44.0	49.0	-5.0
02:10 AM - 02:15 AM	52.0	49.6	-	51.3	48.4	2.9
02:15 AM - 02:20 AM	52.3	49.9	-	51.6	47.8	3.8
02:20 AM - 02:25 AM	51.4	49.2	-	50.4	48.1	2.3
02:25 AM - 02:30 AM	51.2	49.6	-	49.1	46.6	2.5
02:30 AM - 02:35 AM	50.7	47.5	-	50.9	46.3	4.6
02:35 AM - 02:40 AM	50.5	47.2	-	50.8	46.3	4.5
02:40 AM - 02:45 AM	50.5	47.1	-	50.8	46.2	4.6
02:45 AM - 02:50 AM	50.6	47.4	-	50.8	46.1	4.7
02:50 AM - 02:55 AM	51.0	48.9	-	49.8	46.6	3.2
02:55 AM - 03:00 AM	51.3	49.3	-	50.0	47.7	2.3
03:00 AM - 03:05 AM	51.2	48.9	-	50.3	47.6	2.7
03:05 AM - 03:10 AM	50.8	48.1	-	50.5	47.2	3.3
03:10 AM - 03:15 AM	51.0	48.2	-	50.8	47.5	3.3
03:15 AM - 03:20 AM	50.9	48.2	-	50.6	46.9	3.7
03:20 AM - 03:25 AM	51.2	48.8	-	50.5	46.6	3.9
03:25 AM - 03:30 AM	50.7	47.6	-	50.8	46.6	4.2
03:30 AM - 03:35 AM	50.9	47.6	-	51.2	46.6	4.6
03:35 AM - 03:40 AM	51.1	48.4	-	50.8	47.0	3.8

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Approved by
Kanokkorn Anek
Senior Manager

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284524-1

Sample No. 24144513-9
Parameter เสียงรบกวน
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 723024, 1616344)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00672789

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	52.0	49.8	-	51.0	48.3	2.7
03:45 AM - 03:50 AM	51.8	49.8	-	50.5	47.7	2.8
03:50 AM - 03:55 AM	51.4	49.2	-	50.4	47.5	2.9
03:55 AM - 04:00 AM	52.7	50.2	-	52.1	48.3	3.8
04:00 AM - 04:05 AM	52.7	51.4	-	49.8	47.6	2.2
04:05 AM - 04:10 AM	52.0	48.4	-	52.5	47.6	4.9
04:10 AM - 04:15 AM	52.2	48.9	-	52.5	47.7	4.8
04:15 AM - 04:20 AM	51.4	48.7	-	51.1	47.5	3.6
04:20 AM - 04:25 AM	52.6	50.5	-	51.4	48.0	3.4
04:25 AM - 04:30 AM	53.1	51.5	-	51.0	49.4	1.6
04:30 AM - 04:35 AM	52.4	50.6	-	50.7	48.5	2.2
04:35 AM - 04:40 AM	52.2	50.0	-	51.2	48.7	2.5
04:40 AM - 04:45 AM	53.1	50.8	-	52.2	49.1	3.1
04:45 AM - 04:50 AM	53.0	50.0	-	53.0	48.8	4.2
04:50 AM - 04:55 AM	52.4	50.4	-	51.1	48.7	2.4
04:55 AM - 05:00 AM	51.7	49.7	-	50.4	48.2	2.2
05:00 AM - 05:05 AM	52.8	50.4	-	52.1	48.5	3.6
05:05 AM - 05:10 AM	53.7	54.7	-	n/a	48.5	-
05:10 AM - 05:15 AM	52.6	50.3	-	51.7	48.1	3.6
05:15 AM - 05:20 AM	53.5	50.2	-	53.8	48.6	5.2
05:20 AM - 05:25 AM	52.8	50.2	-	52.3	48.9	3.4
05:25 AM - 05:30 AM	52.3	49.8	-	51.7	48.5	3.2
05:30 AM - 05:35 AM	52.3	50.6	-	50.4	48.7	1.7
05:35 AM - 05:40 AM	52.8	51.6	-	49.6	50.0	-0.4
05:40 AM - 05:45 AM	53.3	51.3	-	52.0	49.7	2.3
05:45 AM - 05:50 AM	52.9	51.9	-	49.0	49.8	-0.8
05:50 AM - 05:55 AM	53.1	54.1	-	n/a	49.9	-
05:55 AM - 06:00 AM	52.7	51.8	-	48.4	50.2	-1.8
06:00 AM - 07:00 AM	53.8	52.7	47.3	-	50.2	-2.9
07:00 AM - 08:00 AM	52.6	52.2	42.0	-	48.6	-6.6
08:00 AM - 09:00 AM	52.8	57.0	n/a	-	53.0	-
09:00 AM - 10:00 AM	52.8	54.3	n/a	-	51.8	-
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 03-04 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-9 วันที่ตรวจวัด 03-04 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดมากกว่าระดับเสียงขณะไม่มีการรบกวน

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

Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284525-1

Sample No. 24144513-10
Parameter เสียงรบกวน
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 723024, 1616344)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00672789

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	52.0	49.1	48.9	-	46.0	2.9
11:00 AM - 12:00 PM	51.7	48.6	48.8	-	46.0	2.8
12:00 PM - 01:00 PM	51.1	50.8	39.3	-	46.0	-6.7
01:00 PM - 02:00 PM	50.5	48.9	45.4	-	46.7	-1.3
02:00 PM - 03:00 PM	52.5	52.1	41.9	-	46.8	-4.9
03:00 PM - 04:00 PM	64.5	66.0	n/a	-	60.6	-
04:00 PM - 05:00 PM	54.8	52.8	50.5	-	50.3	0.2
05:00 PM - 06:00 PM	56.0	55.1	48.7	-	50.7	-2.0
06:00 PM - 07:00 PM	54.8	53.7	48.3	-	50.9	-2.6
07:00 PM - 08:00 PM	53.9	54.3	n/a	-	53.0	-
08:00 PM - 09:00 PM	54.5	58.8	n/a	-	57.8	-
09:00 PM - 10:00 PM	54.9	58.4	n/a	-	57.2	-
10:00 PM - 10:05 PM	54.7	57.7	-	n/a	56.4	-
10:05 PM - 10:10 PM	55.0	57.9	-	n/a	56.5	-
10:10 PM - 10:15 PM	54.6	57.7	-	n/a	56.6	-
10:15 PM - 10:20 PM	54.6	57.4	-	n/a	56.2	-
10:20 PM - 10:25 PM	54.5	57.1	-	n/a	56.1	-
10:25 PM - 10:30 PM	54.6	56.3	-	n/a	55.1	-
10:30 PM - 10:35 PM	55.0	56.8	-	n/a	55.7	-
10:35 PM - 10:40 PM	55.1	56.5	-	n/a	55.3	-
10:40 PM - 10:45 PM	55.1	56.6	-	n/a	55.5	-
10:45 PM - 10:50 PM	55.1	56.1	-	n/a	54.6	-
10:50 PM - 10:55 PM	55.0	56.0	-	n/a	54.2	-
10:55 PM - 11:00 PM	54.6	54.6	-	n/a	52.2	-
11:00 PM - 11:05 PM	55.0	54.3	-	49.7	52.2	-2.5
11:05 PM - 11:10 PM	55.4	56.1	-	n/a	52.7	-
11:10 PM - 11:15 PM	54.4	55.3	-	n/a	53.7	-
11:15 PM - 11:20 PM	54.5	54.5	-	n/a	53.1	-
11:20 PM - 11:25 PM	54.4	54.7	-	n/a	53.3	-
11:25 PM - 11:30 PM	54.2	54.3	-	n/a	52.9	-
11:30 PM - 11:35 PM	54.2	53.6	-	48.3	51.9	-3.6
11:35 PM - 11:40 PM	54.3	53.7	-	48.4	52.1	-3.7
11:40 PM - 11:45 PM	54.3	54.1	-	43.8	52.1	-8.3
11:45 PM - 11:50 PM	54.2	53.1	-	50.7	51.1	-0.4
11:50 PM - 11:55 PM	54.3	54.0	-	45.5	52.0	-6.5
11:55 PM - 12:00 AM	54.3	52.6	-	52.4	51.4	1.0
12:00 AM - 12:05 AM	54.3	52.1	-	53.3	50.7	2.6
12:05 AM - 12:10 AM	54.5	52.5	-	53.2	51.2	2.0
12:10 AM - 12:15 AM	54.5	53.6	-	50.2	51.4	-1.2
12:15 AM - 12:20 AM	54.4	54.1	-	45.6	52.4	-6.8

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284525-1

Sample No. 24144513-10
Parameter เสียงรบกวน
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 723024, 1616344)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00672789

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	54.3	54.8	-	n/a	53.1	-
12:25 AM - 12:30 AM	54.1	54.5	-	n/a	52.6	-
12:30 AM - 12:35 AM	53.9	53.8	-	40.5	51.3	-10.8
12:35 AM - 12:40 AM	54.1	51.4	-	53.8	49.5	4.3
12:40 AM - 12:45 AM	54.0	52.9	-	50.5	50.7	-0.2
12:45 AM - 12:50 AM	53.9	52.9	-	50.0	50.0	0.0
12:50 AM - 12:55 AM	54.0	52.1	-	52.5	49.9	2.6
12:55 AM - 01:00 AM	54.1	51.9	-	53.1	50.4	2.7
01:00 AM - 01:05 AM	54.3	51.3	-	54.3	50.0	4.3
01:05 AM - 01:10 AM	54.1	52.5	-	52.0	49.9	2.1
01:10 AM - 01:15 AM	54.1	51.5	-	53.6	50.2	3.4
01:15 AM - 01:20 AM	53.9	51.5	-	53.2	50.1	3.1
01:20 AM - 01:25 AM	57.3	62.6	-	n/a	50.1	-
01:25 AM - 01:30 AM	55.4	51.2	-	56.3	49.8	6.5
01:30 AM - 01:35 AM	54.9	51.3	-	55.4	49.7	5.7
01:35 AM - 01:40 AM	54.0	51.8	-	53.0	50.1	2.9
01:40 AM - 01:45 AM	54.2	51.6	-	53.7	49.6	4.1
01:45 AM - 01:50 AM	54.2	51.4	-	54.0	49.8	4.2
01:50 AM - 01:55 AM	54.4	51.4	-	54.4	49.4	5.0
01:55 AM - 02:00 AM	55.2	53.1	-	54.0	49.7	4.3
02:00 AM - 02:05 AM	55.7	52.9	-	55.5	50.8	4.7
02:05 AM - 02:10 AM	55.3	52.6	-	55.0	49.7	5.3
02:10 AM - 02:15 AM	55.6	52.6	-	55.6	50.4	5.2
02:15 AM - 02:20 AM	55.5	53.4	-	54.3	50.9	3.4
02:20 AM - 02:25 AM	60.2	54.4	-	61.9	52.0	9.9
02:25 AM - 02:30 AM	56.2	65.1	-	n/a	52.3	-
02:30 AM - 02:35 AM	56.8	55.3	-	54.5	52.3	2.2
02:35 AM - 02:40 AM	57.2	55.7	-	54.9	53.3	1.6
02:40 AM - 02:45 AM	57.3	55.8	-	55.0	53.3	1.7
02:45 AM - 02:50 AM	57.1	55.3	-	55.4	52.7	2.7
02:50 AM - 02:55 AM	57.0	55.4	-	54.9	52.2	2.7
02:55 AM - 03:00 AM	57.3	55.2	-	56.1	51.6	4.5
03:00 AM - 03:05 AM	57.5	55.0	-	56.9	52.6	4.3
03:05 AM - 03:10 AM	57.5	54.8	-	57.2	52.5	4.7
03:10 AM - 03:15 AM	57.6	55.0	-	57.1	52.5	4.6
03:15 AM - 03:20 AM	57.1	54.9	-	56.1	52.0	4.1
03:20 AM - 03:25 AM	56.8	54.0	-	56.6	51.6	5.0
03:25 AM - 03:30 AM	57.0	54.7	-	56.1	52.1	4.0
03:30 AM - 03:35 AM	56.8	54.8	-	55.5	52.2	3.3
03:35 AM - 03:40 AM	56.2	54.6	-	54.1	51.4	2.7

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Approved by

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Senior Manager

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284525-1

Sample No. 24144513-10
Parameter เสียงรบกวน
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 723024, 1616344)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00672789

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	57.2	54.6	-	56.7	51.7	5.0
03:45 AM - 03:50 AM	55.6	53.2	-	54.9	50.2	4.7
03:50 AM - 03:55 AM	56.0	55.4	-	50.1	51.2	-1.1
03:55 AM - 04:00 AM	55.8	54.2	-	53.7	50.4	3.3
04:00 AM - 04:05 AM	55.5	54.5	-	51.6	50.6	1.0
04:05 AM - 04:10 AM	56.9	53.6	-	57.2	50.8	6.4
04:10 AM - 04:15 AM	54.6	58.6	-	n/a	49.3	-
04:15 AM - 04:20 AM	54.3	53.8	-	47.7	49.6	-1.9
04:20 AM - 04:25 AM	53.7	50.3	-	54.0	48.4	5.6
04:25 AM - 04:30 AM	53.2	51.6	-	51.1	49.2	1.9
04:30 AM - 04:35 AM	53.5	50.7	-	53.3	48.8	4.5
04:35 AM - 04:40 AM	53.4	50.6	-	53.2	49.2	4.0
04:40 AM - 04:45 AM	52.8	49.8	-	52.8	48.5	4.3
04:45 AM - 04:50 AM	52.8	49.7	-	52.9	48.5	4.4
04:50 AM - 04:55 AM	53.8	54.4	-	n/a	48.6	-
04:55 AM - 05:00 AM	52.8	50.5	-	51.9	49.1	2.8
05:00 AM - 05:05 AM	52.6	50.4	-	51.6	49.1	2.5
05:05 AM - 05:10 AM	53.5	51.6	-	52.0	48.5	3.5
05:10 AM - 05:15 AM	52.8	48.6	-	53.7	47.4	6.3
05:15 AM - 05:20 AM	52.5	48.6	-	53.2	47.3	5.9
05:20 AM - 05:25 AM	52.5	48.8	-	53.1	47.4	5.7
05:25 AM - 05:30 AM	52.5	48.8	-	53.1	47.7	5.4
05:30 AM - 05:35 AM	53.0	48.9	-	53.9	47.2	6.7
05:35 AM - 05:40 AM	52.7	48.7	-	53.5	47.1	6.4
05:40 AM - 05:45 AM	53.8	50.1	-	54.4	47.9	6.5
05:45 AM - 05:50 AM	54.6	63.2	-	n/a	51.2	-
05:50 AM - 05:55 AM	53.7	65.5	-	n/a	50.6	-
05:55 AM - 06:00 AM	54.1	59.1	-	n/a	50.9	-
06:00 AM - 07:00 AM	53.6	53.8	n/a	-	49.4	-
07:00 AM - 08:00 AM	52.4	50.2	48.4	-	47.6	0.8
08:00 AM - 09:00 AM	52.6	50.4	48.6	-	48.6	0.0
09:00 AM - 10:00 AM	53.1	51.1	48.8	-	48.4	0.4
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 ; 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานผลกระทบทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 04-05 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-10 วันที่ตรวจวัด 04-05 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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

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Kanokkorn Anek
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284526-1

Sample No. 24144513-11
Parameter เสียงรบกวน
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 723024, 1616344)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00672789

ระดับเสียง (dB(A))						
เวลา	เสียงจาก	เสียงขณะ	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ
	แหล่งกำเนิด	ไม่มีการรบกวน	กลางวัน	กลางคืน		การรบกวน
10:00 AM - 11:00 AM	53.4	52.0	47.8	-	46.0	1.8
11:00 AM - 12:00 PM	52.8	49.2	50.3	-	47.3	3.0
12:00 PM - 01:00 PM	52.6	48.8	50.3	-	46.9	3.4
01:00 PM - 02:00 PM	52.0	49.3	48.7	-	47.3	1.4
02:00 PM - 03:00 PM	51.6	51.3	39.8	-	49.2	-9.4
03:00 PM - 04:00 PM	52.0	53.8	n/a	-	49.5	-
04:00 PM - 05:00 PM	51.8	52.6	n/a	-	50.8	-
05:00 PM - 06:00 PM	52.2	53.1	n/a	-	50.9	-
06:00 PM - 07:00 PM	51.8	54.1	n/a	-	50.8	-
07:00 PM - 08:00 PM	55.1	53.1	50.8	-	51.6	-0.8
08:00 PM - 09:00 PM	60.7	56.5	58.6	-	55.1	3.5
09:00 PM - 10:00 PM	66.8	60.7	65.6	-	58.8	6.8
10:00 PM - 10:05 PM	66.1	60.4	-	67.7	58.8	8.9
10:05 PM - 10:10 PM	66.3	60.4	-	68.0	58.9	9.1
10:10 PM - 10:15 PM	67.1	59.6	-	69.2	58.1	11.1
10:15 PM - 10:20 PM	66.3	60.2	-	68.1	58.9	9.2
10:20 PM - 10:25 PM	66.4	60.2	-	68.2	59.0	9.2
10:25 PM - 10:30 PM	66.7	60.8	-	68.4	59.0	9.4
10:30 PM - 10:35 PM	68.4	60.2	-	70.7	58.7	12.0
10:35 PM - 10:40 PM	67.1	60.3	-	69.1	58.9	10.2
10:40 PM - 10:45 PM	66.9	59.6	-	69.0	58.5	10.5
10:45 PM - 10:50 PM	66.3	60.3	-	68.0	58.9	9.1
10:50 PM - 10:55 PM	67.4	60.1	-	69.5	58.6	10.9
10:55 PM - 11:00 PM	67.4	60.7	-	69.4	59.3	10.1
11:00 PM - 11:05 PM	67.6	61.4	-	69.4	59.2	10.2
11:05 PM - 11:10 PM	67.1	60.6	-	69.0	59.0	10.0
11:10 PM - 11:15 PM	66.2	60.8	-	67.7	59.6	8.1
11:15 PM - 11:20 PM	65.7	61.0	-	66.9	59.5	7.4
11:20 PM - 11:25 PM	66.2	61.2	-	67.5	59.3	8.2
11:25 PM - 11:30 PM	66.3	60.0	-	68.1	58.6	9.5
11:30 PM - 11:35 PM	66.0	60.6	-	67.5	59.3	8.2
11:35 PM - 11:40 PM	65.1	60.4	-	66.3	58.9	7.4
11:40 PM - 11:45 PM	65.9	59.9	-	67.6	58.2	9.4
11:45 PM - 11:50 PM	65.4	60.2	-	66.8	58.7	8.1
11:50 PM - 11:55 PM	66.4	60.3	-	68.2	58.9	9.3
11:55 PM - 12:00 AM	64.8	60.3	-	65.9	58.9	7.0
12:00 AM - 12:05 AM	63.8	60.6	-	64.0	59.2	4.8
12:05 AM - 12:10 AM	63.6	60.6	-	63.6	59.1	4.5
12:10 AM - 12:15 AM	62.5	60.0	-	61.9	58.2	3.7
12:15 AM - 12:20 AM	58.9	60.7	-	n/a	58.8	-

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Approved by

Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284526-1

Sample No. 24144513-12
Parameter เสียงรบกวน
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 723024, 1616344)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00672789

ระดับเสียง (dB(A))						
เวลา	เสียงจาก	เสียงขณะ	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ
	แหล่งกำเนิด	ไม่มีการรบกวน	กลางวัน	กลางคืน		การรบกวน
12:20 AM - 12:25 AM	60.1	59.7	-	52.5	58.0	-5.5
12:25 AM - 12:30 AM	60.3	60.0	-	51.5	58.4	-6.9
12:30 AM - 12:35 AM	60.5	59.8	-	55.2	58.3	-3.1
12:35 AM - 12:40 AM	61.0	60.4	-	55.1	58.6	-3.5
12:40 AM - 12:45 AM	60.3	60.4	-	n/a	58.5	-
12:45 AM - 12:50 AM	60.4	60.5	-	n/a	58.9	-
12:50 AM - 12:55 AM	60.2	60.4	-	n/a	59.0	-
12:55 AM - 01:00 AM	60.1	60.4	-	n/a	58.7	-
01:00 AM - 01:05 AM	60.1	60.0	-	46.7	58.0	-11.3
01:05 AM - 01:10 AM	59.8	60.1	-	n/a	58.5	-
01:10 AM - 01:15 AM	59.2	60.1	-	n/a	58.4	-
01:15 AM - 01:20 AM	59.1	59.1	-	n/a	57.3	-
01:20 AM - 01:25 AM	59.1	59.4	-	n/a	57.7	-
01:25 AM - 01:30 AM	58.6	59.7	-	n/a	57.2	-
01:30 AM - 01:35 AM	58.7	58.8	-	n/a	56.7	-
01:35 AM - 01:40 AM	58.6	58.4	-	48.1	56.3	-8.2
01:40 AM - 01:45 AM	58.6	57.9	-	53.3	55.8	-2.5
01:45 AM - 01:50 AM	57.7	58.6	-	n/a	55.7	-
01:50 AM - 01:55 AM	57.4	57.3	-	44.0	54.1	-10.1
01:55 AM - 02:00 AM	56.3	56.7	-	n/a	53.7	-
02:00 AM - 02:05 AM	56.4	55.6	-	51.7	52.3	-0.6
02:05 AM - 02:10 AM	56.9	56.4	-	50.3	52.6	-2.3
02:10 AM - 02:15 AM	56.8	55.2	-	54.7	52.3	2.4
02:15 AM - 02:20 AM	55.3	54.3	-	51.4	51.1	0.3
02:20 AM - 02:25 AM	55.6	54.2	-	53.0	51.2	1.8
02:25 AM - 02:30 AM	55.0	54.9	-	41.6	51.2	-9.6
02:30 AM - 02:35 AM	56.1	54.3	-	54.4	50.0	4.4
02:35 AM - 02:40 AM	55.2	57.6	-	n/a	51.6	-
02:40 AM - 02:45 AM	54.9	55.7	-	n/a	52.1	-
02:45 AM - 02:50 AM	54.9	55.6	-	n/a	52.0	-
02:50 AM - 02:55 AM	54.7	55.7	-	n/a	52.3	-
02:55 AM - 03:00 AM	55.0	56.1	-	n/a	51.6	-
03:00 AM - 03:05 AM	53.6	54.9	-	n/a	50.9	-
03:05 AM - 03:10 AM	53.6	53.2	-	46.0	48.1	-2.1
03:10 AM - 03:15 AM	52.6	53.4	-	n/a	49.7	-
03:15 AM - 03:20 AM	52.6	50.6	-	51.3	47.2	4.1
03:20 AM - 03:25 AM	52.4	50.6	-	50.7	47.3	3.4
03:25 AM - 03:30 AM	52.4	50.3	-	51.2	47.2	4.0
03:30 AM - 03:35 AM	53.4	49.8	-	53.9	46.7	7.2
03:35 AM - 03:40 AM	53.0	49.4	-	53.5	47.0	6.5

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Approved by

Kanokkorn Anek
Senior Manager

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Life Sciences www.alsglobal.com
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284526-1

Sample No. 24144513-11
Parameter เสียงรบกวน
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 723024, 1616344)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00672789

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	53.2	49.5	-	53.8	47.0	6.8
03:45 AM - 03:50 AM	52.5	49.8	-	52.2	47.2	5.0
03:50 AM - 03:55 AM	52.2	49.4	-	52.0	46.8	5.2
03:55 AM - 04:00 AM	51.8	49.8	-	50.5	46.7	3.8
04:00 AM - 04:05 AM	51.9	49.1	-	51.7	47.0	4.7
04:05 AM - 04:10 AM	51.7	49.1	-	51.2	47.0	4.2
04:10 AM - 04:15 AM	52.4	48.2	-	53.3	46.8	6.5
04:15 AM - 04:20 AM	52.2	49.0	-	52.4	47.3	5.1
04:20 AM - 04:25 AM	52.4	50.9	-	50.1	47.0	3.1
04:25 AM - 04:30 AM	51.5	48.1	-	51.8	46.7	5.1
04:30 AM - 04:35 AM	51.1	47.9	-	51.3	46.6	4.7
04:35 AM - 04:40 AM	51.1	47.2	-	51.8	46.2	5.6
04:40 AM - 04:45 AM	51.2	47.6	-	51.7	46.7	5.0
04:45 AM - 04:50 AM	51.4	48.0	-	51.7	46.8	4.9
04:50 AM - 04:55 AM	51.5	48.2	-	51.8	47.3	4.5
04:55 AM - 05:00 AM	51.5	49.2	-	50.6	47.2	3.4
05:00 AM - 05:05 AM	51.4	50.8	-	45.5	47.0	-1.5
05:05 AM - 05:10 AM	52.4	49.3	-	52.5	47.3	5.2
05:10 AM - 05:15 AM	53.0	51.4	-	50.9	47.2	3.7
05:15 AM - 05:20 AM	51.5	49.4	-	50.3	47.2	3.1
05:20 AM - 05:25 AM	51.2	48.6	-	50.7	47.1	3.6
05:25 AM - 05:30 AM	51.8	47.8	-	52.6	46.9	5.7
05:30 AM - 05:35 AM	52.6	48.5	-	53.5	47.3	6.2
05:35 AM - 05:40 AM	52.5	48.3	-	53.4	47.0	6.4
05:40 AM - 05:45 AM	52.7	49.3	-	53.0	47.6	5.4
05:45 AM - 05:50 AM	53.0	50.6	-	52.3	48.7	3.6
05:50 AM - 05:55 AM	52.2	54.5	-	n/a	48.9	-
05:55 AM - 06:00 AM	53.3	59.7	-	n/a	48.6	-
06:00 AM - 07:00 AM	52.5	52.6	n/a	-	48.6	-
07:00 AM - 08:00 AM	66.9	51.7	66.8	-	49.5	17.3
08:00 AM - 09:00 AM	52.6	52.0	43.7	-	49.2	-5.5
09:00 AM - 10:00 AM	51.8	58.6	n/a	-	48.6	-
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 05-06 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-11 วันที่ตรวจวัด 05-06 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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Approved by
Kanokkorn Anek
Senior Manager

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284527-1

Sample No. 24144513-12
Parameter เสียงรบกวน
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 723024, 1616344)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00672789

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	51.8	50.5	45.9	-	48.5	-2.6
11:00 AM - 12:00 PM	51.4	50.7	43.1	-	47.8	-4.7
12:00 PM - 01:00 PM	50.7	50.0	42.4	-	47.1	-4.7
01:00 PM - 02:00 PM	50.6	48.4	46.6	-	46.8	-0.2
02:00 PM - 03:00 PM	50.9	50.8	34.5	-	47.1	-12.6
03:00 PM - 04:00 PM	50.3	49.0	44.4	-	47.2	-2.8
04:00 PM - 05:00 PM	50.9	49.7	44.7	-	48.3	-3.6
05:00 PM - 06:00 PM	50.7	51.2	n/a	-	48.9	-
06:00 PM - 07:00 PM	50.7	50.6	34.3	-	49.0	-14.7
07:00 PM - 08:00 PM	51.0	50.1	43.7	-	49.2	-5.5
08:00 PM - 09:00 PM	51.6	52.3	n/a	-	50.7	-
09:00 PM - 10:00 PM	53.2	56.0	n/a	-	53.0	-
10:00 PM - 10:05 PM	53.9	57.7	-	n/a	54.2	-
10:05 PM - 10:10 PM	53.7	57.7	-	n/a	56.2	-
10:10 PM - 10:15 PM	53.4	57.4	-	n/a	54.9	-
10:15 PM - 10:20 PM	54.0	56.0	-	n/a	52.1	-
10:20 PM - 10:25 PM	53.8	57.1	-	n/a	53.3	-
10:25 PM - 10:30 PM	59.3	57.0	-	58.4	52.4	6.0
10:30 PM - 10:35 PM	60.3	57.3	-	60.3	54.6	5.7
10:35 PM - 10:40 PM	54.2	57.6	-	n/a	55.6	-
10:40 PM - 10:45 PM	56.6	57.1	-	n/a	54.8	-
10:45 PM - 10:50 PM	57.4	57.9	-	n/a	55.8	-
10:50 PM - 10:55 PM	56.0	57.8	-	n/a	55.3	-
10:55 PM - 11:00 PM	56.1	58.3	-	n/a	56.3	-
11:00 PM - 11:05 PM	55.9	57.9	-	n/a	55.8	-
11:05 PM - 11:10 PM	56.5	58.2	-	n/a	56.1	-
11:10 PM - 11:15 PM	57.0	58.6	-	n/a	56.4	-
11:15 PM - 11:20 PM	56.6	57.7	-	n/a	55.2	-
11:20 PM - 11:25 PM	56.3	58.6	-	n/a	56.8	-
11:25 PM - 11:30 PM	55.9	58.4	-	n/a	55.0	-
11:30 PM - 11:35 PM	56.3	58.2	-	n/a	54.9	-
11:35 PM - 11:40 PM	56.3	57.3	-	n/a	52.8	-
11:40 PM - 11:45 PM	55.9	57.5	-	n/a	54.0	-
11:45 PM - 11:50 PM	55.2	57.8	-	n/a	54.5	-
11:50 PM - 11:55 PM	56.7	57.4	-	n/a	53.6	-
11:55 PM - 12:00 AM	56.7	58.4	-	n/a	55.8	-
12:00 AM - 12:05 AM	56.3	57.1	-	n/a	54.1	-
12:05 AM - 12:10 AM	54.2	56.6	-	n/a	52.9	-
12:10 AM - 12:15 AM	54.4	54.2	-	43.9	51.3	-7.4
12:15 AM - 12:20 AM	54.8	53.6	-	51.6	47.3	4.3

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Kanokkorn Anek
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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284527-1

Sample No. 24144513-12
Parameter เสียงรบกวน
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 723024, 1616344)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00672789

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	54.3	54.3	-	n/a	51.2	-
12:25 AM - 12:30 AM	53.2	53.8	-	n/a	48.4	-
12:30 AM - 12:35 AM	52.5	51.1	-	49.9	47.0	2.9
12:35 AM - 12:40 AM	51.7	51.6	-	38.3	47.2	-8.9
12:40 AM - 12:45 AM	51.1	51.5	-	n/a	47.3	-
12:45 AM - 12:50 AM	51.0	50.2	-	46.3	46.5	-0.2
12:50 AM - 12:55 AM	50.1	49.8	-	41.3	47.0	-5.7
12:55 AM - 01:00 AM	51.1	49.2	-	49.6	46.3	3.3
01:00 AM - 01:05 AM	49.8	48.3	-	47.5	46.2	1.3
01:05 AM - 01:10 AM	49.6	47.2	-	48.9	45.7	3.2
01:10 AM - 01:15 AM	50.1	47.6	-	49.5	46.3	3.2
01:15 AM - 01:20 AM	49.8	47.1	-	49.5	46.1	3.4
01:20 AM - 01:25 AM	49.7	47.5	-	48.7	46.3	2.4
01:25 AM - 01:30 AM	55.3	61.1	-	n/a	46.1	-
01:30 AM - 01:35 AM	49.0	46.7	-	48.1	45.8	2.3
01:35 AM - 01:40 AM	49.1	45.9	-	49.3	45.1	4.2
01:40 AM - 01:45 AM	49.2	46.2	-	49.2	45.3	3.9
01:45 AM - 01:50 AM	49.4	47.4	-	48.1	45.2	2.9
01:50 AM - 01:55 AM	49.3	46.3	-	49.3	45.3	4.0
01:55 AM - 02:00 AM	59.8	66.8	-	n/a	45.1	-
02:00 AM - 02:05 AM	49.2	46.6	-	48.7	45.7	3.0
02:05 AM - 02:10 AM	49.4	46.3	-	49.5	44.9	4.6
02:10 AM - 02:15 AM	49.3	49.5	-	n/a	45.6	-
02:15 AM - 02:20 AM	49.5	46.3	-	49.7	45.4	4.3
02:20 AM - 02:25 AM	49.8	46.7	-	49.9	45.6	4.3
02:25 AM - 02:30 AM	50.2	46.9	-	50.5	45.6	4.9
02:30 AM - 02:35 AM	49.8	50.2	-	n/a	45.6	-
02:35 AM - 02:40 AM	49.4	47.2	-	48.4	45.9	2.5
02:40 AM - 02:45 AM	49.8	46.3	-	50.2	45.0	5.2
02:45 AM - 02:50 AM	49.6	47.2	-	48.9	45.7	3.2
02:50 AM - 02:55 AM	50.1	46.7	-	50.4	45.1	5.3
02:55 AM - 03:00 AM	49.4	47.6	-	47.7	46.1	1.6
03:00 AM - 03:05 AM	49.6	46.3	-	49.9	44.8	5.1
03:05 AM - 03:10 AM	49.8	46.8	-	49.8	45.6	4.2
03:10 AM - 03:15 AM	49.5	46.0	-	49.9	44.9	5.0
03:15 AM - 03:20 AM	49.2	46.0	-	49.4	44.9	4.5
03:20 AM - 03:25 AM	50.5	46.2	-	51.5	45.3	6.2
03:25 AM - 03:30 AM	50.1	47.3	-	49.9	45.8	4.1
03:30 AM - 03:35 AM	49.6	46.5	-	49.7	45.4	4.3
03:35 AM - 03:40 AM	49.7	46.3	-	50.0	45.6	4.4

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

Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284527-1

Sample No. 24144513-12
Parameter เสียงรบกวน
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 723024, 1616344)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00672789

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	49.0	45.8	-	49.2	44.8	4.4
03:45 AM - 03:50 AM	49.0	45.1	-	49.7	44.2	5.5
03:50 AM - 03:55 AM	49.0	45.0	-	49.8	44.3	5.5
03:55 AM - 04:00 AM	48.6	45.4	-	48.8	44.3	4.5
04:00 AM - 04:05 AM	49.3	44.8	-	50.4	44.3	6.1
04:05 AM - 04:10 AM	48.5	48.9	-	n/a	44.2	-
04:10 AM - 04:15 AM	48.4	45.4	-	48.4	44.3	4.1
04:15 AM - 04:20 AM	48.5	46.0	-	47.9	44.7	3.2
04:20 AM - 04:25 AM	48.4	45.9	-	47.8	44.5	3.3
04:25 AM - 04:30 AM	48.5	45.6	-	48.4	44.7	3.7
04:30 AM - 04:35 AM	49.4	45.9	-	49.8	44.8	5.0
04:35 AM - 04:40 AM	49.2	45.8	-	49.5	45.0	4.5
04:40 AM - 04:45 AM	49.8	45.6	-	50.7	44.6	6.1
04:45 AM - 04:50 AM	50.7	46.6	-	51.6	45.2	6.4
04:50 AM - 04:55 AM	51.2	47.8	-	51.5	46.4	5.1
04:55 AM - 05:00 AM	52.0	47.5	-	53.1	45.3	7.8
05:00 AM - 05:05 AM	51.5	49.5	-	50.2	47.0	3.2
05:05 AM - 05:10 AM	50.9	48.0	-	50.8	46.8	4.0
05:10 AM - 05:15 AM	53.8	48.2	-	55.4	46.8	8.6
05:15 AM - 05:20 AM	51.7	57.1	-	n/a	47.6	-
05:20 AM - 05:25 AM	51.2	48.4	-	51.0	47.1	3.9
05:25 AM - 05:30 AM	51.6	49.0	-	51.1	46.6	4.5
05:30 AM - 05:35 AM	53.6	49.6	-	54.4	47.4	7.0
05:35 AM - 05:40 AM	52.5	50.6	-	51.0	48.2	2.8
05:40 AM - 05:45 AM	52.1	49.8	-	51.2	48.0	3.2
05:45 AM - 05:50 AM	53.3	49.4	-	54.0	47.4	6.6
05:50 AM - 05:55 AM	53.7	50.6	-	53.8	47.8	6.0
05:55 AM - 06:00 AM	54.1	53.5	-	48.2	49.6	-1.4
06:00 AM - 07:00 AM	54.5	53.7	46.8	-	50.2	-3.4
07:00 AM - 08:00 AM	54.4	53.6	46.7	-	50.8	-4.1
08:00 AM - 09:00 AM	52.9	53.4	n/a	-	48.3	-
09:00 AM - 10:00 AM	52.9	49.3	50.4	-	45.7	4.7
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 06-07 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-12 วันที่ตรวจวัด 06-07 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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Approved by
Kanokkorn Anek
Senior Manager

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Life Sciences www.alsglobal.com
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284528-1

Sample No. 24144513-13
Parameter เสียงรบกวน
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 723024, 1616344)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00672789

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	50.4	49.4	43.5	-	46.8	-3.3
11:00 AM - 12:00 PM	50.9	51.5	n/a	-	46.5	-
12:00 PM - 01:00 PM	50.0	47.6	46.3	-	45.1	1.2
01:00 PM - 02:00 PM	49.9	48.7	43.7	-	46.4	-2.7
02:00 PM - 03:00 PM	51.0	51.9	n/a	-	49.0	-
03:00 PM - 04:00 PM	50.3	49.9	39.7	-	48.1	-8.4
04:00 PM - 05:00 PM	52.8	52.0	45.1	-	50.3	-5.2
05:00 PM - 06:00 PM	51.9	50.6	46.0	-	48.6	-2.6
06:00 PM - 07:00 PM	52.3	56.6	n/a	-	49.5	-
07:00 PM - 08:00 PM	52.9	51.2	48.0	-	49.8	-1.8
08:00 PM - 09:00 PM	51.5	50.9	42.6	-	49.5	-6.9
09:00 PM - 10:00 PM	50.2	51.7	n/a	-	50.3	-
10:00 PM - 10:05 PM	49.9	50.8	-	n/a	49.1	-
10:05 PM - 10:10 PM	49.6	50.3	-	n/a	48.8	-
10:10 PM - 10:15 PM	49.8	51.8	-	n/a	50.1	-
10:15 PM - 10:20 PM	50.3	51.9	-	n/a	50.4	-
10:20 PM - 10:25 PM	51.0	51.7	-	n/a	49.7	-
10:25 PM - 10:30 PM	51.4	51.5	-	n/a	50.6	-
10:30 PM - 10:35 PM	51.1	51.1	-	n/a	49.6	-
10:35 PM - 10:40 PM	51.1	53.1	-	n/a	50.8	-
10:40 PM - 10:45 PM	51.0	51.9	-	n/a	50.7	-
10:45 PM - 10:50 PM	50.3	52.6	-	n/a	51.1	-
10:50 PM - 10:55 PM	50.4	51.5	-	n/a	49.7	-
10:55 PM - 11:00 PM	50.2	50.5	-	n/a	48.5	-
11:00 PM - 11:05 PM	49.9	50.3	-	n/a	48.4	-
11:05 PM - 11:10 PM	50.6	48.7	-	49.1	47.6	1.5
11:10 PM - 11:15 PM	49.6	53.9	-	n/a	47.7	-
11:15 PM - 11:20 PM	49.9	50.9	-	n/a	47.4	-
11:20 PM - 11:25 PM	50.3	51.6	-	n/a	46.8	-
11:25 PM - 11:30 PM	51.0	52.8	-	n/a	47.5	-
11:30 PM - 11:35 PM	50.7	51.0	-	n/a	48.0	-
11:35 PM - 11:40 PM	50.9	52.3	-	n/a	47.7	-
11:40 PM - 11:45 PM	51.3	49.0	-	50.4	46.7	3.7
11:45 PM - 11:50 PM	52.6	50.3	-	51.7	47.1	4.6
11:50 PM - 11:55 PM	52.9	49.3	-	53.4	47.2	6.2
11:55 PM - 12:00 AM	53.7	50.8	-	53.6	48.8	4.8
12:00 AM - 12:05 AM	53.5	51.4	-	52.3	49.1	3.2
12:05 AM - 12:10 AM	52.5	51.9	-	46.6	49.4	-2.8
12:10 AM - 12:15 AM	53.2	51.0	-	52.2	49.2	3.0
12:15 AM - 12:20 AM	52.1	50.4	-	50.2	49.2	1.0

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

Approved by

Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284528-1

Sample No. 24144513-13
Parameter เสียงรบกวน
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 723024, 1616344)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00672789

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	52.2	50.0	-	51.2	48.5	2.7
12:25 AM - 12:30 AM	52.1	49.7	-	51.4	48.5	2.9
12:30 AM - 12:35 AM	52.1	49.2	-	52.0	48.3	3.7
12:35 AM - 12:40 AM	51.8	49.9	-	50.3	48.6	1.7
12:40 AM - 12:45 AM	50.6	49.5	-	47.1	47.8	-0.7
12:45 AM - 12:50 AM	51.3	48.6	-	51.0	47.6	3.4
12:50 AM - 12:55 AM	51.4	47.7	-	52.0	46.6	5.4
12:55 AM - 01:00 AM	51.5	48.7	-	51.3	47.4	3.9
01:00 AM - 01:05 AM	52.0	48.3	-	52.6	47.3	5.3
01:05 AM - 01:10 AM	52.0	48.7	-	52.3	47.4	4.9
01:10 AM - 01:15 AM	52.0	49.3	-	51.7	48.0	3.7
01:15 AM - 01:20 AM	51.4	49.3	-	50.2	47.6	2.6
01:20 AM - 01:25 AM	51.5	49.8	-	49.6	48.6	1.0
01:25 AM - 01:30 AM	51.7	49.2	-	51.1	47.8	3.3
01:30 AM - 01:35 AM	59.3	48.9	-	61.9	47.7	14.2
01:35 AM - 01:40 AM	52.4	49.5	-	52.3	47.7	4.6
01:40 AM - 01:45 AM	51.0	64.3	-	n/a	48.7	-
01:45 AM - 01:50 AM	50.8	48.8	-	49.5	47.4	2.1
01:50 AM - 01:55 AM	50.9	48.6	-	50.0	47.1	2.9
01:55 AM - 02:00 AM	51.2	48.6	-	50.7	47.4	3.3
02:00 AM - 02:05 AM	50.5	48.3	-	49.5	47.1	2.4
02:05 AM - 02:10 AM	50.6	48.2	-	49.9	46.8	3.1
02:10 AM - 02:15 AM	51.0	48.2	-	50.8	46.6	4.2
02:15 AM - 02:20 AM	49.9	47.7	-	48.9	46.3	2.6
02:20 AM - 02:25 AM	49.6	48.8	-	44.9	47.6	-2.7
02:25 AM - 02:30 AM	50.4	46.8	-	50.9	45.7	5.2
02:30 AM - 02:35 AM	50.9	46.8	-	51.8	46.1	5.7
02:35 AM - 02:40 AM	49.7	50.3	-	n/a	46.1	-
02:40 AM - 02:45 AM	50.0	51.0	-	n/a	46.2	-
02:45 AM - 02:50 AM	50.7	47.4	-	51.0	46.4	4.6
02:50 AM - 02:55 AM	50.7	47.8	-	50.6	46.5	4.1
02:55 AM - 03:00 AM	50.2	48.6	-	48.1	47.4	0.7
03:00 AM - 03:05 AM	50.7	48.4	-	49.8	47.1	2.7
03:05 AM - 03:10 AM	51.6	48.9	-	51.3	47.3	4.0
03:10 AM - 03:15 AM	50.5	52.4	-	n/a	47.2	-
03:15 AM - 03:20 AM	50.4	48.6	-	48.7	46.9	1.8
03:20 AM - 03:25 AM	50.2	47.4	-	50.0	46.3	3.7
03:25 AM - 03:30 AM	49.4	47.3	-	48.2	46.1	2.1
03:30 AM - 03:35 AM	49.7	47.8	-	48.2	46.6	1.6
03:35 AM - 03:40 AM	50.4	46.7	-	51.0	45.7	5.3

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Approved by

Kanokkorn Anek
Senior Manager

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284528-1

Sample No. 24144513-13
Parameter เสียงรบกวน
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 723024, 1616344)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00672789

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	51.7	47.0	-	52.9	45.9	7.0
03:45 AM - 03:50 AM	51.1	48.4	-	50.8	47.0	3.8
03:50 AM - 03:55 AM	51.7	49.9	-	50.0	47.7	2.3
03:55 AM - 04:00 AM	52.2	49.2	-	52.2	47.7	4.5
04:00 AM - 04:05 AM	54.3	49.6	-	55.5	47.4	8.1
04:05 AM - 04:10 AM	50.8	51.5	-	n/a	47.6	-
04:10 AM - 04:15 AM	51.9	49.4	-	51.3	47.1	4.2
04:15 AM - 04:20 AM	52.0	48.0	-	52.8	46.1	6.7
04:20 AM - 04:25 AM	51.7	49.6	-	50.5	47.6	2.9
04:25 AM - 04:30 AM	51.3	49.3	-	50.0	47.6	2.4
04:30 AM - 04:35 AM	52.3	49.4	-	52.2	47.8	4.4
04:35 AM - 04:40 AM	52.1	48.8	-	52.4	46.4	6.0
04:40 AM - 04:45 AM	51.9	49.8	-	50.7	47.5	3.2
04:45 AM - 04:50 AM	51.0	49.9	-	47.5	48.6	-1.1
04:50 AM - 04:55 AM	51.0	49.1	-	49.5	47.4	2.1
04:55 AM - 05:00 AM	52.0	49.0	-	52.0	47.6	4.4
05:00 AM - 05:05 AM	52.0	49.4	-	51.5	47.6	3.9
05:05 AM - 05:10 AM	52.1	49.6	-	51.5	48.1	3.4
05:10 AM - 05:15 AM	54.2	49.3	-	55.5	48.4	7.1
05:15 AM - 05:20 AM	52.1	50.4	-	50.2	48.1	2.1
05:20 AM - 05:25 AM	51.9	56.5	-	n/a	48.8	-
05:25 AM - 05:30 AM	52.5	50.4	-	51.3	49.3	2.0
05:30 AM - 05:35 AM	53.0	49.4	-	53.5	48.1	5.4
05:35 AM - 05:40 AM	53.2	51.2	-	51.9	49.3	2.6
05:40 AM - 05:45 AM	53.8	50.9	-	53.7	48.8	4.9
05:45 AM - 05:50 AM	53.4	50.1	-	53.7	48.8	4.9
05:50 AM - 05:55 AM	55.4	52.0	-	55.7	49.8	5.9
05:55 AM - 06:00 AM	54.2	59.2	-	n/a	50.2	-
06:00 AM - 07:00 AM	53.9	56.6	n/a	-	53.6	-
07:00 AM - 08:00 AM	51.7	52.1	n/a	-	49.0	-
08:00 AM - 09:00 AM	50.3	49.7	41.4	-	45.9	-4.5
09:00 AM - 10:00 AM	49.9	50.9	n/a	-	44.9	-
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดมาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 07-08 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-13 วันที่ตรวจวัด 07-08 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284529-1

Sample No. 24144513-14
Parameter เสียงรบกวน
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 723024, 1616344)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00672789

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	49.5	47.7	44.8	-	46.8	-2.0
11:00 AM - 12:00 PM	53.8	46.8	52.8	-	46.5	6.3
12:00 PM - 01:00 PM	48.4	46.0	44.7	-	45.1	-0.4
01:00 PM - 02:00 PM	48.2	45.3	45.1	-	46.4	-1.3
02:00 PM - 03:00 PM	53.8	55.7	n/a	-	49.0	-
03:00 PM - 04:00 PM	50.8	50.6	37.3	-	48.1	-10.8
04:00 PM - 05:00 PM	49.9	49.8	33.5	-	50.3	-16.8
05:00 PM - 06:00 PM	52.5	51.6	45.2	-	48.6	-3.4
06:00 PM - 07:00 PM	54.0	53.7	42.2	-	49.5	-7.3
07:00 PM - 08:00 PM	54.5	51.5	51.5	-	49.8	1.7
08:00 PM - 09:00 PM	51.3	51.7	n/a	-	49.5	-
09:00 PM - 10:00 PM	51.1	53.9	n/a	-	50.3	-
10:00 PM - 10:05 PM	51.7	54.3	-	n/a	49.1	-
10:05 PM - 10:10 PM	51.7	53.6	-	n/a	48.8	-
10:10 PM - 10:15 PM	52.1	54.6	-	n/a	50.1	-
10:15 PM - 10:20 PM	51.8	55.1	-	n/a	50.4	-
10:20 PM - 10:25 PM	52.3	55.0	-	n/a	49.7	-
10:25 PM - 10:30 PM	53.0	56.0	-	n/a	50.6	-
10:30 PM - 10:35 PM	52.9	55.8	-	n/a	49.6	-
10:35 PM - 10:40 PM	52.4	55.3	-	n/a	50.8	-
10:40 PM - 10:45 PM	52.3	54.2	-	n/a	50.7	-
10:45 PM - 10:50 PM	52.0	54.4	-	n/a	51.1	-
10:50 PM - 10:55 PM	52.6	55.9	-	n/a	49.7	-
10:55 PM - 11:00 PM	52.5	54.7	-	n/a	48.5	-
11:00 PM - 11:05 PM	52.7	56.3	-	n/a	48.4	-
11:05 PM - 11:10 PM	53.1	55.1	-	n/a	47.6	-
11:10 PM - 11:15 PM	52.7	54.6	-	n/a	47.7	-
11:15 PM - 11:20 PM	54.2	54.9	-	n/a	47.4	-
11:20 PM - 11:25 PM	54.5	56.3	-	n/a	46.8	-
11:25 PM - 11:30 PM	53.8	55.9	-	n/a	47.5	-
11:30 PM - 11:35 PM	54.4	56.5	-	n/a	48.0	-
11:35 PM - 11:40 PM	54.8	56.7	-	n/a	47.7	-
11:40 PM - 11:45 PM	54.1	57.3	-	n/a	46.7	-
11:45 PM - 11:50 PM	55.0	57.1	-	n/a	47.1	-
11:50 PM - 11:55 PM	55.0	56.1	-	n/a	47.2	-
11:55 PM - 12:00 AM	54.8	56.2	-	n/a	48.8	-
12:00 AM - 12:05 AM	55.5	56.8	-	n/a	49.1	-
12:05 AM - 12:10 AM	54.3	56.3	-	n/a	49.4	-
12:10 AM - 12:15 AM	54.4	56.4	-	n/a	49.2	-
12:15 AM - 12:20 AM	55.3	57.8	-	n/a	49.2	-

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284529-1

Sample No. 24144513-14
Parameter เสียงรบกวน
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 723024, 1616344)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00672789

เวลา	ระดับเสียง (dB(A))					
	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	56.0	55.7	-	47.2	48.5	-1.3
12:25 AM - 12:30 AM	56.3	55.9	-	48.7	48.5	0.2
12:30 AM - 12:35 AM	55.5	55.5	-	n/a	48.3	-
12:35 AM - 12:40 AM	54.5	54.1	-	46.9	48.6	-1.7
12:40 AM - 12:45 AM	53.7	53.5	-	43.2	47.8	-4.6
12:45 AM - 12:50 AM	54.4	52.3	-	53.2	47.6	5.6
12:50 AM - 12:55 AM	54.3	54.0	-	45.5	46.6	-1.1
12:55 AM - 01:00 AM	53.8	52.6	-	50.6	47.4	3.2
01:00 AM - 01:05 AM	52.4	51.0	-	49.8	47.3	2.5
01:05 AM - 01:10 AM	53.1	49.4	-	53.7	47.4	6.3
01:10 AM - 01:15 AM	52.9	50.7	-	51.9	48.0	3.9
01:15 AM - 01:20 AM	52.6	50.0	-	52.1	47.6	4.5
01:20 AM - 01:25 AM	52.5	50.5	-	51.2	48.6	2.6
01:25 AM - 01:30 AM	56.7	50.1	-	58.6	47.8	10.8
01:30 AM - 01:35 AM	52.5	60.8	-	n/a	47.7	-
01:35 AM - 01:40 AM	52.4	50.4	-	51.1	47.7	3.4
01:40 AM - 01:45 AM	52.5	48.6	-	53.2	48.7	4.5
01:45 AM - 01:50 AM	52.3	48.9	-	52.6	47.4	5.2
01:50 AM - 01:55 AM	52.0	47.8	-	52.9	47.1	5.8
01:55 AM - 02:00 AM	52.1	47.4	-	53.3	47.4	5.9
02:00 AM - 02:05 AM	52.9	48.2	-	54.1	47.1	7.0
02:05 AM - 02:10 AM	52.2	48.1	-	53.1	46.8	6.3
02:10 AM - 02:15 AM	52.7	47.5	-	54.1	46.6	7.5
02:15 AM - 02:20 AM	52.4	49.1	-	52.7	46.3	6.4
02:20 AM - 02:25 AM	52.4	47.3	-	53.8	47.6	6.2
02:25 AM - 02:30 AM	52.6	49.0	-	53.1	45.7	7.4
02:30 AM - 02:35 AM	61.0	67.4	-	n/a	46.1	-
02:35 AM - 02:40 AM	52.3	52.8	-	n/a	46.1	-
02:40 AM - 02:45 AM	52.3	47.4	-	53.6	46.2	7.4
02:45 AM - 02:50 AM	52.0	50.2	-	50.3	46.4	3.9
02:50 AM - 02:55 AM	52.3	47.3	-	53.6	46.5	7.1
02:55 AM - 03:00 AM	52.1	47.4	-	53.3	47.4	5.9
03:00 AM - 03:05 AM	52.0	47.3	-	53.2	47.1	6.1
03:05 AM - 03:10 AM	52.2	47.5	-	53.4	47.3	6.1
03:10 AM - 03:15 AM	52.3	47.4	-	53.6	47.2	6.4
03:15 AM - 03:20 AM	52.2	47.4	-	53.5	46.9	6.6
03:20 AM - 03:25 AM	52.2	47.0	-	53.6	46.3	7.3
03:25 AM - 03:30 AM	52.2	47.3	-	53.5	46.1	7.4
03:30 AM - 03:35 AM	52.1	47.8	-	53.1	46.6	6.5
03:35 AM - 03:40 AM	52.2	47.2	-	53.5	45.7	7.8

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Approved by

Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284529-1

Sample No. 24144513-14
Parameter เสียงรบกวน
Location โรงเรียนอนุบาลทับกวาง (GPS 47P 723024, 1616344)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00672789

เวลา	ระดับเสียง (dB(A))					
	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	52.9	47.5	-	54.4	45.9	8.5
03:45 AM - 03:50 AM	52.5	52.0	-	45.9	47.0	-1.1
03:50 AM - 03:55 AM	52.1	50.2	-	50.6	47.7	2.9
03:55 AM - 04:00 AM	51.9	47.8	-	52.8	47.7	5.1
04:00 AM - 04:05 AM	52.1	46.7	-	53.6	47.4	6.2
04:05 AM - 04:10 AM	52.5	48.7	-	53.2	47.6	5.6
04:10 AM - 04:15 AM	52.2	50.1	-	51.0	47.1	3.9
04:15 AM - 04:20 AM	52.2	48.0	-	53.1	46.1	7.0
04:20 AM - 04:25 AM	52.4	47.6	-	53.7	47.6	6.1
04:25 AM - 04:30 AM	52.8	48.3	-	53.9	47.6	6.3
04:30 AM - 04:35 AM	52.4	47.8	-	53.6	47.8	5.8
04:35 AM - 04:40 AM	52.9	47.8	-	54.3	46.4	7.9
04:40 AM - 04:45 AM	52.2	48.0	-	53.1	47.5	5.6
04:45 AM - 04:50 AM	52.5	47.3	-	53.9	48.6	5.3
04:50 AM - 04:55 AM	52.8	47.9	-	54.1	47.4	6.7
04:55 AM - 05:00 AM	53.5	49.1	-	54.5	47.6	6.9
05:00 AM - 05:05 AM	52.7	48.8	-	53.4	47.6	5.8
05:05 AM - 05:10 AM	52.8	47.9	-	54.1	48.1	6.0
05:10 AM - 05:15 AM	53.1	47.7	-	54.6	48.4	6.2
05:15 AM - 05:20 AM	53.6	53.9	-	n/a	48.1	-
05:20 AM - 05:25 AM	53.0	48.8	-	53.9	48.8	5.1
05:25 AM - 05:30 AM	53.1	49.0	-	54.0	49.3	4.7
05:30 AM - 05:35 AM	53.0	48.6	-	54.0	48.1	5.9
05:35 AM - 05:40 AM	53.2	48.4	-	54.5	49.3	5.2
05:40 AM - 05:45 AM	53.4	49.4	-	54.2	48.8	5.4
05:45 AM - 05:50 AM	53.6	49.9	-	54.2	48.8	5.4
05:50 AM - 05:55 AM	54.2	59.5	-	n/a	49.8	-
05:55 AM - 06:00 AM	54.0	55.4	-	n/a	50.2	-
06:00 AM - 07:00 AM	53.1	51.8	47.2	-	53.6	-6.4
07:00 AM - 08:00 AM	52.7	54.3	n/a	-	49.0	-
08:00 AM - 09:00 AM	52.2	50.5	47.3	-	45.9	1.4
09:00 AM - 10:00 AM	51.8	50.2	46.7	-	44.9	1.8
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 08-09 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-14 วันที่ตรวจวัด 08-09 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดปลอกกำระดับเสียงขณะไม่มีการรบกวน

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284530-1

Sample No. 24144513-15
Parameter เสียงรบกวน
Location บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00584983

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	50.4	54.6	n/a	-	43.7	-
11:00 AM - 12:00 PM	48.2	52.3	n/a	-	41.4	-
12:00 PM - 01:00 PM	46.0	50.2	n/a	-	40.6	-
01:00 PM - 02:00 PM	44.2	57.6	n/a	-	40.3	-
02:00 PM - 03:00 PM	52.4	52.9	n/a	-	39.5	-
03:00 PM - 04:00 PM	57.9	60.7	n/a	-	38.2	-
04:00 PM - 05:00 PM	55.2	56.7	n/a	-	43.7	-
05:00 PM - 06:00 PM	47.1	52.4	n/a	-	42.0	-
06:00 PM - 07:00 PM	49.7	49.7	n/a	-	39.4	-
07:00 PM - 08:00 PM	43.9	47.5	n/a	-	42.3	-
08:00 PM - 09:00 PM	43.9	48.1	n/a	-	41.7	-
09:00 PM - 10:00 PM	43.6	57.0	n/a	-	40.8	-
10:00 PM - 10:05 PM	43.0	41.3	-	41.1	39.7	1.4
10:05 PM - 10:10 PM	42.9	51.8	-	n/a	39.8	-
10:10 PM - 10:15 PM	44.3	62.4	-	n/a	41.1	-
10:15 PM - 10:20 PM	42.9	48.7	-	n/a	40.2	-
10:20 PM - 10:25 PM	44.3	44.2	-	30.9	40.7	-9.8
10:25 PM - 10:30 PM	43.2	54.7	-	n/a	41.0	-
10:30 PM - 10:35 PM	44.1	61.6	-	n/a	41.1	-
10:35 PM - 10:40 PM	44.1	59.2	-	n/a	41.3	-
10:40 PM - 10:45 PM	44.9	58.6	-	n/a	41.1	-
10:45 PM - 10:50 PM	46.2	42.4	-	46.9	40.9	6.0
10:50 PM - 10:55 PM	44.4	59.1	-	n/a	40.8	-
10:55 PM - 11:00 PM	45.0	51.7	-	n/a	40.3	-
11:00 PM - 11:05 PM	44.4	58.0	-	n/a	40.6	-
11:05 PM - 11:10 PM	44.2	61.1	-	n/a	42.0	-
11:10 PM - 11:15 PM	45.0	53.8	-	n/a	41.3	-
11:15 PM - 11:20 PM	44.6	61.1	-	n/a	40.6	-
11:20 PM - 11:25 PM	43.7	58.9	-	n/a	40.3	-
11:25 PM - 11:30 PM	46.1	57.6	-	n/a	40.0	-
11:30 PM - 11:35 PM	45.8	61.5	-	n/a	39.4	-
11:35 PM - 11:40 PM	43.9	55.8	-	n/a	39.0	-
11:40 PM - 11:45 PM	42.8	63.0	-	n/a	39.6	-
11:45 PM - 11:50 PM	42.4	64.5	-	n/a	40.2	-
11:50 PM - 11:55 PM	43.6	64.3	-	n/a	41.9	-
11:55 PM - 12:00 AM	42.8	61.7	-	n/a	40.5	-
12:00 AM - 12:05 AM	42.9	53.5	-	n/a	39.5	-
12:05 AM - 12:10 AM	45.8	49.5	-	n/a	39.4	-
12:10 AM - 12:15 AM	45.8	47.1	-	n/a	39.8	-
12:15 AM - 12:20 AM	45.5	54.7	-	n/a	39.1	-

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284530-1

Sample No. 24144513-15
Parameter เสียงรบกวน
Location บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00584983

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	45.5	52.2	-	n/a	39.1	-
12:25 AM - 12:30 AM	46.4	62.5	-	n/a	39.4	-
12:30 AM - 12:35 AM	45.0	67.3	-	n/a	40.4	-
12:35 AM - 12:40 AM	46.2	65.8	-	n/a	40.3	-
12:40 AM - 12:45 AM	44.7	65.6	-	n/a	40.6	-
12:45 AM - 12:50 AM	46.1	62.4	-	n/a	39.7	-
12:50 AM - 12:55 AM	46.1	65.7	-	n/a	40.2	-
12:55 AM - 01:00 AM	47.1	67.1	-	n/a	39.9	-
01:00 AM - 01:05 AM	46.4	65.5	-	n/a	39.9	-
01:05 AM - 01:10 AM	45.3	65.0	-	n/a	39.6	-
01:10 AM - 01:15 AM	46.7	66.7	-	n/a	39.8	-
01:15 AM - 01:20 AM	45.8	67.0	-	n/a	39.8	-
01:20 AM - 01:25 AM	44.7	65.6	-	n/a	39.2	-
01:25 AM - 01:30 AM	46.9	64.4	-	n/a	38.4	-
01:30 AM - 01:35 AM	52.1	63.2	-	n/a	40.0	-
01:35 AM - 01:40 AM	41.9	63.2	-	n/a	38.7	-
01:40 AM - 01:45 AM	44.2	64.7	-	n/a	39.1	-
01:45 AM - 01:50 AM	42.3	61.5	-	n/a	38.6	-
01:50 AM - 01:55 AM	44.6	59.0	-	n/a	37.8	-
01:55 AM - 02:00 AM	45.7	61.2	-	n/a	37.6	-
02:00 AM - 02:05 AM	42.9	60.0	-	n/a	38.2	-
02:05 AM - 02:10 AM	42.2	64.7	-	n/a	38.3	-
02:10 AM - 02:15 AM	43.5	59.8	-	n/a	38.2	-
02:15 AM - 02:20 AM	42.9	63.3	-	n/a	38.3	-
02:20 AM - 02:25 AM	41.3	58.5	-	n/a	39.0	-
02:25 AM - 02:30 AM	42.0	51.2	-	n/a	38.9	-
02:30 AM - 02:35 AM	39.3	42.7	-	n/a	39.0	-
02:35 AM - 02:40 AM	42.2	60.6	-	n/a	45.6	-
02:40 AM - 02:45 AM	39.4	47.1	-	n/a	44.7	-
02:45 AM - 02:50 AM	45.4	59.2	-	n/a	44.7	-
02:50 AM - 02:55 AM	42.1	44.6	-	n/a	40.5	-
02:55 AM - 03:00 AM	39.7	42.1	-	n/a	38.4	-
03:00 AM - 03:05 AM	42.2	61.0	-	n/a	39.2	-
03:05 AM - 03:10 AM	40.2	39.6	-	34.3	38.0	-3.7
03:10 AM - 03:15 AM	40.3	57.0	-	n/a	38.4	-
03:15 AM - 03:20 AM	40.1	47.7	-	n/a	37.9	-
03:20 AM - 03:25 AM	41.0	51.7	-	n/a	37.2	-
03:25 AM - 03:30 AM	46.0	39.2	-	48.0	37.4	10.6
03:30 AM - 03:35 AM	40.6	38.9	-	38.7	37.8	0.9
03:35 AM - 03:40 AM	40.6	39.3	-	37.7	38.3	-0.6

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Kanokkorn Anek
Senior Manager

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284530-1

Sample No. 24144513-15
Parameter เสียงรบกวน
Location บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00584983

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	39.2	39.6	-	n/a	38.4	-
03:45 AM - 03:50 AM	39.0	48.3	-	n/a	38.6	-
03:50 AM - 03:55 AM	40.1	43.6	-	n/a	38.5	-
03:55 AM - 04:00 AM	40.8	45.1	-	n/a	36.7	-
04:00 AM - 04:05 AM	41.3	38.5	-	41.1	36.2	4.9
04:05 AM - 04:10 AM	45.3	37.0	-	47.6	35.9	11.7
04:10 AM - 04:15 AM	46.6	37.3	-	49.1	36.0	13.1
04:15 AM - 04:20 AM	42.2	38.2	-	43.0	36.9	6.1
04:20 AM - 04:25 AM	41.0	37.7	-	41.3	36.3	5.0
04:25 AM - 04:30 AM	44.2	37.6	-	46.1	36.0	10.1
04:30 AM - 04:35 AM	44.3	49.8	-	n/a	36.3	-
04:35 AM - 04:40 AM	48.9	43.8	-	50.3	36.0	14.3
04:40 AM - 04:45 AM	48.4	40.6	-	50.6	35.9	14.7
04:45 AM - 04:50 AM	48.3	38.4	-	50.8	34.5	16.3
04:50 AM - 04:55 AM	49.8	48.1	-	47.9	34.8	13.1
04:55 AM - 05:00 AM	51.2	46.1	-	52.6	35.3	17.3
05:00 AM - 05:05 AM	50.0	53.8	-	n/a	36.1	-
05:05 AM - 05:10 AM	51.0	49.1	-	49.5	36.4	13.1
05:10 AM - 05:15 AM	53.3	51.6	-	51.4	35.8	15.6
05:15 AM - 05:20 AM	51.9	51.9	-	n/a	36.8	-
05:20 AM - 05:25 AM	51.7	49.9	-	50.0	36.5	13.5
05:25 AM - 05:30 AM	52.4	53.7	-	n/a	36.6	-
05:30 AM - 05:35 AM	51.8	50.2	-	49.7	37.4	12.3
05:35 AM - 05:40 AM	51.7	53.8	-	n/a	38.1	-
05:40 AM - 05:45 AM	54.5	50.5	-	55.3	38.0	17.3
05:45 AM - 05:50 AM	54.9	52.1	-	54.7	37.7	17.0
05:50 AM - 05:55 AM	54.7	51.0	-	55.3	39.0	16.3
05:55 AM - 06:00 AM	54.0	54.0	-	n/a	38.8	-
06:00 AM - 07:00 AM	51.1	57.1	n/a	-	44.7	-
07:00 AM - 08:00 AM	50.0	54.0	n/a	-	43.5	-
08:00 AM - 09:00 AM	58.5	54.8	56.1	-	42.0	14.1
09:00 AM - 10:00 AM	54.9	62.1	n/a	-	39.3	-
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานผลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 02-03 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-15 วันที่ตรวจวัด 02-03 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284531-1

Sample No. 24144513-16
Parameter เสียงรบกวน
Location บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00584983

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	52.1	56.1	n/a	-	42.0	-
11:00 AM - 12:00 PM	47.6	54.1	n/a	-	43.6	-
12:00 PM - 01:00 PM	47.5	52.9	n/a	-	42.6	-
01:00 PM - 02:00 PM	47.9	55.9	n/a	-	43.2	-
02:00 PM - 03:00 PM	51.7	54.5	n/a	-	41.6	-
03:00 PM - 04:00 PM	56.7	55.1	51.6	-	41.3	10.3
04:00 PM - 05:00 PM	49.9	59.4	n/a	-	43.3	-
05:00 PM - 06:00 PM	49.8	56.0	n/a	-	42.6	-
06:00 PM - 07:00 PM	48.0	51.2	n/a	-	39.4	-
07:00 PM - 08:00 PM	43.1	49.8	n/a	-	41.6	-
08:00 PM - 09:00 PM	42.8	41.6	36.6	-	40.3	-3.7
09:00 PM - 10:00 PM	43.7	50.8	n/a	-	39.9	-
10:00 PM - 10:05 PM	41.0	39.3	-	39.1	38.1	1.0
10:05 PM - 10:10 PM	40.1	57.6	-	n/a	37.9	-
10:10 PM - 10:15 PM	41.5	58.1	-	n/a	39.0	-
10:15 PM - 10:20 PM	38.6	54.4	-	n/a	39.2	-
10:20 PM - 10:25 PM	36.6	41.2	-	n/a	39.8	-
10:25 PM - 10:30 PM	38.6	40.6	-	n/a	39.5	-
10:30 PM - 10:35 PM	43.6	58.3	-	n/a	39.3	-
10:35 PM - 10:40 PM	39.9	42.6	-	n/a	39.4	-
10:40 PM - 10:45 PM	39.5	39.8	-	n/a	39.0	-
10:45 PM - 10:50 PM	40.4	40.8	-	n/a	39.7	-
10:50 PM - 10:55 PM	43.2	46.0	-	n/a	41.0	-
10:55 PM - 11:00 PM	42.7	48.9	-	n/a	41.5	-
11:00 PM - 11:05 PM	40.4	48.3	-	n/a	41.1	-
11:05 PM - 11:10 PM	38.3	61.2	-	n/a	41.0	-
11:10 PM - 11:15 PM	42.4	58.8	-	n/a	41.1	-
11:15 PM - 11:20 PM	41.7	56.5	-	n/a	41.1	-
11:20 PM - 11:25 PM	41.5	60.0	-	n/a	41.5	-
11:25 PM - 11:30 PM	44.4	42.7	-	42.5	41.0	1.5
11:30 PM - 11:35 PM	42.6	57.4	-	n/a	40.0	-
11:35 PM - 11:40 PM	41.1	60.2	-	n/a	40.5	-
11:40 PM - 11:45 PM	41.9	61.8	-	n/a	40.4	-
11:45 PM - 11:50 PM	42.5	64.3	-	n/a	40.5	-
11:50 PM - 11:55 PM	44.7	64.1	-	n/a	42.0	-
11:55 PM - 12:00 AM	43.5	60.0	-	n/a	40.0	-
12:00 AM - 12:05 AM	45.6	60.2	-	n/a	39.3	-
12:05 AM - 12:10 AM	44.4	60.9	-	n/a	39.0	-
12:10 AM - 12:15 AM	43.3	55.4	-	n/a	38.8	-
12:15 AM - 12:20 AM	46.1	60.1	-	n/a	39.1	-

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284531-1

Sample No. 24144513-16
Parameter เสียงรบกวน
Location บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00584983

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	44.9	60.3	-	n/a	39.1	-
12:25 AM - 12:30 AM	42.1	60.6	-	n/a	37.8	-
12:30 AM - 12:35 AM	44.7	59.0	-	n/a	37.4	-
12:35 AM - 12:40 AM	46.3	64.1	-	n/a	37.4	-
12:40 AM - 12:45 AM	41.8	63.7	-	n/a	38.2	-
12:45 AM - 12:50 AM	45.9	61.1	-	n/a	36.9	-
12:50 AM - 12:55 AM	45.7	59.8	-	n/a	36.9	-
12:55 AM - 01:00 AM	45.3	58.2	-	n/a	37.7	-
01:00 AM - 01:05 AM	46.1	56.8	-	n/a	37.2	-
01:05 AM - 01:10 AM	44.5	65.6	-	n/a	37.5	-
01:10 AM - 01:15 AM	45.9	65.9	-	n/a	37.1	-
01:15 AM - 01:20 AM	42.1	64.1	-	n/a	36.5	-
01:20 AM - 01:25 AM	44.7	67.0	-	n/a	37.6	-
01:25 AM - 01:30 AM	44.8	61.5	-	n/a	34.9	-
01:30 AM - 01:35 AM	44.4	65.2	-	n/a	35.8	-
01:35 AM - 01:40 AM	42.9	58.7	-	n/a	35.9	-
01:40 AM - 01:45 AM	40.8	55.7	-	n/a	35.2	-
01:45 AM - 01:50 AM	48.2	57.8	-	n/a	37.3	-
01:50 AM - 01:55 AM	43.8	59.8	-	n/a	36.7	-
01:55 AM - 02:00 AM	45.0	64.7	-	n/a	33.5	-
02:00 AM - 02:05 AM	42.1	60.8	-	n/a	35.6	-
02:05 AM - 02:10 AM	43.1	63.4	-	n/a	34.9	-
02:10 AM - 02:15 AM	41.2	63.1	-	n/a	36.1	-
02:15 AM - 02:20 AM	42.9	64.7	-	n/a	36.9	-
02:20 AM - 02:25 AM	39.3	63.6	-	n/a	36.1	-
02:25 AM - 02:30 AM	36.9	61.4	-	n/a	36.6	-
02:30 AM - 02:35 AM	35.5	58.8	-	n/a	36.5	-
02:35 AM - 02:40 AM	35.4	57.5	-	n/a	36.2	-
02:40 AM - 02:45 AM	41.1	51.0	-	n/a	35.1	-
02:45 AM - 02:50 AM	41.8	57.9	-	n/a	36.2	-
02:50 AM - 02:55 AM	38.4	36.4	-	37.1	33.3	3.8
02:55 AM - 03:00 AM	38.9	39.0	-	n/a	35.0	-
03:00 AM - 03:05 AM	38.0	54.7	-	n/a	35.9	-
03:05 AM - 03:10 AM	38.3	52.3	-	n/a	35.7	-
03:10 AM - 03:15 AM	35.4	47.3	-	n/a	36.3	-
03:15 AM - 03:20 AM	35.1	52.6	-	n/a	35.3	-
03:20 AM - 03:25 AM	34.8	49.5	-	n/a	33.3	-
03:25 AM - 03:30 AM	35.0	55.7	-	n/a	33.8	-
03:30 AM - 03:35 AM	35.0	36.4	-	n/a	33.9	-
03:35 AM - 03:40 AM	35.9	39.5	-	n/a	33.8	-

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Approved by

Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284531-1

Sample No. 24144513-16
Parameter เสียงรบกวน
Location บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00584983

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	36.1	35.4	-	30.8	33.6	-2.8
03:45 AM - 03:50 AM	36.2	33.8	-	35.5	32.6	2.9
03:50 AM - 03:55 AM	46.2	34.4	-	48.9	33.0	15.9
03:55 AM - 04:00 AM	35.0	34.9	-	21.6	33.6	-12.0
04:00 AM - 04:05 AM	35.6	35.6	-	n/a	34.6	-
04:05 AM - 04:10 AM	35.0	35.7	-	n/a	34.7	-
04:10 AM - 04:15 AM	38.7	42.5	-	n/a	34.8	-
04:15 AM - 04:20 AM	43.7	47.7	-	n/a	34.0	-
04:20 AM - 04:25 AM	42.6	34.8	-	44.8	33.8	11.0
04:25 AM - 04:30 AM	50.8	36.4	-	53.6	33.4	20.2
04:30 AM - 04:35 AM	44.7	38.9	-	46.4	34.6	11.8
04:35 AM - 04:40 AM	50.4	48.9	-	48.1	33.6	14.5
04:40 AM - 04:45 AM	50.9	42.7	-	53.2	34.0	19.2
04:45 AM - 04:50 AM	42.8	48.9	-	n/a	34.5	-
04:50 AM - 04:55 AM	47.6	45.9	-	45.7	33.8	11.9
04:55 AM - 05:00 AM	44.9	42.3	-	44.4	33.4	11.0
05:00 AM - 05:05 AM	47.3	49.1	-	n/a	34.4	-
05:05 AM - 05:10 AM	47.7	49.1	-	n/a	35.0	-
05:10 AM - 05:15 AM	48.1	49.2	-	n/a	35.7	-
05:15 AM - 05:20 AM	49.7	48.7	-	45.8	35.3	10.5
05:20 AM - 05:25 AM	51.5	49.4	-	50.3	35.1	15.2
05:25 AM - 05:30 AM	51.2	53.9	-	n/a	36.0	-
05:30 AM - 05:35 AM	53.0	50.0	-	53.0	35.1	17.9
05:35 AM - 05:40 AM	52.6	49.1	-	53.0	36.1	16.9
05:40 AM - 05:45 AM	54.2	50.5	-	54.8	37.3	17.5
05:45 AM - 05:50 AM	55.5	51.7	-	56.2	39.7	16.5
05:50 AM - 05:55 AM	55.4	53.2	-	54.4	39.7	14.7
05:55 AM - 06:00 AM	55.5	54.7	-	50.8	39.5	11.3
06:00 AM - 07:00 AM	51.8	56.6	n/a	-	44.8	-
07:00 AM - 08:00 AM	54.8	53.0	50.1	-	43.4	6.7
08:00 AM - 09:00 AM	50.9	54.2	n/a	-	42.1	-
09:00 AM - 10:00 AM	58.0	59.1	n/a	-	39.5	-
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 03-04 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-16 วันที่ตรวจวัด 03-04 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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

Approved by

Kanokkorn Anek
Senior Manager

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Life Sciences www.alsglobal.com
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284532-1

Sample No. 24144513-17
Parameter เสียงรบกวน
Location บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00584983

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	52.5	53.3	n/a	-	39.8	-
11:00 AM - 12:00 PM	51.1	52.9	n/a	-	40.7	-
12:00 PM - 01:00 PM	50.2	51.9	n/a	-	41.6	-
01:00 PM - 02:00 PM	48.7	56.2	n/a	-	43.6	-
02:00 PM - 03:00 PM	54.9	56.9	n/a	-	44.6	-
03:00 PM - 04:00 PM	62.0	60.8	55.8	-	55.6	0.2
04:00 PM - 05:00 PM	51.2	61.9	n/a	-	45.9	-
05:00 PM - 06:00 PM	48.0	52.8	n/a	-	40.9	-
06:00 PM - 07:00 PM	52.9	57.1	n/a	-	41.1	-
07:00 PM - 08:00 PM	54.5	52.8	49.6	-	44.9	4.7
08:00 PM - 09:00 PM	54.2	50.8	51.5	-	45.1	6.4
09:00 PM - 10:00 PM	47.1	48.4	n/a	-	45.9	-
10:00 PM - 10:05 PM	45.4	50.0	-	n/a	45.1	-
10:05 PM - 10:10 PM	45.2	51.1	-	n/a	48.2	-
10:10 PM - 10:15 PM	46.9	52.7	-	n/a	49.3	-
10:15 PM - 10:20 PM	45.5	57.9	-	n/a	47.8	-
10:20 PM - 10:25 PM	46.4	54.0	-	n/a	48.0	-
10:25 PM - 10:30 PM	46.6	54.5	-	n/a	50.8	-
10:30 PM - 10:35 PM	70.6	57.2	-	73.4	54.6	18.8
10:35 PM - 10:40 PM	49.8	58.0	-	n/a	56.4	-
10:40 PM - 10:45 PM	47.9	57.7	-	n/a	54.2	-
10:45 PM - 10:50 PM	47.2	61.4	-	n/a	59.1	-
10:50 PM - 10:55 PM	46.5	71.1	-	n/a	58.7	-
10:55 PM - 11:00 PM	46.9	64.5	-	n/a	58.2	-
11:00 PM - 11:05 PM	45.9	61.5	-	n/a	58.4	-
11:05 PM - 11:10 PM	46.7	62.1	-	n/a	55.8	-
11:10 PM - 11:15 PM	47.2	64.2	-	n/a	59.9	-
11:15 PM - 11:20 PM	47.1	62.5	-	n/a	59.8	-
11:20 PM - 11:25 PM	47.4	60.8	-	n/a	58.9	-
11:25 PM - 11:30 PM	48.6	64.0	-	n/a	57.9	-
11:30 PM - 11:35 PM	48.6	60.5	-	n/a	54.2	-
11:35 PM - 11:40 PM	48.7	60.8	-	n/a	57.8	-
11:40 PM - 11:45 PM	48.1	61.0	-	n/a	58.2	-
11:45 PM - 11:50 PM	49.8	62.0	-	n/a	59.0	-
11:50 PM - 11:55 PM	50.4	63.3	-	n/a	60.0	-
11:55 PM - 12:00 AM	49.7	63.3	-	n/a	58.3	-
12:00 AM - 12:05 AM	50.4	63.2	-	n/a	60.0	-
12:05 AM - 12:10 AM	51.2	61.7	-	n/a	59.1	-
12:10 AM - 12:15 AM	52.5	63.9	-	n/a	60.2	-
12:15 AM - 12:20 AM	55.7	64.7	-	n/a	60.1	-

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284532-1

Sample No. 24144513-17
Parameter เสียงรบกวน
Location บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00584983

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	55.8	64.5	-	n/a	59.6	-
12:25 AM - 12:30 AM	56.1	65.0	-	n/a	58.7	-
12:30 AM - 12:35 AM	56.7	65.1	-	n/a	59.6	-
12:35 AM - 12:40 AM	56.3	64.2	-	n/a	59.4	-
12:40 AM - 12:45 AM	56.4	66.6	-	n/a	60.9	-
12:45 AM - 12:50 AM	57.2	66.2	-	n/a	60.2	-
12:50 AM - 12:55 AM	58.2	64.3	-	n/a	59.7	-
12:55 AM - 01:00 AM	57.7	63.8	-	n/a	58.6	-
01:00 AM - 01:05 AM	58.0	60.3	-	n/a	52.5	-
01:05 AM - 01:10 AM	59.4	62.6	-	n/a	54.3	-
01:10 AM - 01:15 AM	59.0	65.3	-	n/a	58.5	-
01:15 AM - 01:20 AM	58.9	62.3	-	n/a	53.9	-
01:20 AM - 01:25 AM	59.3	65.1	-	n/a	55.6	-
01:25 AM - 01:30 AM	60.1	61.8	-	n/a	55.9	-
01:30 AM - 01:35 AM	59.8	63.8	-	n/a	57.2	-
01:35 AM - 01:40 AM	60.0	67.7	-	n/a	59.4	-
01:40 AM - 01:45 AM	59.4	68.3	-	n/a	56.9	-
01:45 AM - 01:50 AM	59.0	63.9	-	n/a	58.5	-
01:50 AM - 01:55 AM	59.2	68.0	-	n/a	58.8	-
01:55 AM - 02:00 AM	60.0	67.6	-	n/a	57.5	-
02:00 AM - 02:05 AM	59.8	65.7	-	n/a	57.5	-
02:05 AM - 02:10 AM	59.6	64.3	-	n/a	56.7	-
02:10 AM - 02:15 AM	59.6	67.1	-	n/a	57.2	-
02:15 AM - 02:20 AM	59.2	65.2	-	n/a	57.5	-
02:20 AM - 02:25 AM	59.5	66.5	-	n/a	57.8	-
02:25 AM - 02:30 AM	59.5	67.4	-	n/a	60.2	-
02:30 AM - 02:35 AM	60.2	65.4	-	n/a	59.8	-
02:35 AM - 02:40 AM	60.1	65.3	-	n/a	59.7	-
02:40 AM - 02:45 AM	60.8	66.7	-	n/a	60.2	-
02:45 AM - 02:50 AM	60.6	67.5	-	n/a	59.7	-
02:50 AM - 02:55 AM	60.8	67.2	-	n/a	59.1	-
02:55 AM - 03:00 AM	59.9	66.7	-	n/a	60.0	-
03:00 AM - 03:05 AM	60.1	67.2	-	n/a	58.5	-
03:05 AM - 03:10 AM	59.5	67.6	-	n/a	57.7	-
03:10 AM - 03:15 AM	59.9	67.8	-	n/a	58.8	-
03:15 AM - 03:20 AM	60.1	66.7	-	n/a	59.2	-
03:20 AM - 03:25 AM	60.3	66.9	-	n/a	58.1	-
03:25 AM - 03:30 AM	59.8	66.2	-	n/a	57.4	-
03:30 AM - 03:35 AM	58.8	65.8	-	n/a	56.9	-
03:35 AM - 03:40 AM	59.0	66.3	-	n/a	57.2	-

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284532-1

Sample No. 24144513-17
Parameter เสียงรบกวน
Location บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00584983

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	60.0	63.3	-	n/a	57.1	-
03:45 AM - 03:50 AM	59.7	64.8	-	n/a	56.8	-
03:50 AM - 03:55 AM	58.6	64.6	-	n/a	57.0	-
03:55 AM - 04:00 AM	58.3	62.7	-	n/a	56.0	-
04:00 AM - 04:05 AM	68.2	64.0	-	69.1	56.4	12.7
04:05 AM - 04:10 AM	58.6	57.5	-	55.1	55.9	-0.8
04:10 AM - 04:15 AM	58.8	60.3	-	n/a	56.0	-
04:15 AM - 04:20 AM	59.4	61.1	-	n/a	55.9	-
04:20 AM - 04:25 AM	59.5	61.1	-	n/a	56.5	-
04:25 AM - 04:30 AM	58.4	71.3	-	n/a	56.0	-
04:30 AM - 04:35 AM	58.7	63.9	-	n/a	56.0	-
04:35 AM - 04:40 AM	58.2	60.8	-	n/a	55.8	-
04:40 AM - 04:45 AM	58.2	60.6	-	n/a	56.6	-
04:45 AM - 04:50 AM	58.2	59.7	-	n/a	55.9	-
04:50 AM - 04:55 AM	57.6	58.4	-	n/a	55.0	-
04:55 AM - 05:00 AM	58.4	60.7	-	n/a	55.2	-
05:00 AM - 05:05 AM	58.0	58.8	-	n/a	55.7	-
05:05 AM - 05:10 AM	58.4	57.5	-	54.1	54.6	-0.5
05:10 AM - 05:15 AM	58.7	57.0	-	56.8	54.7	2.1
05:15 AM - 05:20 AM	58.3	57.3	-	54.4	54.0	0.4
05:20 AM - 05:25 AM	58.8	58.8	-	n/a	54.2	-
05:25 AM - 05:30 AM	58.3	61.6	-	n/a	54.3	-
05:30 AM - 05:35 AM	57.4	57.8	-	n/a	54.7	-
05:35 AM - 05:40 AM	57.4	59.3	-	n/a	54.0	-
05:40 AM - 05:45 AM	56.4	56.7	-	n/a	53.9	-
05:45 AM - 05:50 AM	55.9	58.0	-	n/a	53.8	-
05:50 AM - 05:55 AM	55.0	61.0	-	n/a	54.1	-
05:55 AM - 06:00 AM	55.3	58.0	-	n/a	51.8	-
06:00 AM - 07:00 AM	56.7	58.8	n/a	-	48.4	-
07:00 AM - 08:00 AM	52.5	54.1	n/a	-	45.0	-
08:00 AM - 09:00 AM	51.5	52.9	n/a	-	42.9	-
09:00 AM - 10:00 AM	53.2	52.7	43.6	-	42.0	1.6
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 04-05 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-17 วันที่ตรวจวัด 04-05 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284533-1

Sample No. 24144513-18
Parameter เสียงรบกวน
Location บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00584983

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	49.3	55.3	n/a	-	39.8	-
11:00 AM - 12:00 PM	53.2	53.5	n/a	-	43.2	-
12:00 PM - 01:00 PM	47.6	51.9	n/a	-	43.9	-
01:00 PM - 02:00 PM	52.7	55.8	n/a	-	43.5	-
02:00 PM - 03:00 PM	49.7	53.9	n/a	-	45.1	-
03:00 PM - 04:00 PM	49.5	53.2	n/a	-	44.8	-
04:00 PM - 05:00 PM	50.8	54.0	n/a	-	46.2	-
05:00 PM - 06:00 PM	47.9	51.1	n/a	-	44.7	-
06:00 PM - 07:00 PM	51.0	50.7	39.2	-	43.0	-3.8
07:00 PM - 08:00 PM	53.5	50.9	50.0	-	45.2	4.8
08:00 PM - 09:00 PM	44.3	47.8	n/a	-	46.1	-
09:00 PM - 10:00 PM	49.6	51.7	n/a	-	44.3	-
10:00 PM - 10:05 PM	47.4	50.5	-	n/a	42.8	-
10:05 PM - 10:10 PM	45.9	47.5	-	n/a	42.6	-
10:10 PM - 10:15 PM	46.1	48.7	-	n/a	43.1	-
10:15 PM - 10:20 PM	47.1	53.0	-	n/a	43.2	-
10:20 PM - 10:25 PM	49.5	49.1	-	41.9	43.2	-1.3
10:25 PM - 10:30 PM	47.6	52.2	-	n/a	43.2	-
10:30 PM - 10:35 PM	50.8	49.1	-	48.9	43.1	5.8
10:35 PM - 10:40 PM	55.0	49.7	-	56.5	43.5	13.0
10:40 PM - 10:45 PM	49.7	50.8	-	n/a	44.1	-
10:45 PM - 10:50 PM	50.4	52.8	-	n/a	43.5	-
10:50 PM - 10:55 PM	51.2	54.2	-	n/a	44.8	-
10:55 PM - 11:00 PM	51.4	56.7	-	n/a	49.9	-
11:00 PM - 11:05 PM	52.5	55.9	-	n/a	50.5	-
11:05 PM - 11:10 PM	53.7	55.0	-	n/a	49.6	-
11:10 PM - 11:15 PM	53.9	53.8	-	40.5	48.9	-8.4
11:15 PM - 11:20 PM	54.4	55.1	-	n/a	48.4	-
11:20 PM - 11:25 PM	53.2	55.2	-	n/a	49.4	-
11:25 PM - 11:30 PM	54.0	55.2	-	n/a	50.2	-
11:30 PM - 11:35 PM	54.9	58.1	-	n/a	52.5	-
11:35 PM - 11:40 PM	53.9	56.8	-	n/a	52.1	-
11:40 PM - 11:45 PM	54.4	55.0	-	n/a	50.9	-
11:45 PM - 11:50 PM	55.2	55.2	-	n/a	50.3	-
11:50 PM - 11:55 PM	54.8	55.2	-	n/a	50.6	-
11:55 PM - 12:00 AM	55.2	57.1	-	n/a	52.7	-
12:00 AM - 12:05 AM	54.6	56.2	-	n/a	51.0	-
12:05 AM - 12:10 AM	56.4	56.2	-	45.9	50.7	-4.8
12:10 AM - 12:15 AM	55.4	56.0	-	n/a	52.3	-
12:15 AM - 12:20 AM	55.7	57.2	-	n/a	50.4	-

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284533-1

Sample No. 24144513-18
Parameter เสียงรบกวน
Location บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00584983

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	55.5	57.0	-	n/a	50.9	-
12:25 AM - 12:30 AM	56.3	55.9	-	48.7	51.5	-2.8
12:30 AM - 12:35 AM	56.9	56.2	-	51.6	50.9	0.7
12:35 AM - 12:40 AM	57.0	54.8	-	56.0	50.3	5.7
12:40 AM - 12:45 AM	56.5	54.7	-	54.8	51.3	3.5
12:45 AM - 12:50 AM	57.2	55.4	-	55.5	50.7	4.8
12:50 AM - 12:55 AM	56.8	55.3	-	54.5	52.0	2.5
12:55 AM - 01:00 AM	56.9	55.1	-	55.2	52.2	3.0
01:00 AM - 01:05 AM	56.6	55.4	-	53.4	52.6	0.8
01:05 AM - 01:10 AM	56.8	55.5	-	53.9	51.3	2.6
01:10 AM - 01:15 AM	56.5	55.0	-	54.2	52.4	1.8
01:15 AM - 01:20 AM	57.0	54.8	-	56.0	51.4	4.6
01:20 AM - 01:25 AM	55.8	55.5	-	47.0	52.9	-5.9
01:25 AM - 01:30 AM	56.2	55.1	-	52.7	52.0	0.7
01:30 AM - 01:35 AM	56.0	54.7	-	53.1	51.8	1.3
01:35 AM - 01:40 AM	55.4	54.8	-	49.5	50.9	-1.4
01:40 AM - 01:45 AM	54.0	56.1	-	n/a	52.7	-
01:45 AM - 01:50 AM	53.9	55.6	-	n/a	52.1	-
01:50 AM - 01:55 AM	54.8	55.4	-	n/a	50.6	-
01:55 AM - 02:00 AM	55.3	55.3	-	n/a	50.5	-
02:00 AM - 02:05 AM	52.7	53.4	-	n/a	50.8	-
02:05 AM - 02:10 AM	52.4	54.8	-	n/a	50.7	-
02:10 AM - 02:15 AM	52.5	53.8	-	n/a	49.6	-
02:15 AM - 02:20 AM	50.3	53.4	-	n/a	47.0	-
02:20 AM - 02:25 AM	49.6	52.9	-	n/a	47.1	-
02:25 AM - 02:30 AM	52.0	52.7	-	n/a	46.6	-
02:30 AM - 02:35 AM	52.7	53.5	-	n/a	47.9	-
02:35 AM - 02:40 AM	48.2	50.6	-	n/a	43.4	-
02:40 AM - 02:45 AM	49.9	48.8	-	46.4	44.0	2.4
02:45 AM - 02:50 AM	47.7	49.2	-	n/a	43.4	-
02:50 AM - 02:55 AM	48.9	51.9	-	n/a	46.2	-
02:55 AM - 03:00 AM	45.1	50.1	-	n/a	45.8	-
03:00 AM - 03:05 AM	46.4	49.5	-	n/a	41.4	-
03:05 AM - 03:10 AM	48.8	50.4	-	n/a	42.2	-
03:10 AM - 03:15 AM	47.2	47.9	-	n/a	42.7	-
03:15 AM - 03:20 AM	49.1	47.6	-	46.8	42.4	4.4
03:20 AM - 03:25 AM	44.2	43.2	-	40.3	40.4	-0.1
03:25 AM - 03:30 AM	46.5	45.0	-	44.2	38.7	5.5
03:30 AM - 03:35 AM	44.0	48.5	-	n/a	39.3	-
03:35 AM - 03:40 AM	39.3	50.0	-	n/a	39.9	-

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Approved by

Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284533-1

Sample No. 24144513-18
Parameter เสียงรบกวน
Location บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00584983

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	42.3	45.6	-	n/a	39.3	-
03:45 AM - 03:50 AM	46.9	42.9	-	47.7	40.1	7.6
03:50 AM - 03:55 AM	47.6	47.1	-	41.0	40.9	0.1
03:55 AM - 04:00 AM	46.8	42.3	-	47.9	38.5	9.4
04:00 AM - 04:05 AM	47.6	42.2	-	49.1	39.3	9.8
04:05 AM - 04:10 AM	49.0	41.0	-	51.3	38.4	12.9
04:10 AM - 04:15 AM	47.5	49.4	-	n/a	38.6	-
04:15 AM - 04:20 AM	44.2	45.0	-	n/a	38.5	-
04:20 AM - 04:25 AM	47.1	47.6	-	n/a	38.4	-
04:25 AM - 04:30 AM	49.0	41.3	-	51.2	38.1	13.1
04:30 AM - 04:35 AM	45.0	45.8	-	n/a	38.4	-
04:35 AM - 04:40 AM	47.8	48.1	-	n/a	38.8	-
04:40 AM - 04:45 AM	48.6	43.3	-	50.1	37.6	12.5
04:45 AM - 04:50 AM	46.3	47.2	-	n/a	37.2	-
04:50 AM - 04:55 AM	47.0	48.3	-	n/a	37.9	-
04:55 AM - 05:00 AM	47.4	45.6	-	45.7	37.7	8.0
05:00 AM - 05:05 AM	48.1	49.5	-	n/a	38.2	-
05:05 AM - 05:10 AM	47.7	52.2	-	n/a	38.0	-
05:10 AM - 05:15 AM	49.8	47.9	-	48.3	38.0	10.3
05:15 AM - 05:20 AM	49.2	49.9	-	n/a	38.7	-
05:20 AM - 05:25 AM	49.4	48.1	-	46.5	39.0	7.5
05:25 AM - 05:30 AM	49.8	50.2	-	n/a	39.7	-
05:30 AM - 05:35 AM	50.2	53.5	-	n/a	39.7	-
05:35 AM - 05:40 AM	51.1	51.9	-	n/a	40.4	-
05:40 AM - 05:45 AM	52.5	53.0	-	n/a	40.3	-
05:45 AM - 05:50 AM	55.0	53.7	-	52.1	39.6	12.5
05:50 AM - 05:55 AM	56.3	52.8	-	56.7	39.8	16.9
05:55 AM - 06:00 AM	55.2	51.2	-	56.0	41.3	14.7
06:00 AM - 07:00 AM	52.7	58.3	n/a	-	46.0	-
07:00 AM - 08:00 AM	53.7	54.4	n/a	-	44.9	-
08:00 AM - 09:00 AM	53.4	56.7	n/a	-	44.1	-
09:00 AM - 10:00 AM	48.8	53.7	n/a	-	43.4	-
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 05-06 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-18 วันที่ตรวจวัด 05-06 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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Approved by

Kanokkorn Anek
Senior Manager

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Life Sciences www.alsglobal.com
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284534-1

Sample No. 24144513-19
Parameter เสียงรบกวน
Location บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00584983

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	52.2	51.9	40.4	-	43.0	-2.6
11:00 AM - 12:00 PM	49.3	56.6	n/a	-	45.7	-
12:00 PM - 01:00 PM	45.5	53.4	n/a	-	43.2	-
01:00 PM - 02:00 PM	45.2	58.5	n/a	-	42.0	-
02:00 PM - 03:00 PM	47.4	53.8	n/a	-	42.9	-
03:00 PM - 04:00 PM	49.3	54.0	n/a	-	42.8	-
04:00 PM - 05:00 PM	49.6	53.2	n/a	-	43.0	-
05:00 PM - 06:00 PM	48.0	50.5	n/a	-	41.7	-
06:00 PM - 07:00 PM	47.2	54.8	n/a	-	39.8	-
07:00 PM - 08:00 PM	42.2	49.4	n/a	-	43.3	-
08:00 PM - 09:00 PM	42.8	44.8	n/a	-	43.4	-
09:00 PM - 10:00 PM	42.9	44.7	n/a	-	42.5	-
10:00 PM - 10:05 PM	44.8	43.8	-	40.9	42.3	-1.4
10:05 PM - 10:10 PM	43.1	45.5	-	n/a	42.2	-
10:10 PM - 10:15 PM	41.0	47.5	-	n/a	43.7	-
10:15 PM - 10:20 PM	41.4	46.7	-	n/a	43.2	-
10:20 PM - 10:25 PM	40.1	45.5	-	n/a	43.1	-
10:25 PM - 10:30 PM	39.7	46.9	-	n/a	43.9	-
10:30 PM - 10:35 PM	39.7	46.5	-	n/a	43.5	-
10:35 PM - 10:40 PM	39.5	46.6	-	n/a	43.6	-
10:40 PM - 10:45 PM	44.7	44.8	-	n/a	42.0	-
10:45 PM - 10:50 PM	45.7	42.5	-	45.9	40.6	5.3
10:50 PM - 10:55 PM	44.4	41.8	-	43.9	39.4	4.5
10:55 PM - 11:00 PM	43.9	41.0	-	43.8	39.1	4.7
11:00 PM - 11:05 PM	42.5	40.5	-	41.2	38.5	2.7
11:05 PM - 11:10 PM	42.8	44.3	-	n/a	38.8	-
11:10 PM - 11:15 PM	44.5	43.8	-	39.2	39.1	0.1
11:15 PM - 11:20 PM	44.3	43.6	-	39.0	39.0	0.0
11:20 PM - 11:25 PM	42.2	42.9	-	n/a	38.3	-
11:25 PM - 11:30 PM	45.0	42.2	-	44.8	39.1	5.7
11:30 PM - 11:35 PM	44.7	41.8	-	44.6	39.7	4.9
11:35 PM - 11:40 PM	45.0	42.0	-	45.0	39.7	5.3
11:40 PM - 11:45 PM	43.3	43.3	-	n/a	40.9	-
11:45 PM - 11:50 PM	40.2	45.7	-	n/a	42.8	-
11:50 PM - 11:55 PM	46.6	47.1	-	n/a	42.3	-
11:55 PM - 12:00 AM	53.3	47.9	-	54.8	44.2	10.6
12:00 AM - 12:05 AM	53.9	48.3	-	55.5	44.4	11.1
12:05 AM - 12:10 AM	52.3	48.1	-	53.2	44.3	8.9
12:10 AM - 12:15 AM	50.6	47.9	-	50.3	43.6	6.7
12:15 AM - 12:20 AM	52.4	48.4	-	53.2	43.6	9.6

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284534-1

Sample No. 24144513-19
Parameter เสียงรบกวน
Location บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00584983

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	51.8	48.7	-	51.9	45.2	6.7
12:25 AM - 12:30 AM	50.8	49.3	-	48.5	45.8	2.7
12:30 AM - 12:35 AM	49.2	49.5	-	n/a	45.9	-
12:35 AM - 12:40 AM	45.7	48.2	-	n/a	44.2	-
12:40 AM - 12:45 AM	45.0	47.8	-	n/a	43.4	-
12:45 AM - 12:50 AM	38.3	48.6	-	n/a	43.4	-
12:50 AM - 12:55 AM	44.2	48.4	-	n/a	45.0	-
12:55 AM - 01:00 AM	38.4	50.8	-	n/a	42.9	-
01:00 AM - 01:05 AM	38.5	49.0	-	n/a	41.2	-
01:05 AM - 01:10 AM	43.6	48.3	-	n/a	43.7	-
01:10 AM - 01:15 AM	41.7	47.2	-	n/a	43.0	-
01:15 AM - 01:20 AM	42.1	47.7	-	n/a	41.5	-
01:20 AM - 01:25 AM	42.3	44.9	-	n/a	40.3	-
01:25 AM - 01:30 AM	38.6	47.9	-	n/a	43.5	-
01:30 AM - 01:35 AM	37.2	48.1	-	n/a	43.6	-
01:35 AM - 01:40 AM	39.5	47.3	-	n/a	41.9	-
01:40 AM - 01:45 AM	44.2	45.8	-	n/a	40.6	-
01:45 AM - 01:50 AM	38.4	45.2	-	n/a	39.8	-
01:50 AM - 01:55 AM	37.4	46.6	-	n/a	41.0	-
01:55 AM - 02:00 AM	37.7	43.6	-	n/a	38.8	-
02:00 AM - 02:05 AM	37.9	44.1	-	n/a	39.1	-
02:05 AM - 02:10 AM	38.9	44.7	-	n/a	38.6	-
02:10 AM - 02:15 AM	39.3	43.4	-	n/a	38.8	-
02:15 AM - 02:20 AM	38.6	45.1	-	n/a	39.3	-
02:20 AM - 02:25 AM	38.9	42.4	-	n/a	37.9	-
02:25 AM - 02:30 AM	38.6	39.8	-	n/a	37.2	-
02:30 AM - 02:35 AM	46.9	38.2	-	49.3	35.5	13.8
02:35 AM - 02:40 AM	45.4	38.3	-	47.5	36.2	11.3
02:40 AM - 02:45 AM	47.5	37.8	-	50.0	36.2	13.8
02:45 AM - 02:50 AM	45.8	38.2	-	48.0	36.6	11.4
02:50 AM - 02:55 AM	44.5	38.1	-	46.4	36.6	9.8
02:55 AM - 03:00 AM	40.8	52.2	-	n/a	36.0	-
03:00 AM - 03:05 AM	41.9	43.3	-	n/a	35.2	-
03:05 AM - 03:10 AM	40.8	45.3	-	n/a	35.9	-
03:10 AM - 03:15 AM	39.6	52.0	-	n/a	37.3	-
03:15 AM - 03:20 AM	34.6	51.4	-	n/a	36.9	-
03:20 AM - 03:25 AM	44.8	52.5	-	n/a	37.3	-
03:25 AM - 03:30 AM	39.9	46.1	-	n/a	34.8	-
03:30 AM - 03:35 AM	38.8	43.8	-	n/a	34.5	-
03:35 AM - 03:40 AM	45.4	44.6	-	40.7	34.2	6.5

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Approved by
Kanokkorn Anek
Senior Manager

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Life Sciences www.alsglobal.com
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284534-1

Sample No. 24144513-19
Parameter เสียงรบกวน
Location บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00584983

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	39.5	34.6	-	40.8	33.7	7.1
03:45 AM - 03:50 AM	42.4	45.0	-	n/a	33.2	-
03:50 AM - 03:55 AM	39.7	44.1	-	n/a	33.2	-
03:55 AM - 04:00 AM	42.6	40.2	-	41.9	33.9	8.0
04:00 AM - 04:05 AM	41.7	46.9	-	n/a	35.6	-
04:05 AM - 04:10 AM	45.4	42.7	-	45.1	34.7	10.4
04:10 AM - 04:15 AM	41.6	44.4	-	n/a	35.2	-
04:15 AM - 04:20 AM	44.4	48.2	-	n/a	35.2	-
04:20 AM - 04:25 AM	44.4	37.2	-	46.5	34.7	11.8
04:25 AM - 04:30 AM	53.6	40.2	-	56.4	33.6	22.8
04:30 AM - 04:35 AM	54.5	48.4	-	56.3	33.6	22.7
04:35 AM - 04:40 AM	52.0	40.3	-	54.7	33.2	21.5
04:40 AM - 04:45 AM	46.6	42.4	-	47.5	34.4	13.1
04:45 AM - 04:50 AM	48.1	42.1	-	49.8	35.1	14.7
04:50 AM - 04:55 AM	48.5	49.8	-	n/a	37.5	-
04:55 AM - 05:00 AM	48.7	48.6	-	35.3	39.4	-4.1
05:00 AM - 05:05 AM	49.1	47.0	-	47.9	39.3	8.6
05:05 AM - 05:10 AM	48.5	52.0	-	n/a	38.8	-
05:10 AM - 05:15 AM	50.3	49.8	-	43.7	38.2	5.5
05:15 AM - 05:20 AM	49.5	49.6	-	n/a	39.4	-
05:20 AM - 05:25 AM	50.4	49.5	-	46.1	38.7	7.4
05:25 AM - 05:30 AM	48.9	55.2	-	n/a	37.3	-
05:30 AM - 05:35 AM	50.9	54.9	-	n/a	37.4	-
05:35 AM - 05:40 AM	52.0	55.5	-	n/a	37.7	-
05:40 AM - 05:45 AM	53.6	51.2	-	52.9	38.2	14.7
05:45 AM - 05:50 AM	53.6	52.9	-	48.3	40.7	7.6
05:50 AM - 05:55 AM	54.7	51.1	-	55.2	41.4	13.8
05:55 AM - 06:00 AM	55.6	56.6	-	n/a	41.2	-
06:00 AM - 07:00 AM	53.4	57.1	n/a	-	45.2	-
07:00 AM - 08:00 AM	52.0	56.7	n/a	-	46.3	-
08:00 AM - 09:00 AM	53.3	54.8	n/a	-	45.9	-
09:00 AM - 10:00 AM	49.7	66.2	n/a	-	41.4	-
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอับเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 06-07 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-19 วันที่ตรวจวัด 06-07 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284535-1

Sample No. 24144513-20
Parameter เสียงรบกวน
Location บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00584983

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	44.3	48.3	n/a	-	39.8	-
11:00 AM - 12:00 PM	55.1	50.5	53.3	-	40.4	12.9
12:00 PM - 01:00 PM	46.3	50.6	n/a	-	38.9	-
01:00 PM - 02:00 PM	48.9	52.4	n/a	-	40.5	-
02:00 PM - 03:00 PM	54.7	55.3	n/a	-	46.1	-
03:00 PM - 04:00 PM	48.6	51.9	n/a	-	42.8	-
04:00 PM - 05:00 PM	49.6	56.1	n/a	-	42.7	-
05:00 PM - 06:00 PM	47.8	49.9	n/a	-	41.7	-
06:00 PM - 07:00 PM	51.3	51.5	n/a	-	36.6	-
07:00 PM - 08:00 PM	55.3	46.7	54.7	-	40.8	13.9
08:00 PM - 09:00 PM	54.7	46.1	54.1	-	39.5	14.6
09:00 PM - 10:00 PM	61.8	61.4	51.2	-	39.4	11.8
10:00 PM - 10:05 PM	54.6	45.6	-	57.0	39.6	17.4
10:05 PM - 10:10 PM	54.1	45.1	-	56.5	39.6	16.9
10:10 PM - 10:15 PM	50.3	40.1	-	52.9	39.4	13.5
10:15 PM - 10:20 PM	43.2	41.2	-	41.9	39.3	2.6
10:20 PM - 10:25 PM	41.5	40.7	-	36.8	39.6	-2.8
10:25 PM - 10:30 PM	42.0	41.5	-	35.4	39.9	-4.5
10:30 PM - 10:35 PM	45.5	40.9	-	46.7	39.5	7.2
10:35 PM - 10:40 PM	45.7	43.6	-	44.5	40.0	4.5
10:40 PM - 10:45 PM	40.9	45.2	-	n/a	39.1	-
10:45 PM - 10:50 PM	43.2	42.9	-	34.4	39.7	-5.3
10:50 PM - 10:55 PM	41.8	40.3	-	39.5	38.7	0.8
10:55 PM - 11:00 PM	42.9	40.0	-	42.8	38.2	4.6
11:00 PM - 11:05 PM	40.6	41.7	-	n/a	38.1	-
11:05 PM - 11:10 PM	42.9	38.9	-	43.7	37.7	6.0
11:10 PM - 11:15 PM	42.0	39.9	-	40.8	36.2	4.6
11:15 PM - 11:20 PM	43.5	39.4	-	44.4	37.3	7.1
11:20 PM - 11:25 PM	44.1	41.8	-	43.2	37.5	5.7
11:25 PM - 11:30 PM	42.0	42.0	-	n/a	37.7	-
11:30 PM - 11:35 PM	40.7	38.2	-	40.1	36.9	3.2
11:35 PM - 11:40 PM	42.8	39.0	-	43.5	37.9	5.6
11:40 PM - 11:45 PM	49.4	38.8	-	52.0	37.5	14.5
11:45 PM - 11:50 PM	46.8	38.7	-	49.1	37.5	11.6
11:50 PM - 11:55 PM	39.6	43.1	-	n/a	37.7	-
11:55 PM - 12:00 AM	40.1	40.3	-	n/a	37.6	-
12:00 AM - 12:05 AM	42.8	42.6	-	32.3	37.6	-5.3
12:05 AM - 12:10 AM	46.7	45.6	-	43.2	38.4	4.8
12:10 AM - 12:15 AM	44.6	47.4	-	n/a	39.4	-
12:15 AM - 12:20 AM	46.9	40.0	-	48.9	37.9	11.0

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284535-1

Sample No. 24144513-20
Parameter เสียงรบกวน
Location บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00584983

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	46.0	38.5	-	48.1	37.4	10.7
12:25 AM - 12:30 AM	43.7	43.0	-	38.4	37.7	0.7
12:30 AM - 12:35 AM	41.8	39.5	-	40.9	37.1	3.8
12:35 AM - 12:40 AM	41.9	50.9	-	n/a	37.7	-
12:40 AM - 12:45 AM	43.2	53.7	-	n/a	38.0	-
12:45 AM - 12:50 AM	44.8	50.8	-	n/a	37.6	-
12:50 AM - 12:55 AM	42.8	49.0	-	n/a	37.1	-
12:55 AM - 01:00 AM	43.4	43.3	-	30.0	36.8	-6.8
01:00 AM - 01:05 AM	39.4	38.7	-	34.1	35.9	-1.8
01:05 AM - 01:10 AM	41.1	37.1	-	41.9	35.1	6.8
01:10 AM - 01:15 AM	43.6	43.9	-	n/a	36.2	-
01:15 AM - 01:20 AM	44.2	45.2	-	n/a	37.0	-
01:20 AM - 01:25 AM	45.9	43.9	-	44.6	35.7	8.9
01:25 AM - 01:30 AM	45.0	42.2	-	44.8	35.2	9.6
01:30 AM - 01:35 AM	45.9	36.8	-	48.3	35.1	13.2
01:35 AM - 01:40 AM	43.8	48.3	-	n/a	36.2	-
01:40 AM - 01:45 AM	41.3	47.1	-	n/a	36.1	-
01:45 AM - 01:50 AM	42.7	44.5	-	n/a	36.2	-
01:50 AM - 01:55 AM	44.2	45.5	-	n/a	37.9	-
01:55 AM - 02:00 AM	42.7	47.5	-	n/a	37.5	-
02:00 AM - 02:05 AM	44.2	48.9	-	n/a	37.6	-
02:05 AM - 02:10 AM	45.1	44.6	-	38.5	36.4	2.1
02:10 AM - 02:15 AM	42.9	38.0	-	44.2	36.1	8.1
02:15 AM - 02:20 AM	43.8	41.0	-	43.6	37.0	6.6
02:20 AM - 02:25 AM	44.9	41.9	-	44.9	36.7	8.2
02:25 AM - 02:30 AM	42.3	39.6	-	42.0	35.6	6.4
02:30 AM - 02:35 AM	38.4	37.9	-	31.8	35.8	-4.0
02:35 AM - 02:40 AM	40.8	49.9	-	n/a	35.5	-
02:40 AM - 02:45 AM	49.9	37.3	-	52.7	34.3	18.4
02:45 AM - 02:50 AM	41.1	40.9	-	30.6	34.4	-3.8
02:50 AM - 02:55 AM	36.8	39.4	-	n/a	34.3	-
02:55 AM - 03:00 AM	37.4	38.7	-	n/a	35.3	-
03:00 AM - 03:05 AM	42.5	36.3	-	44.3	34.6	9.7
03:05 AM - 03:10 AM	41.1	45.6	-	n/a	34.5	-
03:10 AM - 03:15 AM	46.7	46.4	-	37.9	34.5	3.4
03:15 AM - 03:20 AM	71.5	36.2	-	74.5	34.9	39.6
03:20 AM - 03:25 AM	41.0	35.5	-	42.6	34.1	8.5
03:25 AM - 03:30 AM	39.4	35.5	-	40.1	34.3	5.8
03:30 AM - 03:35 AM	41.6	39.8	-	39.9	35.0	4.9
03:35 AM - 03:40 AM	41.9	44.7	-	n/a	35.3	-

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Approved by

Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284535-1

Sample No. 24144513-20
Parameter เสียงรบกวน
Location บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00584983

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	46.8	68.9	-	n/a	36.7	-
03:45 AM - 03:50 AM	49.0	64.4	-	n/a	34.7	-
03:50 AM - 03:55 AM	46.7	34.9	-	49.4	33.4	16.0
03:55 AM - 04:00 AM	41.8	34.4	-	43.9	33.1	10.8
04:00 AM - 04:05 AM	44.3	35.2	-	46.7	33.5	13.2
04:05 AM - 04:10 AM	45.1	35.4	-	47.6	33.9	13.7
04:10 AM - 04:15 AM	42.8	36.3	-	44.7	32.8	11.9
04:15 AM - 04:20 AM	46.7	44.7	-	45.4	33.5	11.9
04:20 AM - 04:25 AM	47.3	48.6	-	n/a	34.0	-
04:25 AM - 04:30 AM	38.5	43.2	-	n/a	34.1	-
04:30 AM - 04:35 AM	39.3	52.3	-	n/a	33.7	-
04:35 AM - 04:40 AM	45.8	42.1	-	46.4	33.2	13.2
04:40 AM - 04:45 AM	41.6	35.2	-	43.5	32.9	10.6
04:45 AM - 04:50 AM	48.7	46.3	-	48.0	33.8	14.2
04:50 AM - 04:55 AM	46.2	42.8	-	46.5	34.8	11.7
04:55 AM - 05:00 AM	46.7	39.9	-	48.7	35.5	13.2
05:00 AM - 05:05 AM	46.4	45.2	-	43.2	35.5	7.7
05:05 AM - 05:10 AM	48.9	46.0	-	48.8	34.5	14.3
05:10 AM - 05:15 AM	48.0	52.4	-	n/a	35.2	-
05:15 AM - 05:20 AM	48.9	49.4	-	n/a	35.7	-
05:20 AM - 05:25 AM	49.0	51.5	-	n/a	35.8	-
05:25 AM - 05:30 AM	50.8	52.0	-	n/a	35.9	-
05:30 AM - 05:35 AM	50.7	48.4	-	49.8	36.6	13.2
05:35 AM - 05:40 AM	51.3	53.9	-	n/a	37.1	-
05:40 AM - 05:45 AM	53.3	54.9	-	n/a	35.9	-
05:45 AM - 05:50 AM	53.9	50.4	-	54.3	34.9	19.4
05:50 AM - 05:55 AM	54.4	56.4	-	n/a	36.5	-
05:55 AM - 06:00 AM	53.3	56.3	-	n/a	38.5	-
06:00 AM - 07:00 AM	51.5	59.2	n/a	-	45.1	-
07:00 AM - 08:00 AM	51.1	61.4	n/a	-	43.6	-
08:00 AM - 09:00 AM	61.1	63.4	n/a	-	45.2	-
09:00 AM - 10:00 AM	49.9	54.4	n/a	-	39.1	-
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 07-08 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-20 วันที่ตรวจวัด 07-08 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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Approved by

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284536-1

Sample No. 24144513-21
Parameter เสียงรบกวน
Location บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00584983

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	48.5	53.0	n/a	-	39.8	-
11:00 AM - 12:00 PM	46.8	52.1	n/a	-	40.4	-
12:00 PM - 01:00 PM	45.8	55.9	n/a	-	38.9	-
01:00 PM - 02:00 PM	42.4	48.3	n/a	-	40.5	-
02:00 PM - 03:00 PM	48.4	48.4	n/a	-	46.1	-
03:00 PM - 04:00 PM	58.7	60.4	n/a	-	42.8	-
04:00 PM - 05:00 PM	58.6	54.3	56.6	-	42.7	13.9
05:00 PM - 06:00 PM	54.5	53.2	48.6	-	41.7	6.9
06:00 PM - 07:00 PM	47.5	51.7	n/a	-	36.6	-
07:00 PM - 08:00 PM	45.9	50.5	n/a	-	40.8	-
08:00 PM - 09:00 PM	43.6	52.0	n/a	-	39.5	-
09:00 PM - 10:00 PM	43.3	45.0	n/a	-	39.4	-
10:00 PM - 10:05 PM	42.0	42.3	-	n/a	39.6	-
10:05 PM - 10:10 PM	73.4	43.3	-	76.4	39.6	36.8
10:10 PM - 10:15 PM	45.4	46.5	-	n/a	39.4	-
10:15 PM - 10:20 PM	44.1	49.9	-	n/a	39.3	-
10:20 PM - 10:25 PM	43.8	51.4	-	n/a	39.6	-
10:25 PM - 10:30 PM	44.3	50.2	-	n/a	39.9	-
10:30 PM - 10:35 PM	46.6	75.0	-	n/a	39.5	-
10:35 PM - 10:40 PM	41.6	48.1	-	n/a	40.0	-
10:40 PM - 10:45 PM	43.1	47.7	-	n/a	39.1	-
10:45 PM - 10:50 PM	44.8	47.5	-	n/a	39.7	-
10:50 PM - 10:55 PM	44.2	47.9	-	n/a	38.7	-
10:55 PM - 11:00 PM	44.0	47.8	-	n/a	38.2	-
11:00 PM - 11:05 PM	40.5	46.1	-	n/a	38.1	-
11:05 PM - 11:10 PM	38.6	45.2	-	n/a	37.7	-
11:10 PM - 11:15 PM	39.8	47.6	-	n/a	36.2	-
11:15 PM - 11:20 PM	40.1	47.3	-	n/a	37.3	-
11:20 PM - 11:25 PM	39.3	43.7	-	n/a	37.5	-
11:25 PM - 11:30 PM	42.1	43.5	-	n/a	37.7	-
11:30 PM - 11:35 PM	38.8	42.8	-	n/a	36.9	-
11:35 PM - 11:40 PM	39.9	42.9	-	n/a	37.9	-
11:40 PM - 11:45 PM	42.6	44.9	-	n/a	37.5	-
11:45 PM - 11:50 PM	42.4	42.4	-	n/a	37.5	-
11:50 PM - 11:55 PM	41.1	46.9	-	n/a	37.7	-
11:55 PM - 12:00 AM	38.8	43.9	-	n/a	37.6	-
12:00 AM - 12:05 AM	41.1	42.8	-	n/a	37.6	-
12:05 AM - 12:10 AM	39.0	43.7	-	n/a	38.4	-
12:10 AM - 12:15 AM	40.9	43.7	-	n/a	39.4	-
12:15 AM - 12:20 AM	43.5	44.2	-	n/a	37.9	-

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284536-1

Sample No. 24144513-21
Parameter เสียงรบกวน
Location บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00584983

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	47.7	42.0	-	49.3	37.4	11.9
12:25 AM - 12:30 AM	44.1	42.7	-	41.5	37.7	3.8
12:30 AM - 12:35 AM	41.2	42.8	-	n/a	37.1	-
12:35 AM - 12:40 AM	41.5	44.2	-	n/a	37.7	-
12:40 AM - 12:45 AM	41.6	45.6	-	n/a	38.0	-
12:45 AM - 12:50 AM	42.1	45.5	-	n/a	37.6	-
12:50 AM - 12:55 AM	42.7	44.6	-	n/a	37.1	-
12:55 AM - 01:00 AM	44.4	44.8	-	n/a	36.8	-
01:00 AM - 01:05 AM	41.7	46.1	-	n/a	35.9	-
01:05 AM - 01:10 AM	41.1	46.1	-	n/a	35.1	-
01:10 AM - 01:15 AM	43.2	46.7	-	n/a	36.2	-
01:15 AM - 01:20 AM	45.3	43.7	-	43.2	37.0	6.2
01:20 AM - 01:25 AM	43.3	43.3	-	n/a	35.7	-
01:25 AM - 01:30 AM	43.7	43.7	-	n/a	35.2	-
01:30 AM - 01:35 AM	44.9	43.5	-	42.3	35.1	7.2
01:35 AM - 01:40 AM	41.4	42.5	-	n/a	36.2	-
01:40 AM - 01:45 AM	38.3	42.4	-	n/a	36.1	-
01:45 AM - 01:50 AM	37.8	43.8	-	n/a	36.2	-
01:50 AM - 01:55 AM	37.5	43.2	-	n/a	37.9	-
01:55 AM - 02:00 AM	36.4	45.5	-	n/a	37.5	-
02:00 AM - 02:05 AM	35.8	43.8	-	n/a	37.6	-
02:05 AM - 02:10 AM	44.4	40.7	-	45.0	36.4	8.6
02:10 AM - 02:15 AM	42.3	41.5	-	37.6	36.1	1.5
02:15 AM - 02:20 AM	41.3	41.3	-	n/a	37.0	-
02:20 AM - 02:25 AM	41.4	43.4	-	n/a	36.7	-
02:25 AM - 02:30 AM	39.1	42.9	-	n/a	35.6	-
02:30 AM - 02:35 AM	35.6	44.2	-	n/a	35.8	-
02:35 AM - 02:40 AM	38.1	46.6	-	n/a	35.5	-
02:40 AM - 02:45 AM	35.6	45.5	-	n/a	34.3	-
02:45 AM - 02:50 AM	37.3	45.0	-	n/a	34.4	-
02:50 AM - 02:55 AM	41.4	44.4	-	n/a	34.3	-
02:55 AM - 03:00 AM	39.9	39.3	-	34.0	35.3	-1.3
03:00 AM - 03:05 AM	41.4	40.2	-	38.2	34.6	3.6
03:05 AM - 03:10 AM	42.5	39.9	-	42.0	34.5	7.5
03:10 AM - 03:15 AM	38.0	39.8	-	n/a	34.5	-
03:15 AM - 03:20 AM	38.6	42.2	-	n/a	34.9	-
03:20 AM - 03:25 AM	39.8	42.2	-	n/a	34.1	-
03:25 AM - 03:30 AM	39.3	39.3	-	n/a	34.3	-
03:30 AM - 03:35 AM	36.9	47.6	-	n/a	35.0	-
03:35 AM - 03:40 AM	36.8	44.0	-	n/a	35.3	-

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284536-1

Sample No. 24144513-21
Parameter เสียงรบกวน
Location บ้านผาเสด็จ (GPS 47P 726595, 1619822)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00584983

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	37.1	43.6	-	n/a	36.7	-
03:45 AM - 03:50 AM	41.2	42.3	-	n/a	34.7	-
03:50 AM - 03:55 AM	66.4	43.6	-	69.4	33.4	36.0
03:55 AM - 04:00 AM	41.2	43.9	-	n/a	33.1	-
04:00 AM - 04:05 AM	40.1	42.1	-	n/a	33.5	-
04:05 AM - 04:10 AM	44.1	43.5	-	38.2	33.9	4.3
04:10 AM - 04:15 AM	46.6	45.7	-	42.3	32.8	9.5
04:15 AM - 04:20 AM	54.3	66.8	-	n/a	33.5	-
04:20 AM - 04:25 AM	46.2	47.1	-	n/a	34.0	-
04:25 AM - 04:30 AM	36.2	45.9	-	n/a	34.1	-
04:30 AM - 04:35 AM	41.8	48.5	-	n/a	33.7	-
04:35 AM - 04:40 AM	45.5	42.7	-	45.3	33.2	12.1
04:40 AM - 04:45 AM	46.4	43.6	-	46.2	32.9	13.3
04:45 AM - 04:50 AM	43.9	49.4	-	n/a	33.8	-
04:50 AM - 04:55 AM	46.4	42.9	-	46.8	34.8	12.0
04:55 AM - 05:00 AM	46.2	44.2	-	44.9	35.5	9.4
05:00 AM - 05:05 AM	46.8	49.7	-	n/a	35.5	-
05:05 AM - 05:10 AM	48.4	49.3	-	n/a	34.5	-
05:10 AM - 05:15 AM	49.4	49.8	-	n/a	35.2	-
05:15 AM - 05:20 AM	47.7	54.6	-	n/a	35.7	-
05:20 AM - 05:25 AM	49.1	53.3	-	n/a	35.8	-
05:25 AM - 05:30 AM	49.5	51.3	-	n/a	35.9	-
05:30 AM - 05:35 AM	50.9	55.8	-	n/a	36.6	-
05:35 AM - 05:40 AM	52.2	53.8	-	n/a	37.1	-
05:40 AM - 05:45 AM	52.6	54.8	-	n/a	35.9	-
05:45 AM - 05:50 AM	52.7	56.4	-	n/a	34.9	-
05:50 AM - 05:55 AM	55.2	54.4	-	50.5	36.5	14.0
05:55 AM - 06:00 AM	54.7	54.9	-	n/a	38.5	-
06:00 AM - 07:00 AM	51.7	57.3	n/a	-	45.1	-
07:00 AM - 08:00 AM	50.8	54.3	n/a	-	43.6	-
08:00 AM - 09:00 AM	56.3	57.5	n/a	-	45.2	-
09:00 AM - 10:00 AM	49.3	52.5	n/a	-	39.1	-
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 08-09 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-21 วันที่ตรวจวัด 08-09 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284537-1

Sample No. 24144513-22
Parameter เสียงรบกวน
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 1617959)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858525

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	62.1	64.4	n/a	-	60.2	-
11:00 AM - 12:00 PM	61.2	61.1	44.8	-	59.1	-14.3
12:00 PM - 01:00 PM	61.0	61.2	n/a	-	59.0	-
01:00 PM - 02:00 PM	61.3	61.6	n/a	-	59.2	-
02:00 PM - 03:00 PM	61.3	62.2	n/a	-	59.4	-
03:00 PM - 04:00 PM	60.9	61.9	n/a	-	59.3	-
04:00 PM - 05:00 PM	62.1	61.8	50.3	-	58.8	-8.5
05:00 PM - 06:00 PM	62.9	63.0	n/a	-	60.7	-
06:00 PM - 07:00 PM	64.7	64.0	56.4	-	61.1	-4.7
07:00 PM - 08:00 PM	62.7	63.5	n/a	-	61.1	-
08:00 PM - 09:00 PM	62.9	63.2	n/a	-	61.2	-
09:00 PM - 10:00 PM	62.9	67.0	n/a	-	60.7	-
10:00 PM - 10:05 PM	62.4	62.5	-	n/a	61.4	-
10:05 PM - 10:10 PM	62.0	62.3	-	n/a	61.4	-
10:10 PM - 10:15 PM	63.7	64.0	-	n/a	61.5	-
10:15 PM - 10:20 PM	62.2	62.3	-	n/a	61.1	-
10:20 PM - 10:25 PM	61.6	65.5	-	n/a	61.1	-
10:25 PM - 10:30 PM	64.1	64.1	-	n/a	60.9	-
10:30 PM - 10:35 PM	65.3	62.0	-	65.6	61.3	4.3
10:35 PM - 10:40 PM	61.6	65.3	-	n/a	61.3	-
10:40 PM - 10:45 PM	61.7	66.1	-	n/a	61.5	-
10:45 PM - 10:50 PM	61.8	62.2	-	n/a	61.0	-
10:50 PM - 10:55 PM	60.8	61.9	-	n/a	60.9	-
10:55 PM - 11:00 PM	61.5	62.5	-	n/a	60.6	-
11:00 PM - 11:05 PM	60.9	61.3	-	n/a	60.2	-
11:05 PM - 11:10 PM	62.6	61.1	-	60.3	59.9	0.4
11:10 PM - 11:15 PM	60.6	60.8	-	n/a	59.8	-
11:15 PM - 11:20 PM	60.4	62.6	-	n/a	59.8	-
11:20 PM - 11:25 PM	60.1	59.8	-	51.3	58.4	-7.1
11:25 PM - 11:30 PM	59.7	59.3	-	52.1	58.2	-6.1
11:30 PM - 11:35 PM	59.1	59.1	-	n/a	57.7	-
11:35 PM - 11:40 PM	62.0	58.9	-	62.1	57.7	4.4
11:40 PM - 11:45 PM	59.9	58.4	-	57.6	57.1	0.5
11:45 PM - 11:50 PM	60.4	63.9	-	n/a	57.4	-
11:50 PM - 11:55 PM	60.1	59.1	-	56.2	58.1	-1.9
11:55 PM - 12:00 AM	59.8	60.5	-	n/a	58.1	-
12:00 AM - 12:05 AM	60.3	59.2	-	56.8	58.2	-1.4
12:05 AM - 12:10 AM	60.3	59.0	-	57.4	57.9	-0.5
12:10 AM - 12:15 AM	60.5	59.2	-	57.6	58.1	-0.5
12:15 AM - 12:20 AM	62.9	59.5	-	63.2	58.3	4.9

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284537-1

Sample No. 24144513-22
Parameter เสียงรบกวน
Location รินรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 1617959)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858525

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	60.0	62.4	-	n/a	59.2	-
12:25 AM - 12:30 AM	61.6	64.3	-	n/a	59.5	-
12:30 AM - 12:35 AM	59.8	59.0	-	55.1	57.9	-2.8
12:35 AM - 12:40 AM	59.1	59.5	-	n/a	57.7	-
12:40 AM - 12:45 AM	59.9	59.0	-	55.6	57.5	-1.9
12:45 AM - 12:50 AM	58.9	58.6	-	50.1	57.1	-7.0
12:50 AM - 12:55 AM	59.3	58.8	-	52.7	57.4	-4.7
12:55 AM - 01:00 AM	60.4	58.9	-	58.1	57.3	0.8
01:00 AM - 01:05 AM	59.9	59.7	-	49.4	56.9	-7.5
01:05 AM - 01:10 AM	62.3	59.9	-	61.6	58.1	3.5
01:10 AM - 01:15 AM	60.4	60.4	-	n/a	59.1	-
01:15 AM - 01:20 AM	59.6	62.6	-	n/a	59.3	-
01:20 AM - 01:25 AM	62.7	62.6	-	49.3	59.7	-10.4
01:25 AM - 01:30 AM	63.1	60.8	-	62.2	59.6	2.6
01:30 AM - 01:35 AM	60.5	63.7	-	n/a	59.3	-
01:35 AM - 01:40 AM	64.6	65.1	-	n/a	60.1	-
01:40 AM - 01:45 AM	60.2	60.4	-	n/a	59.7	-
01:45 AM - 01:50 AM	59.4	65.2	-	n/a	59.6	-
01:50 AM - 01:55 AM	58.9	62.5	-	n/a	59.5	-
01:55 AM - 02:00 AM	61.8	60.2	-	59.7	59.2	0.5
02:00 AM - 02:05 AM	61.6	60.2	-	59.0	59.1	-0.1
02:05 AM - 02:10 AM	63.0	63.7	-	n/a	59.3	-
02:10 AM - 02:15 AM	59.8	60.7	-	n/a	59.6	-
02:15 AM - 02:20 AM	60.3	63.4	-	n/a	59.4	-
02:20 AM - 02:25 AM	60.3	63.0	-	n/a	59.7	-
02:25 AM - 02:30 AM	61.9	62.6	-	n/a	59.5	-
02:30 AM - 02:35 AM	60.9	60.6	-	52.1	59.5	-7.4
02:35 AM - 02:40 AM	61.5	63.0	-	n/a	59.4	-
02:40 AM - 02:45 AM	63.3	62.5	-	58.6	59.5	-0.9
02:45 AM - 02:50 AM	60.8	64.3	-	n/a	60.5	-
02:50 AM - 02:55 AM	63.1	65.0	-	n/a	61.7	-
02:55 AM - 03:00 AM	60.9	64.9	-	n/a	62.4	-
03:00 AM - 03:05 AM	60.7	67.1	-	n/a	61.4	-
03:05 AM - 03:10 AM	60.3	61.6	-	n/a	59.5	-
03:10 AM - 03:15 AM	62.3	61.7	-	56.4	59.6	-3.2
03:15 AM - 03:20 AM	62.2	62.3	-	n/a	59.3	-
03:20 AM - 03:25 AM	60.8	63.3	-	n/a	59.8	-
03:25 AM - 03:30 AM	59.9	62.3	-	n/a	59.8	-
03:30 AM - 03:35 AM	59.8	60.5	-	n/a	59.5	-
03:35 AM - 03:40 AM	62.9	60.1	-	62.7	59.3	3.4

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284537-1

Sample No. 24144513-22
Parameter เสียงรบกวน
Location รินรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 1617959)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858525

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	61.9	60.5	-	59.3	59.5	-0.2
03:45 AM - 03:50 AM	61.5	63.6	-	n/a	60.2	-
03:50 AM - 03:55 AM	61.1	64.8	-	n/a	60.1	-
03:55 AM - 04:00 AM	60.4	61.0	-	n/a	60.0	-
04:00 AM - 04:05 AM	59.8	61.2	-	n/a	60.2	-
04:05 AM - 04:10 AM	60.9	60.4	-	54.3	59.7	-5.4
04:10 AM - 04:15 AM	60.4	60.5	-	n/a	59.6	-
04:15 AM - 04:20 AM	60.4	60.9	-	n/a	60.2	-
04:20 AM - 04:25 AM	60.4	60.8	-	n/a	60.3	-
04:25 AM - 04:30 AM	60.1	61.0	-	n/a	60.1	-
04:30 AM - 04:35 AM	60.5	60.8	-	n/a	59.6	-
04:35 AM - 04:40 AM	60.9	60.5	-	53.3	59.6	-6.3
04:40 AM - 04:45 AM	61.5	61.2	-	52.7	59.9	-7.2
04:45 AM - 04:50 AM	61.1	61.5	-	n/a	60.1	-
04:50 AM - 04:55 AM	60.4	61.7	-	n/a	60.3	-
04:55 AM - 05:00 AM	60.8	61.2	-	n/a	60.2	-
05:00 AM - 05:05 AM	61.3	60.8	-	54.7	60.0	-5.3
05:05 AM - 05:10 AM	60.8	62.0	-	n/a	60.2	-
05:10 AM - 05:15 AM	61.3	62.1	-	n/a	60.8	-
05:15 AM - 05:20 AM	60.6	61.1	-	n/a	60.4	-
05:20 AM - 05:25 AM	61.9	61.2	-	56.6	60.2	-3.6
05:25 AM - 05:30 AM	62.6	62.1	-	56.0	60.3	-4.3
05:30 AM - 05:35 AM	61.0	64.1	-	n/a	60.8	-
05:35 AM - 05:40 AM	60.2	63.2	-	n/a	60.2	-
05:40 AM - 05:45 AM	60.2	61.2	-	n/a	60.5	-
05:45 AM - 05:50 AM	60.8	60.9	-	n/a	60.2	-
05:50 AM - 05:55 AM	61.5	61.0	-	54.9	60.2	-5.3
05:55 AM - 06:00 AM	63.2	61.3	-	61.7	60.7	1.0
06:00 AM - 07:00 AM	62.1	62.6	n/a	-	61.0	-
07:00 AM - 08:00 AM	61.5	62.7	n/a	-	60.7	-
08:00 AM - 09:00 AM	61.3	61.6	n/a	-	59.7	-
09:00 AM - 10:00 AM	61.4	63.0	n/a	-	60.9	-
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 02-03 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-22 วันที่ตรวจวัด 02-03 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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

Approved by
Kanokkorn Anek
Senior Manager

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284538-1

Sample No. 24144513-23
Parameter เสียงรบกวน
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 1617959)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858525

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	61.1	62.8	n/a	-	60.1	-
11:00 AM - 12:00 PM	60.0	60.7	n/a	-	59.4	-
12:00 PM - 01:00 PM	61.5	61.4	45.1	-	58.8	-13.7
01:00 PM - 02:00 PM	61.0	61.6	n/a	-	59.1	-
02:00 PM - 03:00 PM	61.8	62.2	n/a	-	59.5	-
03:00 PM - 04:00 PM	60.7	61.2	n/a	-	58.5	-
04:00 PM - 05:00 PM	63.4	64.0	n/a	-	60.6	-
05:00 PM - 06:00 PM	64.6	64.8	n/a	-	61.6	-
06:00 PM - 07:00 PM	64.5	64.4	48.1	-	61.8	-13.7
07:00 PM - 08:00 PM	62.7	63.3	n/a	-	60.7	-
08:00 PM - 09:00 PM	62.8	63.7	n/a	-	60.9	-
09:00 PM - 10:00 PM	62.2	62.7	n/a	-	60.8	-
10:00 PM - 10:05 PM	61.5	61.8	-	n/a	60.8	-
10:05 PM - 10:10 PM	61.4	60.9	-	54.8	60.4	-5.6
10:10 PM - 10:15 PM	65.0	61.2	-	65.7	60.4	5.3
10:15 PM - 10:20 PM	62.5	63.6	-	n/a	60.5	-
10:20 PM - 10:25 PM	62.1	63.4	-	n/a	60.4	-
10:25 PM - 10:30 PM	63.6	61.5	-	62.4	60.4	2.0
10:30 PM - 10:35 PM	62.6	62.1	-	56.0	60.6	-4.6
10:35 PM - 10:40 PM	62.0	65.5	-	n/a	60.8	-
10:40 PM - 10:45 PM	62.1	65.4	-	n/a	61.0	-
10:45 PM - 10:50 PM	61.5	60.9	-	55.6	60.0	-4.4
10:50 PM - 10:55 PM	62.1	61.3	-	57.4	60.1	-2.7
10:55 PM - 11:00 PM	62.3	61.0	-	59.4	59.5	-0.1
11:00 PM - 11:05 PM	62.1	61.4	-	56.8	60.1	-3.3
11:05 PM - 11:10 PM	62.9	61.3	-	60.8	60.4	0.4
11:10 PM - 11:15 PM	61.8	63.8	-	n/a	60.4	-
11:15 PM - 11:20 PM	62.1	60.3	-	60.4	58.4	2.0
11:20 PM - 11:25 PM	61.8	60.8	-	57.9	58.7	-0.8
11:25 PM - 11:30 PM	61.3	60.3	-	57.4	58.2	-0.8
11:30 PM - 11:35 PM	60.7	60.8	-	n/a	59.2	-
11:35 PM - 11:40 PM	60.3	59.9	-	52.7	58.5	-5.8
11:40 PM - 11:45 PM	60.1	59.6	-	53.5	58.2	-4.7
11:45 PM - 11:50 PM	60.6	59.7	-	56.3	58.3	-2.0
11:50 PM - 11:55 PM	60.0	59.8	-	49.5	58.4	-8.9
11:55 PM - 12:00 AM	60.3	59.2	-	56.8	58.0	-1.2
12:00 AM - 12:05 AM	60.5	60.4	-	47.1	58.6	-11.5
12:05 AM - 12:10 AM	60.6	60.3	-	51.8	58.5	-6.7
12:10 AM - 12:15 AM	60.4	59.6	-	55.7	58.2	-2.5
12:15 AM - 12:20 AM	61.9	60.4	-	59.6	59.2	0.4

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Approved by

Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284538-1

Sample No. 24144513-23
Parameter เสียงรบกวน
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 1617959)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858525

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	60.7	59.7	-	56.8	58.7	-1.9
12:25 AM - 12:30 AM	65.2	60.3	-	66.5	58.5	8.0
12:30 AM - 12:35 AM	60.9	62.5	-	n/a	58.8	-
12:35 AM - 12:40 AM	60.7	66.8	-	n/a	59.1	-
12:40 AM - 12:45 AM	60.5	60.5	-	n/a	59.6	-
12:45 AM - 12:50 AM	59.9	61.2	-	n/a	60.3	-
12:50 AM - 12:55 AM	59.9	60.7	-	n/a	59.7	-
12:55 AM - 01:00 AM	62.2	60.5	-	60.3	59.1	1.2
01:00 AM - 01:05 AM	59.6	60.3	-	n/a	58.6	-
01:05 AM - 01:10 AM	62.0	62.8	-	n/a	58.5	-
01:10 AM - 01:15 AM	64.2	62.3	-	62.7	60.1	2.6
01:15 AM - 01:20 AM	64.3	61.9	-	63.6	60.7	2.9
01:20 AM - 01:25 AM	64.4	66.1	-	n/a	61.0	-
01:25 AM - 01:30 AM	60.4	67.0	-	n/a	61.0	-
01:30 AM - 01:35 AM	63.4	61.9	-	61.1	60.7	0.4
01:35 AM - 01:40 AM	63.9	61.6	-	63.0	60.8	2.2
01:40 AM - 01:45 AM	64.0	64.7	-	n/a	60.8	-
01:45 AM - 01:50 AM	60.1	66.9	-	n/a	61.0	-
01:50 AM - 01:55 AM	60.1	61.6	-	n/a	60.5	-
01:55 AM - 02:00 AM	63.4	60.7	-	63.1	60.1	3.0
02:00 AM - 02:05 AM	61.6	63.0	-	n/a	60.2	-
02:05 AM - 02:10 AM	61.0	64.9	-	n/a	61.1	-
02:10 AM - 02:15 AM	59.9	62.0	-	n/a	60.2	-
02:15 AM - 02:20 AM	61.1	60.7	-	53.5	59.6	-6.1
02:20 AM - 02:25 AM	60.0	61.1	-	n/a	59.9	-
02:25 AM - 02:30 AM	60.5	60.9	-	n/a	59.5	-
02:30 AM - 02:35 AM	61.0	60.9	-	47.6	60.2	-12.6
02:35 AM - 02:40 AM	61.4	60.9	-	54.8	59.9	-5.1
02:40 AM - 02:45 AM	60.9	61.1	-	n/a	60.5	-
02:45 AM - 02:50 AM	62.2	61.4	-	57.5	60.2	-2.7
02:50 AM - 02:55 AM	60.6	64.6	-	n/a	60.7	-
02:55 AM - 03:00 AM	60.3	61.4	-	n/a	60.5	-
03:00 AM - 03:05 AM	60.9	60.9	-	n/a	60.3	-
03:05 AM - 03:10 AM	61.4	62.0	-	n/a	60.4	-
03:10 AM - 03:15 AM	62.1	61.9	-	51.6	60.5	-8.9
03:15 AM - 03:20 AM	61.7	64.7	-	n/a	60.8	-
03:20 AM - 03:25 AM	61.8	65.5	-	n/a	62.4	-
03:25 AM - 03:30 AM	61.1	63.4	-	n/a	61.7	-
03:30 AM - 03:35 AM	62.2	65.3	-	n/a	62.9	-
03:35 AM - 03:40 AM	59.9	63.8	-	n/a	60.3	-

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Kanokkorn Anek
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284538-1

Sample No. 24144513-23
Parameter เสียงรบกวน
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 1617959)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858525

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	61.1	60.8	-	52.3	60.0	-7.7
03:45 AM - 03:50 AM	62.6	60.7	-	61.1	60.0	1.1
03:50 AM - 03:55 AM	60.8	63.7	-	n/a	60.6	-
03:55 AM - 04:00 AM	62.5	61.4	-	59.0	60.7	-1.7
04:00 AM - 04:05 AM	60.8	62.8	-	n/a	60.3	-
04:05 AM - 04:10 AM	61.2	65.6	-	n/a	60.6	-
04:10 AM - 04:15 AM	60.6	61.4	-	n/a	60.5	-
04:15 AM - 04:20 AM	61.2	61.2	-	n/a	60.2	-
04:20 AM - 04:25 AM	61.2	60.8	-	53.6	60.0	-6.4
04:25 AM - 04:30 AM	60.8	62.1	-	n/a	60.0	-
04:30 AM - 04:35 AM	61.5	60.8	-	56.2	60.2	-4.0
04:35 AM - 04:40 AM	60.9	61.6	-	n/a	60.8	-
04:40 AM - 04:45 AM	60.9	61.3	-	n/a	60.7	-
04:45 AM - 04:50 AM	60.4	61.5	-	n/a	60.7	-
04:50 AM - 04:55 AM	61.2	61.0	-	50.7	60.5	-9.8
04:55 AM - 05:00 AM	61.1	61.0	-	47.7	60.4	-12.7
05:00 AM - 05:05 AM	60.6	61.8	-	n/a	60.4	-
05:05 AM - 05:10 AM	60.5	61.1	-	n/a	60.4	-
05:10 AM - 05:15 AM	61.0	60.3	-	55.7	59.7	-4.0
05:15 AM - 05:20 AM	61.9	60.8	-	58.4	60.3	-1.9
05:20 AM - 05:25 AM	60.9	61.8	-	n/a	60.6	-
05:25 AM - 05:30 AM	60.9	60.9	-	n/a	60.4	-
05:30 AM - 05:35 AM	60.9	61.6	-	n/a	60.2	-
05:35 AM - 05:40 AM	61.2	61.1	-	47.8	60.5	-12.7
05:40 AM - 05:45 AM	63.9	63.0	-	59.6	61.1	-1.5
05:45 AM - 05:50 AM	64.1	66.1	-	n/a	61.2	-
05:50 AM - 05:55 AM	63.5	62.3	-	60.3	60.9	-0.6
05:55 AM - 06:00 AM	64.0	63.0	-	60.1	61.9	-1.8
06:00 AM - 07:00 AM	62.2	63.2	n/a	-	61.1	-
07:00 AM - 08:00 AM	61.9	62.8	n/a	-	59.8	-
08:00 AM - 09:00 AM	61.4	61.9	n/a	-	59.8	-
09:00 AM - 10:00 AM	62.8	64.9	n/a	-	62.6	-
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 03-04 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-23 วันที่ตรวจวัด 03-04 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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

Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284539-1

Sample No. 24144513-24
Parameter เสียงรบกวน
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 1617959)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858525

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	62.1	63.4	n/a	-	61.4	-
11:00 AM - 12:00 PM	62.9	62.8	46.5	-	61.0	-14.5
12:00 PM - 01:00 PM	62.3	62.4	n/a	-	60.9	-
01:00 PM - 02:00 PM	62.6	63.7	n/a	-	61.6	-
02:00 PM - 03:00 PM	62.3	62.9	n/a	-	61.4	-
03:00 PM - 04:00 PM	65.7	69.7	n/a	-	65.2	-
04:00 PM - 05:00 PM	63.9	64.1	n/a	-	62.2	-
05:00 PM - 06:00 PM	64.2	64.8	n/a	-	62.3	-
06:00 PM - 07:00 PM	65.6	65.5	49.2	-	63.0	-13.8
07:00 PM - 08:00 PM	65.2	64.7	55.6	-	61.9	-6.3
08:00 PM - 09:00 PM	64.2	64.0	50.7	-	61.7	-11.0
09:00 PM - 10:00 PM	64.4	64.4	n/a	-	61.9	-
10:00 PM - 10:05 PM	62.6	64.3	-	n/a	62.0	-
10:05 PM - 10:10 PM	64.7	63.7	-	60.8	62.2	-1.4
10:10 PM - 10:15 PM	64.0	63.9	-	50.6	62.2	-11.6
10:15 PM - 10:20 PM	66.4	64.1	-	65.5	62.3	3.2
10:20 PM - 10:25 PM	64.3	65.9	-	n/a	62.7	-
10:25 PM - 10:30 PM	65.1	67.1	-	n/a	62.6	-
10:30 PM - 10:35 PM	64.7	64.5	-	54.2	62.2	-8.0
10:35 PM - 10:40 PM	65.2	65.5	-	n/a	62.5	-
10:40 PM - 10:45 PM	63.1	64.5	-	n/a	60.9	-
10:45 PM - 10:50 PM	64.1	62.0	-	62.9	60.9	2.0
10:50 PM - 10:55 PM	61.8	64.3	-	n/a	60.9	-
10:55 PM - 11:00 PM	62.0	61.4	-	56.1	60.6	-4.5
11:00 PM - 11:05 PM	61.8	61.3	-	55.2	60.4	-5.2
11:05 PM - 11:10 PM	62.1	63.6	-	n/a	61.5	-
11:10 PM - 11:15 PM	61.6	62.8	-	n/a	60.8	-
11:15 PM - 11:20 PM	61.2	61.1	-	47.8	59.3	-11.5
11:20 PM - 11:25 PM	63.7	60.9	-	63.5	59.4	4.1
11:25 PM - 11:30 PM	62.1	63.7	-	n/a	59.3	-
11:30 PM - 11:35 PM	60.9	61.2	-	n/a	59.7	-
11:35 PM - 11:40 PM	60.8	60.0	-	56.1	59.3	-3.2
11:40 PM - 11:45 PM	60.9	60.3	-	55.0	58.4	-3.4
11:45 PM - 11:50 PM	61.2	60.4	-	56.5	58.9	-2.4
11:50 PM - 11:55 PM	60.5	60.2	-	51.7	58.6	-6.9
11:55 PM - 12:00 AM	61.2	59.4	-	59.5	58.2	1.3
12:00 AM - 12:05 AM	61.4	59.6	-	59.7	58.5	1.2
12:05 AM - 12:10 AM	61.2	60.2	-	57.3	59.3	-2.0
12:10 AM - 12:15 AM	61.8	60.2	-	59.7	58.9	0.8
12:15 AM - 12:20 AM	62.5	61.0	-	60.2	60.1	0.1

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284539-1

Sample No. 24144513-24
Parameter เสียงรบกวน
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 1617959)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858525

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	63.6	61.5	-	62.4	60.5	1.9
12:25 AM - 12:30 AM	63.1	65.6	-	n/a	60.7	-
12:30 AM - 12:35 AM	63.7	63.2	-	57.1	59.3	-2.2
12:35 AM - 12:40 AM	60.6	63.4	-	n/a	59.2	-
12:40 AM - 12:45 AM	63.4	59.8	-	63.9	58.9	5.0
12:45 AM - 12:50 AM	61.0	62.9	-	n/a	59.5	-
12:50 AM - 12:55 AM	64.2	60.5	-	64.8	59.4	5.4
12:55 AM - 01:00 AM	60.4	64.8	-	n/a	59.8	-
01:00 AM - 01:05 AM	63.3	59.7	-	63.8	58.3	5.5
01:05 AM - 01:10 AM	64.2	62.8	-	61.6	58.2	3.4
01:10 AM - 01:15 AM	64.6	63.1	-	62.3	58.5	3.8
01:15 AM - 01:20 AM	61.9	63.6	-	n/a	59.4	-
01:20 AM - 01:25 AM	61.1	61.7	-	n/a	59.1	-
01:25 AM - 01:30 AM	64.4	60.7	-	65.0	58.6	6.4
01:30 AM - 01:35 AM	64.1	67.0	-	n/a	60.0	-
01:35 AM - 01:40 AM	62.4	64.2	-	n/a	58.5	-
01:40 AM - 01:45 AM	61.2	64.7	-	n/a	59.9	-
01:45 AM - 01:50 AM	61.7	61.1	-	55.8	59.6	-3.8
01:50 AM - 01:55 AM	61.8	62.3	-	n/a	59.7	-
01:55 AM - 02:00 AM	60.8	61.9	-	n/a	59.7	-
02:00 AM - 02:05 AM	59.8	61.8	-	n/a	59.8	-
02:05 AM - 02:10 AM	60.3	60.1	-	49.8	59.3	-9.5
02:10 AM - 02:15 AM	60.3	59.8	-	53.7	58.8	-5.1
02:15 AM - 02:20 AM	60.3	60.0	-	51.5	59.0	-7.5
02:20 AM - 02:25 AM	65.9	60.0	-	67.6	59.0	8.6
02:25 AM - 02:30 AM	63.1	65.8	-	n/a	58.8	-
02:30 AM - 02:35 AM	59.9	59.9	-	n/a	58.7	-
02:35 AM - 02:40 AM	60.1	62.5	-	n/a	59.1	-
02:40 AM - 02:45 AM	63.9	59.9	-	64.7	59.0	5.7
02:45 AM - 02:50 AM	64.0	59.9	-	64.9	58.9	6.0
02:50 AM - 02:55 AM	63.7	65.6	-	n/a	59.6	-
02:55 AM - 03:00 AM	63.9	63.6	-	55.1	59.6	-4.5
03:00 AM - 03:05 AM	61.5	60.3	-	58.3	59.1	-0.8
03:05 AM - 03:10 AM	60.6	65.5	-	n/a	59.8	-
03:10 AM - 03:15 AM	62.3	60.8	-	60.0	59.0	1.0
03:15 AM - 03:20 AM	61.7	62.1	-	n/a	59.5	-
03:20 AM - 03:25 AM	62.8	62.8	-	n/a	59.7	-
03:25 AM - 03:30 AM	61.2	61.9	-	n/a	59.6	-
03:30 AM - 03:35 AM	60.3	61.6	-	n/a	59.2	-
03:35 AM - 03:40 AM	61.5	60.0	-	59.2	59.1	0.1

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Approved by

Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284539-1

Sample No. 24144513-25
Parameter เสียงรบกวน
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 1617959)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858525

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	61.2	61.3	-	n/a	59.4	-
03:45 AM - 03:50 AM	59.7	60.2	-	n/a	59.2	-
03:50 AM - 03:55 AM	59.7	60.2	-	n/a	59.0	-
03:55 AM - 04:00 AM	61.0	60.5	-	54.4	58.6	-4.2
04:00 AM - 04:05 AM	60.2	60.7	-	n/a	58.9	-
04:05 AM - 04:10 AM	59.8	60.0	-	n/a	58.9	-
04:10 AM - 04:15 AM	59.8	59.5	-	51.0	58.7	-7.7
04:15 AM - 04:20 AM	61.4	60.5	-	57.1	59.5	-2.4
04:20 AM - 04:25 AM	63.0	63.1	-	n/a	59.4	-
04:25 AM - 04:30 AM	60.4	62.1	-	n/a	58.8	-
04:30 AM - 04:35 AM	60.2	61.5	-	n/a	59.5	-
04:35 AM - 04:40 AM	61.6	59.9	-	59.7	58.6	1.1
04:40 AM - 04:45 AM	61.1	62.3	-	n/a	59.8	-
04:45 AM - 04:50 AM	60.6	61.6	-	n/a	59.2	-
04:50 AM - 04:55 AM	60.4	60.5	-	n/a	59.3	-
04:55 AM - 05:00 AM	60.5	60.0	-	53.9	59.2	-5.3
05:00 AM - 05:05 AM	59.9	60.9	-	n/a	59.3	-
05:05 AM - 05:10 AM	60.1	59.7	-	52.5	58.9	-6.4
05:10 AM - 05:15 AM	61.4	60.4	-	57.5	59.2	-1.7
05:15 AM - 05:20 AM	61.1	60.8	-	52.3	60.0	-7.7
05:20 AM - 05:25 AM	60.9	62.4	-	n/a	59.7	-
05:25 AM - 05:30 AM	60.7	60.9	-	n/a	60.0	-
05:30 AM - 05:35 AM	61.6	60.5	-	58.1	59.6	-1.5
05:35 AM - 05:40 AM	61.4	61.7	-	n/a	59.7	-
05:40 AM - 05:45 AM	61.9	61.6	-	53.1	59.5	-6.4
05:45 AM - 05:50 AM	62.1	63.8	-	n/a	59.9	-
05:50 AM - 05:55 AM	65.0	62.5	-	64.4	60.2	4.2
05:55 AM - 06:00 AM	64.0	63.1	-	59.7	61.5	-1.8
06:00 AM - 07:00 AM	61.9	62.0	n/a	-	60.6	-
07:00 AM - 08:00 AM	62.2	61.4	54.5	-	60.1	-5.6
08:00 AM - 09:00 AM	64.1	64.0	47.7	-	61.6	-13.9
09:00 AM - 10:00 AM	63.0	63.8	n/a	-	61.6	-
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 04-05 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-24 วันที่ตรวจวัด 04-05 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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Approved by

Kanokkorn Anek
Senior Manager

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284540-1

Sample No. 24144513-25
Parameter เสียงรบกวน
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 1617959)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858525

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	63.3	63.7	n/a	-	61.4	-
11:00 AM - 12:00 PM	63.4	63.4	n/a	-	61.6	-
12:00 PM - 01:00 PM	63.2	63.3	n/a	-	61.5	-
01:00 PM - 02:00 PM	63.4	63.5	n/a	-	61.5	-
02:00 PM - 03:00 PM	63.8	63.5	52.0	-	61.2	-9.2
03:00 PM - 04:00 PM	62.9	62.7	49.4	-	60.7	-11.3
04:00 PM - 05:00 PM	63.6	62.3	57.7	-	60.8	-3.1
05:00 PM - 06:00 PM	63.9	63.6	52.1	-	61.4	-9.3
06:00 PM - 07:00 PM	63.6	63.9	n/a	-	62.3	-
07:00 PM - 08:00 PM	63.6	63.2	53.0	-	61.3	-8.3
08:00 PM - 09:00 PM	62.7	62.6	46.3	-	61.2	-14.9
09:00 PM - 10:00 PM	62.1	62.1	n/a	-	60.6	-
10:00 PM - 10:05 PM	62.3	61.0	-	59.4	59.9	-0.5
10:05 PM - 10:10 PM	62.0	63.0	-	n/a	61.0	-
10:10 PM - 10:15 PM	61.6	62.1	-	n/a	60.2	-
10:15 PM - 10:20 PM	64.7	62.0	-	64.4	59.6	4.8
10:20 PM - 10:25 PM	63.6	62.3	-	60.7	60.8	-0.1
10:25 PM - 10:30 PM	62.7	62.3	-	55.1	60.8	-5.7
10:30 PM - 10:35 PM	62.5	67.6	-	n/a	61.4	-
10:35 PM - 10:40 PM	61.3	62.6	-	n/a	61.7	-
10:40 PM - 10:45 PM	61.7	61.8	-	n/a	60.8	-
10:45 PM - 10:50 PM	61.6	61.7	-	n/a	60.8	-
10:50 PM - 10:55 PM	61.8	64.9	-	n/a	61.5	-
10:55 PM - 11:00 PM	61.3	61.6	-	n/a	60.8	-
11:00 PM - 11:05 PM	61.4	61.8	-	n/a	61.2	-
11:05 PM - 11:10 PM	62.3	61.8	-	55.7	61.2	-5.5
11:10 PM - 11:15 PM	61.9	61.7	-	51.4	60.9	-9.5
11:15 PM - 11:20 PM	61.6	62.2	-	n/a	61.0	-
11:20 PM - 11:25 PM	62.5	62.0	-	55.9	60.7	-4.8
11:25 PM - 11:30 PM	61.4	63.4	-	n/a	60.6	-
11:30 PM - 11:35 PM	61.2	61.3	-	n/a	60.5	-
11:35 PM - 11:40 PM	62.1	61.2	-	57.8	60.5	-2.7
11:40 PM - 11:45 PM	61.4	62.7	-	n/a	60.6	-
11:45 PM - 11:50 PM	61.5	61.5	-	n/a	60.5	-
11:50 PM - 11:55 PM	61.6	61.6	-	n/a	60.5	-
11:55 PM - 12:00 AM	60.1	61.3	-	n/a	60.1	-
12:00 AM - 12:05 AM	62.5	60.4	-	61.3	59.5	1.8
12:05 AM - 12:10 AM	61.2	61.6	-	n/a	59.7	-
12:10 AM - 12:15 AM	61.1	60.6	-	54.5	59.3	-4.8
12:15 AM - 12:20 AM	60.8	61.4	-	n/a	60.3	-

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284540-1

Sample No. 24144513-25
Parameter เสียงรบกวน
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 1617959)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858525

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	64.3	61.2	-	64.4	60.4	4.0
12:25 AM - 12:30 AM	60.8	62.7	-	n/a	60.3	-
12:30 AM - 12:35 AM	60.5	61.2	-	n/a	59.4	-
12:35 AM - 12:40 AM	60.1	60.3	-	n/a	59.4	-
12:40 AM - 12:45 AM	60.0	59.4	-	54.1	58.2	-4.1
12:45 AM - 12:50 AM	59.5	58.9	-	53.6	57.4	-3.8
12:50 AM - 12:55 AM	59.7	59.3	-	52.1	57.4	-5.3
12:55 AM - 01:00 AM	64.8	60.4	-	65.8	58.1	7.7
01:00 AM - 01:05 AM	60.0	62.2	-	n/a	56.9	-
01:05 AM - 01:10 AM	60.1	64.3	-	n/a	58.8	-
01:10 AM - 01:15 AM	61.8	59.7	-	60.6	58.9	1.7
01:15 AM - 01:20 AM	61.8	64.9	-	n/a	58.8	-
01:20 AM - 01:25 AM	65.7	60.8	-	67.0	59.4	7.6
01:25 AM - 01:30 AM	63.8	65.8	-	n/a	60.2	-
01:30 AM - 01:35 AM	65.7	63.3	-	65.0	59.3	5.7
01:35 AM - 01:40 AM	61.3	63.9	-	n/a	59.6	-
01:40 AM - 01:45 AM	63.4	64.6	-	n/a	59.8	-
01:45 AM - 01:50 AM	65.0	60.8	-	65.9	59.1	6.8
01:50 AM - 01:55 AM	60.1	66.5	-	n/a	60.0	-
01:55 AM - 02:00 AM	63.4	62.6	-	58.7	58.7	0.0
02:00 AM - 02:05 AM	60.4	63.0	-	n/a	59.1	-
02:05 AM - 02:10 AM	60.8	61.5	-	n/a	58.4	-
02:10 AM - 02:15 AM	60.5	61.9	-	n/a	58.4	-
02:15 AM - 02:20 AM	59.5	60.6	-	n/a	58.6	-
02:20 AM - 02:25 AM	60.9	60.1	-	56.2	58.3	-2.1
02:25 AM - 02:30 AM	60.4	61.8	-	n/a	58.1	-
02:30 AM - 02:35 AM	63.4	60.3	-	63.5	58.9	4.6
02:35 AM - 02:40 AM	60.5	62.5	-	n/a	58.4	-
02:40 AM - 02:45 AM	59.3	64.4	-	n/a	58.5	-
02:45 AM - 02:50 AM	59.9	60.2	-	n/a	57.9	-
02:50 AM - 02:55 AM	59.6	59.9	-	n/a	58.5	-
02:55 AM - 03:00 AM	59.9	59.9	-	n/a	58.4	-
03:00 AM - 03:05 AM	60.6	60.0	-	54.7	57.8	-3.1
03:05 AM - 03:10 AM	59.0	62.3	-	n/a	57.6	-
03:10 AM - 03:15 AM	59.4	59.7	-	n/a	57.7	-
03:15 AM - 03:20 AM	59.3	59.7	-	n/a	57.5	-
03:20 AM - 03:25 AM	59.4	60.2	-	n/a	57.9	-
03:25 AM - 03:30 AM	59.3	59.7	-	n/a	57.7	-
03:30 AM - 03:35 AM	59.3	59.4	-	n/a	57.7	-
03:35 AM - 03:40 AM	62.2	59.9	-	61.3	57.6	3.7

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Kanokkorn Anek
Senior Manager

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Life Sciences www.alsglobal.com
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284540-1

Sample No. 24144513-25
Parameter เสียงรบกวน
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 1617959)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858525

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	61.4	65.0	-	n/a	59.5	-
03:45 AM - 03:50 AM	61.0	66.3	-	n/a	63.3	-
03:50 AM - 03:55 AM	61.9	64.2	-	n/a	57.9	-
03:55 AM - 04:00 AM	59.8	67.0	-	n/a	58.0	-
04:00 AM - 04:05 AM	60.3	61.4	-	n/a	58.0	-
04:05 AM - 04:10 AM	60.4	60.3	-	47.0	58.7	-11.7
04:10 AM - 04:15 AM	59.2	59.9	-	n/a	58.8	-
04:15 AM - 04:20 AM	59.4	58.7	-	54.1	57.9	-3.8
04:20 AM - 04:25 AM	58.2	59.1	-	n/a	57.9	-
04:25 AM - 04:30 AM	60.0	58.4	-	57.9	57.3	0.6
04:30 AM - 04:35 AM	59.4	59.1	-	50.6	57.8	-7.2
04:35 AM - 04:40 AM	59.0	59.1	-	n/a	57.6	-
04:40 AM - 04:45 AM	58.7	58.8	-	n/a	57.8	-
04:45 AM - 04:50 AM	60.2	58.6	-	58.1	57.9	0.2
04:50 AM - 04:55 AM	59.9	58.5	-	57.3	57.1	0.2
04:55 AM - 05:00 AM	60.7	60.8	-	n/a	57.8	-
05:00 AM - 05:05 AM	59.1	60.1	-	n/a	58.1	-
05:05 AM - 05:10 AM	61.1	58.9	-	60.1	57.7	2.4
05:10 AM - 05:15 AM	60.6	60.1	-	54.0	58.3	-4.3
05:15 AM - 05:20 AM	60.7	60.8	-	n/a	58.8	-
05:20 AM - 05:25 AM	60.4	62.3	-	n/a	58.4	-
05:25 AM - 05:30 AM	60.7	64.1	-	n/a	58.3	-
05:30 AM - 05:35 AM	60.5	61.6	-	n/a	58.3	-
05:35 AM - 05:40 AM	60.4	59.7	-	55.1	58.3	-3.2
05:40 AM - 05:45 AM	60.3	60.0	-	51.5	58.6	-7.1
05:45 AM - 05:50 AM	61.0	60.0	-	57.1	58.9	-1.8
05:50 AM - 05:55 AM	63.2	59.7	-	63.6	57.8	5.8
05:55 AM - 06:00 AM	62.6	61.1	-	60.3	59.0	1.3
06:00 AM - 07:00 AM	61.0	60.7	49.2	-	59.1	-9.9
07:00 AM - 08:00 AM	61.5	61.4	45.1	-	59.0	-13.9
08:00 AM - 09:00 AM	62.0	60.7	56.1	-	58.9	-2.8
09:00 AM - 10:00 AM	62.9	62.6	51.1	-	60.5	-9.4
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 05-06 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-25 วันที่ตรวจวัด 05-06 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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Approved by

Kanokkorn Anek
Senior Manager

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284541-1

Sample No. 24144513-26
Parameter เสียงรบกวน
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 1617959)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858525

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	62.7	62.4	50.9	-	60.5	-9.6
11:00 AM - 12:00 PM	62.8	62.8	n/a	-	60.8	-
12:00 PM - 01:00 PM	62.6	62.9	n/a	-	60.9	-
01:00 PM - 02:00 PM	62.5	62.3	49.0	-	60.5	-11.5
02:00 PM - 03:00 PM	62.6	62.5	46.2	-	60.1	-13.9
03:00 PM - 04:00 PM	62.1	61.9	48.6	-	60.1	-11.5
04:00 PM - 05:00 PM	62.4	61.8	53.5	-	59.4	-5.9
05:00 PM - 06:00 PM	63.1	63.1	n/a	-	60.5	-
06:00 PM - 07:00 PM	63.2	62.8	52.6	-	61.2	-8.6
07:00 PM - 08:00 PM	61.5	61.7	n/a	-	59.3	-
08:00 PM - 09:00 PM	60.9	60.7	47.4	-	59.4	-12.0
09:00 PM - 10:00 PM	61.1	60.6	51.5	-	59.1	-7.6
10:00 PM - 10:05 PM	61.7	59.4	-	60.8	57.4	3.4
10:05 PM - 10:10 PM	59.4	60.6	-	n/a	58.2	-
10:10 PM - 10:15 PM	60.6	58.6	-	59.3	57.2	2.1
10:15 PM - 10:20 PM	60.2	58.8	-	57.6	57.2	0.4
10:20 PM - 10:25 PM	60.5	59.4	-	57.0	57.8	-0.8
10:25 PM - 10:30 PM	60.8	61.3	-	n/a	57.5	-
10:30 PM - 10:35 PM	60.4	59.6	-	55.7	58.2	-2.5
10:35 PM - 10:40 PM	60.1	60.0	-	46.7	58.4	-11.7
10:40 PM - 10:45 PM	60.3	59.9	-	52.7	57.9	-5.2
10:45 PM - 10:50 PM	60.0	59.3	-	54.7	58.0	-3.3
10:50 PM - 10:55 PM	59.5	59.1	-	51.9	57.8	-5.9
10:55 PM - 11:00 PM	59.5	59.2	-	50.7	57.9	-7.2
11:00 PM - 11:05 PM	60.0	58.6	-	57.4	57.4	0.0
11:05 PM - 11:10 PM	60.8	58.5	-	59.9	57.1	2.8
11:10 PM - 11:15 PM	60.0	61.0	-	n/a	57.9	-
11:15 PM - 11:20 PM	60.6	58.4	-	59.6	56.5	3.1
11:20 PM - 11:25 PM	61.6	58.6	-	61.6	56.2	5.4
11:25 PM - 11:30 PM	61.1	61.5	-	n/a	59.3	-
11:30 PM - 11:35 PM	62.2	62.1	-	48.8	58.7	-9.9
11:35 PM - 11:40 PM	60.4	60.2	-	49.9	57.0	-7.1
11:40 PM - 11:45 PM	59.9	58.7	-	56.7	57.1	-0.4
11:45 PM - 11:50 PM	60.0	58.7	-	57.1	57.8	-0.7
11:50 PM - 11:55 PM	59.4	58.0	-	56.8	56.6	0.2
11:55 PM - 12:00 AM	61.4	57.9	-	61.8	56.7	5.1
12:00 AM - 12:05 AM	60.2	58.6	-	58.1	56.9	1.2
12:05 AM - 12:10 AM	60.5	59.7	-	55.8	58.1	-2.3
12:10 AM - 12:15 AM	60.5	60.0	-	53.9	58.8	-4.9
12:15 AM - 12:20 AM	60.7	60.0	-	55.4	58.0	-2.6

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Kanokkorn Anek
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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284541-1

Sample No. 24144513-26
Parameter เสียงรบกวน
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 1617959)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858525

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	61.3	59.4	-	59.8	58.0	1.8
12:25 AM - 12:30 AM	61.1	61.4	-	n/a	58.5	-
12:30 AM - 12:35 AM	61.0	63.8	-	n/a	60.4	-
12:35 AM - 12:40 AM	60.8	61.5	-	n/a	60.1	-
12:40 AM - 12:45 AM	59.9	60.8	-	n/a	59.8	-
12:45 AM - 12:50 AM	60.0	60.8	-	n/a	59.5	-
12:50 AM - 12:55 AM	59.7	60.7	-	n/a	59.1	-
12:55 AM - 01:00 AM	59.7	60.4	-	n/a	59.2	-
01:00 AM - 01:05 AM	60.2	60.3	-	n/a	59.2	-
01:05 AM - 01:10 AM	61.6	61.2	-	54.0	58.9	-4.9
01:10 AM - 01:15 AM	63.4	65.2	-	n/a	61.2	-
01:15 AM - 01:20 AM	62.0	65.9	-	n/a	62.4	-
01:20 AM - 01:25 AM	62.4	68.2	-	n/a	64.1	-
01:25 AM - 01:30 AM	62.9	63.6	-	n/a	60.2	-
01:30 AM - 01:35 AM	62.4	64.7	-	n/a	60.2	-
01:35 AM - 01:40 AM	61.3	63.7	-	n/a	59.4	-
01:40 AM - 01:45 AM	60.9	62.3	-	n/a	59.4	-
01:45 AM - 01:50 AM	60.1	60.7	-	n/a	59.7	-
01:50 AM - 01:55 AM	59.8	60.7	-	n/a	59.5	-
01:55 AM - 02:00 AM	59.8	60.1	-	n/a	58.6	-
02:00 AM - 02:05 AM	59.3	59.7	-	n/a	58.8	-
02:05 AM - 02:10 AM	62.1	58.6	-	62.5	57.4	5.1
02:10 AM - 02:15 AM	60.3	61.5	-	n/a	58.0	-
02:15 AM - 02:20 AM	59.0	61.4	-	n/a	57.5	-
02:20 AM - 02:25 AM	59.2	59.1	-	45.8	58.1	-12.3
02:25 AM - 02:30 AM	60.0	58.6	-	57.4	57.2	0.2
02:30 AM - 02:35 AM	59.3	59.0	-	50.5	57.5	-7.0
02:35 AM - 02:40 AM	59.1	60.1	-	n/a	57.2	-
02:40 AM - 02:45 AM	60.5	58.5	-	59.2	57.3	1.9
02:45 AM - 02:50 AM	59.0	61.3	-	n/a	58.3	-
02:50 AM - 02:55 AM	59.8	58.6	-	56.6	57.5	-0.9
02:55 AM - 03:00 AM	59.1	59.1	-	n/a	58.0	-
03:00 AM - 03:05 AM	59.6	59.1	-	53.0	58.2	-5.2
03:05 AM - 03:10 AM	59.5	59.2	-	50.7	58.2	-7.5
03:10 AM - 03:15 AM	59.3	59.5	-	n/a	58.6	-
03:15 AM - 03:20 AM	59.2	58.8	-	51.6	57.9	-6.3
03:20 AM - 03:25 AM	60.5	58.8	-	58.6	57.9	0.7
03:25 AM - 03:30 AM	60.5	60.5	-	n/a	57.8	-
03:30 AM - 03:35 AM	59.5	59.4	-	46.1	57.6	-11.5
03:35 AM - 03:40 AM	59.0	59.0	-	n/a	57.8	-

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Approved by

Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284541-1

Sample No. 24144513-26
Parameter เสียงรบกวน
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 1617959)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858525

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	59.0	58.3	-	53.7	57.1	-3.4
03:45 AM - 03:50 AM	59.3	58.5	-	54.6	57.4	-2.8
03:50 AM - 03:55 AM	59.5	58.5	-	55.6	57.1	-1.5
03:55 AM - 04:00 AM	60.3	58.0	-	59.4	56.5	2.9
04:00 AM - 04:05 AM	59.1	57.6	-	56.8	56.4	0.4
04:05 AM - 04:10 AM	58.7	59.1	-	n/a	57.0	-
04:10 AM - 04:15 AM	59.2	58.0	-	56.0	56.8	-0.8
04:15 AM - 04:20 AM	61.5	58.1	-	61.8	57.1	4.7
04:20 AM - 04:25 AM	59.1	58.7	-	51.5	56.5	-5.0
04:25 AM - 04:30 AM	60.3	58.1	-	59.3	56.2	3.1
04:30 AM - 04:35 AM	58.8	60.9	-	n/a	56.6	-
04:35 AM - 04:40 AM	59.2	57.2	-	57.9	56.1	1.8
04:40 AM - 04:45 AM	59.3	57.6	-	57.4	56.3	1.1
04:45 AM - 04:50 AM	60.2	57.9	-	59.3	56.5	2.8
04:50 AM - 04:55 AM	59.2	58.2	-	55.3	56.8	-1.5
04:55 AM - 05:00 AM	60.2	59.5	-	54.9	56.7	-1.8
05:00 AM - 05:05 AM	58.6	59.1	-	n/a	57.1	-
05:05 AM - 05:10 AM	60.2	58.0	-	59.2	56.6	2.6
05:10 AM - 05:15 AM	59.2	58.8	-	51.6	56.3	-4.7
05:15 AM - 05:20 AM	62.4	58.5	-	63.1	56.9	6.2
05:20 AM - 05:25 AM	58.8	60.5	-	n/a	57.6	-
05:25 AM - 05:30 AM	60.1	60.1	-	n/a	57.1	-
05:30 AM - 05:35 AM	60.1	58.7	-	57.5	57.3	0.2
05:35 AM - 05:40 AM	60.1	58.9	-	56.9	57.6	-0.7
05:40 AM - 05:45 AM	59.4	59.0	-	51.8	58.0	-6.2
05:45 AM - 05:50 AM	60.1	58.1	-	58.8	57.0	1.8
05:50 AM - 05:55 AM	59.5	59.4	-	46.1	56.8	-10.7
05:55 AM - 06:00 AM	65.3	58.7	-	67.2	57.2	10.0
06:00 AM - 07:00 AM	62.4	62.6	n/a	-	59.6	-
07:00 AM - 08:00 AM	61.1	61.1	n/a	-	59.0	-
08:00 AM - 09:00 AM	63.2	62.0	57.0	-	60.2	-3.2
09:00 AM - 10:00 AM	64.2	64.6	n/a	-	62.5	-
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 06-07 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-26 วันที่ตรวจวัด 06-07 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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

Approved by

Kanokkorn Anek
Senior Manager

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284542-1

Sample No. 24144513-27
Parameter เสียงรบกวน
Location รับริ้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 1617959)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858525

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	63.2	64.5	n/a	-	62.2	-
11:00 AM - 12:00 PM	62.0	62.2	n/a	-	60.0	-
12:00 PM - 01:00 PM	62.2	62.2	n/a	-	60.4	-
01:00 PM - 02:00 PM	62.5	62.5	n/a	-	60.1	-
02:00 PM - 03:00 PM	62.2	61.9	50.4	-	60.1	-9.7
03:00 PM - 04:00 PM	62.9	61.9	56.0	-	60.4	-4.4
04:00 PM - 05:00 PM	62.5	63.0	n/a	-	61.0	-
05:00 PM - 06:00 PM	63.9	62.7	57.7	-	61.2	-3.5
06:00 PM - 07:00 PM	64.6	63.2	59.0	-	60.2	-1.2
07:00 PM - 08:00 PM	63.3	61.7	58.2	-	59.2	-1.0
08:00 PM - 09:00 PM	63.2	62.4	55.5	-	59.0	-3.5
09:00 PM - 10:00 PM	62.8	62.1	54.5	-	59.7	-5.2
10:00 PM - 10:05 PM	62.3	59.7	-	61.8	59.0	2.8
10:05 PM - 10:10 PM	61.8	60.1	-	59.9	59.4	0.5
10:10 PM - 10:15 PM	64.4	59.9	-	65.5	59.0	6.5
10:15 PM - 10:20 PM	61.4	60.4	-	57.5	59.5	-2.0
10:20 PM - 10:25 PM	64.0	60.8	-	64.2	59.5	4.7
10:25 PM - 10:30 PM	63.1	61.7	-	60.5	59.1	1.4
10:30 PM - 10:35 PM	63.6	61.0	-	63.1	59.5	3.6
10:35 PM - 10:40 PM	62.6	61.5	-	59.1	59.7	-0.6
10:40 PM - 10:45 PM	62.4	60.9	-	60.1	59.6	0.5
10:45 PM - 10:50 PM	62.7	60.5	-	61.7	59.5	2.2
10:50 PM - 10:55 PM	61.7	60.9	-	57.0	60.2	-3.2
10:55 PM - 11:00 PM	62.4	61.0	-	59.8	58.9	0.9
11:00 PM - 11:05 PM	61.2	60.9	-	52.4	60.2	-7.8
11:05 PM - 11:10 PM	61.9	60.6	-	59.0	59.8	-0.8
11:10 PM - 11:15 PM	61.0	60.2	-	56.3	59.3	-3.0
11:15 PM - 11:20 PM	60.6	60.9	-	n/a	59.6	-
11:20 PM - 11:25 PM	60.9	60.5	-	53.3	59.6	-6.3
11:25 PM - 11:30 PM	61.0	61.8	-	n/a	58.2	-
11:30 PM - 11:35 PM	61.2	61.0	-	50.7	59.6	-8.9
11:35 PM - 11:40 PM	61.2	60.2	-	57.3	59.2	-1.9
11:40 PM - 11:45 PM	61.1	60.0	-	57.6	58.3	-0.7
11:45 PM - 11:50 PM	61.3	59.8	-	59.0	58.3	0.7
11:50 PM - 11:55 PM	60.7	59.4	-	57.8	57.6	0.2
11:55 PM - 12:00 AM	61.5	59.4	-	60.3	57.4	2.9
12:00 AM - 12:05 AM	61.1	60.6	-	54.5	58.2	-3.7
12:05 AM - 12:10 AM	60.4	58.6	-	58.7	57.2	1.5
12:10 AM - 12:15 AM	60.7	58.8	-	59.2	57.2	2.0
12:15 AM - 12:20 AM	59.9	61.4	-	n/a	57.5	-

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Approved by

Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284542-1

Sample No. 24144513-27
Parameter เสียงรบกวน
Location รับริ้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 1617959)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858525

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	62.6	59.1	-	63.0	58.1	4.9
12:25 AM - 12:30 AM	63.6	58.6	-	64.9	57.2	7.7
12:30 AM - 12:35 AM	60.2	59.0	-	57.0	57.5	-0.5
12:35 AM - 12:40 AM	59.9	60.1	-	n/a	57.2	-
12:40 AM - 12:45 AM	63.7	58.5	-	65.1	57.3	7.8
12:45 AM - 12:50 AM	61.0	61.3	-	n/a	58.3	-
12:50 AM - 12:55 AM	61.3	58.6	-	61.0	57.5	3.5
12:55 AM - 01:00 AM	60.0	59.1	-	55.7	58.0	-2.3
01:00 AM - 01:05 AM	63.3	59.1	-	64.2	58.2	6.0
01:05 AM - 01:10 AM	62.5	59.2	-	62.8	58.2	4.6
01:10 AM - 01:15 AM	63.6	59.5	-	64.5	58.6	5.9
01:15 AM - 01:20 AM	62.0	58.8	-	62.2	57.9	4.3
01:20 AM - 01:25 AM	62.9	58.8	-	63.8	57.9	5.9
01:25 AM - 01:30 AM	61.3	60.5	-	56.6	57.8	-1.2
01:30 AM - 01:35 AM	64.4	59.4	-	65.7	57.6	8.1
01:35 AM - 01:40 AM	63.2	59.0	-	64.1	57.8	6.3
01:40 AM - 01:45 AM	61.6	58.3	-	61.9	57.1	4.8
01:45 AM - 01:50 AM	64.8	58.5	-	66.6	57.4	9.2
01:50 AM - 01:55 AM	62.9	58.5	-	63.9	57.1	6.8
01:55 AM - 02:00 AM	60.0	58.0	-	58.7	56.5	2.2
02:00 AM - 02:05 AM	64.7	57.6	-	66.8	56.4	10.4
02:05 AM - 02:10 AM	62.3	59.1	-	62.5	57.0	5.5
02:10 AM - 02:15 AM	62.0	58.0	-	62.8	56.8	6.0
02:15 AM - 02:20 AM	60.5	58.1	-	59.8	57.1	2.7
02:20 AM - 02:25 AM	62.0	58.7	-	62.3	56.5	5.8
02:25 AM - 02:30 AM	62.3	58.1	-	63.2	56.2	7.0
02:30 AM - 02:35 AM	61.8	60.9	-	57.5	56.6	0.9
02:35 AM - 02:40 AM	60.6	57.2	-	60.9	56.1	4.8
02:40 AM - 02:45 AM	61.1	57.6	-	61.5	56.3	5.2
02:45 AM - 02:50 AM	63.9	57.9	-	65.6	56.5	9.1
02:50 AM - 02:55 AM	63.4	59.4	-	64.2	58.2	6.0
02:55 AM - 03:00 AM	61.9	58.9	-	61.9	57.4	4.5
03:00 AM - 03:05 AM	62.3	59.3	-	62.3	57.4	4.9
03:05 AM - 03:10 AM	60.4	60.4	-	n/a	58.1	-
03:10 AM - 03:15 AM	62.2	62.2	-	n/a	56.9	-
03:15 AM - 03:20 AM	62.5	64.3	-	n/a	58.8	-
03:20 AM - 03:25 AM	62.2	59.7	-	61.6	58.9	2.7
03:25 AM - 03:30 AM	62.2	64.9	-	n/a	58.8	-
03:30 AM - 03:35 AM	63.5	60.8	-	63.2	59.4	3.8
03:35 AM - 03:40 AM	61.3	65.8	-	n/a	60.2	-

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Approved by

Kanokkorn Anek
Senior Manager

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Life Sciences www.alsglobal.com
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284542-1

Sample No. 24144513-27
Parameter เสียงรบกวน
Location รับรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 1617959)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858525

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	63.3	63.3	-	n/a	59.3	-
03:45 AM - 03:50 AM	61.2	63.9	-	n/a	59.6	-
03:50 AM - 03:55 AM	61.5	64.6	-	n/a	59.8	-
03:55 AM - 04:00 AM	62.6	60.8	-	60.9	59.1	1.8
04:00 AM - 04:05 AM	61.2	66.5	-	n/a	60.0	-
04:05 AM - 04:10 AM	61.4	62.6	-	n/a	58.7	-
04:10 AM - 04:15 AM	61.3	63.0	-	n/a	59.1	-
04:15 AM - 04:20 AM	60.7	61.5	-	n/a	58.4	-
04:20 AM - 04:25 AM	61.4	61.9	-	n/a	58.4	-
04:25 AM - 04:30 AM	60.1	60.6	-	n/a	58.6	-
04:30 AM - 04:35 AM	60.6	60.1	-	54.0	58.3	-4.3
04:35 AM - 04:40 AM	60.8	61.8	-	n/a	58.1	-
04:40 AM - 04:45 AM	61.6	60.3	-	58.7	58.9	-0.2
04:45 AM - 04:50 AM	61.8	62.5	-	n/a	58.4	-
04:50 AM - 04:55 AM	64.3	64.4	-	n/a	58.5	-
04:55 AM - 05:00 AM	60.8	60.2	-	54.9	57.9	-3.0
05:00 AM - 05:05 AM	60.4	59.9	-	53.8	58.5	-4.7
05:05 AM - 05:10 AM	60.2	59.9	-	51.4	58.4	-7.0
05:10 AM - 05:15 AM	60.7	60.0	-	55.4	57.8	-2.4
05:15 AM - 05:20 AM	60.6	62.3	-	n/a	57.6	-
05:20 AM - 05:25 AM	61.7	59.7	-	60.4	57.7	2.7
05:25 AM - 05:30 AM	64.1	59.7	-	65.1	57.5	7.6
05:30 AM - 05:35 AM	60.5	60.2	-	51.7	57.9	-6.2
05:35 AM - 05:40 AM	60.7	59.7	-	56.8	57.7	-0.9
05:40 AM - 05:45 AM	61.0	59.4	-	58.9	57.7	1.2
05:45 AM - 05:50 AM	60.9	59.9	-	57.0	57.6	-0.6
05:50 AM - 05:55 AM	61.9	65.0	-	n/a	59.5	-
05:55 AM - 06:00 AM	67.6	66.3	-	64.7	63.3	1.4
06:00 AM - 07:00 AM	62.8	61.4	57.2	-	58.0	-0.8
07:00 AM - 08:00 AM	60.6	60.8	n/a	-	58.2	-
08:00 AM - 09:00 AM	62.0	61.0	55.1	-	59.4	-4.3
09:00 AM - 10:00 AM	65.0	64.2	57.3	-	62.8	-5.5
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 07-08 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-27 วันที่ตรวจวัด 07-08 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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

Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284543-1

Sample No. 24144513-28
Parameter เสียงรบกวน
Location รับรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 1617959)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858525

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	60.5	65.0	n/a	-	62.2	-
11:00 AM - 12:00 PM	62.8	63.6	n/a	-	60.0	-
12:00 PM - 01:00 PM	62.3	62.7	n/a	-	60.4	-
01:00 PM - 02:00 PM	62.4	63.3	n/a	-	60.1	-
02:00 PM - 03:00 PM	60.6	61.9	n/a	-	60.1	-
03:00 PM - 04:00 PM	60.3	60.5	n/a	-	60.4	-
04:00 PM - 05:00 PM	62.1	61.4	53.8	-	61.0	-7.2
05:00 PM - 06:00 PM	62.5	62.9	n/a	-	61.2	-
06:00 PM - 07:00 PM	64.9	64.0	57.6	-	60.2	-2.6
07:00 PM - 08:00 PM	63.5	62.9	54.6	-	59.2	-4.6
08:00 PM - 09:00 PM	63.0	62.5	53.4	-	59.0	-5.6
09:00 PM - 10:00 PM	63.0	63.1	n/a	-	59.7	-
10:00 PM - 10:05 PM	61.7	63.1	-	n/a	59.0	-
10:05 PM - 10:10 PM	66.0	63.3	-	65.7	59.4	6.3
10:10 PM - 10:15 PM	61.1	65.2	-	n/a	59.0	-
10:15 PM - 10:20 PM	61.3	61.4	-	n/a	59.5	-
10:20 PM - 10:25 PM	60.9	62.1	-	n/a	59.5	-
10:25 PM - 10:30 PM	62.7	62.2	-	56.1	59.1	-3.0
10:30 PM - 10:35 PM	61.4	62.0	-	n/a	59.5	-
10:35 PM - 10:40 PM	60.5	60.8	-	n/a	59.7	-
10:40 PM - 10:45 PM	60.0	61.6	-	n/a	59.6	-
10:45 PM - 10:50 PM	61.2	60.3	-	56.9	59.5	-2.6
10:50 PM - 10:55 PM	60.5	61.4	-	n/a	60.2	-
10:55 PM - 11:00 PM	60.8	60.7	-	47.4	58.9	-11.5
11:00 PM - 11:05 PM	61.1	60.4	-	55.8	60.2	-4.4
11:05 PM - 11:10 PM	62.8	61.6	-	59.6	59.8	-0.2
11:10 PM - 11:15 PM	59.8	60.8	-	n/a	59.3	-
11:15 PM - 11:20 PM	59.8	61.1	-	n/a	59.6	-
11:20 PM - 11:25 PM	59.9	59.2	-	54.6	59.6	-5.0
11:25 PM - 11:30 PM	60.6	59.6	-	56.7	58.2	-1.5
11:30 PM - 11:35 PM	62.1	59.6	-	61.5	59.6	1.9
11:35 PM - 11:40 PM	60.0	64.6	-	n/a	59.2	-
11:40 PM - 11:45 PM	59.4	62.0	-	n/a	58.3	-
11:45 PM - 11:50 PM	60.1	60.6	-	n/a	58.3	-
11:50 PM - 11:55 PM	60.0	59.2	-	55.3	57.6	-2.3
11:55 PM - 12:00 AM	60.4	58.8	-	58.3	57.4	0.9
12:00 AM - 12:05 AM	60.2	58.6	-	58.1	58.2	-0.1
12:05 AM - 12:10 AM	61.0	60.7	-	52.2	57.2	-5.0
12:10 AM - 12:15 AM	60.2	60.6	-	n/a	57.2	-
12:15 AM - 12:20 AM	64.1	60.7	-	64.4	57.5	6.9

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284543-1

Sample No. 24144513-28
Parameter เสียงรบกวน
Location รินริ่งด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 1617959)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858525

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	60.0	60.9	-	n/a	58.1	-
12:25 AM - 12:30 AM	60.5	62.0	-	n/a	57.2	-
12:30 AM - 12:35 AM	60.4	60.1	-	51.6	57.5	-5.9
12:35 AM - 12:40 AM	60.0	59.8	-	49.5	57.2	-7.7
12:40 AM - 12:45 AM	64.1	59.8	-	65.1	57.3	7.8
12:45 AM - 12:50 AM	60.3	62.7	-	n/a	58.3	-
12:50 AM - 12:55 AM	60.4	60.7	-	n/a	57.5	-
12:55 AM - 01:00 AM	60.6	61.3	-	n/a	58.0	-
01:00 AM - 01:05 AM	63.0	61.2	-	61.3	58.2	3.1
01:05 AM - 01:10 AM	63.7	62.6	-	60.2	58.2	2.0
01:10 AM - 01:15 AM	65.4	62.6	-	65.2	58.6	6.6
01:15 AM - 01:20 AM	63.6	68.2	-	n/a	57.9	-
01:20 AM - 01:25 AM	65.0	63.6	-	62.4	57.9	4.5
01:25 AM - 01:30 AM	60.9	64.5	-	n/a	57.8	-
01:30 AM - 01:35 AM	59.7	64.2	-	n/a	57.6	-
01:35 AM - 01:40 AM	63.0	60.6	-	62.3	57.8	4.5
01:40 AM - 01:45 AM	60.3	61.7	-	n/a	57.1	-
01:45 AM - 01:50 AM	62.9	62.1	-	58.2	57.4	0.8
01:50 AM - 01:55 AM	59.5	60.6	-	n/a	57.1	-
01:55 AM - 02:00 AM	60.0	61.9	-	n/a	56.5	-
02:00 AM - 02:05 AM	60.7	61.3	-	n/a	56.4	-
02:05 AM - 02:10 AM	61.4	60.8	-	55.5	57.0	-1.5
02:10 AM - 02:15 AM	61.1	66.5	-	n/a	56.8	-
02:15 AM - 02:20 AM	60.2	64.4	-	n/a	57.1	-
02:20 AM - 02:25 AM	61.5	60.9	-	55.6	56.5	-0.9
02:25 AM - 02:30 AM	60.6	60.5	-	47.2	56.2	-9.0
02:30 AM - 02:35 AM	61.2	61.2	-	n/a	56.6	-
02:35 AM - 02:40 AM	60.7	61.7	-	n/a	56.1	-
02:40 AM - 02:45 AM	60.3	61.1	-	n/a	56.3	-
02:45 AM - 02:50 AM	59.8	60.3	-	n/a	56.5	-
02:50 AM - 02:55 AM	60.3	60.3	-	n/a	58.2	-
02:55 AM - 03:00 AM	60.2	60.1	-	46.8	57.4	-10.6
03:00 AM - 03:05 AM	60.4	60.5	-	n/a	57.4	-
03:05 AM - 03:10 AM	59.4	60.7	-	n/a	58.1	-
03:10 AM - 03:15 AM	60.1	60.0	-	46.7	56.9	-10.2
03:15 AM - 03:20 AM	60.0	60.1	-	n/a	58.8	-
03:20 AM - 03:25 AM	59.8	60.4	-	n/a	58.9	-
03:25 AM - 03:30 AM	60.7	60.1	-	54.8	58.8	-4.0
03:30 AM - 03:35 AM	63.1	60.9	-	62.1	59.4	2.7
03:35 AM - 03:40 AM	60.7	61.0	-	n/a	60.2	-

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Approved by

Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144513
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report Number : 3284543-1

Sample No. 24144513-28
Parameter เสียงรบกวน
Location รินริ่งด้านหน้าโรงงาน (ระยะดำเนินการ) (GPS 47P 726015, 1617959)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858525

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	60.6	61.0	-	n/a	59.3	-
03:45 AM - 03:50 AM	61.0	60.6	-	53.4	59.6	-6.2
03:50 AM - 03:55 AM	61.8	62.0	-	n/a	59.8	-
03:55 AM - 04:00 AM	60.8	64.0	-	n/a	59.1	-
04:00 AM - 04:05 AM	61.7	62.1	-	n/a	60.0	-
04:05 AM - 04:10 AM	60.8	62.4	-	n/a	58.7	-
04:10 AM - 04:15 AM	61.7	62.0	-	n/a	59.1	-
04:15 AM - 04:20 AM	60.4	61.6	-	n/a	58.4	-
04:20 AM - 04:25 AM	60.0	61.4	-	n/a	58.4	-
04:25 AM - 04:30 AM	60.5	60.4	-	47.1	58.6	-11.5
04:30 AM - 04:35 AM	60.1	61.4	-	n/a	58.3	-
04:35 AM - 04:40 AM	59.9	62.2	-	n/a	58.1	-
04:40 AM - 04:45 AM	60.1	61.9	-	n/a	58.9	-
04:45 AM - 04:50 AM	60.5	60.4	-	47.1	58.4	-11.3
04:50 AM - 04:55 AM	60.4	60.2	-	49.9	58.5	-8.6
04:55 AM - 05:00 AM	60.5	60.5	-	n/a	57.9	-
05:00 AM - 05:05 AM	60.9	60.5	-	53.3	58.5	-5.2
05:05 AM - 05:10 AM	60.2	60.5	-	n/a	58.4	-
05:10 AM - 05:15 AM	59.8	60.6	-	n/a	57.8	-
05:15 AM - 05:20 AM	61.1	59.9	-	57.9	57.6	0.3
05:20 AM - 05:25 AM	60.6	60.5	-	47.2	57.7	-10.5
05:25 AM - 05:30 AM	61.0	60.2	-	56.3	57.5	-1.2
05:30 AM - 05:35 AM	60.8	64.9	-	n/a	57.9	-
05:35 AM - 05:40 AM	61.5	60.4	-	58.0	57.7	0.3
05:40 AM - 05:45 AM	60.9	60.4	-	54.3	57.7	-3.4
05:45 AM - 05:50 AM	60.5	61.6	-	n/a	57.6	-
05:50 AM - 05:55 AM	66.1	60.5	-	67.7	59.5	8.2
05:55 AM - 06:00 AM	66.9	62.5	-	67.9	63.3	4.6
06:00 AM - 07:00 AM	62.3	63.3	n/a	-	58.0	-
07:00 AM - 08:00 AM	61.4	61.7	n/a	-	58.2	-
08:00 AM - 09:00 AM	63.1	64.0	n/a	-	59.4	-
09:00 AM - 10:00 AM	65.5	65.7	n/a	-	62.8	-
ค่ามาตรฐาน						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 08-09 เมษายน 2568
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.24144528-28 วันที่ตรวจวัด 08-09 เมษายน 2568)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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

Approved by

Kanokkorn Anek
Senior Manager

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284610-1

Sample No. 24144528-1
Parameter Noise
Location บ้านขับมอน (จุดอ้างอิง) (GPS 47P 728133, 1619176) (Shut down)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	67.3	97.3	57.5
11:00 AM - 12:00 PM	62.7	78.2	59.5
12:00 PM - 01:00 PM	58.6	79.8	56.4
01:00 PM - 02:00 PM	59.4	82.5	55.6
02:00 PM - 03:00 PM	57.9	79.9	55.6
03:00 PM - 04:00 PM	60.3	77.1	57.1
04:00 PM - 05:00 PM	61.3	78.9	57.5
05:00 PM - 06:00 PM	59.2	72.0	57.3
06:00 PM - 07:00 PM	60.1	77.7	57.3
07:00 PM - 08:00 PM	59.4	75.6	57.3
08:00 PM - 09:00 PM	58.7	70.4	56.9
09:00 PM - 10:00 PM	58.9	80.7	56.7
10:00 PM - 10:05 PM	58.6	75.3	56.7
10:05 PM - 10:10 PM	59.2	67.3	56.8
10:10 PM - 10:15 PM	58.0	64.5	56.2
10:15 PM - 10:20 PM	60.3	73.3	56.9
10:20 PM - 10:25 PM	59.2	76.8	56.6
10:25 PM - 10:30 PM	66.7	87.8	56.8
10:30 PM - 10:35 PM	59.3	77.5	56.7
10:35 PM - 10:40 PM	66.9	86.7	56.3
10:40 PM - 10:45 PM	58.8	81.5	56.6
10:45 PM - 10:50 PM	58.6	81.2	56.1
10:50 PM - 10:55 PM	58.3	69.8	56.3
10:55 PM - 11:00 PM	59.9	72.7	56.9
11:00 PM - 11:05 PM	58.8	75.1	56.9
11:05 PM - 11:10 PM	59.2	76.6	56.4
11:10 PM - 11:15 PM	58.5	75.6	56.2
11:15 PM - 11:20 PM	57.4	64.2	55.9
11:20 PM - 11:25 PM	58.0	73.1	56.0
11:25 PM - 11:30 PM	58.1	70.9	56.3
11:30 PM - 11:35 PM	59.2	70.1	56.3
11:35 PM - 11:40 PM	58.7	68.8	56.5
11:40 PM - 11:45 PM	58.5	66.1	56.3
11:45 PM - 11:50 PM	58.3	76.5	55.7
11:50 PM - 11:55 PM	63.2	79.6	56.4
11:55 PM - 12:00 AM	62.7	80.9	56.1
12:00 AM - 12:05 AM	58.1	71.6	56.1
12:05 AM - 12:10 AM	57.8	71.2	56.0
12:10 AM - 12:15 AM	57.6	64.3	55.8
12:15 AM - 12:20 AM	58.1	63.2	56.5

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284610-1

Sample No. 24144528-1
Parameter Noise
Location บ้านขับมอน (จุดอ้างอิง) (GPS 47P 728133, 1619176) (Shut down)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	57.7	63.3	56.2
12:25 AM - 12:30 AM	57.7	65.0	55.9
12:30 AM - 12:35 AM	57.1	61.8	55.9
12:35 AM - 12:40 AM	58.0	71.3	55.4
12:40 AM - 12:45 AM	57.8	63.7	56.1
12:45 AM - 12:50 AM	57.9	65.1	55.8
12:50 AM - 12:55 AM	58.3	65.1	56.4
12:55 AM - 01:00 AM	58.8	69.9	55.8
01:00 AM - 01:05 AM	57.2	64.0	55.4
01:05 AM - 01:10 AM	58.7	69.6	56.4
01:10 AM - 01:15 AM	57.8	65.2	56.0
01:15 AM - 01:20 AM	57.3	68.1	55.4
01:20 AM - 01:25 AM	56.8	68.7	55.4
01:25 AM - 01:30 AM	57.6	71.3	55.5
01:30 AM - 01:35 AM	57.4	62.7	56.0
01:35 AM - 01:40 AM	64.5	84.8	56.6
01:40 AM - 01:45 AM	57.5	62.3	56.1
01:45 AM - 01:50 AM	57.7	64.7	55.9
01:50 AM - 01:55 AM	58.2	70.9	56.0
01:55 AM - 02:00 AM	58.7	68.0	56.3
02:00 AM - 02:05 AM	57.7	66.6	56.0
02:05 AM - 02:10 AM	58.6	70.2	55.9
02:10 AM - 02:15 AM	57.7	67.3	55.4
02:15 AM - 02:20 AM	58.4	65.1	56.2
02:20 AM - 02:25 AM	57.4	65.6	55.5
02:25 AM - 02:30 AM	57.9	64.9	55.9
02:30 AM - 02:35 AM	57.7	66.2	55.9
02:35 AM - 02:40 AM	58.3	69.9	56.5
02:40 AM - 02:45 AM	58.2	67.3	56.2
02:45 AM - 02:50 AM	57.3	61.5	55.8
02:50 AM - 02:55 AM	57.5	62.8	55.7
02:55 AM - 03:00 AM	57.6	67.3	56.1
03:00 AM - 03:05 AM	57.5	62.2	55.8
03:05 AM - 03:10 AM	57.4	64.6	55.9
03:10 AM - 03:15 AM	59.2	71.3	56.2
03:15 AM - 03:20 AM	60.0	82.8	56.1
03:20 AM - 03:25 AM	57.9	74.7	55.8
03:25 AM - 03:30 AM	57.8	64.6	55.8
03:30 AM - 03:35 AM	58.0	67.0	55.7
03:35 AM - 03:40 AM	57.4	62.8	55.8

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284610-1

Sample No. 24144528-1
Parameter Noise
Location บ้านซับมอน (จุดอ้างอิง) (GPS 47P 728133, 1619176) (Shut down)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	57.5	62.4	55.7
03:45 AM - 03:50 AM	57.4	66.3	55.9
03:50 AM - 03:55 AM	57.9	70.1	55.2
03:55 AM - 04:00 AM	57.1	65.6	55.3
04:00 AM - 04:05 AM	58.5	76.5	55.1
04:05 AM - 04:10 AM	57.8	70.8	55.6
04:10 AM - 04:15 AM	58.7	68.6	56.9
04:15 AM - 04:20 AM	58.4	73.9	56.1
04:20 AM - 04:25 AM	57.1	66.1	55.8
04:25 AM - 04:30 AM	57.2	65.3	55.7
04:30 AM - 04:35 AM	57.1	67.7	55.3
04:35 AM - 04:40 AM	58.0	66.0	55.7
04:40 AM - 04:45 AM	57.6	67.5	56.0
04:45 AM - 04:50 AM	57.7	65.3	56.1
04:50 AM - 04:55 AM	57.9	65.2	55.8
04:55 AM - 05:00 AM	58.0	63.7	56.2
05:00 AM - 05:05 AM	58.7	72.5	56.3
05:05 AM - 05:10 AM	58.2	63.2	56.4
05:10 AM - 05:15 AM	59.5	69.0	57.0
05:15 AM - 05:20 AM	58.8	64.5	56.7
05:20 AM - 05:25 AM	66.5	87.0	59.9
05:25 AM - 05:30 AM	63.4	79.0	60.0
05:30 AM - 05:35 AM	59.2	69.5	57.1
05:35 AM - 05:40 AM	59.7	68.0	56.9
05:40 AM - 05:45 AM	58.8	67.6	56.6
05:45 AM - 05:50 AM	58.7	69.4	57.0
05:50 AM - 05:55 AM	59.0	66.3	57.1
05:55 AM - 06:00 AM	59.7	71.7	57.2
06:00 AM - 07:00 AM	63.0	79.8	59.0
07:00 AM - 08:00 AM	62.6	76.0	57.8
08:00 AM - 09:00 AM	59.0	73.9	56.1
09:00 AM - 10:00 AM	62.0	81.4	56.8

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284611-1

Sample No. 24144528-2
Parameter Noise
Location บ้านซับมอน (จุดอ้างอิง) (GPS 47P 728133, 1619176) (Shut down)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	63.0	89.2	57.2
11:00 AM - 12:00 PM	59.4	79.7	57.3
12:00 PM - 01:00 PM	58.4	73.8	56.4
01:00 PM - 02:00 PM	60.3	88.5	57.5
02:00 PM - 03:00 PM	59.0	77.2	56.8
03:00 PM - 04:00 PM	63.1	90.2	56.8
04:00 PM - 05:00 PM	63.3	78.5	59.1
05:00 PM - 06:00 PM	59.2	72.7	57.2
06:00 PM - 07:00 PM	60.4	78.8	57.9
07:00 PM - 08:00 PM	59.4	75.7	57.2
08:00 PM - 09:00 PM	60.1	86.8	57.1
09:00 PM - 10:00 PM	59.2	68.3	57.3
10:00 PM - 10:05 PM	58.1	64.3	56.3
10:05 PM - 10:10 PM	58.0	62.6	56.3
10:10 PM - 10:15 PM	57.6	70.0	55.8
10:15 PM - 10:20 PM	58.8	69.8	56.4
10:20 PM - 10:25 PM	58.6	66.3	56.3
10:25 PM - 10:30 PM	58.3	66.3	56.0
10:30 PM - 10:35 PM	57.9	67.0	55.3
10:35 PM - 10:40 PM	59.8	70.5	56.6
10:40 PM - 10:45 PM	58.9	68.8	56.2
10:45 PM - 10:50 PM	59.4	77.9	55.7
10:50 PM - 10:55 PM	56.7	61.6	54.9
10:55 PM - 11:00 PM	59.2	68.1	56.1
11:00 PM - 11:05 PM	58.2	73.9	55.9
11:05 PM - 11:10 PM	58.3	74.9	55.5
11:10 PM - 11:15 PM	56.8	68.9	54.9
11:15 PM - 11:20 PM	59.3	77.9	55.3
11:20 PM - 11:25 PM	58.8	69.0	56.4
11:25 PM - 11:30 PM	60.6	78.4	55.4
11:30 PM - 11:35 PM	58.2	63.9	56.2
11:35 PM - 11:40 PM	58.0	66.5	56.1
11:40 PM - 11:45 PM	58.1	66.4	55.9
11:45 PM - 11:50 PM	63.4	85.7	55.6
11:50 PM - 11:55 PM	58.6	72.2	56.4
11:55 PM - 12:00 AM	56.9	64.8	54.9
12:00 AM - 12:05 AM	59.9	84.3	54.8
12:05 AM - 12:10 AM	57.5	69.5	55.9
12:10 AM - 12:15 AM	57.0	61.9	55.5
12:15 AM - 12:20 AM	58.6	67.7	56.5

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Kanokkorn Anek
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284611-1

Sample No. 24144528-2
Parameter Noise
Location บ้านซับมอน (จุดอ้างอิง) (GPS 47P 728133, 1619176) (Shut down)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	57.4	68.0	55.9
12:25 AM - 12:30 AM	57.4	67.0	55.5
12:30 AM - 12:35 AM	57.8	63.8	55.9
12:35 AM - 12:40 AM	56.6	67.6	54.4
12:40 AM - 12:45 AM	60.5	75.0	55.9
12:45 AM - 12:50 AM	58.4	68.4	56.2
12:50 AM - 12:55 AM	57.4	63.0	55.9
12:55 AM - 01:00 AM	57.8	67.9	55.3
01:00 AM - 01:05 AM	57.7	67.8	55.7
01:05 AM - 01:10 AM	57.4	70.1	55.6
01:10 AM - 01:15 AM	58.6	72.8	56.4
01:15 AM - 01:20 AM	58.0	68.3	55.5
01:20 AM - 01:25 AM	57.9	70.0	55.6
01:25 AM - 01:30 AM	57.6	66.5	55.7
01:30 AM - 01:35 AM	57.4	62.1	55.4
01:35 AM - 01:40 AM	57.8	65.4	55.7
01:40 AM - 01:45 AM	58.8	65.5	56.8
01:45 AM - 01:50 AM	57.7	66.3	55.7
01:50 AM - 01:55 AM	58.3	72.3	56.3
01:55 AM - 02:00 AM	57.8	63.3	55.6
02:00 AM - 02:05 AM	58.1	66.2	56.0
02:05 AM - 02:10 AM	58.5	70.3	56.6
02:10 AM - 02:15 AM	58.2	63.7	56.5
02:15 AM - 02:20 AM	58.3	68.0	56.1
02:20 AM - 02:25 AM	57.7	62.6	56.1
02:25 AM - 02:30 AM	58.5	72.9	56.4
02:30 AM - 02:35 AM	57.2	62.2	55.8
02:35 AM - 02:40 AM	57.7	66.8	56.1
02:40 AM - 02:45 AM	57.6	63.5	56.0
02:45 AM - 02:50 AM	57.8	66.7	56.2
02:50 AM - 02:55 AM	57.2	64.5	55.7
02:55 AM - 03:00 AM	58.5	69.9	55.7
03:00 AM - 03:05 AM	57.7	66.6	55.9
03:05 AM - 03:10 AM	57.5	63.5	55.9
03:10 AM - 03:15 AM	57.4	64.2	55.4
03:15 AM - 03:20 AM	58.1	66.8	56.2
03:20 AM - 03:25 AM	58.6	68.4	56.4
03:25 AM - 03:30 AM	58.0	66.8	56.2
03:30 AM - 03:35 AM	59.3	79.3	56.6
03:35 AM - 03:40 AM	57.5	65.4	55.7

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Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284611-1

Sample No. 24144528-2
Parameter Noise
Location บ้านซับมอน (จุดอ้างอิง) (GPS 47P 728133, 1619176) (Shut down)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	57.7	66.9	55.8
03:45 AM - 03:50 AM	57.7	64.0	55.9
03:50 AM - 03:55 AM	57.9	65.0	56.0
03:55 AM - 04:00 AM	70.2	80.7	55.3
04:00 AM - 04:05 AM	73.8	81.3	57.3
04:05 AM - 04:10 AM	68.6	80.7	56.4
04:10 AM - 04:15 AM	70.7	82.1	56.1
04:15 AM - 04:20 AM	63.3	71.7	56.5
04:20 AM - 04:25 AM	59.2	66.4	57.0
04:25 AM - 04:30 AM	58.4	70.5	56.6
04:30 AM - 04:35 AM	59.1	67.7	57.1
04:35 AM - 04:40 AM	58.4	72.7	56.4
04:40 AM - 04:45 AM	58.8	77.0	56.7
04:45 AM - 04:50 AM	59.1	69.4	57.2
04:50 AM - 04:55 AM	58.4	63.2	56.8
04:55 AM - 05:00 AM	57.9	65.4	56.1
05:00 AM - 05:05 AM	57.9	63.9	56.3
05:05 AM - 05:10 AM	58.8	71.5	56.3
05:10 AM - 05:15 AM	59.8	72.6	56.9
05:15 AM - 05:20 AM	60.6	77.0	57.8
05:20 AM - 05:25 AM	62.5	69.3	60.6
05:25 AM - 05:30 AM	61.8	72.9	58.9
05:30 AM - 05:35 AM	59.7	74.0	57.6
05:35 AM - 05:40 AM	62.7	86.3	57.4
05:40 AM - 05:45 AM	60.2	69.7	57.5
05:45 AM - 05:50 AM	59.3	71.1	57.0
05:50 AM - 05:55 AM	61.8	80.8	57.2
05:55 AM - 06:00 AM	64.6	78.3	57.4
06:00 AM - 07:00 AM	65.0	83.3	59.6
07:00 AM - 08:00 AM	67.7	82.8	58.1
08:00 AM - 09:00 AM	60.5	80.0	55.8
09:00 AM - 10:00 AM	58.1	73.2	55.5

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284612-1

Sample No. 24144528-3
Parameter Noise
Location บ้านซับบอน (จุดอ้างอิง) (GPS 47P 728133, 1619176) (Shut down)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	65.7	95.7	55.0
11:00 AM - 12:00 PM	62.0	79.7	57.9
12:00 PM - 01:00 PM	58.2	74.9	55.6
01:00 PM - 02:00 PM	60.9	87.2	55.5
02:00 PM - 03:00 PM	76.5	87.8	72.7
03:00 PM - 04:00 PM	60.9	78.5	58.9
04:00 PM - 05:00 PM	60.7	73.1	58.6
05:00 PM - 06:00 PM	60.9	81.4	58.8
06:00 PM - 07:00 PM	60.7	75.7	58.6
07:00 PM - 08:00 PM	59.4	82.2	56.7
08:00 PM - 09:00 PM	60.4	86.1	56.9
09:00 PM - 10:00 PM	59.9	85.8	56.7
10:00 PM - 10:05 PM	57.8	63.9	56.0
10:05 PM - 10:10 PM	58.2	64.8	56.4
10:10 PM - 10:15 PM	63.3	71.7	57.3
10:15 PM - 10:20 PM	60.1	72.8	56.6
10:20 PM - 10:25 PM	59.5	69.7	56.9
10:25 PM - 10:30 PM	57.8	67.4	56.4
10:30 PM - 10:35 PM	58.5	65.7	56.5
10:35 PM - 10:40 PM	57.7	63.4	56.2
10:40 PM - 10:45 PM	58.0	65.5	56.4
10:45 PM - 10:50 PM	58.4	71.0	56.4
10:50 PM - 10:55 PM	57.2	61.9	55.6
10:55 PM - 11:00 PM	59.3	71.3	56.8
11:00 PM - 11:05 PM	58.3	65.3	56.1
11:05 PM - 11:10 PM	57.9	68.7	56.1
11:10 PM - 11:15 PM	58.0	66.9	55.7
11:15 PM - 11:20 PM	59.3	69.8	57.3
11:20 PM - 11:25 PM	57.6	65.6	56.1
11:25 PM - 11:30 PM	57.9	66.3	56.0
11:30 PM - 11:35 PM	58.4	68.2	56.0
11:35 PM - 11:40 PM	58.1	65.6	55.8
11:40 PM - 11:45 PM	58.1	63.9	56.0
11:45 PM - 11:50 PM	59.2	67.0	57.0
11:50 PM - 11:55 PM	58.3	63.4	56.6
11:55 PM - 12:00 AM	57.4	62.1	55.8
12:00 AM - 12:05 AM	57.6	66.8	54.6
12:05 AM - 12:10 AM	56.8	63.0	55.3
12:10 AM - 12:15 AM	57.0	63.9	55.2
12:15 AM - 12:20 AM	58.1	65.9	55.3

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284612-1

Sample No. 24144528-3
Parameter Noise
Location บ้านซับบอน (จุดอ้างอิง) (GPS 47P 728133, 1619176) (Shut down)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	58.4	66.3	55.9
12:25 AM - 12:30 AM	57.3	61.6	55.3
12:30 AM - 12:35 AM	56.7	61.3	54.8
12:35 AM - 12:40 AM	57.7	65.1	55.6
12:40 AM - 12:45 AM	57.9	66.6	55.3
12:45 AM - 12:50 AM	57.9	65.1	55.9
12:50 AM - 12:55 AM	58.9	76.2	55.3
12:55 AM - 01:00 AM	57.5	73.7	55.6
01:00 AM - 01:05 AM	58.0	70.5	56.1
01:05 AM - 01:10 AM	57.7	73.8	55.1
01:10 AM - 01:15 AM	57.3	65.3	54.8
01:15 AM - 01:20 AM	57.9	63.8	55.9
01:20 AM - 01:25 AM	58.6	73.6	55.0
01:25 AM - 01:30 AM	57.5	64.1	55.3
01:30 AM - 01:35 AM	58.2	69.8	54.8
01:35 AM - 01:40 AM	58.8	75.5	55.8
01:40 AM - 01:45 AM	57.4	75.2	54.6
01:45 AM - 01:50 AM	57.1	65.3	55.3
01:50 AM - 01:55 AM	57.6	64.0	55.9
01:55 AM - 02:00 AM	57.3	63.4	55.3
02:00 AM - 02:05 AM	57.5	63.7	55.5
02:05 AM - 02:10 AM	56.8	66.2	55.0
02:10 AM - 02:15 AM	56.9	64.5	54.9
02:15 AM - 02:20 AM	57.5	66.7	55.8
02:20 AM - 02:25 AM	57.3	63.9	55.4
02:25 AM - 02:30 AM	56.7	65.4	54.9
02:30 AM - 02:35 AM	56.8	68.4	55.0
02:35 AM - 02:40 AM	58.0	65.6	55.8
02:40 AM - 02:45 AM	57.7	71.3	55.6
02:45 AM - 02:50 AM	58.0	74.3	55.4
02:50 AM - 02:55 AM	57.2	64.8	55.3
02:55 AM - 03:00 AM	58.4	75.1	56.0
03:00 AM - 03:05 AM	57.9	62.5	55.6
03:05 AM - 03:10 AM	58.0	65.4	56.3
03:10 AM - 03:15 AM	56.1	64.4	54.5
03:15 AM - 03:20 AM	57.5	68.9	54.7
03:20 AM - 03:25 AM	56.9	63.1	55.0
03:25 AM - 03:30 AM	57.7	68.2	55.5
03:30 AM - 03:35 AM	57.1	69.7	54.3
03:35 AM - 03:40 AM	57.2	65.0	54.7

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Kanokkorn Anek
Senior Manager

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284612-1

Sample No. 24144528-3
Parameter Noise
Location บ้านซับมอน (จุดอ้างอิง) (GPS 47P 728133, 1619176) (Shut down)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	57.6	63.8	55.6
03:45 AM - 03:50 AM	57.7	67.2	55.4
03:50 AM - 03:55 AM	57.0	62.0	55.4
03:55 AM - 04:00 AM	57.6	65.4	55.7
04:00 AM - 04:05 AM	57.4	64.5	55.4
04:05 AM - 04:10 AM	56.9	62.2	55.3
04:10 AM - 04:15 AM	57.4	66.6	55.4
04:15 AM - 04:20 AM	59.2	79.5	55.9
04:20 AM - 04:25 AM	58.4	82.8	54.6
04:25 AM - 04:30 AM	57.7	68.4	55.2
04:30 AM - 04:35 AM	57.0	65.3	54.9
04:35 AM - 04:40 AM	58.0	65.2	55.9
04:40 AM - 04:45 AM	57.8	67.2	55.9
04:45 AM - 04:50 AM	57.9	66.4	56.0
04:50 AM - 04:55 AM	57.9	67.7	55.3
04:55 AM - 05:00 AM	58.8	65.3	56.5
05:00 AM - 05:05 AM	60.4	76.2	56.1
05:05 AM - 05:10 AM	58.6	68.1	56.2
05:10 AM - 05:15 AM	60.4	70.6	56.6
05:15 AM - 05:20 AM	60.1	70.1	57.6
05:20 AM - 05:25 AM	60.4	66.6	58.8
05:25 AM - 05:30 AM	60.7	72.8	57.9
05:30 AM - 05:35 AM	59.6	64.6	57.5
05:35 AM - 05:40 AM	59.1	70.5	57.3
05:40 AM - 05:45 AM	59.5	69.3	57.5
05:45 AM - 05:50 AM	59.0	66.5	57.3
05:50 AM - 05:55 AM	59.9	69.3	57.8
05:55 AM - 06:00 AM	59.7	67.1	57.7
06:00 AM - 07:00 AM	60.1	77.3	57.5
07:00 AM - 08:00 AM	60.5	84.6	57.0
08:00 AM - 09:00 AM	62.0	79.3	58.1
09:00 AM - 10:00 AM	65.1	79.0	58.5

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284613-1

Sample No. 24144528-4
Parameter Noise
Location บ้านซับมอน (จุดอ้างอิง) (GPS 47P 728133, 1619176) (Shut down)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	65.8	87.9	58.5
11:00 AM - 12:00 PM	62.8	78.1	58.3
12:00 PM - 01:00 PM	59.1	79.3	55.8
01:00 PM - 02:00 PM	59.4	77.2	55.4
02:00 PM - 03:00 PM	57.5	77.8	55.6
03:00 PM - 04:00 PM	59.0	75.4	55.7
04:00 PM - 05:00 PM	58.1	76.2	55.8
05:00 PM - 06:00 PM	59.2	84.4	56.2
06:00 PM - 07:00 PM	60.5	84.1	56.5
07:00 PM - 08:00 PM	58.1	74.1	55.5
08:00 PM - 09:00 PM	60.6	86.3	55.8
09:00 PM - 10:00 PM	58.9	85.2	55.7
10:00 PM - 10:05 PM	57.4	66.3	55.8
10:05 PM - 10:10 PM	67.3	78.4	56.6
10:10 PM - 10:15 PM	65.1	76.7	56.4
10:15 PM - 10:20 PM	59.6	73.3	56.4
10:20 PM - 10:25 PM	57.9	63.2	56.1
10:25 PM - 10:30 PM	58.1	65.5	55.5
10:30 PM - 10:35 PM	57.2	61.7	55.4
10:35 PM - 10:40 PM	56.7	61.5	54.6
10:40 PM - 10:45 PM	57.7	69.4	55.8
10:45 PM - 10:50 PM	58.7	65.7	55.5
10:50 PM - 10:55 PM	57.3	72.6	55.2
10:55 PM - 11:00 PM	58.0	68.3	55.4
11:00 PM - 11:05 PM	57.1	72.3	55.0
11:05 PM - 11:10 PM	59.1	77.9	55.3
11:10 PM - 11:15 PM	58.8	71.2	55.9
11:15 PM - 11:20 PM	57.4	64.5	55.9
11:20 PM - 11:25 PM	57.2	61.4	55.4
11:25 PM - 11:30 PM	57.6	63.9	55.2
11:30 PM - 11:35 PM	57.3	65.0	55.1
11:35 PM - 11:40 PM	57.9	71.7	55.6
11:40 PM - 11:45 PM	60.7	80.3	56.2
11:45 PM - 11:50 PM	61.7	80.2	56.0
11:50 PM - 11:55 PM	57.2	64.9	55.1
11:55 PM - 12:00 AM	59.2	82.4	54.9
12:00 AM - 12:05 AM	59.2	75.2	56.5
12:05 AM - 12:10 AM	57.1	65.6	54.8
12:10 AM - 12:15 AM	57.5	69.6	55.0
12:15 AM - 12:20 AM	58.1	67.5	54.9

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284613-1

Sample No. 24144528-4
Parameter Noise
Location บ้านซับมอน (จุดอ้างอิง) (GPS 47P 728133, 1619176) (Shut down)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	57.7	63.8	54.9
12:25 AM - 12:30 AM	56.6	65.3	54.6
12:30 AM - 12:35 AM	56.4	60.7	54.7
12:35 AM - 12:40 AM	56.5	65.3	54.8
12:40 AM - 12:45 AM	58.0	68.3	54.8
12:45 AM - 12:50 AM	56.2	63.4	54.0
12:50 AM - 12:55 AM	56.8	65.6	54.8
12:55 AM - 01:00 AM	56.8	65.5	54.1
01:00 AM - 01:05 AM	57.0	72.5	54.5
01:05 AM - 01:10 AM	57.5	69.6	54.4
01:10 AM - 01:15 AM	55.8	61.7	54.2
01:15 AM - 01:20 AM	56.6	63.2	54.2
01:20 AM - 01:25 AM	56.4	67.5	54.0
01:25 AM - 01:30 AM	57.2	65.9	54.8
01:30 AM - 01:35 AM	56.2	67.6	54.2
01:35 AM - 01:40 AM	57.1	65.7	54.4
01:40 AM - 01:45 AM	56.2	60.5	54.5
01:45 AM - 01:50 AM	56.8	68.5	55.3
01:50 AM - 01:55 AM	56.8	69.9	54.0
01:55 AM - 02:00 AM	56.6	68.9	54.2
02:00 AM - 02:05 AM	56.7	61.1	55.0
02:05 AM - 02:10 AM	56.9	62.8	54.6
02:10 AM - 02:15 AM	62.1	86.5	54.2
02:15 AM - 02:20 AM	57.2	66.8	55.0
02:20 AM - 02:25 AM	57.9	64.9	55.4
02:25 AM - 02:30 AM	57.4	64.6	55.2
02:30 AM - 02:35 AM	56.7	67.9	54.0
02:35 AM - 02:40 AM	56.7	62.1	54.7
02:40 AM - 02:45 AM	56.3	75.3	53.8
02:45 AM - 02:50 AM	57.3	62.1	55.3
02:50 AM - 02:55 AM	57.6	64.6	55.1
02:55 AM - 03:00 AM	57.2	69.3	54.7
03:00 AM - 03:05 AM	57.6	68.4	55.2
03:05 AM - 03:10 AM	56.3	64.7	54.4
03:10 AM - 03:15 AM	57.7	64.9	54.9
03:15 AM - 03:20 AM	56.8	66.7	54.4
03:20 AM - 03:25 AM	58.6	72.0	54.3
03:25 AM - 03:30 AM	58.1	70.9	55.1
03:30 AM - 03:35 AM	56.9	67.1	54.2
03:35 AM - 03:40 AM	58.3	73.9	55.4

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report
TESTING
No.0009
Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :
Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284613-1

Sample No. 24144528-4
Parameter Noise
Location บ้านซับมอน (จุดอ้างอิง) (GPS 47P 728133, 1619176) (Shut down)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	56.8	66.3	54.0
03:45 AM - 03:50 AM	57.7	68.6	54.6
03:50 AM - 03:55 AM	57.1	67.1	54.7
03:55 AM - 04:00 AM	56.4	63.0	54.4
04:00 AM - 04:05 AM	57.5	70.5	55.3
04:05 AM - 04:10 AM	57.1	69.2	54.7
04:10 AM - 04:15 AM	56.6	67.0	54.4
04:15 AM - 04:20 AM	56.3	61.2	54.6
04:20 AM - 04:25 AM	57.2	67.3	54.4
04:25 AM - 04:30 AM	56.5	61.5	54.5
04:30 AM - 04:35 AM	57.0	66.3	54.9
04:35 AM - 04:40 AM	56.7	62.1	54.8
04:40 AM - 04:45 AM	60.5	85.9	55.5
04:45 AM - 04:50 AM	56.8	63.5	54.5
04:50 AM - 04:55 AM	57.8	70.2	54.6
04:55 AM - 05:00 AM	57.6	64.4	55.5
05:00 AM - 05:05 AM	57.6	67.6	54.6
05:05 AM - 05:10 AM	58.3	70.4	55.3
05:10 AM - 05:15 AM	57.2	62.6	55.6
05:15 AM - 05:20 AM	57.6	69.5	55.3
05:20 AM - 05:25 AM	59.6	69.5	56.0
05:25 AM - 05:30 AM	61.7	72.4	59.9
05:30 AM - 05:35 AM	60.7	66.0	58.1
05:35 AM - 05:40 AM	59.1	67.9	57.6
05:40 AM - 05:45 AM	59.3	74.2	57.1
05:45 AM - 05:50 AM	58.3	63.2	56.6
05:50 AM - 05:55 AM	58.7	68.7	56.7
05:55 AM - 06:00 AM	58.2	69.8	56.5
06:00 AM - 07:00 AM	59.3	81.3	56.7
07:00 AM - 08:00 AM	58.4	75.7	55.8
08:00 AM - 09:00 AM	58.0	73.3	55.7
09:00 AM - 10:00 AM	60.4	86.4	55.5

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Kanokkorn Anek
Senior Manager

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284614-1

Sample No. 24144528-5
Parameter Noise
Location บ้านซับมอน (จุดอ้างอิง) (GPS 47P 728133, 1619176) (Shut down)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	59.4	85.0	55.5
11:00 AM - 12:00 PM	58.1	76.6	55.1
12:00 PM - 01:00 PM	57.8	77.8	55.3
01:00 PM - 02:00 PM	57.6	75.5	55.4
02:00 PM - 03:00 PM	57.4	73.0	55.4
03:00 PM - 04:00 PM	58.6	75.4	56.5
04:00 PM - 05:00 PM	57.8	72.7	55.7
05:00 PM - 06:00 PM	60.2	76.3	56.2
06:00 PM - 07:00 PM	59.9	84.7	55.8
07:00 PM - 08:00 PM	57.4	76.4	54.8
08:00 PM - 09:00 PM	57.7	84.9	55.1
09:00 PM - 10:00 PM	57.9	84.9	54.6
10:00 PM - 10:05 PM	55.6	66.3	53.7
10:05 PM - 10:10 PM	56.7	61.7	54.9
10:10 PM - 10:15 PM	58.7	78.9	54.9
10:15 PM - 10:20 PM	56.7	63.3	54.9
10:20 PM - 10:25 PM	57.3	66.0	55.1
10:25 PM - 10:30 PM	59.9	79.0	55.9
10:30 PM - 10:35 PM	59.4	86.5	54.4
10:35 PM - 10:40 PM	57.1	70.4	54.5
10:40 PM - 10:45 PM	57.1	68.8	55.0
10:45 PM - 10:50 PM	58.4	70.1	54.8
10:50 PM - 10:55 PM	56.7	64.2	54.7
10:55 PM - 11:00 PM	57.3	78.8	54.0
11:00 PM - 11:05 PM	57.3	67.4	55.4
11:05 PM - 11:10 PM	66.7	77.5	55.5
11:10 PM - 11:15 PM	57.5	67.5	54.8
11:15 PM - 11:20 PM	57.1	67.0	54.7
11:20 PM - 11:25 PM	56.4	64.6	54.2
11:25 PM - 11:30 PM	55.9	63.5	54.4
11:30 PM - 11:35 PM	55.9	64.3	53.4
11:35 PM - 11:40 PM	56.5	64.8	54.5
11:40 PM - 11:45 PM	67.6	86.7	54.7
11:45 PM - 11:50 PM	56.4	74.8	54.2
11:50 PM - 11:55 PM	57.0	66.9	54.4
11:55 PM - 12:00 AM	58.0	70.5	54.2
12:00 AM - 12:05 AM	58.5	80.3	54.6
12:05 AM - 12:10 AM	68.1	80.0	54.4
12:10 AM - 12:15 AM	68.4	80.4	54.8
12:15 AM - 12:20 AM	69.2	78.7	55.2

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Kanokkorn Anek
Senior Manager

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284614-1

Sample No. 24144528-5
Parameter Noise
Location บ้านซับมอน (จุดอ้างอิง) (GPS 47P 728133, 1619176) (Shut down)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	62.0	73.1	54.4
12:25 AM - 12:30 AM	57.8	75.4	54.8
12:30 AM - 12:35 AM	59.1	81.9	54.8
12:35 AM - 12:40 AM	56.2	62.3	54.7
12:40 AM - 12:45 AM	55.9	62.1	53.7
12:45 AM - 12:50 AM	56.1	64.9	54.2
12:50 AM - 12:55 AM	55.8	62.7	53.8
12:55 AM - 01:00 AM	56.7	65.9	54.7
01:00 AM - 01:05 AM	56.1	62.6	54.6
01:05 AM - 01:10 AM	56.1	61.5	54.6
01:10 AM - 01:15 AM	55.4	69.8	54.0
01:15 AM - 01:20 AM	56.0	61.1	54.1
01:20 AM - 01:25 AM	55.8	63.5	54.4
01:25 AM - 01:30 AM	56.8	61.9	54.9
01:30 AM - 01:35 AM	57.2	68.5	55.3
01:35 AM - 01:40 AM	56.5	67.6	54.7
01:40 AM - 01:45 AM	59.0	71.3	55.2
01:45 AM - 01:50 AM	61.2	86.3	54.9
01:50 AM - 01:55 AM	57.3	70.4	54.9
01:55 AM - 02:00 AM	57.7	65.9	55.6
02:00 AM - 02:05 AM	60.4	84.5	56.1
02:05 AM - 02:10 AM	58.6	84.3	55.2
02:10 AM - 02:15 AM	57.3	68.5	55.5
02:15 AM - 02:20 AM	57.4	64.2	55.7
02:20 AM - 02:25 AM	57.8	63.5	56.2
02:25 AM - 02:30 AM	57.5	65.4	55.6
02:30 AM - 02:35 AM	59.1	78.1	55.9
02:35 AM - 02:40 AM	56.5	61.9	55.1
02:40 AM - 02:45 AM	58.1	65.3	55.5
02:45 AM - 02:50 AM	57.8	64.2	55.9
02:50 AM - 02:55 AM	57.5	66.3	55.7
02:55 AM - 03:00 AM	57.1	67.8	55.6
03:00 AM - 03:05 AM	58.2	69.9	55.9
03:05 AM - 03:10 AM	57.6	63.4	55.9
03:10 AM - 03:15 AM	57.9	63.7	56.2
03:15 AM - 03:20 AM	58.7	70.7	56.7
03:20 AM - 03:25 AM	58.6	66.7	57.4
03:25 AM - 03:30 AM	59.3	73.7	57.8
03:30 AM - 03:35 AM	59.4	68.5	57.6
03:35 AM - 03:40 AM	59.9	67.8	58.0

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284614-1

Sample No. 24144528-5
Parameter Noise
Location บ้านซับมอน (จุดอ้างอิง) (GPS 47P 728133, 1619176) (Shut down)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	59.4	64.8	58.3
03:45 AM - 03:50 AM	60.0	64.2	58.8
03:50 AM - 03:55 AM	59.6	66.8	58.1
03:55 AM - 04:00 AM	61.2	81.5	58.0
04:00 AM - 04:05 AM	59.9	70.0	57.9
04:05 AM - 04:10 AM	59.5	63.3	58.8
04:10 AM - 04:15 AM	59.8	69.7	58.4
04:15 AM - 04:20 AM	59.7	64.0	58.7
04:20 AM - 04:25 AM	59.5	64.8	58.5
04:25 AM - 04:30 AM	59.9	65.9	58.9
04:30 AM - 04:35 AM	59.4	70.1	58.3
04:35 AM - 04:40 AM	60.6	74.2	58.2
04:40 AM - 04:45 AM	58.9	64.5	57.9
04:45 AM - 04:50 AM	59.1	67.6	57.9
04:50 AM - 04:55 AM	58.7	62.8	57.4
04:55 AM - 05:00 AM	58.7	69.1	57.3
05:00 AM - 05:05 AM	58.7	65.5	57.2
05:05 AM - 05:10 AM	58.8	66.7	57.1
05:10 AM - 05:15 AM	60.0	73.2	58.0
05:15 AM - 05:20 AM	59.3	67.3	57.6
05:20 AM - 05:25 AM	59.2	67.3	57.8
05:25 AM - 05:30 AM	59.6	66.4	57.9
05:30 AM - 05:35 AM	61.0	69.6	59.8
05:35 AM - 05:40 AM	60.8	69.8	59.3
05:40 AM - 05:45 AM	61.3	75.9	59.7
05:45 AM - 05:50 AM	60.2	74.6	58.9
05:50 AM - 05:55 AM	68.3	78.3	59.1
05:55 AM - 06:00 AM	71.7	77.5	59.2
06:00 AM - 07:00 AM	62.5	75.6	60.6
07:00 AM - 08:00 AM	60.5	78.1	58.9
08:00 AM - 09:00 AM	59.8	81.6	57.2
09:00 AM - 10:00 AM	58.2	76.3	55.7

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284615-1

Sample No. 24144528-6
Parameter Noise
Location บ้านซับมอน (จุดอ้างอิง) (GPS 47P 728133, 1619176) (Shut down)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	57.6	72.3	55.5
11:00 AM - 12:00 PM	57.6	70.2	55.6
12:00 PM - 01:00 PM	58.4	81.7	56.2
01:00 PM - 02:00 PM	63.5	80.2	61.1
02:00 PM - 03:00 PM	59.2	72.8	57.2
03:00 PM - 04:00 PM	59.2	74.3	57.1
04:00 PM - 05:00 PM	59.9	85.8	57.4
05:00 PM - 06:00 PM	59.3	76.6	57.3
06:00 PM - 07:00 PM	59.8	79.3	57.6
07:00 PM - 08:00 PM	59.3	77.9	57.3
08:00 PM - 09:00 PM	61.8	86.1	56.7
09:00 PM - 10:00 PM	59.1	86.4	56.6
10:00 PM - 10:05 PM	58.9	66.1	57.0
10:05 PM - 10:10 PM	58.8	68.5	57.1
10:10 PM - 10:15 PM	58.9	66.4	57.1
10:15 PM - 10:20 PM	59.8	71.4	57.0
10:20 PM - 10:25 PM	59.2	67.0	56.8
10:25 PM - 10:30 PM	59.1	69.7	56.8
10:30 PM - 10:35 PM	61.7	84.6	56.9
10:35 PM - 10:40 PM	58.6	65.5	56.8
10:40 PM - 10:45 PM	58.6	63.3	57.1
10:45 PM - 10:50 PM	58.9	69.1	56.6
10:50 PM - 10:55 PM	59.0	68.5	57.1
10:55 PM - 11:00 PM	58.9	65.6	56.8
11:00 PM - 11:05 PM	58.0	63.7	56.3
11:05 PM - 11:10 PM	58.1	67.2	56.7
11:10 PM - 11:15 PM	62.7	84.6	56.6
11:15 PM - 11:20 PM	70.1	88.0	56.7
11:20 PM - 11:25 PM	59.8	67.1	57.0
11:25 PM - 11:30 PM	59.2	75.8	56.9
11:30 PM - 11:35 PM	58.0	65.1	56.0
11:35 PM - 11:40 PM	57.8	63.7	56.2
11:40 PM - 11:45 PM	58.1	70.8	56.1
11:45 PM - 11:50 PM	64.4	87.0	56.1
11:50 PM - 11:55 PM	66.1	87.3	55.9
11:55 PM - 12:00 AM	64.1	85.8	55.4
12:00 AM - 12:05 AM	60.4	77.3	54.9
12:05 AM - 12:10 AM	58.3	74.8	55.6
12:10 AM - 12:15 AM	57.1	64.5	55.2
12:15 AM - 12:20 AM	59.4	79.8	55.8

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Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284615-1

Sample No. 24144528-6
Parameter Noise
Location บ้านซับมอน (จุดอ้างอิง) (GPS 47P 728133, 1619176) (Shut down)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	58.0	62.2	56.2
12:25 AM - 12:30 AM	56.7	64.6	54.9
12:30 AM - 12:35 AM	56.9	70.4	55.0
12:35 AM - 12:40 AM	56.7	63.3	54.7
12:40 AM - 12:45 AM	58.0	65.2	56.0
12:45 AM - 12:50 AM	57.7	67.8	55.3
12:50 AM - 12:55 AM	58.4	64.9	56.4
12:55 AM - 01:00 AM	58.3	77.4	56.0
01:00 AM - 01:05 AM	58.8	65.3	56.6
01:05 AM - 01:10 AM	57.8	66.2	55.9
01:10 AM - 01:15 AM	59.0	68.8	56.2
01:15 AM - 01:20 AM	57.4	63.5	55.7
01:20 AM - 01:25 AM	58.3	72.0	56.0
01:25 AM - 01:30 AM	58.3	67.4	56.0
01:30 AM - 01:35 AM	58.1	66.2	56.1
01:35 AM - 01:40 AM	59.5	72.9	56.1
01:40 AM - 01:45 AM	63.1	87.1	56.4
01:45 AM - 01:50 AM	57.5	74.9	55.4
01:50 AM - 01:55 AM	57.9	66.8	55.9
01:55 AM - 02:00 AM	57.8	65.3	55.8
02:00 AM - 02:05 AM	57.3	63.1	55.6
02:05 AM - 02:10 AM	58.0	66.4	56.2
02:10 AM - 02:15 AM	59.7	72.9	55.7
02:15 AM - 02:20 AM	59.2	71.4	55.9
02:20 AM - 02:25 AM	58.2	66.9	56.2
02:25 AM - 02:30 AM	57.9	68.0	55.6
02:30 AM - 02:35 AM	59.4	71.3	56.5
02:35 AM - 02:40 AM	57.9	76.8	55.7
02:40 AM - 02:45 AM	58.9	77.7	55.8
02:45 AM - 02:50 AM	58.0	68.1	56.2
02:50 AM - 02:55 AM	57.1	63.0	55.2
02:55 AM - 03:00 AM	57.4	65.6	55.7
03:00 AM - 03:05 AM	57.1	62.4	55.4
03:05 AM - 03:10 AM	57.5	70.2	55.8
03:10 AM - 03:15 AM	58.1	73.5	56.0
03:15 AM - 03:20 AM	58.0	67.8	55.7
03:20 AM - 03:25 AM	57.3	62.7	55.5
03:25 AM - 03:30 AM	57.5	71.9	55.2
03:30 AM - 03:35 AM	58.5	71.8	55.8
03:35 AM - 03:40 AM	57.9	64.5	55.8

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Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284615-1

Sample No. 24144528-6
Parameter Noise
Location บ้านซับมอน (จุดอ้างอิง) (GPS 47P 728133, 1619176) (Shut down)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	57.9	66.2	55.6
03:45 AM - 03:50 AM	57.1	67.4	55.2
03:50 AM - 03:55 AM	57.7	70.4	55.4
03:55 AM - 04:00 AM	58.4	66.5	56.2
04:00 AM - 04:05 AM	58.1	65.8	56.1
04:05 AM - 04:10 AM	57.6	75.4	55.6
04:10 AM - 04:15 AM	58.4	69.2	56.1
04:15 AM - 04:20 AM	58.1	68.4	56.0
04:20 AM - 04:25 AM	59.0	68.1	56.9
04:25 AM - 04:30 AM	58.2	65.7	55.9
04:30 AM - 04:35 AM	57.7	63.4	56.2
04:35 AM - 04:40 AM	57.5	64.1	56.1
04:40 AM - 04:45 AM	58.3	64.2	56.6
04:45 AM - 04:50 AM	58.3	68.4	56.7
04:50 AM - 04:55 AM	58.7	66.4	56.6
04:55 AM - 05:00 AM	58.6	72.9	57.1
05:00 AM - 05:05 AM	58.6	66.1	56.8
05:05 AM - 05:10 AM	57.8	63.6	56.6
05:10 AM - 05:15 AM	59.1	69.7	56.9
05:15 AM - 05:20 AM	58.0	65.7	56.2
05:20 AM - 05:25 AM	61.3	73.2	57.3
05:25 AM - 05:30 AM	63.7	77.6	59.5
05:30 AM - 05:35 AM	59.9	69.4	57.8
05:35 AM - 05:40 AM	60.4	72.8	57.9
05:40 AM - 05:45 AM	60.3	70.4	57.9
05:45 AM - 05:50 AM	60.1	68.7	57.4
05:50 AM - 05:55 AM	67.3	79.9	58.3
05:55 AM - 06:00 AM	59.4	66.2	57.5
06:00 AM - 07:00 AM	61.2	86.7	57.4
07:00 AM - 08:00 AM	63.3	85.4	56.8
08:00 AM - 09:00 AM	59.3	80.1	56.0
09:00 AM - 10:00 AM	59.5	88.4	55.6

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284616-1

Sample No. 24144528-7
Parameter Noise
Location บ้านซับมอน (จุดอ้างอิง) (GPS 47P 728133, 1619176) (Shut down)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	62.3	91.4	55.7
11:00 AM - 12:00 PM	64.9	92.2	56.7
12:00 PM - 01:00 PM	58.4	74.3	55.6
01:00 PM - 02:00 PM	58.8	79.8	55.9
02:00 PM - 03:00 PM	59.0	76.3	56.8
03:00 PM - 04:00 PM	59.3	72.4	57.2
04:00 PM - 05:00 PM	68.7	93.4	61.0
05:00 PM - 06:00 PM	64.0	80.0	60.1
06:00 PM - 07:00 PM	60.2	76.6	58.5
07:00 PM - 08:00 PM	59.9	79.8	57.6
08:00 PM - 09:00 PM	61.5	87.2	57.2
09:00 PM - 10:00 PM	61.6	88.5	56.8
10:00 PM - 10:05 PM	58.6	67.6	56.8
10:05 PM - 10:10 PM	58.3	65.1	56.2
10:10 PM - 10:15 PM	59.0	66.8	56.8
10:15 PM - 10:20 PM	58.7	69.6	56.7
10:20 PM - 10:25 PM	58.2	64.1	56.4
10:25 PM - 10:30 PM	61.7	82.4	56.3
10:30 PM - 10:35 PM	59.0	68.3	56.3
10:35 PM - 10:40 PM	58.0	71.5	55.8
10:40 PM - 10:45 PM	58.0	65.8	56.3
10:45 PM - 10:50 PM	58.1	68.1	56.0
10:50 PM - 10:55 PM	59.0	71.8	56.0
10:55 PM - 11:00 PM	57.8	64.9	55.8
11:00 PM - 11:05 PM	57.6	67.5	55.6
11:05 PM - 11:10 PM	59.2	68.6	56.7
11:10 PM - 11:15 PM	60.6	74.6	57.1
11:15 PM - 11:20 PM	57.7	69.4	55.5
11:20 PM - 11:25 PM	57.9	73.2	55.4
11:25 PM - 11:30 PM	57.3	69.0	54.8
11:30 PM - 11:35 PM	58.1	66.2	56.1
11:35 PM - 11:40 PM	58.7	63.8	56.2
11:40 PM - 11:45 PM	57.6	61.9	56.2
11:45 PM - 11:50 PM	59.2	67.6	56.5
11:50 PM - 11:55 PM	58.4	75.7	56.2
11:55 PM - 12:00 AM	58.3	65.1	56.1
12:00 AM - 12:05 AM	57.7	70.3	55.7
12:05 AM - 12:10 AM	57.9	64.1	56.3
12:10 AM - 12:15 AM	58.2	65.7	56.7
12:15 AM - 12:20 AM	57.5	63.3	55.7

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Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284616-1

Sample No. 24144528-7
Parameter Noise
Location บ้านซับมอน (จุดอ้างอิง) (GPS 47P 728133, 1619176) (Shut down)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	58.4	64.3	55.9
12:25 AM - 12:30 AM	57.5	64.4	54.8
12:30 AM - 12:35 AM	57.3	64.2	55.4
12:35 AM - 12:40 AM	62.1	86.3	55.6
12:40 AM - 12:45 AM	58.5	72.2	55.0
12:45 AM - 12:50 AM	58.5	68.8	55.9
12:50 AM - 12:55 AM	58.5	69.0	55.2
12:55 AM - 01:00 AM	57.6	62.3	56.0
01:00 AM - 01:05 AM	57.9	66.3	55.7
01:05 AM - 01:10 AM	58.9	66.8	56.5
01:10 AM - 01:15 AM	57.2	63.5	54.9
01:15 AM - 01:20 AM	60.0	85.1	55.4
01:20 AM - 01:25 AM	62.5	82.0	55.8
01:25 AM - 01:30 AM	57.9	65.6	55.8
01:30 AM - 01:35 AM	59.2	74.2	56.3
01:35 AM - 01:40 AM	57.9	73.7	54.8
01:40 AM - 01:45 AM	57.2	66.5	55.4
01:45 AM - 01:50 AM	61.1	86.4	56.5
01:50 AM - 01:55 AM	57.3	61.9	55.3
01:55 AM - 02:00 AM	56.6	64.1	54.9
02:00 AM - 02:05 AM	57.3	68.9	55.7
02:05 AM - 02:10 AM	57.2	63.3	55.4
02:10 AM - 02:15 AM	57.2	63.8	55.5
02:15 AM - 02:20 AM	57.3	65.7	54.7
02:20 AM - 02:25 AM	58.6	67.1	56.5
02:25 AM - 02:30 AM	56.7	62.7	54.9
02:30 AM - 02:35 AM	58.8	64.5	56.9
02:35 AM - 02:40 AM	57.4	62.8	55.4
02:40 AM - 02:45 AM	56.8	65.7	54.5
02:45 AM - 02:50 AM	57.4	62.9	55.8
02:50 AM - 02:55 AM	58.9	65.8	56.0
02:55 AM - 03:00 AM	57.7	68.5	55.4
03:00 AM - 03:05 AM	58.8	65.3	57.2
03:05 AM - 03:10 AM	58.9	69.3	55.9
03:10 AM - 03:15 AM	59.0	77.2	56.4
03:15 AM - 03:20 AM	58.0	65.5	56.3
03:20 AM - 03:25 AM	59.1	71.6	55.7
03:25 AM - 03:30 AM	58.6	72.5	55.7
03:30 AM - 03:35 AM	56.6	63.2	55.0
03:35 AM - 03:40 AM	57.7	68.5	55.0

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284616-1

Sample No. 24144528-7
Parameter Noise
Location บ้านชับบอน (จุดอ้างอิง) (GPS 47P 728133, 1619176) (Shut down)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	57.7	68.5	55.2
03:45 AM - 03:50 AM	58.1	71.7	55.7
03:50 AM - 03:55 AM	58.7	68.7	56.4
03:55 AM - 04:00 AM	58.2	63.2	55.9
04:00 AM - 04:05 AM	59.1	71.5	55.8
04:05 AM - 04:10 AM	56.7	61.8	55.3
04:10 AM - 04:15 AM	57.1	71.3	55.5
04:15 AM - 04:20 AM	57.4	75.3	55.1
04:20 AM - 04:25 AM	57.6	66.3	55.7
04:25 AM - 04:30 AM	57.0	63.9	54.8
04:30 AM - 04:35 AM	58.3	70.8	56.0
04:35 AM - 04:40 AM	57.9	67.2	55.6
04:40 AM - 04:45 AM	57.1	64.4	55.5
04:45 AM - 04:50 AM	57.5	67.2	55.5
04:50 AM - 04:55 AM	57.8	65.9	56.1
04:55 AM - 05:00 AM	58.1	66.3	56.3
05:00 AM - 05:05 AM	59.2	68.1	56.3
05:05 AM - 05:10 AM	58.0	65.9	56.2
05:10 AM - 05:15 AM	58.1	64.7	56.2
05:15 AM - 05:20 AM	59.6	72.7	56.2
05:20 AM - 05:25 AM	59.3	73.6	57.1
05:25 AM - 05:30 AM	59.4	63.7	58.1
05:30 AM - 05:35 AM	59.8	72.4	57.9
05:35 AM - 05:40 AM	59.8	66.6	58.1
05:40 AM - 05:45 AM	59.9	69.2	58.2
05:45 AM - 05:50 AM	60.1	69.2	57.8
05:50 AM - 05:55 AM	59.3	65.7	57.9
05:55 AM - 06:00 AM	58.9	64.0	57.2
06:00 AM - 07:00 AM	69.2	89.0	58.4
07:00 AM - 08:00 AM	61.9	88.4	58.1
08:00 AM - 09:00 AM	61.5	88.0	56.3
09:00 AM - 10:00 AM	57.6	74.3	55.4

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284617-1

Sample No. 24144528-8
Parameter Noise
Location โรงเรียนอนุบาลทับกวาง (จุดอ้างอิง) (GPS 47P 722986, 1616400) (Shut down)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572552

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	50.8	69.5	48.8
11:00 AM - 12:00 PM	50.8	81.9	47.1
12:00 PM - 01:00 PM	49.3	61.1	47.2
01:00 PM - 02:00 PM	49.3	72.7	47.0
02:00 PM - 03:00 PM	50.5	73.5	47.1
03:00 PM - 04:00 PM	49.1	66.9	47.0
04:00 PM - 05:00 PM	50.3	71.6	47.8
05:00 PM - 06:00 PM	51.3	70.8	49.7
06:00 PM - 07:00 PM	52.5	69.0	50.9
07:00 PM - 08:00 PM	52.9	69.9	51.0
08:00 PM - 09:00 PM	54.4	65.8	53.0
09:00 PM - 10:00 PM	56.3	79.9	53.0
10:00 PM - 10:05 PM	53.0	57.5	51.9
10:05 PM - 10:10 PM	53.2	56.9	51.9
10:10 PM - 10:15 PM	53.5	57.6	52.2
10:15 PM - 10:20 PM	52.5	57.9	51.3
10:20 PM - 10:25 PM	53.4	61.8	51.7
10:25 PM - 10:30 PM	52.6	55.4	51.4
10:30 PM - 10:35 PM	52.7	57.1	51.3
10:35 PM - 10:40 PM	53.5	61.1	52.1
10:40 PM - 10:45 PM	53.6	61.9	51.7
10:45 PM - 10:50 PM	53.0	62.8	51.3
10:50 PM - 10:55 PM	52.1	58.1	50.7
10:55 PM - 11:00 PM	52.0	70.4	50.3
11:00 PM - 11:05 PM	52.2	56.4	50.8
11:05 PM - 11:10 PM	54.1	63.2	51.7
11:10 PM - 11:15 PM	52.1	58.9	50.3
11:15 PM - 11:20 PM	51.5	57.4	50.1
11:20 PM - 11:25 PM	51.3	58.4	49.6
11:25 PM - 11:30 PM	51.5	56.4	50.2
11:30 PM - 11:35 PM	50.7	54.0	49.5
11:35 PM - 11:40 PM	51.6	59.0	49.8
11:40 PM - 11:45 PM	51.1	62.3	49.5
11:45 PM - 11:50 PM	51.8	57.4	50.2
11:50 PM - 11:55 PM	50.9	54.0	49.6
11:55 PM - 12:00 AM	51.2	55.8	49.6
12:00 AM - 12:05 AM	51.4	58.1	49.8
12:05 AM - 12:10 AM	50.9	55.1	49.5
12:10 AM - 12:15 AM	51.3	57.4	49.5
12:15 AM - 12:20 AM	52.3	56.5	50.7

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Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284617-1

Sample No. 24144528-8
Parameter Noise
Location โรงเรียนอนุบาลทับกวาง (จุดอ้างอิง) (GPS 47P 722986, 1616400) (Shut down)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572552

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	51.3	55.7	49.7
12:25 AM - 12:30 AM	50.9	57.7	49.2
12:30 AM - 12:35 AM	51.0	62.3	49.1
12:35 AM - 12:40 AM	50.2	57.5	48.5
12:40 AM - 12:45 AM	50.5	59.0	49.1
12:45 AM - 12:50 AM	50.2	59.1	48.8
12:50 AM - 12:55 AM	50.7	62.1	48.4
12:55 AM - 01:00 AM	50.4	61.9	48.9
01:00 AM - 01:05 AM	49.3	52.8	48.3
01:05 AM - 01:10 AM	49.2	54.7	48.0
01:10 AM - 01:15 AM	48.7	53.7	47.8
01:15 AM - 01:20 AM	49.9	53.7	48.7
01:20 AM - 01:25 AM	62.6	79.5	48.6
01:25 AM - 01:30 AM	49.4	53.6	47.8
01:30 AM - 01:35 AM	49.2	51.8	48.3
01:35 AM - 01:40 AM	49.7	54.6	48.3
01:40 AM - 01:45 AM	49.6	56.4	48.4
01:45 AM - 01:50 AM	49.6	53.1	48.5
01:50 AM - 01:55 AM	49.4	53.2	48.6
01:55 AM - 02:00 AM	48.4	51.2	47.6
02:00 AM - 02:05 AM	48.3	51.2	47.3
02:05 AM - 02:10 AM	51.0	62.4	47.4
02:10 AM - 02:15 AM	47.9	50.2	47.1
02:15 AM - 02:20 AM	49.0	53.0	48.3
02:20 AM - 02:25 AM	50.2	54.4	48.5
02:25 AM - 02:30 AM	52.1	64.0	47.9
02:30 AM - 02:35 AM	50.3	58.3	48.4
02:35 AM - 02:40 AM	51.2	54.8	49.4
02:40 AM - 02:45 AM	50.4	56.2	48.2
02:45 AM - 02:50 AM	49.9	55.9	48.8
02:50 AM - 02:55 AM	49.0	52.3	48.4
02:55 AM - 03:00 AM	49.1	55.1	47.8
03:00 AM - 03:05 AM	49.2	55.6	48.0
03:05 AM - 03:10 AM	49.3	55.4	48.2
03:10 AM - 03:15 AM	48.7	50.9	47.6
03:15 AM - 03:20 AM	50.3	53.7	49.0
03:20 AM - 03:25 AM	50.0	53.9	49.0
03:25 AM - 03:30 AM	50.0	53.1	48.9
03:30 AM - 03:35 AM	49.8	53.0	48.8
03:35 AM - 03:40 AM	49.5	52.1	48.6

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Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284617-1

Sample No. 24144528-8
Parameter Noise
Location โรงเรียนอนุบาลทับกวาง (จุดอ้างอิง) (GPS 47P 722986, 1616400) (Shut down)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572552

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	49.3	52.3	48.2
03:45 AM - 03:50 AM	50.3	55.2	49.1
03:50 AM - 03:55 AM	49.4	52.3	48.4
03:55 AM - 04:00 AM	49.5	54.7	48.1
04:00 AM - 04:05 AM	49.7	56.9	48.6
04:05 AM - 04:10 AM	49.8	53.1	48.7
04:10 AM - 04:15 AM	51.2	62.4	48.3
04:15 AM - 04:20 AM	49.5	55.2	48.3
04:20 AM - 04:25 AM	49.8	56.2	48.5
04:25 AM - 04:30 AM	49.7	52.5	48.3
04:30 AM - 04:35 AM	49.6	53.2	48.2
04:35 AM - 04:40 AM	49.8	54.8	48.6
04:40 AM - 04:45 AM	49.9	57.2	48.6
04:45 AM - 04:50 AM	49.9	53.1	48.8
04:50 AM - 04:55 AM	50.0	53.9	48.9
04:55 AM - 05:00 AM	50.1	53.2	48.9
05:00 AM - 05:05 AM	50.7	54.4	49.5
05:05 AM - 05:10 AM	54.9	69.0	49.5
05:10 AM - 05:15 AM	50.8	54.6	49.6
05:15 AM - 05:20 AM	50.3	54.8	49.2
05:20 AM - 05:25 AM	50.6	58.3	49.1
05:25 AM - 05:30 AM	50.3	54.8	49.1
05:30 AM - 05:35 AM	51.1	56.8	49.7
05:35 AM - 05:40 AM	50.4	54.1	49.3
05:40 AM - 05:45 AM	50.9	54.4	49.9
05:45 AM - 05:50 AM	52.8	62.3	49.9
05:50 AM - 05:55 AM	51.2	58.3	49.9
05:55 AM - 06:00 AM	52.0	59.6	50.0
06:00 AM - 07:00 AM	55.0	78.9	50.0
07:00 AM - 08:00 AM	52.6	75.4	50.3
08:00 AM - 09:00 AM	52.2	73.3	49.3
09:00 AM - 10:00 AM	54.6	85.2	49.8

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284618-1

Sample No. 24144528-9
Parameter Noise
Location โรงเรียนอนุบาลทับกวาง (จุดอ้างอิง) (GPS 47P 722986, 1616400) (Shut down)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572552

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	51.5	64.3	49.8
11:00 AM - 12:00 PM	51.7	81.6	48.8
12:00 PM - 01:00 PM	58.8	81.6	49.4
01:00 PM - 02:00 PM	50.1	72.1	48.5
02:00 PM - 03:00 PM	53.1	86.1	47.8
03:00 PM - 04:00 PM	51.4	80.5	48.2
04:00 PM - 05:00 PM	52.0	71.1	50.1
05:00 PM - 06:00 PM	53.8	81.2	50.6
06:00 PM - 07:00 PM	51.6	66.4	49.1
07:00 PM - 08:00 PM	51.7	65.7	50.5
08:00 PM - 09:00 PM	52.6	72.3	51.4
09:00 PM - 10:00 PM	55.1	87.5	52.5
10:00 PM - 10:05 PM	52.8	55.2	51.8
10:05 PM - 10:10 PM	52.8	56.2	51.5
10:10 PM - 10:15 PM	52.4	55.7	51.0
10:15 PM - 10:20 PM	52.6	55.9	51.8
10:20 PM - 10:25 PM	51.5	54.2	49.8
10:25 PM - 10:30 PM	52.0	56.1	50.4
10:30 PM - 10:35 PM	52.3	59.0	51.3
10:35 PM - 10:40 PM	52.1	58.6	50.8
10:40 PM - 10:45 PM	51.3	54.9	50.2
10:45 PM - 10:50 PM	51.8	57.0	50.5
10:50 PM - 10:55 PM	51.9	54.9	51.0
10:55 PM - 11:00 PM	51.3	56.2	50.3
11:00 PM - 11:05 PM	51.6	56.8	50.7
11:05 PM - 11:10 PM	51.5	55.9	50.4
11:10 PM - 11:15 PM	50.8	56.1	49.6
11:15 PM - 11:20 PM	51.9	63.7	49.6
11:20 PM - 11:25 PM	50.4	55.9	49.1
11:25 PM - 11:30 PM	51.3	59.5	50.3
11:30 PM - 11:35 PM	50.0	53.5	49.0
11:35 PM - 11:40 PM	51.0	54.3	49.7
11:40 PM - 11:45 PM	50.0	53.3	48.8
11:45 PM - 11:50 PM	48.6	53.8	47.4
11:50 PM - 11:55 PM	48.5	52.6	47.5
11:55 PM - 12:00 AM	48.6	53.2	47.2
12:00 AM - 12:05 AM	48.0	50.7	47.2
12:05 AM - 12:10 AM	47.9	51.7	47.1
12:10 AM - 12:15 AM	48.0	51.4	47.0
12:15 AM - 12:20 AM	48.9	53.8	47.5

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Approved by
Kanokkorn Anek
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284618-1

Sample No. 24144528-9
Parameter Noise
Location โรงเรียนอนุบาลทับกวาง (จุดอ้างอิง) (GPS 47P 722986, 1616400) (Shut down)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572552

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	48.4	55.1	47.1
12:25 AM - 12:30 AM	48.5	54.6	47.3
12:30 AM - 12:35 AM	47.8	50.9	46.8
12:35 AM - 12:40 AM	49.0	52.6	48.0
12:40 AM - 12:45 AM	48.2	50.7	47.2
12:45 AM - 12:50 AM	48.6	52.7	47.1
12:50 AM - 12:55 AM	48.9	54.6	47.5
12:55 AM - 01:00 AM	48.7	53.2	47.8
01:00 AM - 01:05 AM	48.6	52.4	47.8
01:05 AM - 01:10 AM	48.8	54.8	47.6
01:10 AM - 01:15 AM	48.3	50.7	47.2
01:15 AM - 01:20 AM	48.2	56.7	46.6
01:20 AM - 01:25 AM	51.9	66.7	46.3
01:25 AM - 01:30 AM	47.0	51.7	46.2
01:30 AM - 01:35 AM	46.8	50.1	46.0
01:35 AM - 01:40 AM	47.3	49.6	46.5
01:40 AM - 01:45 AM	47.9	52.1	46.8
01:45 AM - 01:50 AM	49.4	58.1	47.7
01:50 AM - 01:55 AM	49.0	58.6	47.6
01:55 AM - 02:00 AM	49.0	52.6	47.8
02:00 AM - 02:05 AM	49.5	54.6	47.9
02:05 AM - 02:10 AM	52.5	75.9	49.0
02:10 AM - 02:15 AM	49.6	56.7	48.4
02:15 AM - 02:20 AM	49.9	58.3	47.8
02:20 AM - 02:25 AM	49.2	53.4	48.1
02:25 AM - 02:30 AM	49.6	60.9	46.6
02:30 AM - 02:35 AM	47.5	52.2	46.3
02:35 AM - 02:40 AM	47.2	51.6	46.3
02:40 AM - 02:45 AM	47.1	49.5	46.2
02:45 AM - 02:50 AM	47.4	56.3	46.1
02:50 AM - 02:55 AM	48.9	56.9	46.6
02:55 AM - 03:00 AM	49.3	56.9	47.7
03:00 AM - 03:05 AM	48.9	58.5	47.6
03:05 AM - 03:10 AM	48.1	52.2	47.2
03:10 AM - 03:15 AM	48.2	53.5	47.5
03:15 AM - 03:20 AM	48.2	57.0	46.9
03:20 AM - 03:25 AM	48.8	57.2	46.6
03:25 AM - 03:30 AM	47.6	50.1	46.6
03:30 AM - 03:35 AM	47.6	51.6	46.6
03:35 AM - 03:40 AM	48.4	52.3	47.0

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Senior Manager

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284618-1

Sample No. 24144528-9
Parameter Noise
Location โรงเรียนอนุบาลทับกวาง (จุดอ้างอิง) (GPS 47P 722986, 1616400) (Shut down)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572552

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	49.8	57.6	48.3
03:45 AM - 03:50 AM	49.8	56.3	47.7
03:50 AM - 03:55 AM	49.2	52.4	47.5
03:55 AM - 04:00 AM	50.2	56.2	48.3
04:00 AM - 04:05 AM	51.4	63.9	47.6
04:05 AM - 04:10 AM	48.4	52.3	47.6
04:10 AM - 04:15 AM	48.9	51.6	47.7
04:15 AM - 04:20 AM	48.7	53.4	47.5
04:20 AM - 04:25 AM	50.5	58.4	48.0
04:25 AM - 04:30 AM	51.5	60.4	49.4
04:30 AM - 04:35 AM	50.6	56.6	48.5
04:35 AM - 04:40 AM	50.0	55.8	48.7
04:40 AM - 04:45 AM	50.8	57.7	49.1
04:45 AM - 04:50 AM	50.0	58.0	48.8
04:50 AM - 04:55 AM	50.4	56.8	48.7
04:55 AM - 05:00 AM	49.7	53.9	48.2
05:00 AM - 05:05 AM	50.4	56.3	48.5
05:05 AM - 05:10 AM	54.7	69.3	48.5
05:10 AM - 05:15 AM	50.3	54.7	48.1
05:15 AM - 05:20 AM	50.2	55.5	48.6
05:20 AM - 05:25 AM	50.2	56.3	48.9
05:25 AM - 05:30 AM	49.8	55.9	48.5
05:30 AM - 05:35 AM	50.6	59.2	48.7
05:35 AM - 05:40 AM	51.6	59.7	50.0
05:40 AM - 05:45 AM	51.3	59.6	49.7
05:45 AM - 05:50 AM	51.9	61.4	49.8
05:50 AM - 05:55 AM	54.1	62.7	49.9
05:55 AM - 06:00 AM	51.8	63.1	50.2
06:00 AM - 07:00 AM	52.7	71.3	50.2
07:00 AM - 08:00 AM	52.2	70.9	48.6
08:00 AM - 09:00 AM	57.0	76.2	53.0
09:00 AM - 10:00 AM	54.3	69.8	51.8

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284619-1

Sample No. 24144528-10
Parameter Noise
Location โรงเรียนอนุบาลทับกวาง (จุดอ้างอิง) (GPS 47P 722986, 1616400) (Shut down)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572552

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	49.1	73.1	46.0
11:00 AM - 12:00 PM	48.6	79.7	46.0
12:00 PM - 01:00 PM	50.8	76.5	46.0
01:00 PM - 02:00 PM	48.9	69.9	46.7
02:00 PM - 03:00 PM	52.1	74.9	46.8
03:00 PM - 04:00 PM	66.0	93.9	60.6
04:00 PM - 05:00 PM	52.8	71.3	50.3
05:00 PM - 06:00 PM	55.1	89.6	50.7
06:00 PM - 07:00 PM	53.7	72.4	50.9
07:00 PM - 08:00 PM	54.3	76.2	53.0
08:00 PM - 09:00 PM	58.8	64.3	57.8
09:00 PM - 10:00 PM	58.4	70.0	57.2
10:00 PM - 10:05 PM	57.7	62.6	56.4
10:05 PM - 10:10 PM	57.9	65.2	56.5
10:10 PM - 10:15 PM	57.7	62.6	56.6
10:15 PM - 10:20 PM	57.4	61.1	56.2
10:20 PM - 10:25 PM	57.1	59.8	56.1
10:25 PM - 10:30 PM	56.3	59.9	55.1
10:30 PM - 10:35 PM	56.8	59.7	55.7
10:35 PM - 10:40 PM	56.5	59.4	55.3
10:40 PM - 10:45 PM	56.6	59.7	55.5
10:45 PM - 10:50 PM	56.1	59.4	54.6
10:50 PM - 10:55 PM	56.0	59.4	54.2
10:55 PM - 11:00 PM	54.6	59.5	52.2
11:00 PM - 11:05 PM	54.3	58.5	52.2
11:05 PM - 11:10 PM	56.1	69.7	52.7
11:10 PM - 11:15 PM	55.3	60.2	53.7
11:15 PM - 11:20 PM	54.5	57.8	53.1
11:20 PM - 11:25 PM	54.7	58.5	53.3
11:25 PM - 11:30 PM	54.3	58.2	52.9
11:30 PM - 11:35 PM	53.6	57.5	51.9
11:35 PM - 11:40 PM	53.7	57.7	52.1
11:40 PM - 11:45 PM	54.1	58.3	52.1
11:45 PM - 11:50 PM	53.1	57.5	51.1
11:50 PM - 11:55 PM	54.0	58.1	52.0
11:55 PM - 12:00 AM	52.6	56.5	51.4
12:00 AM - 12:05 AM	52.1	57.2	50.7
12:05 AM - 12:10 AM	52.5	56.6	51.2
12:10 AM - 12:15 AM	53.6	57.4	51.4
12:15 AM - 12:20 AM	54.1	58.4	52.4

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284619-1

Sample No. 24144528-10
Parameter Noise
Location โรงเรียนอนุบาลทับกวาง (จุดอ้างอิง) (GPS 47P 722986, 1616400) (Shut down)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572552

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	54.8	58.6	53.1
12:25 AM - 12:30 AM	54.5	59.1	52.6
12:30 AM - 12:35 AM	53.8	58.4	51.3
12:35 AM - 12:40 AM	51.4	55.7	49.5
12:40 AM - 12:45 AM	52.9	58.0	50.7
12:45 AM - 12:50 AM	52.9	59.6	50.0
12:50 AM - 12:55 AM	52.1	58.7	49.9
12:55 AM - 01:00 AM	51.9	55.9	50.4
01:00 AM - 01:05 AM	51.3	55.9	50.0
01:05 AM - 01:10 AM	52.5	59.4	49.9
01:10 AM - 01:15 AM	51.5	60.1	50.2
01:15 AM - 01:20 AM	51.5	56.0	50.1
01:20 AM - 01:25 AM	62.6	81.1	50.1
01:25 AM - 01:30 AM	51.2	54.1	49.8
01:30 AM - 01:35 AM	51.3	56.9	49.7
01:35 AM - 01:40 AM	51.8	58.3	50.1
01:40 AM - 01:45 AM	51.6	57.9	49.6
01:45 AM - 01:50 AM	51.4	57.4	49.8
01:50 AM - 01:55 AM	51.4	56.5	49.4
01:55 AM - 02:00 AM	53.1	63.8	49.7
02:00 AM - 02:05 AM	52.9	57.4	50.8
02:05 AM - 02:10 AM	52.6	58.5	49.7
02:10 AM - 02:15 AM	52.6	59.0	50.4
02:15 AM - 02:20 AM	53.4	63.5	50.9
02:20 AM - 02:25 AM	54.4	60.1	52.0
02:25 AM - 02:30 AM	65.1	78.8	52.3
02:30 AM - 02:35 AM	55.3	60.3	52.3
02:35 AM - 02:40 AM	55.7	63.2	53.3
02:40 AM - 02:45 AM	55.8	62.0	53.3
02:45 AM - 02:50 AM	55.3	59.7	52.7
02:50 AM - 02:55 AM	55.4	60.1	52.2
02:55 AM - 03:00 AM	55.2	60.9	51.6
03:00 AM - 03:05 AM	55.0	59.7	52.6
03:05 AM - 03:10 AM	54.8	59.3	52.5
03:10 AM - 03:15 AM	55.0	59.3	52.5
03:15 AM - 03:20 AM	54.9	59.3	52.0
03:20 AM - 03:25 AM	54.0	58.0	51.6
03:25 AM - 03:30 AM	54.7	60.4	52.1
03:30 AM - 03:35 AM	54.8	59.0	52.2
03:35 AM - 03:40 AM	54.6	59.2	51.4

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Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284619-1

Sample No. 24144528-10
Parameter Noise
Location โรงเรียนอนุบาลทับกวาง (จุดอ้างอิง) (GPS 47P 722986, 1616400) (Shut down)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572552

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	54.6	58.8	51.7
03:45 AM - 03:50 AM	53.2	57.3	50.2
03:50 AM - 03:55 AM	55.4	66.6	51.2
03:55 AM - 04:00 AM	54.2	59.8	50.4
04:00 AM - 04:05 AM	54.5	65.7	50.6
04:05 AM - 04:10 AM	53.6	57.8	50.8
04:10 AM - 04:15 AM	58.6	75.1	49.3
04:15 AM - 04:20 AM	53.8	63.0	49.6
04:20 AM - 04:25 AM	50.3	59.3	48.4
04:25 AM - 04:30 AM	51.6	59.9	49.2
04:30 AM - 04:35 AM	50.7	57.5	48.8
04:35 AM - 04:40 AM	50.6	54.9	49.2
04:40 AM - 04:45 AM	49.8	56.0	48.5
04:45 AM - 04:50 AM	49.7	52.9	48.5
04:50 AM - 04:55 AM	54.4	76.3	48.6
04:55 AM - 05:00 AM	50.5	58.6	49.1
05:00 AM - 05:05 AM	50.4	56.4	49.1
05:05 AM - 05:10 AM	51.6	64.1	48.5
05:10 AM - 05:15 AM	48.6	55.3	47.4
05:15 AM - 05:20 AM	48.6	54.9	47.3
05:20 AM - 05:25 AM	48.8	56.7	47.4
05:25 AM - 05:30 AM	48.8	55.1	47.7
05:30 AM - 05:35 AM	48.9	57.5	47.2
05:35 AM - 05:40 AM	48.7	55.7	47.1
05:40 AM - 05:45 AM	50.1	59.6	47.9
05:45 AM - 05:50 AM	63.2	70.6	51.2
05:50 AM - 05:55 AM	65.5	70.8	50.6
05:55 AM - 06:00 AM	59.1	65.2	50.9
06:00 AM - 07:00 AM	53.8	74.4	49.4
07:00 AM - 08:00 AM	50.2	70.2	47.6
08:00 AM - 09:00 AM	50.4	67.5	48.6
09:00 AM - 10:00 AM	51.1	69.3	48.4

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284620-1

Sample No. 24144528-11
Parameter Noise
Location โรงเรียนอนุบาลทับกวาง (จุดอ้างอิง) (GPS 47P 722986, 1616400) (Shut down)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572552

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	52.0	77.4	48.5
11:00 AM - 12:00 PM	49.2	67.8	47.3
12:00 PM - 01:00 PM	48.8	68.8	46.9
01:00 PM - 02:00 PM	49.3	66.5	47.3
02:00 PM - 03:00 PM	51.3	69.1	49.2
03:00 PM - 04:00 PM	53.8	76.8	49.5
04:00 PM - 05:00 PM	52.6	67.2	50.8
05:00 PM - 06:00 PM	53.1	81.0	50.9
06:00 PM - 07:00 PM	54.1	78.3	50.8
07:00 PM - 08:00 PM	53.1	62.5	51.6
08:00 PM - 09:00 PM	56.5	65.2	55.1
09:00 PM - 10:00 PM	60.7	68.0	58.8
10:00 PM - 10:05 PM	60.4	64.1	58.8
10:05 PM - 10:10 PM	60.4	63.2	58.9
10:10 PM - 10:15 PM	59.6	62.3	58.1
10:15 PM - 10:20 PM	60.2	63.6	58.9
10:20 PM - 10:25 PM	60.2	63.6	59.0
10:25 PM - 10:30 PM	60.8	64.6	59.0
10:30 PM - 10:35 PM	60.2	65.4	58.7
10:35 PM - 10:40 PM	60.3	63.4	58.9
10:40 PM - 10:45 PM	59.6	61.9	58.5
10:45 PM - 10:50 PM	60.3	64.9	58.9
10:50 PM - 10:55 PM	60.1	64.5	58.6
10:55 PM - 11:00 PM	60.7	63.8	59.3
11:00 PM - 11:05 PM	61.4	77.9	59.2
11:05 PM - 11:10 PM	60.6	64.0	59.0
11:10 PM - 11:15 PM	60.8	64.4	59.6
11:15 PM - 11:20 PM	61.0	64.1	59.5
11:20 PM - 11:25 PM	61.2	69.0	59.3
11:25 PM - 11:30 PM	60.0	63.0	58.6
11:30 PM - 11:35 PM	60.6	63.9	59.3
11:35 PM - 11:40 PM	60.4	64.1	58.9
11:40 PM - 11:45 PM	59.9	63.1	58.2
11:45 PM - 11:50 PM	60.2	63.2	58.7
11:50 PM - 11:55 PM	60.3	63.3	58.9
11:55 PM - 12:00 AM	60.3	65.9	58.9
12:00 AM - 12:05 AM	60.6	64.0	59.2
12:05 AM - 12:10 AM	60.6	64.3	59.1
12:10 AM - 12:15 AM	60.0	64.6	58.2
12:15 AM - 12:20 AM	60.7	65.5	58.8

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284620-1

Sample No. 24144528-11
Parameter Noise
Location โรงเรียนอนุบาลทับกวาง (จุดอ้างอิง) (GPS 47P 722986, 1616400) (Shut down)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572552

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	59.7	63.4	58.0
12:25 AM - 12:30 AM	60.0	63.3	58.4
12:30 AM - 12:35 AM	59.8	63.5	58.3
12:35 AM - 12:40 AM	60.4	64.2	58.6
12:40 AM - 12:45 AM	60.4	63.9	58.5
12:45 AM - 12:50 AM	60.5	64.0	58.9
12:50 AM - 12:55 AM	60.4	63.9	59.0
12:55 AM - 01:00 AM	60.4	63.9	58.7
01:00 AM - 01:05 AM	60.0	64.3	58.0
01:05 AM - 01:10 AM	60.1	63.5	58.5
01:10 AM - 01:15 AM	60.1	63.8	58.4
01:15 AM - 01:20 AM	59.1	63.4	57.3
01:20 AM - 01:25 AM	59.4	71.4	57.7
01:25 AM - 01:30 AM	59.7	69.0	57.2
01:30 AM - 01:35 AM	58.8	62.9	56.7
01:35 AM - 01:40 AM	58.4	62.9	56.3
01:40 AM - 01:45 AM	57.9	62.8	55.8
01:45 AM - 01:50 AM	58.6	63.1	55.7
01:50 AM - 01:55 AM	57.3	61.9	54.1
01:55 AM - 02:00 AM	56.7	61.5	53.7
02:00 AM - 02:05 AM	55.6	61.7	52.3
02:05 AM - 02:10 AM	56.4	63.1	52.6
02:10 AM - 02:15 AM	55.2	60.1	52.3
02:15 AM - 02:20 AM	54.3	59.6	51.1
02:20 AM - 02:25 AM	54.2	59.7	51.2
02:25 AM - 02:30 AM	54.9	60.2	51.2
02:30 AM - 02:35 AM	54.3	74.7	50.0
02:35 AM - 02:40 AM	57.6	73.0	51.6
02:40 AM - 02:45 AM	55.7	60.0	52.1
02:45 AM - 02:50 AM	55.6	60.1	52.0
02:50 AM - 02:55 AM	55.7	59.9	52.3
02:55 AM - 03:00 AM	56.1	61.2	51.6
03:00 AM - 03:05 AM	54.9	59.5	50.9
03:05 AM - 03:10 AM	53.2	60.0	48.1
03:10 AM - 03:15 AM	53.4	59.4	49.7
03:15 AM - 03:20 AM	50.6	58.1	47.2
03:20 AM - 03:25 AM	50.6	56.9	47.3
03:25 AM - 03:30 AM	50.3	57.3	47.2
03:30 AM - 03:35 AM	49.8	56.6	46.7
03:35 AM - 03:40 AM	49.4	54.4	47.0

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284620-1

Sample No. 24144528-11
Parameter Noise
Location โรงเรียนอนุบาลทับกวาง (จุดอ้างอิง) (GPS 47P 722986, 1616400) (Shut down)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572552

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	49.5	54.9	47.0
03:45 AM - 03:50 AM	49.8	53.6	47.2
03:50 AM - 03:55 AM	49.4	55.5	46.8
03:55 AM - 04:00 AM	49.8	54.7	46.7
04:00 AM - 04:05 AM	49.1	55.3	47.0
04:05 AM - 04:10 AM	49.1	54.8	47.0
04:10 AM - 04:15 AM	48.2	54.2	46.8
04:15 AM - 04:20 AM	49.0	56.1	47.3
04:20 AM - 04:25 AM	50.9	62.4	47.0
04:25 AM - 04:30 AM	48.1	52.8	46.7
04:30 AM - 04:35 AM	47.9	53.2	46.6
04:35 AM - 04:40 AM	47.2	50.8	46.2
04:40 AM - 04:45 AM	47.6	51.9	46.7
04:45 AM - 04:50 AM	48.0	53.1	46.8
04:50 AM - 04:55 AM	48.2	51.9	47.3
04:55 AM - 05:00 AM	49.2	55.3	47.2
05:00 AM - 05:05 AM	50.8	60.5	47.0
05:05 AM - 05:10 AM	49.3	55.3	47.3
05:10 AM - 05:15 AM	51.4	65.4	47.2
05:15 AM - 05:20 AM	49.4	55.6	47.2
05:20 AM - 05:25 AM	48.6	53.5	47.1
05:25 AM - 05:30 AM	47.8	53.0	46.9
05:30 AM - 05:35 AM	48.5	53.8	47.3
05:35 AM - 05:40 AM	48.3	54.8	47.0
05:40 AM - 05:45 AM	49.3	56.2	47.6
05:45 AM - 05:50 AM	50.6	59.0	48.7
05:50 AM - 05:55 AM	54.5	62.3	48.9
05:55 AM - 06:00 AM	59.7	65.4	48.6
06:00 AM - 07:00 AM	52.6	73.6	48.6
07:00 AM - 08:00 AM	51.7	70.3	49.5
08:00 AM - 09:00 AM	52.0	73.6	49.2
09:00 AM - 10:00 AM	58.6	80.6	48.6

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284621-1

Sample No. 24144528-12
Parameter Noise
Location โรงเรียนอนุบาลทับกวาง (จุดอ้างอิง) (GPS 47P 722986, 1616400) (Shut down)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572552

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	50.5	68.7	48.5
11:00 AM - 12:00 PM	50.7	79.5	47.8
12:00 PM - 01:00 PM	50.0	72.5	47.1
01:00 PM - 02:00 PM	48.4	72.5	46.8
02:00 PM - 03:00 PM	50.8	75.9	47.1
03:00 PM - 04:00 PM	49.0	67.0	47.2
04:00 PM - 05:00 PM	49.7	64.2	48.3
05:00 PM - 06:00 PM	51.2	78.4	48.9
06:00 PM - 07:00 PM	50.6	74.0	49.0
07:00 PM - 08:00 PM	50.1	62.5	49.2
08:00 PM - 09:00 PM	52.3	66.4	50.7
09:00 PM - 10:00 PM	56.0	69.7	53.0
10:00 PM - 10:05 PM	57.7	62.8	54.2
10:05 PM - 10:10 PM	57.7	62.0	56.2
10:10 PM - 10:15 PM	57.4	61.9	54.9
10:15 PM - 10:20 PM	56.0	62.2	52.1
10:20 PM - 10:25 PM	57.1	63.0	53.3
10:25 PM - 10:30 PM	57.0	61.7	52.4
10:30 PM - 10:35 PM	57.3	61.5	54.6
10:35 PM - 10:40 PM	57.6	62.2	55.6
10:40 PM - 10:45 PM	57.1	61.6	54.8
10:45 PM - 10:50 PM	57.9	61.6	55.8
10:50 PM - 10:55 PM	57.8	61.9	55.3
10:55 PM - 11:00 PM	58.3	61.8	56.3
11:00 PM - 11:05 PM	57.9	62.0	55.8
11:05 PM - 11:10 PM	58.2	62.6	56.1
11:10 PM - 11:15 PM	58.6	68.0	56.4
11:15 PM - 11:20 PM	57.7	61.4	55.2
11:20 PM - 11:25 PM	58.6	62.7	56.8
11:25 PM - 11:30 PM	58.4	63.6	55.0
11:30 PM - 11:35 PM	58.2	63.2	54.9
11:35 PM - 11:40 PM	57.3	62.2	52.8
11:40 PM - 11:45 PM	57.5	62.2	54.0
11:45 PM - 11:50 PM	57.8	62.2	54.5
11:50 PM - 11:55 PM	57.4	62.7	53.6
11:55 PM - 12:00 AM	58.4	62.3	55.8
12:00 AM - 12:05 AM	57.1	61.9	54.1
12:05 AM - 12:10 AM	56.6	63.4	52.9
12:10 AM - 12:15 AM	54.2	60.4	51.3
12:15 AM - 12:20 AM	53.6	60.0	47.3

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284621-1

Sample No. 24144528-12
Parameter Noise
Location โรงเรียนอนุบาลทับกวาง (จุดอ้างอิง) (GPS 47P 722986, 1616400) (Shut down)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572552

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	54.3	60.1	51.2
12:25 AM - 12:30 AM	53.8	60.1	48.4
12:30 AM - 12:35 AM	51.1	58.8	47.0
12:35 AM - 12:40 AM	51.6	57.8	47.2
12:40 AM - 12:45 AM	51.5	57.0	47.3
12:45 AM - 12:50 AM	50.2	57.5	46.5
12:50 AM - 12:55 AM	49.8	58.4	47.0
12:55 AM - 01:00 AM	49.2	57.5	46.3
01:00 AM - 01:05 AM	48.3	55.4	46.2
01:05 AM - 01:10 AM	47.2	58.3	45.7
01:10 AM - 01:15 AM	47.6	65.0	46.3
01:15 AM - 01:20 AM	47.1	50.9	46.1
01:20 AM - 01:25 AM	47.5	51.5	46.3
01:25 AM - 01:30 AM	61.1	78.5	46.1
01:30 AM - 01:35 AM	46.7	50.0	45.8
01:35 AM - 01:40 AM	45.9	49.1	45.1
01:40 AM - 01:45 AM	46.2	49.7	45.3
01:45 AM - 01:50 AM	47.4	54.6	45.2
01:50 AM - 01:55 AM	46.3	49.6	45.3
01:55 AM - 02:00 AM	66.8	81.3	45.1
02:00 AM - 02:05 AM	46.6	50.3	45.7
02:05 AM - 02:10 AM	46.3	50.8	44.9
02:10 AM - 02:15 AM	49.5	61.8	45.6
02:15 AM - 02:20 AM	46.3	50.1	45.4
02:20 AM - 02:25 AM	46.7	50.4	45.6
02:25 AM - 02:30 AM	46.9	52.4	45.6
02:30 AM - 02:35 AM	50.2	66.2	45.6
02:35 AM - 02:40 AM	47.2	53.1	45.9
02:40 AM - 02:45 AM	46.3	53.5	45.0
02:45 AM - 02:50 AM	47.2	53.1	45.7
02:50 AM - 02:55 AM	46.7	52.3	45.1
02:55 AM - 03:00 AM	47.6	52.9	46.1
03:00 AM - 03:05 AM	46.3	50.4	44.8
03:05 AM - 03:10 AM	46.8	54.9	45.6
03:10 AM - 03:15 AM	46.0	49.0	44.9
03:15 AM - 03:20 AM	46.0	49.8	44.9
03:20 AM - 03:25 AM	46.2	50.7	45.3
03:25 AM - 03:30 AM	47.3	53.1	45.8
03:30 AM - 03:35 AM	46.5	51.6	45.4
03:35 AM - 03:40 AM	46.3	49.5	45.6

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284621-1

Sample No. 24144528-12
Parameter Noise
Location โรงเรียนอนุบาลทับกวาง (จุดอ้างอิง) (GPS 47P 722986, 1616400) (Shut down)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572552

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	45.8	53.1	44.8
03:45 AM - 03:50 AM	45.1	50.1	44.2
03:50 AM - 03:55 AM	45.0	50.6	44.3
03:55 AM - 04:00 AM	45.4	51.8	44.3
04:00 AM - 04:05 AM	44.8	48.5	44.3
04:05 AM - 04:10 AM	48.9	61.3	44.2
04:10 AM - 04:15 AM	45.4	50.9	44.3
04:15 AM - 04:20 AM	46.0	53.9	44.7
04:20 AM - 04:25 AM	45.9	50.9	44.5
04:25 AM - 04:30 AM	45.6	49.6	44.7
04:30 AM - 04:35 AM	45.9	54.9	44.8
04:35 AM - 04:40 AM	45.8	51.1	45.0
04:40 AM - 04:45 AM	45.6	50.3	44.6
04:45 AM - 04:50 AM	46.6	51.0	45.2
04:50 AM - 04:55 AM	47.8	54.0	46.4
04:55 AM - 05:00 AM	47.5	54.9	45.3
05:00 AM - 05:05 AM	49.5	56.5	47.0
05:05 AM - 05:10 AM	48.0	51.2	46.8
05:10 AM - 05:15 AM	48.2	53.3	46.8
05:15 AM - 05:20 AM	57.1	71.5	47.6
05:20 AM - 05:25 AM	48.4	52.5	47.1
05:25 AM - 05:30 AM	49.0	60.5	46.6
05:30 AM - 05:35 AM	49.6	59.1	47.4
05:35 AM - 05:40 AM	50.6	59.2	48.2
05:40 AM - 05:45 AM	49.8	56.7	48.0
05:45 AM - 05:50 AM	49.4	58.2	47.4
05:50 AM - 05:55 AM	50.6	62.3	47.8
05:55 AM - 06:00 AM	53.5	66.4	49.6
06:00 AM - 07:00 AM	53.7	74.6	50.2
07:00 AM - 08:00 AM	53.6	68.8	50.8
08:00 AM - 09:00 AM	53.4	73.5	48.3
09:00 AM - 10:00 AM	49.3	69.7	45.7

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284622-1

Sample No. 24144528-13
Parameter Noise
Location โรงเรียนอนุบาลทับกวาง (จุดอ้างอิง) (GPS 47P 722986, 1616400) (Shut down)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572552

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	49.4	68.7	46.8
11:00 AM - 12:00 PM	51.5	77.5	46.5
12:00 PM - 01:00 PM	47.6	64.2	45.1
01:00 PM - 02:00 PM	48.7	66.5	46.4
02:00 PM - 03:00 PM	51.9	72.1	49.0
03:00 PM - 04:00 PM	49.9	71.9	48.1
04:00 PM - 05:00 PM	52.0	68.5	50.3
05:00 PM - 06:00 PM	50.6	70.4	48.6
06:00 PM - 07:00 PM	56.6	85.4	49.5
07:00 PM - 08:00 PM	51.2	64.4	49.8
08:00 PM - 09:00 PM	50.9	60.5	49.5
09:00 PM - 10:00 PM	51.7	66.7	50.3
10:00 PM - 10:05 PM	50.8	55.3	49.1
10:05 PM - 10:10 PM	50.3	55.6	48.8
10:10 PM - 10:15 PM	51.8	56.4	50.1
10:15 PM - 10:20 PM	51.9	56.8	50.4
10:20 PM - 10:25 PM	51.7	56.7	49.7
10:25 PM - 10:30 PM	51.5	55.2	50.6
10:30 PM - 10:35 PM	51.1	56.3	49.6
10:35 PM - 10:40 PM	53.1	58.2	50.8
10:40 PM - 10:45 PM	51.9	57.3	50.7
10:45 PM - 10:50 PM	52.6	57.8	51.1
10:50 PM - 10:55 PM	51.5	57.6	49.7
10:55 PM - 11:00 PM	50.5	56.8	48.5
11:00 PM - 11:05 PM	50.3	56.8	48.4
11:05 PM - 11:10 PM	48.7	51.9	47.6
11:10 PM - 11:15 PM	53.9	65.7	47.7
11:15 PM - 11:20 PM	50.9	57.4	47.4
11:20 PM - 11:25 PM	51.6	58.7	46.8
11:25 PM - 11:30 PM	52.8	57.7	47.5
11:30 PM - 11:35 PM	51.0	56.8	48.0
11:35 PM - 11:40 PM	52.3	57.1	47.7
11:40 PM - 11:45 PM	49.0	55.8	46.7
11:45 PM - 11:50 PM	50.3	57.2	47.1
11:50 PM - 11:55 PM	49.3	56.1	47.2
11:55 PM - 12:00 AM	50.8	56.7	48.8
12:00 AM - 12:05 AM	51.4	57.5	49.1
12:05 AM - 12:10 AM	51.9	58.9	49.4
12:10 AM - 12:15 AM	51.0	56.9	49.2
12:15 AM - 12:20 AM	50.4	55.9	49.2

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Approved by

Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284622-1

Sample No. 24144528-13
Parameter Noise
Location โรงเรียนอนุบาลทับกวาง (จุดอ้างอิง) (GPS 47P 722986, 1616400) (Shut down)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572552

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	50.0	53.8	48.5
12:25 AM - 12:30 AM	49.7	55.0	48.5
12:30 AM - 12:35 AM	49.2	52.5	48.3
12:35 AM - 12:40 AM	49.9	54.8	48.6
12:40 AM - 12:45 AM	49.5	55.8	47.8
12:45 AM - 12:50 AM	48.6	52.6	47.6
12:50 AM - 12:55 AM	47.7	52.7	46.6
12:55 AM - 01:00 AM	48.7	57.2	47.4
01:00 AM - 01:05 AM	48.3	51.0	47.3
01:05 AM - 01:10 AM	48.7	53.1	47.4
01:10 AM - 01:15 AM	49.3	55.0	48.0
01:15 AM - 01:20 AM	49.3	55.2	47.6
01:20 AM - 01:25 AM	49.8	63.9	48.6
01:25 AM - 01:30 AM	49.2	57.5	47.8
01:30 AM - 01:35 AM	48.9	53.3	47.7
01:35 AM - 01:40 AM	49.5	56.1	47.7
01:40 AM - 01:45 AM	64.3	80.1	48.7
01:45 AM - 01:50 AM	48.8	52.1	47.4
01:50 AM - 01:55 AM	48.6	53.7	47.1
01:55 AM - 02:00 AM	48.6	53.7	47.4
02:00 AM - 02:05 AM	48.3	52.2	47.1
02:05 AM - 02:10 AM	48.2	54.0	46.8
02:10 AM - 02:15 AM	48.2	54.5	46.6
02:15 AM - 02:20 AM	47.7	52.6	46.3
02:20 AM - 02:25 AM	48.8	52.1	47.6
02:25 AM - 02:30 AM	46.8	51.0	45.7
02:30 AM - 02:35 AM	46.8	49.2	46.1
02:35 AM - 02:40 AM	50.3	62.2	46.1
02:40 AM - 02:45 AM	51.0	65.9	46.2
02:45 AM - 02:50 AM	47.4	53.6	46.4
02:50 AM - 02:55 AM	47.8	51.7	46.5
02:55 AM - 03:00 AM	48.6	53.7	47.4
03:00 AM - 03:05 AM	48.4	51.0	47.1
03:05 AM - 03:10 AM	48.9	53.3	47.3
03:10 AM - 03:15 AM	52.4	65.1	47.2
03:15 AM - 03:20 AM	48.6	54.8	46.9
03:20 AM - 03:25 AM	47.4	50.9	46.3
03:25 AM - 03:30 AM	47.3	50.8	46.1
03:30 AM - 03:35 AM	47.8	52.6	46.6
03:35 AM - 03:40 AM	46.7	50.9	45.7

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Approved by

Kanokkorn Anek
Senior Manager

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284622-1

Sample No. 24144528-13
Parameter Noise
Location โรงเรียนอนุบาลทับกวาง (จุดอ้างอิง) (GPS 47P 722986, 1616400) (Shut down)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572552

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	47.0	51.3	45.9
03:45 AM - 03:50 AM	48.4	54.5	47.0
03:50 AM - 03:55 AM	49.9	60.3	47.7
03:55 AM - 04:00 AM	49.2	53.3	47.7
04:00 AM - 04:05 AM	49.6	57.5	47.4
04:05 AM - 04:10 AM	51.5	64.2	47.6
04:10 AM - 04:15 AM	49.4	59.8	47.1
04:15 AM - 04:20 AM	48.0	60.0	46.1
04:20 AM - 04:25 AM	49.6	61.3	47.6
04:25 AM - 04:30 AM	49.3	53.9	47.6
04:30 AM - 04:35 AM	49.4	55.0	47.8
04:35 AM - 04:40 AM	48.8	53.9	46.4
04:40 AM - 04:45 AM	49.8	60.0	47.5
04:45 AM - 04:50 AM	49.9	57.1	48.6
04:50 AM - 04:55 AM	49.1	52.9	47.4
04:55 AM - 05:00 AM	49.0	53.2	47.6
05:00 AM - 05:05 AM	49.4	54.9	47.6
05:05 AM - 05:10 AM	49.6	54.2	48.1
05:10 AM - 05:15 AM	49.3	53.0	48.4
05:15 AM - 05:20 AM	50.4	59.2	48.1
05:20 AM - 05:25 AM	56.5	70.8	48.8
05:25 AM - 05:30 AM	50.4	54.1	49.3
05:30 AM - 05:35 AM	49.4	54.2	48.1
05:35 AM - 05:40 AM	51.2	60.8	49.3
05:40 AM - 05:45 AM	50.9	61.8	48.8
05:45 AM - 05:50 AM	50.1	60.8	48.8
05:50 AM - 05:55 AM	52.0	62.1	49.8
05:55 AM - 06:00 AM	59.2	64.2	50.2
06:00 AM - 07:00 AM	56.6	81.3	53.6
07:00 AM - 08:00 AM	52.1	73.2	49.0
08:00 AM - 09:00 AM	49.7	77.0	45.9
09:00 AM - 10:00 AM	50.9	75.7	44.9

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Approved by

Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284623-1

Sample No. 24144528-14
Parameter Noise
Location โรงเรียนอนุบาลทับกวาง (จุดอ้างอิง) (GPS 47P 722986, 1616400) (Shut down)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572552

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	47.7	70.4	44.6
11:00 AM - 12:00 PM	46.8	64.5	44.2
12:00 PM - 01:00 PM	46.0	65.1	43.3
01:00 PM - 02:00 PM	45.3	63.3	43.9
02:00 PM - 03:00 PM	55.7	79.9	51.5
03:00 PM - 04:00 PM	50.6	74.4	48.2
04:00 PM - 05:00 PM	49.8	71.1	48.2
05:00 PM - 06:00 PM	51.6	67.6	49.3
06:00 PM - 07:00 PM	53.7	66.4	51.6
07:00 PM - 08:00 PM	51.5	62.5	49.9
08:00 PM - 09:00 PM	51.7	70.4	50.0
09:00 PM - 10:00 PM	53.9	65.6	51.8
10:00 PM - 10:05 PM	54.3	59.3	51.9
10:05 PM - 10:10 PM	53.6	58.1	51.5
10:10 PM - 10:15 PM	54.6	58.1	52.5
10:15 PM - 10:20 PM	55.1	60.9	52.4
10:20 PM - 10:25 PM	55.0	60.2	52.4
10:25 PM - 10:30 PM	56.0	59.9	52.0
10:30 PM - 10:35 PM	55.8	75.2	51.1
10:35 PM - 10:40 PM	55.3	58.8	52.4
10:40 PM - 10:45 PM	54.2	59.6	50.5
10:45 PM - 10:50 PM	54.4	59.6	51.0
10:50 PM - 10:55 PM	55.9	60.4	51.6
10:55 PM - 11:00 PM	54.7	60.9	50.4
11:00 PM - 11:05 PM	56.3	61.5	50.8
11:05 PM - 11:10 PM	55.1	59.7	50.2
11:10 PM - 11:15 PM	54.6	58.6	50.9
11:15 PM - 11:20 PM	54.9	58.3	51.8
11:20 PM - 11:25 PM	56.3	68.2	51.9
11:25 PM - 11:30 PM	55.9	60.1	52.7
11:30 PM - 11:35 PM	56.5	61.0	52.9
11:35 PM - 11:40 PM	56.7	61.2	53.8
11:40 PM - 11:45 PM	57.3	61.5	53.1
11:45 PM - 11:50 PM	57.1	61.5	53.5
11:50 PM - 11:55 PM	56.1	61.2	51.6
11:55 PM - 12:00 AM	56.2	60.3	52.9
12:00 AM - 12:05 AM	56.8	61.0	53.4
12:05 AM - 12:10 AM	56.3	61.1	52.0
12:10 AM - 12:15 AM	56.4	61.6	51.8
12:15 AM - 12:20 AM	57.8	62.8	52.8

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Approved by

Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284623-1

Sample No. 24144528-14
Parameter Noise
Location โรงเรียนอนุบาลทับกวาง (จุดอ้างอิง) (GPS 47P 722986, 1616400) (Shut down)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572552

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	55.7	60.2	53.6
12:25 AM - 12:30 AM	55.9	61.3	52.9
12:30 AM - 12:35 AM	55.5	60.8	52.9
12:35 AM - 12:40 AM	54.1	58.3	50.4
12:40 AM - 12:45 AM	53.5	58.5	47.8
12:45 AM - 12:50 AM	52.3	59.3	47.8
12:50 AM - 12:55 AM	54.0	60.0	49.4
12:55 AM - 01:00 AM	52.6	58.4	48.7
01:00 AM - 01:05 AM	51.0	58.2	48.1
01:05 AM - 01:10 AM	49.4	57.2	47.9
01:10 AM - 01:15 AM	50.7	57.6	47.8
01:15 AM - 01:20 AM	50.0	57.7	48.0
01:20 AM - 01:25 AM	50.5	56.7	47.5
01:25 AM - 01:30 AM	50.1	56.8	47.6
01:30 AM - 01:35 AM	60.8	77.4	47.8
01:35 AM - 01:40 AM	50.4	57.0	46.9
01:40 AM - 01:45 AM	48.6	55.3	46.4
01:45 AM - 01:50 AM	48.9	56.4	47.0
01:50 AM - 01:55 AM	47.8	50.8	47.1
01:55 AM - 02:00 AM	47.4	51.0	46.6
02:00 AM - 02:05 AM	48.2	63.1	47.1
02:05 AM - 02:10 AM	48.1	52.2	46.8
02:10 AM - 02:15 AM	47.5	50.3	46.8
02:15 AM - 02:20 AM	49.1	56.1	46.8
02:20 AM - 02:25 AM	47.3	51.8	46.5
02:25 AM - 02:30 AM	49.0	59.1	46.7
02:30 AM - 02:35 AM	67.4	82.1	46.6
02:35 AM - 02:40 AM	52.8	69.4	46.6
02:40 AM - 02:45 AM	47.4	52.4	46.5
02:45 AM - 02:50 AM	50.2	64.2	46.8
02:50 AM - 02:55 AM	47.3	52.4	46.4
02:55 AM - 03:00 AM	47.4	50.1	46.8
03:00 AM - 03:05 AM	47.3	50.1	46.4
03:05 AM - 03:10 AM	47.5	52.1	46.6
03:10 AM - 03:15 AM	47.4	50.6	46.7
03:15 AM - 03:20 AM	47.4	52.9	46.6
03:20 AM - 03:25 AM	47.0	50.6	46.3
03:25 AM - 03:30 AM	47.3	52.2	46.2
03:30 AM - 03:35 AM	47.8	52.1	46.8
03:35 AM - 03:40 AM	47.2	49.5	46.4

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284623-1

Sample No. 24144528-14
Parameter Noise
Location โรงเรียนอนุบาลทับกวาง (จุดอ้างอิง) (GPS 47P 722986, 1616400) (Shut down)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572552

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	47.5	56.3	46.4
03:45 AM - 03:50 AM	52.0	67.8	46.3
03:50 AM - 03:55 AM	50.2	60.4	46.8
03:55 AM - 04:00 AM	47.8	55.9	46.3
04:00 AM - 04:05 AM	46.7	49.9	46.1
04:05 AM - 04:10 AM	48.7	61.6	46.7
04:10 AM - 04:15 AM	50.1	61.4	47.0
04:15 AM - 04:20 AM	48.0	52.7	47.1
04:20 AM - 04:25 AM	47.6	56.4	46.7
04:25 AM - 04:30 AM	48.3	59.0	46.5
04:30 AM - 04:35 AM	47.8	54.9	46.4
04:35 AM - 04:40 AM	47.8	57.1	46.7
04:40 AM - 04:45 AM	48.0	56.5	46.4
04:45 AM - 04:50 AM	47.3	50.7	46.5
04:50 AM - 04:55 AM	47.9	52.7	46.5
04:55 AM - 05:00 AM	49.1	57.1	47.3
05:00 AM - 05:05 AM	48.8	56.0	47.6
05:05 AM - 05:10 AM	47.9	57.6	46.9
05:10 AM - 05:15 AM	47.7	50.3	46.8
05:15 AM - 05:20 AM	53.9	69.5	47.3
05:20 AM - 05:25 AM	48.8	57.3	47.6
05:25 AM - 05:30 AM	49.0	59.1	47.4
05:30 AM - 05:35 AM	48.6	57.6	47.2
05:35 AM - 05:40 AM	48.4	52.9	47.6
05:40 AM - 05:45 AM	49.4	56.6	48.3
05:45 AM - 05:50 AM	49.9	60.8	48.1
05:50 AM - 05:55 AM	59.5	83.8	48.5
05:55 AM - 06:00 AM	55.4	62.4	53.4
06:00 AM - 07:00 AM	51.8	73.6	49.4
07:00 AM - 08:00 AM	54.3	74.1	48.6
08:00 AM - 09:00 AM	50.5	67.5	48.5
09:00 AM - 10:00 AM	50.2	66.4	48.2

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Kanokkorn Anek
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284624-1

Sample No. 24144528-15
Parameter Noise
Location บ้านผาเสด็จ (จุดอ่างอิง) (GPS 47P 726657, 1619819) (Shut down)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	54.6	75.6	43.7
11:00 AM - 12:00 PM	52.3	78.1	41.4
12:00 PM - 01:00 PM	50.2	74.0	40.6
01:00 PM - 02:00 PM	57.6	89.0	40.3
02:00 PM - 03:00 PM	52.9	79.4	39.5
03:00 PM - 04:00 PM	60.7	88.1	38.2
04:00 PM - 05:00 PM	56.7	80.2	43.7
05:00 PM - 06:00 PM	52.4	75.1	42.0
06:00 PM - 07:00 PM	49.7	69.0	39.4
07:00 PM - 08:00 PM	47.5	68.2	42.3
08:00 PM - 09:00 PM	48.1	69.9	41.7
09:00 PM - 10:00 PM	57.0	72.5	40.8
10:00 PM - 10:05 PM	41.3	45.9	39.7
10:05 PM - 10:10 PM	51.8	70.3	39.8
10:10 PM - 10:15 PM	62.4	72.0	41.1
10:15 PM - 10:20 PM	48.7	63.7	40.2
10:20 PM - 10:25 PM	44.2	62.2	40.7
10:25 PM - 10:30 PM	54.7	68.9	41.0
10:30 PM - 10:35 PM	61.6	71.1	41.1
10:35 PM - 10:40 PM	59.2	71.4	41.3
10:40 PM - 10:45 PM	58.6	70.6	41.1
10:45 PM - 10:50 PM	42.4	45.7	40.9
10:50 PM - 10:55 PM	59.1	70.3	40.8
10:55 PM - 11:00 PM	51.7	70.4	40.3
11:00 PM - 11:05 PM	58.0	70.4	40.6
11:05 PM - 11:10 PM	61.1	71.0	42.0
11:10 PM - 11:15 PM	53.8	69.5	41.3
11:15 PM - 11:20 PM	61.1	71.7	40.6
11:20 PM - 11:25 PM	58.9	71.1	40.3
11:25 PM - 11:30 PM	57.6	71.3	40.0
11:30 PM - 11:35 PM	61.5	71.7	39.4
11:35 PM - 11:40 PM	55.8	69.1	39.0
11:40 PM - 11:45 PM	63.0	70.1	39.6
11:45 PM - 11:50 PM	64.5	72.4	40.2
11:50 PM - 11:55 PM	64.3	72.0	41.9
11:55 PM - 12:00 AM	61.7	72.0	40.5
12:00 AM - 12:05 AM	53.5	61.1	39.5
12:05 AM - 12:10 AM	49.5	59.5	39.4
12:10 AM - 12:15 AM	47.1	60.1	39.8
12:15 AM - 12:20 AM	54.7	61.9	39.1

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Approved by

Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284624-1

Sample No. 24144528-15
Parameter Noise
Location บ้านผาเสด็จ (จุดอ่างอิง) (GPS 47P 726657, 1619819) (Shut down)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	52.2	60.6	39.1
12:25 AM - 12:30 AM	62.5	72.8	39.4
12:30 AM - 12:35 AM	67.3	74.3	40.4
12:35 AM - 12:40 AM	65.8	73.2	40.3
12:40 AM - 12:45 AM	65.6	72.6	40.6
12:45 AM - 12:50 AM	62.4	72.1	39.7
12:50 AM - 12:55 AM	65.7	72.1	40.2
12:55 AM - 01:00 AM	67.1	72.5	39.9
01:00 AM - 01:05 AM	65.5	72.5	39.9
01:05 AM - 01:10 AM	65.0	71.9	39.6
01:10 AM - 01:15 AM	66.7	72.1	39.8
01:15 AM - 01:20 AM	67.0	72.1	39.8
01:20 AM - 01:25 AM	65.6	71.0	39.2
01:25 AM - 01:30 AM	64.4	70.8	38.4
01:30 AM - 01:35 AM	63.2	70.5	40.0
01:35 AM - 01:40 AM	63.2	69.7	38.7
01:40 AM - 01:45 AM	64.7	71.7	39.1
01:45 AM - 01:50 AM	61.5	71.7	38.6
01:50 AM - 01:55 AM	59.0	71.3	37.8
01:55 AM - 02:00 AM	61.2	71.8	37.6
02:00 AM - 02:05 AM	60.0	72.1	38.2
02:05 AM - 02:10 AM	64.7	72.5	38.3
02:10 AM - 02:15 AM	59.8	71.8	38.2
02:15 AM - 02:20 AM	63.3	72.5	38.3
02:20 AM - 02:25 AM	58.5	69.7	39.0
02:25 AM - 02:30 AM	51.2	63.8	38.9
02:30 AM - 02:35 AM	42.7	65.0	39.0
02:35 AM - 02:40 AM	60.6	71.7	45.6
02:40 AM - 02:45 AM	47.1	61.6	44.7
02:45 AM - 02:50 AM	59.2	71.9	44.7
02:50 AM - 02:55 AM	44.6	47.6	40.5
02:55 AM - 03:00 AM	42.1	47.4	38.4
03:00 AM - 03:05 AM	61.0	72.1	39.2
03:05 AM - 03:10 AM	39.6	47.1	38.0
03:10 AM - 03:15 AM	57.0	81.2	38.4
03:15 AM - 03:20 AM	47.7	77.1	37.9
03:20 AM - 03:25 AM	51.7	80.2	37.2
03:25 AM - 03:30 AM	39.2	44.2	37.4
03:30 AM - 03:35 AM	38.9	42.4	37.8
03:35 AM - 03:40 AM	39.3	42.3	38.3

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284624-1

Sample No. 24144528-15
Parameter Noise
Location บ้านผาเสด็จ (จุดอ้างอิง) (GPS 47P 726657, 1619819) (Shut down)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	39.6	42.8	38.4
03:45 AM - 03:50 AM	48.3	63.8	38.6
03:50 AM - 03:55 AM	43.6	64.0	38.5
03:55 AM - 04:00 AM	45.1	62.9	36.7
04:00 AM - 04:05 AM	38.5	46.7	36.2
04:05 AM - 04:10 AM	37.0	40.0	35.9
04:10 AM - 04:15 AM	37.3	41.6	36.0
04:15 AM - 04:20 AM	38.2	44.8	36.9
04:20 AM - 04:25 AM	37.7	45.5	36.3
04:25 AM - 04:30 AM	37.6	42.2	36.0
04:30 AM - 04:35 AM	49.8	65.0	36.3
04:35 AM - 04:40 AM	43.8	61.8	36.0
04:40 AM - 04:45 AM	40.6	57.8	35.9
04:45 AM - 04:50 AM	38.4	59.5	34.5
04:50 AM - 04:55 AM	48.1	63.7	34.8
04:55 AM - 05:00 AM	46.1	63.9	35.3
05:00 AM - 05:05 AM	53.8	72.7	36.1
05:05 AM - 05:10 AM	49.1	64.7	36.4
05:10 AM - 05:15 AM	51.6	72.4	35.8
05:15 AM - 05:20 AM	51.9	71.7	36.8
05:20 AM - 05:25 AM	49.9	71.0	36.5
05:25 AM - 05:30 AM	53.7	71.4	36.6
05:30 AM - 05:35 AM	50.2	64.5	37.4
05:35 AM - 05:40 AM	53.8	72.6	38.1
05:40 AM - 05:45 AM	50.5	71.8	38.0
05:45 AM - 05:50 AM	52.1	71.3	37.7
05:50 AM - 05:55 AM	51.0	63.1	39.0
05:55 AM - 06:00 AM	54.0	72.7	38.8
06:00 AM - 07:00 AM	57.1	78.2	44.7
07:00 AM - 08:00 AM	54.0	82.1	43.5
08:00 AM - 09:00 AM	54.8	79.2	42.0
09:00 AM - 10:00 AM	62.1	89.0	39.3

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284625-1

Sample No. 24144528-16
Parameter Noise
Location บ้านผาเสด็จ (จุดอ้างอิง) (GPS 47P 726657, 1619819) (Shut down)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	56.1	85.2	42.0
11:00 AM - 12:00 PM	54.1	76.8	43.6
12:00 PM - 01:00 PM	52.9	72.6	42.6
01:00 PM - 02:00 PM	55.9	82.6	43.2
02:00 PM - 03:00 PM	54.5	81.1	41.6
03:00 PM - 04:00 PM	55.1	83.5	41.3
04:00 PM - 05:00 PM	59.4	81.7	43.3
05:00 PM - 06:00 PM	56.0	83.8	42.6
06:00 PM - 07:00 PM	51.2	71.0	39.4
07:00 PM - 08:00 PM	49.8	79.1	41.6
08:00 PM - 09:00 PM	41.6	57.0	40.3
09:00 PM - 10:00 PM	50.8	70.7	39.9
10:00 PM - 10:05 PM	39.3	43.6	38.1
10:05 PM - 10:10 PM	57.6	70.1	37.9
10:10 PM - 10:15 PM	58.1	71.2	39.0
10:15 PM - 10:20 PM	54.4	68.9	39.2
10:20 PM - 10:25 PM	41.2	54.8	39.8
10:25 PM - 10:30 PM	40.6	48.6	39.5
10:30 PM - 10:35 PM	58.3	70.1	39.3
10:35 PM - 10:40 PM	42.6	68.5	39.4
10:40 PM - 10:45 PM	39.8	49.1	39.0
10:45 PM - 10:50 PM	40.8	48.0	39.7
10:50 PM - 10:55 PM	46.0	62.8	41.0
10:55 PM - 11:00 PM	48.9	73.4	41.5
11:00 PM - 11:05 PM	48.3	63.1	41.1
11:05 PM - 11:10 PM	61.2	70.4	41.0
11:10 PM - 11:15 PM	58.8	70.7	41.1
11:15 PM - 11:20 PM	56.5	70.2	41.1
11:20 PM - 11:25 PM	60.0	70.6	41.5
11:25 PM - 11:30 PM	42.7	48.4	41.0
11:30 PM - 11:35 PM	57.4	70.2	40.0
11:35 PM - 11:40 PM	60.2	70.8	40.5
11:40 PM - 11:45 PM	61.8	71.5	40.4
11:45 PM - 11:50 PM	64.3	72.2	40.5
11:50 PM - 11:55 PM	64.1	71.0	42.0
11:55 PM - 12:00 AM	60.0	72.0	40.0
12:00 AM - 12:05 AM	60.2	71.3	39.3
12:05 AM - 12:10 AM	60.9	72.0	39.0
12:10 AM - 12:15 AM	55.4	71.8	38.8
12:15 AM - 12:20 AM	60.1	72.4	39.1

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284625-1

Sample No. 24144528-16
Parameter Noise
Location บ้านผาเสด็จ (จุดอ้างอิง) (GPS 47P 726657, 1619819) (Shut down)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	60.3	71.4	39.1
12:25 AM - 12:30 AM	60.6	71.3	37.8
12:30 AM - 12:35 AM	59.0	70.6	37.4
12:35 AM - 12:40 AM	64.1	72.7	37.4
12:40 AM - 12:45 AM	63.7	71.7	38.2
12:45 AM - 12:50 AM	61.1	72.6	36.9
12:50 AM - 12:55 AM	59.8	70.5	36.9
12:55 AM - 01:00 AM	58.2	66.4	37.7
01:00 AM - 01:05 AM	56.8	66.4	37.2
01:05 AM - 01:10 AM	65.6	71.8	37.5
01:10 AM - 01:15 AM	65.9	72.2	37.1
01:15 AM - 01:20 AM	64.1	72.4	36.5
01:20 AM - 01:25 AM	67.0	75.1	37.6
01:25 AM - 01:30 AM	61.5	71.5	34.9
01:30 AM - 01:35 AM	65.2	75.4	35.8
01:35 AM - 01:40 AM	58.7	66.6	35.9
01:40 AM - 01:45 AM	55.7	64.8	35.2
01:45 AM - 01:50 AM	57.8	65.7	37.3
01:50 AM - 01:55 AM	59.8	72.8	36.7
01:55 AM - 02:00 AM	64.7	72.4	33.5
02:00 AM - 02:05 AM	60.8	72.4	35.6
02:05 AM - 02:10 AM	63.4	72.4	34.9
02:10 AM - 02:15 AM	63.1	72.8	36.1
02:15 AM - 02:20 AM	64.7	71.9	36.9
02:20 AM - 02:25 AM	63.6	72.5	36.1
02:25 AM - 02:30 AM	61.4	80.7	36.6
02:30 AM - 02:35 AM	58.8	74.2	36.5
02:35 AM - 02:40 AM	57.5	81.3	36.2
02:40 AM - 02:45 AM	51.0	81.0	35.1
02:45 AM - 02:50 AM	57.9	71.5	36.2
02:50 AM - 02:55 AM	36.4	40.0	33.3
02:55 AM - 03:00 AM	39.0	66.8	35.0
03:00 AM - 03:05 AM	54.7	67.3	35.9
03:05 AM - 03:10 AM	52.3	65.2	35.7
03:10 AM - 03:15 AM	47.3	69.5	36.3
03:15 AM - 03:20 AM	52.6	66.6	35.3
03:20 AM - 03:25 AM	49.5	66.8	33.3
03:25 AM - 03:30 AM	55.7	68.5	33.8
03:30 AM - 03:35 AM	36.4	48.5	33.9
03:35 AM - 03:40 AM	39.5	63.7	33.8

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Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284625-1

Sample No. 24144528-16
Parameter Noise
Location บ้านผาเสด็จ (จุดอ้างอิง) (GPS 47P 726657, 1619819) (Shut down)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	35.4	41.7	33.6
03:45 AM - 03:50 AM	33.8	45.6	32.6
03:50 AM - 03:55 AM	34.4	43.3	33.0
03:55 AM - 04:00 AM	34.9	38.5	33.6
04:00 AM - 04:05 AM	35.6	43.3	34.6
04:05 AM - 04:10 AM	35.7	40.0	34.7
04:10 AM - 04:15 AM	42.5	62.0	34.8
04:15 AM - 04:20 AM	47.7	63.9	34.0
04:20 AM - 04:25 AM	34.8	47.6	33.8
04:25 AM - 04:30 AM	36.4	55.5	33.4
04:30 AM - 04:35 AM	38.9	46.6	34.6
04:35 AM - 04:40 AM	48.9	65.2	33.6
04:40 AM - 04:45 AM	42.7	60.9	34.0
04:45 AM - 04:50 AM	48.9	64.6	34.5
04:50 AM - 04:55 AM	45.9	56.1	33.8
04:55 AM - 05:00 AM	42.3	51.1	33.4
05:00 AM - 05:05 AM	49.1	65.2	34.4
05:05 AM - 05:10 AM	49.1	64.0	35.0
05:10 AM - 05:15 AM	49.2	70.0	35.7
05:15 AM - 05:20 AM	48.7	70.5	35.3
05:20 AM - 05:25 AM	49.4	63.3	35.1
05:25 AM - 05:30 AM	53.9	72.1	36.0
05:30 AM - 05:35 AM	50.0	66.5	35.1
05:35 AM - 05:40 AM	49.1	66.3	36.1
05:40 AM - 05:45 AM	50.5	66.0	37.3
05:45 AM - 05:50 AM	51.7	71.5	39.7
05:50 AM - 05:55 AM	53.2	66.8	39.7
05:55 AM - 06:00 AM	54.7	72.9	39.5
06:00 AM - 07:00 AM	56.6	76.2	44.8
07:00 AM - 08:00 AM	53.0	75.2	43.4
08:00 AM - 09:00 AM	54.2	75.0	42.1
09:00 AM - 10:00 AM	59.1	84.0	39.5

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284626-1

Sample No. 24144528-17
Parameter Noise
Location บ้านผาเสด็จ (จุดอ้างอิง) (GPS 47P 726657, 1619819) (Shut down)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	53.3	74.2	39.8
11:00 AM - 12:00 PM	52.9	73.2	40.7
12:00 PM - 01:00 PM	51.9	72.8	41.6
01:00 PM - 02:00 PM	56.2	80.3	43.6
02:00 PM - 03:00 PM	56.9	81.4	44.6
03:00 PM - 04:00 PM	60.8	82.5	55.6
04:00 PM - 05:00 PM	61.9	88.5	45.9
05:00 PM - 06:00 PM	52.8	85.0	40.9
06:00 PM - 07:00 PM	57.1	83.5	41.1
07:00 PM - 08:00 PM	52.8	82.8	44.9
08:00 PM - 09:00 PM	50.8	81.4	45.1
09:00 PM - 10:00 PM	48.4	61.6	45.9
10:00 PM - 10:05 PM	50.0	58.2	45.1
10:05 PM - 10:10 PM	51.1	55.8	48.2
10:10 PM - 10:15 PM	52.7	68.3	49.3
10:15 PM - 10:20 PM	57.9	78.5	47.8
10:20 PM - 10:25 PM	54.0	59.1	48.0
10:25 PM - 10:30 PM	54.5	59.8	50.8
10:30 PM - 10:35 PM	57.2	72.8	54.6
10:35 PM - 10:40 PM	58.0	74.5	56.4
10:40 PM - 10:45 PM	57.7	63.6	54.2
10:45 PM - 10:50 PM	61.4	70.1	59.1
10:50 PM - 10:55 PM	71.1	89.7	58.7
10:55 PM - 11:00 PM	64.5	77.4	58.2
11:00 PM - 11:05 PM	61.5	69.8	58.4
11:05 PM - 11:10 PM	62.1	73.3	55.8
11:10 PM - 11:15 PM	64.2	74.0	59.9
11:15 PM - 11:20 PM	62.5	71.0	59.8
11:20 PM - 11:25 PM	60.8	64.6	58.9
11:25 PM - 11:30 PM	64.0	72.8	57.9
11:30 PM - 11:35 PM	60.5	72.1	54.2
11:35 PM - 11:40 PM	60.8	64.9	57.8
11:40 PM - 11:45 PM	61.0	66.9	58.2
11:45 PM - 11:50 PM	62.0	68.7	59.0
11:50 PM - 11:55 PM	63.3	72.6	60.0
11:55 PM - 12:00 AM	63.3	72.3	58.3
12:00 AM - 12:05 AM	63.2	69.3	60.0
12:05 AM - 12:10 AM	61.7	66.3	59.1
12:10 AM - 12:15 AM	63.9	71.4	60.2
12:15 AM - 12:20 AM	64.7	72.2	60.1

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Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284626-1

Sample No. 24144528-17
Parameter Noise
Location บ้านผาเสด็จ (จุดอ้างอิง) (GPS 47P 726657, 1619819) (Shut down)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	64.5	72.7	59.6
12:25 AM - 12:30 AM	65.0	72.7	58.7
12:30 AM - 12:35 AM	65.1	72.2	59.6
12:35 AM - 12:40 AM	64.2	71.0	59.4
12:40 AM - 12:45 AM	66.6	71.7	60.9
12:45 AM - 12:50 AM	66.2	72.9	60.2
12:50 AM - 12:55 AM	64.3	71.1	59.7
12:55 AM - 01:00 AM	63.8	72.0	58.6
01:00 AM - 01:05 AM	60.3	70.1	52.5
01:05 AM - 01:10 AM	62.6	72.1	54.3
01:10 AM - 01:15 AM	65.3	71.8	58.5
01:15 AM - 01:20 AM	62.3	85.3	53.9
01:20 AM - 01:25 AM	65.1	73.8	55.6
01:25 AM - 01:30 AM	61.8	74.2	55.9
01:30 AM - 01:35 AM	63.8	81.8	57.2
01:35 AM - 01:40 AM	67.7	74.0	59.4
01:40 AM - 01:45 AM	68.3	75.3	56.9
01:45 AM - 01:50 AM	63.9	69.5	58.5
01:50 AM - 01:55 AM	68.0	75.1	58.8
01:55 AM - 02:00 AM	67.6	73.4	57.5
02:00 AM - 02:05 AM	65.7	72.3	57.5
02:05 AM - 02:10 AM	64.3	70.7	56.7
02:10 AM - 02:15 AM	67.1	75.4	57.2
02:15 AM - 02:20 AM	65.2	75.5	57.5
02:20 AM - 02:25 AM	66.5	73.5	57.8
02:25 AM - 02:30 AM	67.4	72.3	60.2
02:30 AM - 02:35 AM	65.4	70.8	59.8
02:35 AM - 02:40 AM	65.3	71.4	59.7
02:40 AM - 02:45 AM	66.7	73.0	60.2
02:45 AM - 02:50 AM	67.5	73.6	59.7
02:50 AM - 02:55 AM	67.2	73.6	59.1
02:55 AM - 03:00 AM	66.7	71.8	60.0
03:00 AM - 03:05 AM	67.2	72.2	58.5
03:05 AM - 03:10 AM	67.6	73.4	57.7
03:10 AM - 03:15 AM	67.8	73.5	58.8
03:15 AM - 03:20 AM	66.7	72.0	59.2
03:20 AM - 03:25 AM	66.9	71.6	58.1
03:25 AM - 03:30 AM	66.2	72.4	57.4
03:30 AM - 03:35 AM	65.8	72.4	56.9
03:35 AM - 03:40 AM	66.3	75.6	57.2

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Kanokkorn Anek
Senior Manager

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284626-1

Sample No. 24144528-17
Parameter Noise
Location บ้านผาเสด็จ (จุดอ้างอิง) (GPS 47P 726657, 1619819) (Shut down)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	63.3	72.8	57.1
03:45 AM - 03:50 AM	64.8	74.8	56.8
03:50 AM - 03:55 AM	64.6	71.5	57.0
03:55 AM - 04:00 AM	62.7	70.6	56.0
04:00 AM - 04:05 AM	64.0	72.5	56.4
04:05 AM - 04:10 AM	57.5	63.0	55.9
04:10 AM - 04:15 AM	60.3	69.3	56.0
04:15 AM - 04:20 AM	61.1	70.7	55.9
04:20 AM - 04:25 AM	61.1	69.4	56.5
04:25 AM - 04:30 AM	71.3	89.7	56.0
04:30 AM - 04:35 AM	63.9	73.3	56.0
04:35 AM - 04:40 AM	60.8	70.9	55.8
04:40 AM - 04:45 AM	60.6	69.6	56.6
04:45 AM - 04:50 AM	59.7	69.3	55.9
04:50 AM - 04:55 AM	58.4	68.5	55.0
04:55 AM - 05:00 AM	60.7	70.4	55.2
05:00 AM - 05:05 AM	58.8	75.8	55.7
05:05 AM - 05:10 AM	57.5	62.2	54.6
05:10 AM - 05:15 AM	57.0	63.5	54.7
05:15 AM - 05:20 AM	57.3	64.5	54.0
05:20 AM - 05:25 AM	58.8	72.5	54.2
05:25 AM - 05:30 AM	61.6	76.5	54.3
05:30 AM - 05:35 AM	57.8	65.6	54.7
05:35 AM - 05:40 AM	59.3	77.0	54.0
05:40 AM - 05:45 AM	56.7	64.7	53.9
05:45 AM - 05:50 AM	58.0	68.8	53.8
05:50 AM - 05:55 AM	61.0	88.6	54.1
05:55 AM - 06:00 AM	58.0	77.4	51.8
06:00 AM - 07:00 AM	58.8	79.7	48.4
07:00 AM - 08:00 AM	54.1	73.0	45.0
08:00 AM - 09:00 AM	52.9	75.7	42.9
09:00 AM - 10:00 AM	52.7	77.2	42.0

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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

Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284627-1

Sample No. 24144528-18
Parameter Noise
Location บ้านผาเสด็จ (จุดอ้างอิง) (GPS 47P 726657, 1619819) (Shut down)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	55.3	77.1	43.1
11:00 AM - 12:00 PM	53.5	75.7	43.2
12:00 PM - 01:00 PM	51.9	71.1	43.9
01:00 PM - 02:00 PM	55.8	81.7	43.5
02:00 PM - 03:00 PM	53.9	73.5	45.1
03:00 PM - 04:00 PM	53.2	77.3	44.8
04:00 PM - 05:00 PM	54.0	72.7	46.2
05:00 PM - 06:00 PM	51.1	74.2	44.7
06:00 PM - 07:00 PM	50.7	70.8	43.0
07:00 PM - 08:00 PM	50.9	82.5	45.2
08:00 PM - 09:00 PM	47.8	69.5	46.1
09:00 PM - 10:00 PM	51.7	76.8	44.3
10:00 PM - 10:05 PM	50.5	64.0	42.8
10:05 PM - 10:10 PM	47.5	56.3	42.6
10:10 PM - 10:15 PM	48.7	59.9	43.1
10:15 PM - 10:20 PM	53.0	73.2	43.2
10:20 PM - 10:25 PM	49.1	60.8	43.2
10:25 PM - 10:30 PM	52.2	65.7	43.2
10:30 PM - 10:35 PM	49.1	59.7	43.1
10:35 PM - 10:40 PM	49.7	59.4	43.5
10:40 PM - 10:45 PM	50.8	60.7	44.1
10:45 PM - 10:50 PM	52.8	62.5	43.5
10:50 PM - 10:55 PM	54.2	61.5	44.8
10:55 PM - 11:00 PM	56.7	65.6	49.9
11:00 PM - 11:05 PM	55.9	69.4	50.5
11:05 PM - 11:10 PM	55.0	66.1	49.6
11:10 PM - 11:15 PM	53.8	61.8	48.9
11:15 PM - 11:20 PM	55.1	61.6	48.4
11:20 PM - 11:25 PM	55.2	62.1	49.4
11:25 PM - 11:30 PM	55.2	62.9	50.2
11:30 PM - 11:35 PM	58.1	63.7	52.5
11:35 PM - 11:40 PM	56.8	64.8	52.1
11:40 PM - 11:45 PM	55.0	60.2	50.9
11:45 PM - 11:50 PM	55.2	62.9	50.3
11:50 PM - 11:55 PM	55.2	62.1	50.6
11:55 PM - 12:00 AM	57.1	64.0	52.7
12:00 AM - 12:05 AM	56.2	63.3	51.0
12:05 AM - 12:10 AM	56.2	62.9	50.7
12:10 AM - 12:15 AM	56.0	62.0	52.3
12:15 AM - 12:20 AM	57.2	62.8	50.4

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284627-1

Sample No. 24144528-18
Parameter Noise
Location บ้านผาเสด็จ (จุดอ้างอิง) (GPS 47P 726657, 1619819) (Shut down)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	57.0	62.3	50.9
12:25 AM - 12:30 AM	55.9	61.4	51.5
12:30 AM - 12:35 AM	56.2	61.6	50.9
12:35 AM - 12:40 AM	54.8	60.6	50.3
12:40 AM - 12:45 AM	54.7	60.6	51.3
12:45 AM - 12:50 AM	55.4	60.4	50.7
12:50 AM - 12:55 AM	55.3	61.1	52.0
12:55 AM - 01:00 AM	55.1	60.6	52.2
01:00 AM - 01:05 AM	55.4	60.6	52.6
01:05 AM - 01:10 AM	55.5	61.3	51.3
01:10 AM - 01:15 AM	55.0	60.8	52.4
01:15 AM - 01:20 AM	54.8	60.1	51.4
01:20 AM - 01:25 AM	55.5	60.2	52.9
01:25 AM - 01:30 AM	55.1	59.8	52.0
01:30 AM - 01:35 AM	54.7	59.0	51.8
01:35 AM - 01:40 AM	54.8	64.5	50.9
01:40 AM - 01:45 AM	56.1	61.4	52.7
01:45 AM - 01:50 AM	55.6	61.4	52.1
01:50 AM - 01:55 AM	55.4	62.5	50.6
01:55 AM - 02:00 AM	55.3	66.1	50.5
02:00 AM - 02:05 AM	53.4	60.2	50.8
02:05 AM - 02:10 AM	54.8	62.5	50.7
02:10 AM - 02:15 AM	53.8	62.4	49.6
02:15 AM - 02:20 AM	53.4	61.5	47.0
02:20 AM - 02:25 AM	52.9	59.6	47.1
02:25 AM - 02:30 AM	52.7	68.3	46.6
02:30 AM - 02:35 AM	53.5	74.7	47.9
02:35 AM - 02:40 AM	50.6	56.0	43.4
02:40 AM - 02:45 AM	48.8	55.1	44.0
02:45 AM - 02:50 AM	49.2	60.1	43.4
02:50 AM - 02:55 AM	51.9	61.3	46.2
02:55 AM - 03:00 AM	50.1	54.9	45.8
03:00 AM - 03:05 AM	49.5	60.4	41.4
03:05 AM - 03:10 AM	50.4	60.2	42.2
03:10 AM - 03:15 AM	47.9	56.7	42.7
03:15 AM - 03:20 AM	47.6	54.6	42.4
03:20 AM - 03:25 AM	43.2	52.7	40.4
03:25 AM - 03:30 AM	45.0	53.8	38.7
03:30 AM - 03:35 AM	48.5	57.0	39.3
03:35 AM - 03:40 AM	50.0	59.7	39.9

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284627-1

Sample No. 24144528-18
Parameter Noise
Location บ้านผาเสด็จ (จุดอ้างอิง) (GPS 47P 726657, 1619819) (Shut down)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	45.6	54.0	39.3
03:45 AM - 03:50 AM	42.9	52.4	40.1
03:50 AM - 03:55 AM	47.1	57.0	40.9
03:55 AM - 04:00 AM	42.3	50.7	38.5
04:00 AM - 04:05 AM	42.2	51.6	39.3
04:05 AM - 04:10 AM	41.0	55.3	38.4
04:10 AM - 04:15 AM	49.4	63.2	38.6
04:15 AM - 04:20 AM	45.0	55.9	38.5
04:20 AM - 04:25 AM	47.6	56.3	38.4
04:25 AM - 04:30 AM	41.3	50.3	38.1
04:30 AM - 04:35 AM	45.8	54.9	38.4
04:35 AM - 04:40 AM	48.1	64.0	38.8
04:40 AM - 04:45 AM	43.3	55.6	37.6
04:45 AM - 04:50 AM	47.2	64.9	37.2
04:50 AM - 04:55 AM	48.3	62.2	37.9
04:55 AM - 05:00 AM	45.6	63.6	37.7
05:00 AM - 05:05 AM	49.5	70.1	38.2
05:05 AM - 05:10 AM	52.2	70.5	38.0
05:10 AM - 05:15 AM	47.9	63.1	38.0
05:15 AM - 05:20 AM	49.9	63.7	38.7
05:20 AM - 05:25 AM	48.1	60.8	39.0
05:25 AM - 05:30 AM	50.2	64.2	39.7
05:30 AM - 05:35 AM	53.5	72.1	39.7
05:35 AM - 05:40 AM	51.9	72.1	40.4
05:40 AM - 05:45 AM	53.0	72.0	40.3
05:45 AM - 05:50 AM	53.7	71.8	39.6
05:50 AM - 05:55 AM	52.8	72.5	39.8
05:55 AM - 06:00 AM	51.2	63.8	41.3
06:00 AM - 07:00 AM	58.3	80.8	46.0
07:00 AM - 08:00 AM	54.4	72.1	44.9
08:00 AM - 09:00 AM	56.7	83.4	44.1
09:00 AM - 10:00 AM	53.7	75.3	43.4

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Kanokkorn Anek
Senior Manager

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284628-1

Sample No. 24144528-19
Parameter Noise
Location บ้านผาเสด็จ (จุดล้างล้อ) (GPS 47P 726657, 1619819) (Shut down)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	51.9	78.2	43.0
11:00 AM - 12:00 PM	56.6	76.3	45.7
12:00 PM - 01:00 PM	53.4	81.2	43.2
01:00 PM - 02:00 PM	58.5	85.8	42.0
02:00 PM - 03:00 PM	53.8	74.5	42.9
03:00 PM - 04:00 PM	54.0	80.3	42.8
04:00 PM - 05:00 PM	53.2	79.5	43.0
05:00 PM - 06:00 PM	50.5	69.5	41.7
06:00 PM - 07:00 PM	54.8	86.4	39.8
07:00 PM - 08:00 PM	49.4	78.1	43.3
08:00 PM - 09:00 PM	44.8	51.2	43.4
09:00 PM - 10:00 PM	44.7	59.3	42.5
10:00 PM - 10:05 PM	43.8	47.1	42.3
10:05 PM - 10:10 PM	45.5	55.0	42.2
10:10 PM - 10:15 PM	47.5	55.3	43.7
10:15 PM - 10:20 PM	46.7	54.0	43.2
10:20 PM - 10:25 PM	45.5	53.0	43.1
10:25 PM - 10:30 PM	46.9	55.3	43.9
10:30 PM - 10:35 PM	46.5	54.9	43.5
10:35 PM - 10:40 PM	46.6	53.4	43.6
10:40 PM - 10:45 PM	44.8	53.9	42.0
10:45 PM - 10:50 PM	42.5	46.2	40.6
10:50 PM - 10:55 PM	41.8	48.7	39.4
10:55 PM - 11:00 PM	41.0	49.6	39.1
11:00 PM - 11:05 PM	40.5	44.0	38.5
11:05 PM - 11:10 PM	44.3	54.5	38.8
11:10 PM - 11:15 PM	43.8	53.6	39.1
11:15 PM - 11:20 PM	43.6	53.5	39.0
11:20 PM - 11:25 PM	42.9	52.9	38.3
11:25 PM - 11:30 PM	42.2	52.7	39.1
11:30 PM - 11:35 PM	41.8	48.5	39.7
11:35 PM - 11:40 PM	42.0	48.3	39.7
11:40 PM - 11:45 PM	43.3	48.8	40.9
11:45 PM - 11:50 PM	45.7	50.5	42.8
11:50 PM - 11:55 PM	47.1	53.5	42.3
11:55 PM - 12:00 AM	47.9	52.8	44.2
12:00 AM - 12:05 AM	48.3	53.7	44.4
12:05 AM - 12:10 AM	48.1	52.9	44.3
12:10 AM - 12:15 AM	47.9	52.4	43.6
12:15 AM - 12:20 AM	48.4	58.4	43.6

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284628-1

Sample No. 24144528-19
Parameter Noise
Location บ้านผาเสด็จ (จุดล้างล้อ) (GPS 47P 726657, 1619819) (Shut down)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	48.7	52.8	45.2
12:25 AM - 12:30 AM	49.3	56.2	45.8
12:30 AM - 12:35 AM	49.5	55.0	45.9
12:35 AM - 12:40 AM	48.2	55.8	44.2
12:40 AM - 12:45 AM	47.8	52.9	43.4
12:45 AM - 12:50 AM	48.6	57.2	43.4
12:50 AM - 12:55 AM	48.4	53.6	45.0
12:55 AM - 01:00 AM	50.8	56.4	42.9
01:00 AM - 01:05 AM	49.0	54.4	41.2
01:05 AM - 01:10 AM	48.3	54.0	43.7
01:10 AM - 01:15 AM	47.2	52.7	43.0
01:15 AM - 01:20 AM	47.7	54.7	41.5
01:20 AM - 01:25 AM	44.9	51.1	40.3
01:25 AM - 01:30 AM	47.9	52.7	43.5
01:30 AM - 01:35 AM	48.1	60.1	43.6
01:35 AM - 01:40 AM	47.3	60.9	41.9
01:40 AM - 01:45 AM	45.8	51.6	40.6
01:45 AM - 01:50 AM	45.2	58.3	39.8
01:50 AM - 01:55 AM	46.6	52.3	41.0
01:55 AM - 02:00 AM	43.6	50.6	38.8
02:00 AM - 02:05 AM	44.1	60.3	39.1
02:05 AM - 02:10 AM	44.7	63.7	38.6
02:10 AM - 02:15 AM	43.4	50.6	38.8
02:15 AM - 02:20 AM	45.1	51.0	39.3
02:20 AM - 02:25 AM	42.4	49.9	37.9
02:25 AM - 02:30 AM	39.8	47.6	37.2
02:30 AM - 02:35 AM	38.2	49.5	35.5
02:35 AM - 02:40 AM	38.3	44.7	36.2
02:40 AM - 02:45 AM	37.8	44.5	36.2
02:45 AM - 02:50 AM	38.2	48.2	36.6
02:50 AM - 02:55 AM	38.1	45.5	36.6
02:55 AM - 03:00 AM	52.2	75.4	36.0
03:00 AM - 03:05 AM	43.3	61.0	35.2
03:05 AM - 03:10 AM	45.3	59.8	35.9
03:10 AM - 03:15 AM	52.0	61.8	37.3
03:15 AM - 03:20 AM	51.4	60.8	36.9
03:20 AM - 03:25 AM	52.5	61.7	37.3
03:25 AM - 03:30 AM	46.1	61.6	34.8
03:30 AM - 03:35 AM	43.8	53.8	34.5
03:35 AM - 03:40 AM	44.6	54.4	34.2

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Approved by
Kanokkorn Anek
Senior Manager

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284628-1

Sample No. 24144528-19
Parameter Noise
Location บ้านผาเสด็จ (จุดอ้างอิง) (GPS 47P 726657, 1619819) (Shut down)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	34.6	39.4	33.7
03:45 AM - 03:50 AM	45.0	62.7	33.2
03:50 AM - 03:55 AM	44.1	62.5	33.2
03:55 AM - 04:00 AM	40.2	46.5	33.9
04:00 AM - 04:05 AM	46.9	61.6	35.6
04:05 AM - 04:10 AM	42.7	60.0	34.7
04:10 AM - 04:15 AM	44.4	60.2	35.2
04:15 AM - 04:20 AM	48.2	67.1	35.2
04:20 AM - 04:25 AM	37.2	52.3	34.7
04:25 AM - 04:30 AM	40.2	65.0	33.6
04:30 AM - 04:35 AM	48.4	62.7	33.6
04:35 AM - 04:40 AM	40.3	57.3	33.2
04:40 AM - 04:45 AM	42.4	57.6	34.4
04:45 AM - 04:50 AM	42.1	60.9	35.1
04:50 AM - 04:55 AM	49.8	63.6	37.5
04:55 AM - 05:00 AM	48.6	64.0	39.4
05:00 AM - 05:05 AM	47.0	62.5	39.3
05:05 AM - 05:10 AM	52.0	74.6	38.8
05:10 AM - 05:15 AM	49.8	64.7	38.2
05:15 AM - 05:20 AM	49.6	62.8	39.4
05:20 AM - 05:25 AM	49.5	64.3	38.7
05:25 AM - 05:30 AM	55.2	75.3	37.3
05:30 AM - 05:35 AM	54.9	75.6	37.4
05:35 AM - 05:40 AM	55.5	77.4	37.7
05:40 AM - 05:45 AM	51.2	65.4	38.2
05:45 AM - 05:50 AM	52.9	73.2	40.7
05:50 AM - 05:55 AM	51.1	65.2	41.4
05:55 AM - 06:00 AM	56.6	74.4	41.2
06:00 AM - 07:00 AM	57.1	78.7	45.2
07:00 AM - 08:00 AM	56.7	81.6	46.3
08:00 AM - 09:00 AM	54.8	81.3	45.9
09:00 AM - 10:00 AM	66.2	87.1	41.4

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Approved by
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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284629-1

Sample No. 24144528-20
Parameter Noise
Location บ้านผาเสด็จ (จุดอ้างอิง) (GPS 47P 726657, 1619819) (Shut down)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	48.3	70.6	39.8
11:00 AM - 12:00 PM	50.5	71.1	40.4
12:00 PM - 01:00 PM	50.6	76.1	38.9
01:00 PM - 02:00 PM	52.4	80.5	40.5
02:00 PM - 03:00 PM	55.3	75.4	46.1
03:00 PM - 04:00 PM	51.9	74.9	42.8
04:00 PM - 05:00 PM	56.1	81.7	42.7
05:00 PM - 06:00 PM	49.9	70.6	41.7
06:00 PM - 07:00 PM	51.5	69.7	36.6
07:00 PM - 08:00 PM	46.7	74.7	40.8
08:00 PM - 09:00 PM	46.1	64.2	39.5
09:00 PM - 10:00 PM	61.4	89.0	39.4
10:00 PM - 10:05 PM	45.6	59.1	39.6
10:05 PM - 10:10 PM	45.1	57.7	39.6
10:10 PM - 10:15 PM	40.1	42.1	39.4
10:15 PM - 10:20 PM	41.2	49.9	39.3
10:20 PM - 10:25 PM	40.7	45.5	39.6
10:25 PM - 10:30 PM	41.5	54.2	39.9
10:30 PM - 10:35 PM	40.9	46.0	39.5
10:35 PM - 10:40 PM	43.6	53.6	40.0
10:40 PM - 10:45 PM	45.2	53.9	39.1
10:45 PM - 10:50 PM	42.9	54.9	39.7
10:50 PM - 10:55 PM	40.3	45.3	38.7
10:55 PM - 11:00 PM	40.0	55.1	38.2
11:00 PM - 11:05 PM	41.7	51.4	38.1
11:05 PM - 11:10 PM	38.9	47.1	37.7
11:10 PM - 11:15 PM	39.9	60.9	36.2
11:15 PM - 11:20 PM	39.4	58.0	37.3
11:20 PM - 11:25 PM	41.8	53.6	37.5
11:25 PM - 11:30 PM	42.0	55.2	37.7
11:30 PM - 11:35 PM	38.2	42.1	36.9
11:35 PM - 11:40 PM	39.0	44.6	37.9
11:40 PM - 11:45 PM	38.8	46.9	37.5
11:45 PM - 11:50 PM	38.7	48.0	37.5
11:50 PM - 11:55 PM	43.1	53.2	37.7
11:55 PM - 12:00 AM	40.3	53.6	37.6
12:00 AM - 12:05 AM	42.6	53.4	37.6
12:05 AM - 12:10 AM	45.6	56.8	38.4
12:10 AM - 12:15 AM	47.4	55.8	39.4
12:15 AM - 12:20 AM	40.0	53.9	37.9

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284629-1

Sample No. 24144528-20
Parameter Noise
Location บ้านผาเสด็จ (จุดอ้างอิง) (GPS 47P 726657, 1619819) (Shut down)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	38.5	45.1	37.4
12:25 AM - 12:30 AM	43.0	58.9	37.7
12:30 AM - 12:35 AM	39.5	59.7	37.1
12:35 AM - 12:40 AM	50.9	63.5	37.7
12:40 AM - 12:45 AM	53.7	64.3	38.0
12:45 AM - 12:50 AM	50.8	61.2	37.6
12:50 AM - 12:55 AM	49.0	60.0	37.1
12:55 AM - 01:00 AM	43.3	54.8	36.8
01:00 AM - 01:05 AM	38.7	52.7	35.9
01:05 AM - 01:10 AM	37.1	44.6	35.1
01:10 AM - 01:15 AM	43.9	53.8	36.2
01:15 AM - 01:20 AM	45.2	54.1	37.0
01:20 AM - 01:25 AM	43.9	53.7	35.7
01:25 AM - 01:30 AM	42.2	53.5	35.2
01:30 AM - 01:35 AM	36.8	42.7	35.1
01:35 AM - 01:40 AM	48.3	59.6	36.2
01:40 AM - 01:45 AM	47.1	59.1	36.1
01:45 AM - 01:50 AM	44.5	56.2	36.2
01:50 AM - 01:55 AM	45.5	54.1	37.9
01:55 AM - 02:00 AM	47.5	60.0	37.5
02:00 AM - 02:05 AM	48.9	59.0	37.6
02:05 AM - 02:10 AM	44.6	59.5	36.4
02:10 AM - 02:15 AM	38.0	48.9	36.1
02:15 AM - 02:20 AM	41.0	56.3	37.0
02:20 AM - 02:25 AM	41.9	63.2	36.7
02:25 AM - 02:30 AM	39.6	58.3	35.6
02:30 AM - 02:35 AM	37.9	50.4	35.8
02:35 AM - 02:40 AM	49.9	72.9	35.5
02:40 AM - 02:45 AM	37.3	58.9	34.3
02:45 AM - 02:50 AM	40.9	55.2	34.4
02:50 AM - 02:55 AM	39.4	53.8	34.3
02:55 AM - 03:00 AM	38.7	49.3	35.3
03:00 AM - 03:05 AM	36.3	40.5	34.6
03:05 AM - 03:10 AM	45.6	59.5	34.5
03:10 AM - 03:15 AM	46.4	61.8	34.5
03:15 AM - 03:20 AM	36.2	40.6	34.9
03:20 AM - 03:25 AM	35.5	41.7	34.1
03:25 AM - 03:30 AM	35.5	39.2	34.3
03:30 AM - 03:35 AM	39.8	53.0	35.0
03:35 AM - 03:40 AM	44.7	54.2	35.3

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284629-1

Sample No. 24144528-20
Parameter Noise
Location บ้านผาเสด็จ (จุดอ้างอิง) (GPS 47P 726657, 1619819) (Shut down)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	68.9	88.9	36.7
03:45 AM - 03:50 AM	64.4	77.9	34.7
03:50 AM - 03:55 AM	34.9	41.3	33.4
03:55 AM - 04:00 AM	34.4	39.7	33.1
04:00 AM - 04:05 AM	35.2	41.0	33.5
04:05 AM - 04:10 AM	35.4	42.0	33.9
04:10 AM - 04:15 AM	36.3	52.3	32.8
04:15 AM - 04:20 AM	44.7	65.0	33.5
04:20 AM - 04:25 AM	48.6	63.7	34.0
04:25 AM - 04:30 AM	43.2	53.8	34.1
04:30 AM - 04:35 AM	52.3	75.0	33.7
04:35 AM - 04:40 AM	42.1	53.5	33.2
04:40 AM - 04:45 AM	35.2	46.8	32.9
04:45 AM - 04:50 AM	46.3	60.6	33.8
04:50 AM - 04:55 AM	42.8	59.3	34.8
04:55 AM - 05:00 AM	39.9	59.6	35.5
05:00 AM - 05:05 AM	45.2	62.4	35.5
05:05 AM - 05:10 AM	46.0	62.2	34.5
05:10 AM - 05:15 AM	52.4	75.5	35.2
05:15 AM - 05:20 AM	49.4	62.2	35.7
05:20 AM - 05:25 AM	51.5	75.6	35.8
05:25 AM - 05:30 AM	52.0	76.2	35.9
05:30 AM - 05:35 AM	48.4	62.7	36.6
05:35 AM - 05:40 AM	53.9	76.1	37.1
05:40 AM - 05:45 AM	54.9	76.8	35.9
05:45 AM - 05:50 AM	50.4	62.9	34.9
05:50 AM - 05:55 AM	56.4	77.8	36.5
05:55 AM - 06:00 AM	56.3	77.5	38.5
06:00 AM - 07:00 AM	59.2	79.5	45.1
07:00 AM - 08:00 AM	61.4	82.8	43.6
08:00 AM - 09:00 AM	63.4	94.3	45.2
09:00 AM - 10:00 AM	54.4	75.4	39.1

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284630-1

Sample No. 24144528-21
Parameter Noise
Location บ้านผาเสด็จ (จุดอ้างอิง) (GPS 47P 726657, 1619819) (Shut down)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	53.0	76.3	39.2
11:00 AM - 12:00 PM	52.1	72.8	39.2
12:00 PM - 01:00 PM	55.9	92.0	38.3
01:00 PM - 02:00 PM	48.3	69.7	37.1
02:00 PM - 03:00 PM	48.4	70.8	39.8
03:00 PM - 04:00 PM	60.4	85.8	43.8
04:00 PM - 05:00 PM	54.3	71.2	44.3
05:00 PM - 06:00 PM	53.2	73.2	42.6
06:00 PM - 07:00 PM	51.7	70.9	42.6
07:00 PM - 08:00 PM	50.5	77.4	44.0
08:00 PM - 09:00 PM	52.0	63.5	44.6
09:00 PM - 10:00 PM	45.0	55.3	41.2
10:00 PM - 10:05 PM	42.3	50.4	39.8
10:05 PM - 10:10 PM	43.3	52.7	39.6
10:10 PM - 10:15 PM	46.5	59.7	39.9
10:15 PM - 10:20 PM	49.9	62.0	40.1
10:20 PM - 10:25 PM	51.4	61.0	39.8
10:25 PM - 10:30 PM	50.2	61.9	40.6
10:30 PM - 10:35 PM	75.0	96.4	41.1
10:35 PM - 10:40 PM	48.1	56.1	41.5
10:40 PM - 10:45 PM	47.7	56.9	41.7
10:45 PM - 10:50 PM	47.5	55.7	41.0
10:50 PM - 10:55 PM	47.9	56.9	41.4
10:55 PM - 11:00 PM	47.8	57.1	41.6
11:00 PM - 11:05 PM	46.1	54.6	41.5
11:05 PM - 11:10 PM	45.2	54.6	40.9
11:10 PM - 11:15 PM	47.6	56.4	40.4
11:15 PM - 11:20 PM	47.3	57.0	41.0
11:20 PM - 11:25 PM	43.7	51.8	41.2
11:25 PM - 11:30 PM	43.5	54.2	40.9
11:30 PM - 11:35 PM	42.8	51.4	40.5
11:35 PM - 11:40 PM	42.9	52.6	40.1
11:40 PM - 11:45 PM	44.9	71.3	39.4
11:45 PM - 11:50 PM	42.4	53.4	39.2
11:50 PM - 11:55 PM	46.9	56.4	39.9
11:55 PM - 12:00 AM	43.9	54.1	39.8
12:00 AM - 12:05 AM	42.8	53.6	39.5
12:05 AM - 12:10 AM	43.7	52.0	39.6
12:10 AM - 12:15 AM	43.7	53.6	38.8
12:15 AM - 12:20 AM	44.2	52.7	39.4

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284630-1

Sample No. 24144528-21
Parameter Noise
Location บ้านผาเสด็จ (จุดอ้างอิง) (GPS 47P 726657, 1619819) (Shut down)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	42.0	53.3	38.7
12:25 AM - 12:30 AM	42.7	55.7	38.5
12:30 AM - 12:35 AM	42.8	56.7	39.1
12:35 AM - 12:40 AM	44.2	51.9	40.2
12:40 AM - 12:45 AM	45.6	55.0	40.9
12:45 AM - 12:50 AM	45.5	61.2	39.9
12:50 AM - 12:55 AM	44.6	54.9	39.2
12:55 AM - 01:00 AM	44.8	54.1	39.8
01:00 AM - 01:05 AM	46.1	59.4	39.4
01:05 AM - 01:10 AM	46.1	56.5	39.5
01:10 AM - 01:15 AM	46.7	57.9	40.6
01:15 AM - 01:20 AM	43.7	55.8	39.8
01:20 AM - 01:25 AM	43.3	51.7	39.7
01:25 AM - 01:30 AM	43.7	52.0	39.9
01:30 AM - 01:35 AM	43.5	57.5	39.7
01:35 AM - 01:40 AM	42.5	51.6	38.7
01:40 AM - 01:45 AM	42.4	56.6	37.9
01:45 AM - 01:50 AM	43.8	59.0	37.9
01:50 AM - 01:55 AM	43.2	56.0	37.8
01:55 AM - 02:00 AM	45.5	60.1	38.8
02:00 AM - 02:05 AM	43.8	54.0	37.7
02:05 AM - 02:10 AM	40.7	52.5	38.2
02:10 AM - 02:15 AM	41.5	58.8	37.1
02:15 AM - 02:20 AM	41.3	53.2	37.8
02:20 AM - 02:25 AM	43.4	57.3	38.1
02:25 AM - 02:30 AM	42.9	54.1	36.7
02:30 AM - 02:35 AM	44.2	55.1	37.1
02:35 AM - 02:40 AM	46.6	62.2	37.8
02:40 AM - 02:45 AM	45.5	56.6	38.4
02:45 AM - 02:50 AM	45.0	54.4	38.2
02:50 AM - 02:55 AM	44.4	54.4	38.3
02:55 AM - 03:00 AM	39.3	52.3	36.6
03:00 AM - 03:05 AM	40.2	51.4	37.5
03:05 AM - 03:10 AM	39.9	51.9	37.5
03:10 AM - 03:15 AM	39.8	49.7	37.4
03:15 AM - 03:20 AM	42.2	51.9	38.0
03:20 AM - 03:25 AM	42.2	52.2	37.5
03:25 AM - 03:30 AM	39.3	52.3	36.8
03:30 AM - 03:35 AM	47.6	63.2	36.5
03:35 AM - 03:40 AM	44.0	59.3	36.8

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284630-1

Sample No. 24144528-21
Parameter Noise
Location บ้านผาเสด็จ (จุดอ้างอิง) (GPS 47P 726657, 1619819) (Shut down)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00572609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	43.6	58.6	36.8
03:45 AM - 03:50 AM	42.3	60.4	37.3
03:50 AM - 03:55 AM	43.6	59.2	37.6
03:55 AM - 04:00 AM	43.9	58.6	37.7
04:00 AM - 04:05 AM	42.1	54.1	36.9
04:05 AM - 04:10 AM	43.5	54.1	37.4
04:10 AM - 04:15 AM	45.7	57.2	38.0
04:15 AM - 04:20 AM	66.8	80.1	38.1
04:20 AM - 04:25 AM	47.1	60.5	37.8
04:25 AM - 04:30 AM	45.9	56.2	37.8
04:30 AM - 04:35 AM	48.5	61.6	36.9
04:35 AM - 04:40 AM	42.7	58.7	37.0
04:40 AM - 04:45 AM	43.6	56.4	36.4
04:45 AM - 04:50 AM	49.4	62.9	36.4
04:50 AM - 04:55 AM	42.9	54.4	36.1
04:55 AM - 05:00 AM	44.2	54.4	36.5
05:00 AM - 05:05 AM	49.7	61.4	35.7
05:05 AM - 05:10 AM	49.3	61.6	35.3
05:10 AM - 05:15 AM	49.8	62.0	35.9
05:15 AM - 05:20 AM	54.6	76.2	35.8
05:20 AM - 05:25 AM	53.3	75.0	37.7
05:25 AM - 05:30 AM	51.3	63.4	37.6
05:30 AM - 05:35 AM	55.8	76.7	38.4
05:35 AM - 05:40 AM	53.8	64.0	40.2
05:40 AM - 05:45 AM	54.8	63.8	42.9
05:45 AM - 05:50 AM	56.4	77.0	39.8
05:50 AM - 05:55 AM	54.4	76.1	41.1
05:55 AM - 06:00 AM	54.9	76.3	43.8
06:00 AM - 07:00 AM	57.3	78.5	47.7
07:00 AM - 08:00 AM	54.3	80.0	44.0
08:00 AM - 09:00 AM	57.5	82.7	43.2
09:00 AM - 10:00 AM	52.5	73.6	41.3

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการบวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284631-1

Sample No. 24144528-22
Parameter Noise
Location รั้วรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (จุดอ้างอิง) (GPS 47P 726041, 1617960) (Shut down)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858527

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	64.4	83.9	60.2
11:00 AM - 12:00 PM	61.1	76.7	59.1
12:00 PM - 01:00 PM	61.2	81.0	59.0
01:00 PM - 02:00 PM	61.6	82.9	59.2
02:00 PM - 03:00 PM	62.2	82.9	59.4
03:00 PM - 04:00 PM	61.9	74.8	59.3
04:00 PM - 05:00 PM	61.8	83.7	58.8
05:00 PM - 06:00 PM	63.0	80.3	60.7
06:00 PM - 07:00 PM	64.0	80.1	61.1
07:00 PM - 08:00 PM	63.5	84.6	61.1
08:00 PM - 09:00 PM	63.2	76.3	61.2
09:00 PM - 10:00 PM	67.0	99.1	60.7
10:00 PM - 10:05 PM	62.5	69.8	61.4
10:05 PM - 10:10 PM	62.3	64.1	61.4
10:10 PM - 10:15 PM	64.0	78.0	61.5
10:15 PM - 10:20 PM	62.3	67.8	61.1
10:20 PM - 10:25 PM	65.5	80.3	61.1
10:25 PM - 10:30 PM	64.1	78.6	60.9
10:30 PM - 10:35 PM	62.0	66.5	61.3
10:35 PM - 10:40 PM	65.3	78.7	61.3
10:40 PM - 10:45 PM	66.1	78.8	61.5
10:45 PM - 10:50 PM	62.2	68.2	61.0
10:50 PM - 10:55 PM	61.9	65.5	60.9
10:55 PM - 11:00 PM	62.5	67.5	60.6
11:00 PM - 11:05 PM	61.3	67.5	60.2
11:05 PM - 11:10 PM	61.1	63.8	59.9
11:10 PM - 11:15 PM	60.8	68.8	59.8
11:15 PM - 11:20 PM	62.6	71.4	59.8
11:20 PM - 11:25 PM	59.8	64.2	58.4
11:25 PM - 11:30 PM	59.3	62.4	58.2
11:30 PM - 11:35 PM	59.1	65.6	57.7
11:35 PM - 11:40 PM	58.9	63.5	57.7
11:40 PM - 11:45 PM	58.4	60.9	57.1
11:45 PM - 11:50 PM	63.9	71.7	57.4
11:50 PM - 11:55 PM	59.1	62.6	58.1
11:55 PM - 12:00 AM	60.5	66.8	58.1
12:00 AM - 12:05 AM	59.2	62.1	58.2
12:05 AM - 12:10 AM	59.0	62.0	57.9
12:10 AM - 12:15 AM	59.2	62.5	58.1
12:15 AM - 12:20 AM	59.5	62.2	58.3

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284631-1

Sample No. 24144528-22
Parameter Noise
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (จุดอ้างอิง) (GPS 47P 726041, 1617960) (Shut down)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858527

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	62.4	69.7	59.2
12:25 AM - 12:30 AM	64.3	79.2	59.5
12:30 AM - 12:35 AM	59.0	62.0	57.9
12:35 AM - 12:40 AM	59.5	65.8	57.7
12:40 AM - 12:45 AM	59.0	63.0	57.5
12:45 AM - 12:50 AM	58.6	62.5	57.1
12:50 AM - 12:55 AM	58.8	61.4	57.4
12:55 AM - 01:00 AM	58.9	62.9	57.3
01:00 AM - 01:05 AM	59.7	66.8	56.9
01:05 AM - 01:10 AM	59.9	67.4	58.1
01:10 AM - 01:15 AM	60.4	66.7	59.1
01:15 AM - 01:20 AM	62.6	78.8	59.3
01:20 AM - 01:25 AM	62.6	78.3	59.7
01:25 AM - 01:30 AM	60.8	65.0	59.6
01:30 AM - 01:35 AM	63.7	79.3	59.3
01:35 AM - 01:40 AM	65.1	75.9	60.1
01:40 AM - 01:45 AM	60.4	64.1	59.7
01:45 AM - 01:50 AM	65.2	77.7	59.6
01:50 AM - 01:55 AM	62.5	76.9	59.5
01:55 AM - 02:00 AM	60.2	62.7	59.2
02:00 AM - 02:05 AM	60.2	69.4	59.1
02:05 AM - 02:10 AM	63.7	78.0	59.3
02:10 AM - 02:15 AM	60.7	66.7	59.6
02:15 AM - 02:20 AM	63.4	77.6	59.4
02:20 AM - 02:25 AM	63.0	78.2	59.7
02:25 AM - 02:30 AM	62.6	80.7	59.5
02:30 AM - 02:35 AM	60.6	65.0	59.5
02:35 AM - 02:40 AM	63.0	76.7	59.4
02:40 AM - 02:45 AM	62.5	71.8	59.5
02:45 AM - 02:50 AM	64.3	72.0	60.5
02:50 AM - 02:55 AM	65.0	72.4	61.7
02:55 AM - 03:00 AM	64.9	68.5	62.4
03:00 AM - 03:05 AM	67.1	74.3	61.4
03:05 AM - 03:10 AM	61.6	68.9	59.5
03:10 AM - 03:15 AM	61.7	71.6	59.6
03:15 AM - 03:20 AM	62.3	74.1	59.3
03:20 AM - 03:25 AM	63.3	76.0	59.8
03:25 AM - 03:30 AM	62.3	72.6	59.8
03:30 AM - 03:35 AM	60.5	67.7	59.5
03:35 AM - 03:40 AM	60.1	63.5	59.3

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284631-1

Sample No. 24144528-22
Parameter Noise
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (จุดอ้างอิง) (GPS 47P 726041, 1617960) (Shut down)
Measurement Date Apr 02 - 03, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858527

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	60.5	65.7	59.5
03:45 AM - 03:50 AM	63.6	77.4	60.2
03:50 AM - 03:55 AM	64.8	81.3	60.1
03:55 AM - 04:00 AM	61.0	67.5	60.0
04:00 AM - 04:05 AM	61.2	67.3	60.2
04:05 AM - 04:10 AM	60.4	62.7	59.7
04:10 AM - 04:15 AM	60.5	62.9	59.6
04:15 AM - 04:20 AM	60.9	64.1	60.2
04:20 AM - 04:25 AM	60.8	62.6	60.3
04:25 AM - 04:30 AM	61.0	63.7	60.1
04:30 AM - 04:35 AM	60.8	67.6	59.6
04:35 AM - 04:40 AM	60.5	63.8	59.6
04:40 AM - 04:45 AM	61.2	71.4	59.9
04:45 AM - 04:50 AM	61.5	66.6	60.1
04:50 AM - 04:55 AM	61.7	67.8	60.3
04:55 AM - 05:00 AM	61.2	65.0	60.2
05:00 AM - 05:05 AM	60.8	62.9	60.0
05:05 AM - 05:10 AM	62.0	72.5	60.2
05:10 AM - 05:15 AM	62.1	66.1	60.8
05:15 AM - 05:20 AM	61.1	67.4	60.4
05:20 AM - 05:25 AM	61.2	63.9	60.2
05:25 AM - 05:30 AM	62.1	72.3	60.3
05:30 AM - 05:35 AM	64.1	82.7	60.8
05:35 AM - 05:40 AM	63.2	73.0	60.2
05:40 AM - 05:45 AM	61.2	65.9	60.5
05:45 AM - 05:50 AM	60.9	66.0	60.2
05:50 AM - 05:55 AM	61.0	64.9	60.2
05:55 AM - 06:00 AM	61.3	67.1	60.7
06:00 AM - 07:00 AM	62.6	80.7	61.0
07:00 AM - 08:00 AM	62.7	73.4	60.7
08:00 AM - 09:00 AM	61.6	78.7	59.7
09:00 AM - 10:00 AM	63.0	76.0	60.9

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284632-1

Sample No. 24144528-23
Parameter Noise
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (จุดอ้างอิง) (GPS 47P 726041, 1617960) (Shut down)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858527

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	62.8	78.2	60.1
11:00 AM - 12:00 PM	60.7	71.2	59.4
12:00 PM - 01:00 PM	61.4	75.1	58.8
01:00 PM - 02:00 PM	61.6	79.7	59.1
02:00 PM - 03:00 PM	62.2	80.9	59.5
03:00 PM - 04:00 PM	61.2	76.9	58.5
04:00 PM - 05:00 PM	64.0	81.2	60.6
05:00 PM - 06:00 PM	64.8	88.3	61.6
06:00 PM - 07:00 PM	64.4	83.1	61.8
07:00 PM - 08:00 PM	63.3	86.0	60.7
08:00 PM - 09:00 PM	63.7	87.9	60.9
09:00 PM - 10:00 PM	62.7	78.9	60.8
10:00 PM - 10:05 PM	61.8	64.4	60.8
10:05 PM - 10:10 PM	60.9	62.3	60.4
10:10 PM - 10:15 PM	61.2	64.7	60.4
10:15 PM - 10:20 PM	63.6	72.9	60.5
10:20 PM - 10:25 PM	63.4	74.6	60.4
10:25 PM - 10:30 PM	61.5	68.0	60.4
10:30 PM - 10:35 PM	62.1	69.6	60.6
10:35 PM - 10:40 PM	65.5	69.1	60.8
10:40 PM - 10:45 PM	65.4	69.5	61.0
10:45 PM - 10:50 PM	60.9	67.8	60.0
10:50 PM - 10:55 PM	61.3	65.8	60.1
10:55 PM - 11:00 PM	61.0	65.1	59.5
11:00 PM - 11:05 PM	61.4	67.9	60.1
11:05 PM - 11:10 PM	61.3	65.7	60.4
11:10 PM - 11:15 PM	63.8	75.6	60.4
11:15 PM - 11:20 PM	60.3	66.6	58.4
11:20 PM - 11:25 PM	60.8	73.8	58.7
11:25 PM - 11:30 PM	60.3	73.4	58.2
11:30 PM - 11:35 PM	60.8	67.0	59.2
11:35 PM - 11:40 PM	59.9	62.3	58.5
11:40 PM - 11:45 PM	59.6	61.8	58.2
11:45 PM - 11:50 PM	59.7	63.4	58.3
11:50 PM - 11:55 PM	59.8	62.8	58.4
11:55 PM - 12:00 AM	59.2	61.8	58.0
12:00 AM - 12:05 AM	60.4	75.3	58.6
12:05 AM - 12:10 AM	60.3	65.0	58.5
12:10 AM - 12:15 AM	59.6	65.0	58.2
12:15 AM - 12:20 AM	60.4	64.9	59.2

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Approved by
Kanokkorn Anek
Senior Manager

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284632-1

Sample No. 24144528-23
Parameter Noise
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (จุดอ้างอิง) (GPS 47P 726041, 1617960) (Shut down)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858527

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	59.7	63.3	58.7
12:25 AM - 12:30 AM	60.3	66.0	58.5
12:30 AM - 12:35 AM	62.5	72.1	58.8
12:35 AM - 12:40 AM	66.8	84.5	59.1
12:40 AM - 12:45 AM	60.5	65.2	59.6
12:45 AM - 12:50 AM	61.2	69.0	60.3
12:50 AM - 12:55 AM	60.7	64.5	59.7
12:55 AM - 01:00 AM	60.5	67.7	59.1
01:00 AM - 01:05 AM	60.3	68.0	58.6
01:05 AM - 01:10 AM	62.8	78.1	58.5
01:10 AM - 01:15 AM	62.3	71.5	60.1
01:15 AM - 01:20 AM	61.9	68.2	60.7
01:20 AM - 01:25 AM	66.1	79.4	61.0
01:25 AM - 01:30 AM	67.0	80.1	61.0
01:30 AM - 01:35 AM	61.9	68.7	60.7
01:35 AM - 01:40 AM	61.6	65.1	60.8
01:40 AM - 01:45 AM	64.7	78.3	60.8
01:45 AM - 01:50 AM	66.9	78.8	61.0
01:50 AM - 01:55 AM	61.6	69.8	60.5
01:55 AM - 02:00 AM	60.7	62.8	60.1
02:00 AM - 02:05 AM	63.0	77.5	60.2
02:05 AM - 02:10 AM	64.9	78.6	61.1
02:10 AM - 02:15 AM	62.0	67.9	60.2
02:15 AM - 02:20 AM	60.7	65.5	59.6
02:20 AM - 02:25 AM	61.1	68.9	59.9
02:25 AM - 02:30 AM	60.9	65.2	59.5
02:30 AM - 02:35 AM	60.9	63.4	60.2
02:35 AM - 02:40 AM	60.9	67.9	59.9
02:40 AM - 02:45 AM	61.1	70.0	60.5
02:45 AM - 02:50 AM	61.4	67.5	60.2
02:50 AM - 02:55 AM	64.6	81.5	60.7
02:55 AM - 03:00 AM	61.4	68.7	60.5
03:00 AM - 03:05 AM	60.9	67.9	60.3
03:05 AM - 03:10 AM	62.0	76.7	60.4
03:10 AM - 03:15 AM	61.9	68.4	60.5
03:15 AM - 03:20 AM	64.7	71.7	60.8
03:20 AM - 03:25 AM	65.5	72.7	62.4
03:25 AM - 03:30 AM	63.4	70.1	61.7
03:30 AM - 03:35 AM	65.3	69.3	62.9
03:35 AM - 03:40 AM	63.8	75.3	60.3

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Approved by
Kanokkorn Anek
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284632-1

Sample No. 24144528-23
Parameter Noise
Location รินริ้วด้านหน้าโรงงาน (ระยะดำเนินการ) (จุดอ้างอิง) (GPS 47P 726041, 1617960) (Shut down)
Measurement Date Apr 03 - 04, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858527

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	60.8	65.9	60.0
03:45 AM - 03:50 AM	60.7	65.2	60.0
03:50 AM - 03:55 AM	63.7	76.5	60.6
03:55 AM - 04:00 AM	61.4	63.6	60.7
04:00 AM - 04:05 AM	62.8	75.5	60.3
04:05 AM - 04:10 AM	65.6	75.6	60.6
04:10 AM - 04:15 AM	61.4	66.5	60.5
04:15 AM - 04:20 AM	61.2	64.7	60.2
04:20 AM - 04:25 AM	60.8	63.2	60.0
04:25 AM - 04:30 AM	62.1	75.8	60.0
04:30 AM - 04:35 AM	60.8	64.4	60.2
04:35 AM - 04:40 AM	61.6	64.9	60.8
04:40 AM - 04:45 AM	61.3	64.9	60.7
04:45 AM - 04:50 AM	61.5	64.4	60.7
04:50 AM - 04:55 AM	61.0	62.5	60.5
04:55 AM - 05:00 AM	61.0	62.0	60.4
05:00 AM - 05:05 AM	61.8	70.2	60.4
05:05 AM - 05:10 AM	61.1	62.8	60.4
05:10 AM - 05:15 AM	60.3	61.5	59.7
05:15 AM - 05:20 AM	60.8	62.0	60.3
05:20 AM - 05:25 AM	61.8	68.5	60.6
05:25 AM - 05:30 AM	60.9	62.1	60.4
05:30 AM - 05:35 AM	61.6	67.9	60.2
05:35 AM - 05:40 AM	61.1	62.2	60.5
05:40 AM - 05:45 AM	63.0	64.5	61.1
05:45 AM - 05:50 AM	66.1	85.2	61.2
05:50 AM - 05:55 AM	62.3	75.7	60.9
05:55 AM - 06:00 AM	63.0	65.1	61.9
06:00 AM - 07:00 AM	63.2	79.1	61.1
07:00 AM - 08:00 AM	62.8	75.2	59.8
08:00 AM - 09:00 AM	61.9	77.3	59.8
09:00 AM - 10:00 AM	64.9	79.7	62.6

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284633-1

Sample No. 24144528-24
Parameter Noise
Location รินริ้วด้านหน้าโรงงาน (ระยะดำเนินการ) (จุดอ้างอิง) (GPS 47P 726041, 1617960) (Shut down)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858527

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	63.4	74.8	61.4
11:00 AM - 12:00 PM	62.8	76.7	61.0
12:00 PM - 01:00 PM	62.4	75.0	60.9
01:00 PM - 02:00 PM	63.7	86.9	61.6
02:00 PM - 03:00 PM	62.9	78.7	61.4
03:00 PM - 04:00 PM	69.7	89.7	65.2
04:00 PM - 05:00 PM	64.1	76.7	62.2
05:00 PM - 06:00 PM	64.8	83.9	62.3
06:00 PM - 07:00 PM	65.5	80.5	63.0
07:00 PM - 08:00 PM	64.7	84.8	61.9
08:00 PM - 09:00 PM	64.0	84.0	61.7
09:00 PM - 10:00 PM	64.4	86.2	61.9
10:00 PM - 10:05 PM	64.3	77.5	62.0
10:05 PM - 10:10 PM	63.7	72.7	62.2
10:10 PM - 10:15 PM	63.9	74.8	62.2
10:15 PM - 10:20 PM	64.1	76.5	62.3
10:20 PM - 10:25 PM	65.9	77.1	62.7
10:25 PM - 10:30 PM	67.1	87.5	62.6
10:30 PM - 10:35 PM	64.5	73.9	62.2
10:35 PM - 10:40 PM	65.5	82.5	62.5
10:40 PM - 10:45 PM	64.5	75.7	60.9
10:45 PM - 10:50 PM	62.0	70.0	60.9
10:50 PM - 10:55 PM	64.3	78.7	60.9
10:55 PM - 11:00 PM	61.4	63.9	60.6
11:00 PM - 11:05 PM	61.3	65.3	60.4
11:05 PM - 11:10 PM	63.6	65.8	61.5
11:10 PM - 11:15 PM	62.8	68.0	60.8
11:15 PM - 11:20 PM	61.1	66.4	59.3
11:20 PM - 11:25 PM	60.9	69.2	59.4
11:25 PM - 11:30 PM	63.7	76.0	59.3
11:30 PM - 11:35 PM	61.2	66.7	59.7
11:35 PM - 11:40 PM	60.0	64.4	59.3
11:40 PM - 11:45 PM	60.3	66.5	58.4
11:45 PM - 11:50 PM	60.4	66.9	58.9
11:50 PM - 11:55 PM	60.2	69.1	58.6
11:55 PM - 12:00 AM	59.4	61.7	58.2
12:00 AM - 12:05 AM	59.6	64.1	58.5
12:05 AM - 12:10 AM	60.2	64.8	59.3
12:10 AM - 12:15 AM	60.2	62.3	58.9
12:15 AM - 12:20 AM	61.0	64.0	60.1

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284633-1

Sample No. 24144528-24
Parameter Noise
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (จุดอ้างอิง) (GPS 47P 726041, 1617960) (Shut down)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858527

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	61.5	68.4	60.5
12:25 AM - 12:30 AM	65.6	75.3	60.7
12:30 AM - 12:35 AM	63.2	79.0	59.3
12:35 AM - 12:40 AM	63.4	78.2	59.2
12:40 AM - 12:45 AM	59.8	62.2	58.9
12:45 AM - 12:50 AM	62.9	77.3	59.5
12:50 AM - 12:55 AM	60.5	68.9	59.4
12:55 AM - 01:00 AM	64.8	78.3	59.8
01:00 AM - 01:05 AM	59.7	62.9	58.3
01:05 AM - 01:10 AM	62.8	76.7	58.2
01:10 AM - 01:15 AM	63.1	76.9	58.5
01:15 AM - 01:20 AM	63.6	76.8	59.4
01:20 AM - 01:25 AM	61.7	70.5	59.1
01:25 AM - 01:30 AM	60.7	66.4	58.6
01:30 AM - 01:35 AM	67.0	85.0	60.0
01:35 AM - 01:40 AM	64.2	80.3	58.5
01:40 AM - 01:45 AM	64.7	74.2	59.9
01:45 AM - 01:50 AM	61.1	68.2	59.6
01:50 AM - 01:55 AM	62.3	72.4	59.7
01:55 AM - 02:00 AM	61.9	70.4	59.7
02:00 AM - 02:05 AM	61.8	78.9	59.8
02:05 AM - 02:10 AM	60.1	61.9	59.3
02:10 AM - 02:15 AM	59.8	64.5	58.8
02:15 AM - 02:20 AM	60.0	62.5	59.0
02:20 AM - 02:25 AM	60.0	62.4	59.0
02:25 AM - 02:30 AM	65.8	78.9	58.8
02:30 AM - 02:35 AM	59.9	64.2	58.7
02:35 AM - 02:40 AM	62.5	77.1	59.1
02:40 AM - 02:45 AM	59.9	62.0	59.0
02:45 AM - 02:50 AM	59.9	62.6	58.9
02:50 AM - 02:55 AM	65.6	77.9	59.6
02:55 AM - 03:00 AM	63.6	77.4	59.6
03:00 AM - 03:05 AM	60.3	65.6	59.1
03:05 AM - 03:10 AM	65.5	77.1	59.8
03:10 AM - 03:15 AM	60.8	67.9	59.0
03:15 AM - 03:20 AM	62.1	70.3	59.5
03:20 AM - 03:25 AM	62.8	70.7	59.7
03:25 AM - 03:30 AM	61.9	71.5	59.6
03:30 AM - 03:35 AM	61.6	67.9	59.2
03:35 AM - 03:40 AM	60.0	63.4	59.1

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284633-1

Sample No. 24144528-24
Parameter Noise
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (จุดอ้างอิง) (GPS 47P 726041, 1617960) (Shut down)
Measurement Date Apr 04 - 05, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858527

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	61.3	72.4	59.4
03:45 AM - 03:50 AM	60.2	68.6	59.2
03:50 AM - 03:55 AM	60.2	62.6	59.0
03:55 AM - 04:00 AM	60.5	69.4	58.6
04:00 AM - 04:05 AM	60.7	70.0	58.9
04:05 AM - 04:10 AM	60.0	64.0	58.9
04:10 AM - 04:15 AM	59.5	61.6	58.7
04:15 AM - 04:20 AM	60.5	68.7	59.5
04:20 AM - 04:25 AM	63.1	75.5	59.4
04:25 AM - 04:30 AM	62.1	76.0	58.8
04:30 AM - 04:35 AM	61.5	75.3	59.5
04:35 AM - 04:40 AM	59.9	64.3	58.6
04:40 AM - 04:45 AM	62.3	69.3	59.8
04:45 AM - 04:50 AM	61.6	68.9	59.2
04:50 AM - 04:55 AM	60.5	67.3	59.3
04:55 AM - 05:00 AM	60.0	62.3	59.2
05:00 AM - 05:05 AM	60.9	68.3	59.3
05:05 AM - 05:10 AM	59.7	61.5	58.9
05:10 AM - 05:15 AM	60.4	70.3	59.2
05:15 AM - 05:20 AM	60.8	63.4	60.0
05:20 AM - 05:25 AM	62.4	75.2	59.7
05:25 AM - 05:30 AM	60.9	66.8	60.0
05:30 AM - 05:35 AM	60.5	62.7	59.6
05:35 AM - 05:40 AM	61.7	69.2	59.7
05:40 AM - 05:45 AM	61.6	69.0	59.5
05:45 AM - 05:50 AM	63.8	79.0	59.9
05:50 AM - 05:55 AM	62.5	71.8	60.2
05:55 AM - 06:00 AM	63.1	66.3	61.5
06:00 AM - 07:00 AM	62.0	75.0	60.6
07:00 AM - 08:00 AM	61.4	70.1	60.1
08:00 AM - 09:00 AM	64.0	78.2	61.6
09:00 AM - 10:00 AM	63.8	76.9	61.6

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Kanokkorn Anek
Senior Manager

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Life Sciences www.alsglobal.com
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284634-1

Sample No. 24144528-25
Parameter Noise
Location รับรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (จุดอ้างอิง) (GPS 47P 726041, 1617960) (Shut down)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858527

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	63.7	87.2	61.1
11:00 AM - 12:00 PM	63.4	75.9	61.6
12:00 PM - 01:00 PM	63.3	84.6	61.5
01:00 PM - 02:00 PM	63.5	83.9	61.5
02:00 PM - 03:00 PM	63.5	76.9	61.2
03:00 PM - 04:00 PM	62.7	76.2	60.7
04:00 PM - 05:00 PM	62.3	76.8	60.8
05:00 PM - 06:00 PM	63.6	78.7	61.4
06:00 PM - 07:00 PM	63.9	79.0	62.3
07:00 PM - 08:00 PM	63.2	82.5	61.3
08:00 PM - 09:00 PM	62.6	78.7	61.2
09:00 PM - 10:00 PM	62.1	78.1	60.6
10:00 PM - 10:05 PM	61.0	63.2	59.9
10:05 PM - 10:10 PM	63.0	72.4	61.0
10:10 PM - 10:15 PM	62.1	70.1	60.2
10:15 PM - 10:20 PM	62.0	69.4	59.6
10:20 PM - 10:25 PM	62.3	69.4	60.8
10:25 PM - 10:30 PM	62.3	67.5	60.8
10:30 PM - 10:35 PM	67.6	88.4	61.4
10:35 PM - 10:40 PM	62.6	66.4	61.7
10:40 PM - 10:45 PM	61.8	64.0	60.8
10:45 PM - 10:50 PM	61.7	64.7	60.8
10:50 PM - 10:55 PM	64.9	78.1	61.5
10:55 PM - 11:00 PM	61.6	64.0	60.8
11:00 PM - 11:05 PM	61.8	64.8	61.2
11:05 PM - 11:10 PM	61.8	64.9	61.2
11:10 PM - 11:15 PM	61.7	68.0	60.9
11:15 PM - 11:20 PM	62.2	66.3	61.0
11:20 PM - 11:25 PM	62.0	67.4	60.7
11:25 PM - 11:30 PM	63.4	76.1	60.6
11:30 PM - 11:35 PM	61.3	63.3	60.5
11:35 PM - 11:40 PM	61.2	62.6	60.5
11:40 PM - 11:45 PM	62.7	72.5	60.6
11:45 PM - 11:50 PM	61.5	64.9	60.5
11:50 PM - 11:55 PM	61.6	64.1	60.5
11:55 PM - 12:00 AM	61.3	64.4	60.1
12:00 AM - 12:05 AM	60.4	64.7	59.5
12:05 AM - 12:10 AM	61.6	69.9	59.7
12:10 AM - 12:15 AM	60.6	63.3	59.3
12:15 AM - 12:20 AM	61.4	63.3	60.3

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284634-1

Sample No. 24144528-25
Parameter Noise
Location รับรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (จุดอ้างอิง) (GPS 47P 726041, 1617960) (Shut down)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858527

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	61.2	63.2	60.4
12:25 AM - 12:30 AM	62.7	74.8	60.3
12:30 AM - 12:35 AM	61.2	70.7	59.4
12:35 AM - 12:40 AM	60.3	62.6	59.4
12:40 AM - 12:45 AM	59.4	62.1	58.2
12:45 AM - 12:50 AM	58.9	61.3	57.4
12:50 AM - 12:55 AM	59.3	66.0	57.4
12:55 AM - 01:00 AM	60.4	73.9	58.1
01:00 AM - 01:05 AM	62.2	78.3	56.9
01:05 AM - 01:10 AM	64.3	79.6	58.8
01:10 AM - 01:15 AM	59.7	61.8	58.9
01:15 AM - 01:20 AM	64.9	76.0	58.8
01:20 AM - 01:25 AM	60.8	68.7	59.4
01:25 AM - 01:30 AM	65.8	78.4	60.2
01:30 AM - 01:35 AM	63.3	77.9	59.3
01:35 AM - 01:40 AM	63.9	77.9	59.6
01:40 AM - 01:45 AM	64.6	78.6	59.8
01:45 AM - 01:50 AM	60.8	67.9	59.1
01:50 AM - 01:55 AM	66.5	78.4	60.0
01:55 AM - 02:00 AM	62.6	79.0	58.7
02:00 AM - 02:05 AM	63.0	77.2	59.1
02:05 AM - 02:10 AM	61.5	76.6	58.4
02:10 AM - 02:15 AM	61.9	69.9	58.4
02:15 AM - 02:20 AM	60.6	66.9	58.6
02:20 AM - 02:25 AM	60.1	70.0	58.3
02:25 AM - 02:30 AM	61.8	72.4	58.1
02:30 AM - 02:35 AM	60.3	63.7	58.9
02:35 AM - 02:40 AM	62.5	74.3	58.4
02:40 AM - 02:45 AM	64.4	77.8	58.5
02:45 AM - 02:50 AM	60.2	67.9	57.9
02:50 AM - 02:55 AM	59.9	67.1	58.5
02:55 AM - 03:00 AM	59.9	66.5	58.4
03:00 AM - 03:05 AM	60.0	72.2	57.8
03:05 AM - 03:10 AM	62.3	74.1	57.6
03:10 AM - 03:15 AM	59.7	67.5	57.7
03:15 AM - 03:20 AM	59.7	68.4	57.5
03:20 AM - 03:25 AM	60.2	72.4	57.9
03:25 AM - 03:30 AM	59.7	68.8	57.7
03:30 AM - 03:35 AM	59.4	67.8	57.7
03:35 AM - 03:40 AM	59.9	69.6	57.6

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Approved by
Kanokkorn Anek
Senior Manager

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284634-1

Sample No. 24144528-25
Parameter Noise
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (จุดอ้างอิง) (GPS 47P 726041, 1617960) (Shut down)
Measurement Date Apr 05 - 06, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858527

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	65.0	70.7	59.5
03:45 AM - 03:50 AM	66.3	70.3	63.3
03:50 AM - 03:55 AM	64.2	71.7	57.9
03:55 AM - 04:00 AM	67.0	75.9	58.0
04:00 AM - 04:05 AM	61.4	73.6	58.0
04:05 AM - 04:10 AM	60.3	67.1	58.7
04:10 AM - 04:15 AM	59.9	64.7	58.8
04:15 AM - 04:20 AM	58.7	62.4	57.9
04:20 AM - 04:25 AM	59.1	63.6	57.9
04:25 AM - 04:30 AM	58.4	60.8	57.3
04:30 AM - 04:35 AM	59.1	63.1	57.8
04:35 AM - 04:40 AM	59.1	61.3	57.6
04:40 AM - 04:45 AM	58.8	61.1	57.8
04:45 AM - 04:50 AM	58.6	60.5	57.9
04:50 AM - 04:55 AM	58.5	61.9	57.1
04:55 AM - 05:00 AM	60.8	76.4	57.8
05:00 AM - 05:05 AM	60.1	71.0	58.1
05:05 AM - 05:10 AM	58.9	63.7	57.7
05:10 AM - 05:15 AM	60.1	67.6	58.3
05:15 AM - 05:20 AM	60.8	68.8	58.8
05:20 AM - 05:25 AM	62.3	75.6	58.4
05:25 AM - 05:30 AM	64.1	78.8	58.3
05:30 AM - 05:35 AM	61.6	70.8	58.3
05:35 AM - 05:40 AM	59.7	66.1	58.3
05:40 AM - 05:45 AM	60.0	65.0	58.6
05:45 AM - 05:50 AM	60.0	63.9	58.9
05:50 AM - 05:55 AM	59.7	65.4	57.8
05:55 AM - 06:00 AM	61.1	66.4	59.0
06:00 AM - 07:00 AM	60.7	69.6	59.1
07:00 AM - 08:00 AM	61.4	76.5	59.0
08:00 AM - 09:00 AM	60.7	70.7	58.9
09:00 AM - 10:00 AM	62.6	77.2	60.5

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284635-1

Sample No. 24144528-26
Parameter Noise
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (จุดอ้างอิง) (GPS 47P 726041, 1617960) (Shut down)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858527

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	62.4	81.8	60.5
11:00 AM - 12:00 PM	62.8	77.7	60.8
12:00 PM - 01:00 PM	62.9	82.1	60.9
01:00 PM - 02:00 PM	62.3	77.2	60.5
02:00 PM - 03:00 PM	62.5	82.7	60.1
03:00 PM - 04:00 PM	61.9	74.8	60.1
04:00 PM - 05:00 PM	61.8	78.2	59.4
05:00 PM - 06:00 PM	63.1	78.0	60.5
06:00 PM - 07:00 PM	62.8	77.9	61.2
07:00 PM - 08:00 PM	61.7	79.2	59.3
08:00 PM - 09:00 PM	60.7	69.3	59.4
09:00 PM - 10:00 PM	60.6	79.7	59.1
10:00 PM - 10:05 PM	59.4	65.6	57.4
10:05 PM - 10:10 PM	60.6	69.7	58.2
10:10 PM - 10:15 PM	58.6	61.2	57.2
10:15 PM - 10:20 PM	58.8	66.6	57.2
10:20 PM - 10:25 PM	59.4	67.4	57.8
10:25 PM - 10:30 PM	61.3	69.2	57.5
10:30 PM - 10:35 PM	59.6	62.6	58.2
10:35 PM - 10:40 PM	60.0	66.8	58.4
10:40 PM - 10:45 PM	59.9	66.9	57.9
10:45 PM - 10:50 PM	59.3	61.7	58.0
10:50 PM - 10:55 PM	59.1	61.9	57.8
10:55 PM - 11:00 PM	59.2	61.4	57.9
11:00 PM - 11:05 PM	58.6	61.0	57.4
11:05 PM - 11:10 PM	58.5	61.4	57.1
11:10 PM - 11:15 PM	61.0	71.9	57.9
11:15 PM - 11:20 PM	58.4	66.6	56.5
11:20 PM - 11:25 PM	58.6	64.3	56.2
11:25 PM - 11:30 PM	61.5	64.7	59.3
11:30 PM - 11:35 PM	62.1	70.7	58.7
11:35 PM - 11:40 PM	60.2	64.4	57.0
11:40 PM - 11:45 PM	58.7	63.1	57.1
11:45 PM - 11:50 PM	58.7	60.9	57.8
11:50 PM - 11:55 PM	58.0	61.1	56.6
11:55 PM - 12:00 AM	57.9	60.7	56.7
12:00 AM - 12:05 AM	58.6	62.8	56.9
12:05 AM - 12:10 AM	59.7	64.2	58.1
12:10 AM - 12:15 AM	60.0	62.5	58.8
12:15 AM - 12:20 AM	60.0	65.2	58.0

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284635-1

Sample No. 24144528-26
Parameter Noise
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (จุดอ้างอิง) (GPS 47P 726041, 1617960) (Shut down)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858527

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	59.4	63.8	58.0
12:25 AM - 12:30 AM	61.4	72.4	58.5
12:30 AM - 12:35 AM	63.8	71.5	60.4
12:35 AM - 12:40 AM	61.5	67.0	60.1
12:40 AM - 12:45 AM	60.8	65.1	59.8
12:45 AM - 12:50 AM	60.8	66.4	59.5
12:50 AM - 12:55 AM	60.7	68.4	59.1
12:55 AM - 01:00 AM	60.4	68.8	59.2
01:00 AM - 01:05 AM	60.3	65.5	59.2
01:05 AM - 01:10 AM	61.2	68.8	58.9
01:10 AM - 01:15 AM	65.2	71.2	61.2
01:15 AM - 01:20 AM	65.9	75.9	62.4
01:20 AM - 01:25 AM	68.2	82.8	64.1
01:25 AM - 01:30 AM	63.6	76.8	60.2
01:30 AM - 01:35 AM	64.7	78.7	60.2
01:35 AM - 01:40 AM	63.7	78.9	59.4
01:40 AM - 01:45 AM	62.3	78.5	59.4
01:45 AM - 01:50 AM	60.7	65.8	59.7
01:50 AM - 01:55 AM	60.7	67.3	59.5
01:55 AM - 02:00 AM	60.1	67.3	58.6
02:00 AM - 02:05 AM	59.7	63.3	58.8
02:05 AM - 02:10 AM	58.6	62.9	57.4
02:10 AM - 02:15 AM	61.5	74.1	58.0
02:15 AM - 02:20 AM	61.4	77.9	57.5
02:20 AM - 02:25 AM	59.1	64.8	58.1
02:25 AM - 02:30 AM	58.6	63.2	57.2
02:30 AM - 02:35 AM	59.0	65.0	57.5
02:35 AM - 02:40 AM	60.1	70.7	57.2
02:40 AM - 02:45 AM	58.5	62.7	57.3
02:45 AM - 02:50 AM	61.3	72.5	58.3
02:50 AM - 02:55 AM	58.6	63.0	57.5
02:55 AM - 03:00 AM	59.1	65.9	58.0
03:00 AM - 03:05 AM	59.1	63.0	58.2
03:05 AM - 03:10 AM	59.2	64.1	58.2
03:10 AM - 03:15 AM	59.5	63.5	58.6
03:15 AM - 03:20 AM	58.8	63.0	57.9
03:20 AM - 03:25 AM	58.8	63.2	57.9
03:25 AM - 03:30 AM	60.5	70.8	57.8
03:30 AM - 03:35 AM	59.4	69.6	57.6
03:35 AM - 03:40 AM	59.0	66.1	57.8

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Approved by
Kanokkorn Anek
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284635-1

Sample No. 24144528-26
Parameter Noise
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (จุดอ้างอิง) (GPS 47P 726041, 1617960) (Shut down)
Measurement Date Apr 06 - 07, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858527

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	58.3	63.1	57.1
03:45 AM - 03:50 AM	58.5	62.6	57.4
03:50 AM - 03:55 AM	58.5	65.5	57.1
03:55 AM - 04:00 AM	58.0	62.9	56.5
04:00 AM - 04:05 AM	57.6	62.9	56.4
04:05 AM - 04:10 AM	59.1	71.8	57.0
04:10 AM - 04:15 AM	58.0	62.9	56.8
04:15 AM - 04:20 AM	58.1	62.6	57.1
04:20 AM - 04:25 AM	58.7	67.3	56.5
04:25 AM - 04:30 AM	58.1	63.6	56.2
04:30 AM - 04:35 AM	60.9	76.1	56.6
04:35 AM - 04:40 AM	57.2	62.6	56.1
04:40 AM - 04:45 AM	57.6	62.8	56.3
04:45 AM - 04:50 AM	57.9	62.4	56.5
04:50 AM - 04:55 AM	58.2	63.4	56.8
04:55 AM - 05:00 AM	59.5	76.6	56.7
05:00 AM - 05:05 AM	59.1	66.7	57.1
05:05 AM - 05:10 AM	58.0	66.0	56.6
05:10 AM - 05:15 AM	58.8	68.2	56.3
05:15 AM - 05:20 AM	58.5	62.0	56.9
05:20 AM - 05:25 AM	60.5	71.4	57.6
05:25 AM - 05:30 AM	60.1	71.6	57.1
05:30 AM - 05:35 AM	58.7	60.9	57.3
05:35 AM - 05:40 AM	58.9	61.8	57.6
05:40 AM - 05:45 AM	59.0	64.6	58.0
05:45 AM - 05:50 AM	58.1	59.7	57.0
05:50 AM - 05:55 AM	59.4	67.4	56.8
05:55 AM - 06:00 AM	58.7	61.9	57.2
06:00 AM - 07:00 AM	62.6	78.8	59.6
07:00 AM - 08:00 AM	61.1	70.0	59.0
08:00 AM - 09:00 AM	62.0	72.0	60.2
09:00 AM - 10:00 AM	64.6	74.7	62.5

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Approved by
Kanokkorn Anek
Senior Manager

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Life Sciences www.alsglobal.com
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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284636-1

Sample No. 24144528-27
Parameter Noise
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (จุดอ้างอิง) (GPS 47P 726041, 1617960) (Shut down)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858527

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	64.5	85.7	62.2
11:00 AM - 12:00 PM	62.2	86.7	60.0
12:00 PM - 01:00 PM	62.2	77.2	60.4
01:00 PM - 02:00 PM	62.5	82.7	60.1
02:00 PM - 03:00 PM	61.9	74.8	60.1
03:00 PM - 04:00 PM	61.9	77.2	60.4
04:00 PM - 05:00 PM	63.0	76.7	61.0
05:00 PM - 06:00 PM	62.7	77.1	61.2
06:00 PM - 07:00 PM	63.2	86.9	60.2
07:00 PM - 08:00 PM	61.7	74.8	59.2
08:00 PM - 09:00 PM	62.4	83.7	59.0
09:00 PM - 10:00 PM	62.1	79.3	59.7
10:00 PM - 10:05 PM	59.7	61.3	59.0
10:05 PM - 10:10 PM	60.1	63.0	59.4
10:10 PM - 10:15 PM	59.9	63.4	59.0
10:15 PM - 10:20 PM	60.4	62.3	59.5
10:20 PM - 10:25 PM	60.8	64.6	59.5
10:25 PM - 10:30 PM	61.7	69.3	59.1
10:30 PM - 10:35 PM	61.0	66.7	59.5
10:35 PM - 10:40 PM	61.5	68.7	59.7
10:40 PM - 10:45 PM	60.9	67.5	59.6
10:45 PM - 10:50 PM	60.5	68.6	59.5
10:50 PM - 10:55 PM	60.9	66.1	60.2
10:55 PM - 11:00 PM	61.0	67.2	58.9
11:00 PM - 11:05 PM	60.9	63.7	60.2
11:05 PM - 11:10 PM	60.6	63.9	59.8
11:10 PM - 11:15 PM	60.2	61.9	59.3
11:15 PM - 11:20 PM	60.9	66.8	59.6
11:20 PM - 11:25 PM	60.5	64.1	59.6
11:25 PM - 11:30 PM	61.8	79.7	58.2
11:30 PM - 11:35 PM	61.0	65.9	59.6
11:35 PM - 11:40 PM	60.2	62.9	59.2
11:40 PM - 11:45 PM	60.0	66.1	58.3
11:45 PM - 11:50 PM	59.8	65.3	58.3
11:50 PM - 11:55 PM	59.4	62.7	57.6
11:55 PM - 12:00 AM	59.4	65.6	57.4
12:00 AM - 12:05 AM	60.6	69.7	58.2
12:05 AM - 12:10 AM	58.6	61.2	57.2
12:10 AM - 12:15 AM	58.8	66.6	57.2
12:15 AM - 12:20 AM	61.4	77.9	57.5

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284636-1

Sample No. 24144528-27
Parameter Noise
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (จุดอ้างอิง) (GPS 47P 726041, 1617960) (Shut down)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858527

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	59.1	64.8	58.1
12:25 AM - 12:30 AM	58.6	63.2	57.2
12:30 AM - 12:35 AM	59.0	65.0	57.5
12:35 AM - 12:40 AM	60.1	70.7	57.2
12:40 AM - 12:45 AM	58.5	62.7	57.3
12:45 AM - 12:50 AM	61.3	72.5	58.3
12:50 AM - 12:55 AM	58.6	63.0	57.5
12:55 AM - 01:00 AM	59.1	65.9	58.0
01:00 AM - 01:05 AM	59.1	63.0	58.2
01:05 AM - 01:10 AM	59.2	64.1	58.2
01:10 AM - 01:15 AM	59.5	63.5	58.6
01:15 AM - 01:20 AM	58.8	63.0	57.9
01:20 AM - 01:25 AM	58.8	63.2	57.9
01:25 AM - 01:30 AM	60.5	70.8	57.8
01:30 AM - 01:35 AM	59.4	69.6	57.6
01:35 AM - 01:40 AM	59.0	66.1	57.8
01:40 AM - 01:45 AM	58.3	63.1	57.1
01:45 AM - 01:50 AM	58.5	62.6	57.4
01:50 AM - 01:55 AM	58.5	65.5	57.1
01:55 AM - 02:00 AM	58.0	62.9	56.5
02:00 AM - 02:05 AM	57.6	62.9	56.4
02:05 AM - 02:10 AM	59.1	71.8	57.0
02:10 AM - 02:15 AM	58.0	62.9	56.8
02:15 AM - 02:20 AM	58.1	62.6	57.1
02:20 AM - 02:25 AM	58.7	67.3	56.5
02:25 AM - 02:30 AM	58.1	63.6	56.2
02:30 AM - 02:35 AM	60.9	76.1	56.6
02:35 AM - 02:40 AM	57.2	62.6	56.1
02:40 AM - 02:45 AM	57.6	62.8	56.3
02:45 AM - 02:50 AM	57.9	62.4	56.5
02:50 AM - 02:55 AM	59.4	62.1	58.2
02:55 AM - 03:00 AM	58.9	61.3	57.4
03:00 AM - 03:05 AM	59.3	66.0	57.4
03:05 AM - 03:10 AM	60.4	73.9	58.1
03:10 AM - 03:15 AM	62.2	78.3	56.9
03:15 AM - 03:20 AM	64.3	79.6	58.8
03:20 AM - 03:25 AM	59.7	61.8	58.9
03:25 AM - 03:30 AM	64.9	76.0	58.8
03:30 AM - 03:35 AM	60.8	68.7	59.4
03:35 AM - 03:40 AM	65.8	78.4	60.2

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284636-1

Sample No. 24144528-27
Parameter Noise
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (จุดอ้างอิง) (GPS 47P 726041, 1617960) (Shut down)
Measurement Date Apr 07 - 08, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858527

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	63.3	77.9	59.3
03:45 AM - 03:50 AM	63.9	77.9	59.6
03:50 AM - 03:55 AM	64.6	78.6	59.8
03:55 AM - 04:00 AM	60.8	67.9	59.1
04:00 AM - 04:05 AM	66.5	78.4	60.0
04:05 AM - 04:10 AM	62.6	79.0	58.7
04:10 AM - 04:15 AM	63.0	77.2	59.1
04:15 AM - 04:20 AM	61.5	76.6	58.4
04:20 AM - 04:25 AM	61.9	69.9	58.4
04:25 AM - 04:30 AM	60.6	66.9	58.6
04:30 AM - 04:35 AM	60.1	70.0	58.3
04:35 AM - 04:40 AM	61.8	72.4	58.1
04:40 AM - 04:45 AM	60.3	63.7	58.9
04:45 AM - 04:50 AM	62.5	74.3	58.4
04:50 AM - 04:55 AM	64.4	77.8	58.5
04:55 AM - 05:00 AM	60.2	67.9	57.9
05:00 AM - 05:05 AM	59.9	67.1	58.5
05:05 AM - 05:10 AM	59.9	66.5	58.4
05:10 AM - 05:15 AM	60.0	72.2	57.8
05:15 AM - 05:20 AM	62.3	74.1	57.6
05:20 AM - 05:25 AM	59.7	67.5	57.7
05:25 AM - 05:30 AM	59.7	68.4	57.5
05:30 AM - 05:35 AM	60.2	72.4	57.9
05:35 AM - 05:40 AM	59.7	68.8	57.7
05:40 AM - 05:45 AM	59.4	67.8	57.7
05:45 AM - 05:50 AM	59.9	69.6	57.6
05:50 AM - 05:55 AM	65.0	70.7	59.5
05:55 AM - 06:00 AM	66.3	70.3	63.3
06:00 AM - 07:00 AM	61.4	75.9	58.0
07:00 AM - 08:00 AM	60.8	78.8	58.2
08:00 AM - 09:00 AM	61.0	71.1	59.4
09:00 AM - 10:00 AM	64.2	74.7	62.8

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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

Approved by
Kanokkorn Anek
Senior Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284637-1

Sample No. 24144528-28
Parameter Noise
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (จุดอ้างอิง) (GPS 47P 726041, 1617960) (Shut down)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858527

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	65.0	75.5	62.2
11:00 AM - 12:00 PM	63.6	78.3	61.4
12:00 PM - 01:00 PM	62.7	74.5	60.4
01:00 PM - 02:00 PM	63.3	89.3	60.1
02:00 PM - 03:00 PM	61.9	74.9	59.7
03:00 PM - 04:00 PM	60.5	73.5	58.8
04:00 PM - 05:00 PM	61.4	78.9	59.5
05:00 PM - 06:00 PM	62.9	77.9	60.8
06:00 PM - 07:00 PM	64.0	79.4	61.6
07:00 PM - 08:00 PM	62.9	78.3	60.8
08:00 PM - 09:00 PM	62.5	78.9	60.0
09:00 PM - 10:00 PM	63.1	82.7	60.6
10:00 PM - 10:05 PM	63.1	76.9	59.8
10:05 PM - 10:10 PM	63.3	76.5	59.8
10:10 PM - 10:15 PM	65.2	78.3	60.4
10:15 PM - 10:20 PM	61.4	67.5	60.1
10:20 PM - 10:25 PM	62.1	71.1	59.8
10:25 PM - 10:30 PM	62.2	71.4	59.5
10:30 PM - 10:35 PM	62.0	68.8	59.9
10:35 PM - 10:40 PM	60.8	65.9	59.3
10:40 PM - 10:45 PM	61.6	70.7	59.7
10:45 PM - 10:50 PM	60.3	70.5	59.3
10:50 PM - 10:55 PM	61.4	69.1	59.8
10:55 PM - 11:00 PM	60.7	67.1	59.8
11:00 PM - 11:05 PM	60.4	67.6	59.3
11:05 PM - 11:10 PM	61.6	69.6	59.6
11:10 PM - 11:15 PM	60.8	70.6	58.8
11:15 PM - 11:20 PM	61.1	67.5	58.7
11:20 PM - 11:25 PM	59.2	61.3	58.3
11:25 PM - 11:30 PM	59.6	62.4	58.6
11:30 PM - 11:35 PM	59.6	63.4	58.4
11:35 PM - 11:40 PM	64.6	74.4	58.6
11:40 PM - 11:45 PM	62.0	72.4	59.8
11:45 PM - 11:50 PM	60.6	62.2	60.0
11:50 PM - 11:55 PM	59.2	71.5	57.3
11:55 PM - 12:00 AM	58.8	61.9	57.9
12:00 AM - 12:05 AM	58.6	65.2	57.0
12:05 AM - 12:10 AM	60.7	67.1	59.3
12:10 AM - 12:15 AM	60.6	66.5	59.5
12:15 AM - 12:20 AM	60.7	63.9	60.0

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Approved by
Kanokkorn Anek
Senior Manager

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284637-1

Sample No. 24144528-28
Parameter Noise
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (จุดอ้างอิง) (GPS 47P 726041, 1617960) (Shut down)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858527

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	60.9	63.8	60.3
12:25 AM - 12:30 AM	62.0	72.9	58.9
12:30 AM - 12:35 AM	60.1	66.5	59.1
12:35 AM - 12:40 AM	59.8	62.7	58.8
12:40 AM - 12:45 AM	59.8	61.9	59.1
12:45 AM - 12:50 AM	62.7	74.7	59.2
12:50 AM - 12:55 AM	60.7	62.3	59.9
12:55 AM - 01:00 AM	61.3	63.5	60.1
01:00 AM - 01:05 AM	61.2	63.3	60.5
01:05 AM - 01:10 AM	62.6	73.0	61.1
01:10 AM - 01:15 AM	62.6	73.8	60.1
01:15 AM - 01:20 AM	68.2	88.0	60.3
01:20 AM - 01:25 AM	63.6	77.5	59.5
01:25 AM - 01:30 AM	64.5	78.9	60.0
01:30 AM - 01:35 AM	64.2	78.4	59.8
01:35 AM - 01:40 AM	60.6	64.2	58.7
01:40 AM - 01:45 AM	61.7	75.4	59.5
01:45 AM - 01:50 AM	62.1	74.7	59.9
01:50 AM - 01:55 AM	60.6	66.7	59.7
01:55 AM - 02:00 AM	61.9	75.1	59.4
02:00 AM - 02:05 AM	61.3	67.1	60.3
02:05 AM - 02:10 AM	60.8	65.7	59.8
02:10 AM - 02:15 AM	66.5	87.7	60.1
02:15 AM - 02:20 AM	64.4	80.8	60.6
02:20 AM - 02:25 AM	60.9	68.1	59.5
02:25 AM - 02:30 AM	60.5	64.5	59.3
02:30 AM - 02:35 AM	61.2	69.0	59.4
02:35 AM - 02:40 AM	61.7	67.3	60.0
02:40 AM - 02:45 AM	61.1	66.5	59.8
02:45 AM - 02:50 AM	60.3	63.2	59.4
02:50 AM - 02:55 AM	60.3	65.1	59.5
02:55 AM - 03:00 AM	60.1	66.2	59.1
03:00 AM - 03:05 AM	60.5	65.1	59.4
03:05 AM - 03:10 AM	60.7	65.3	59.7
03:10 AM - 03:15 AM	60.0	67.3	59.1
03:15 AM - 03:20 AM	60.1	64.4	59.4
03:20 AM - 03:25 AM	60.4	63.9	59.4
03:25 AM - 03:30 AM	60.1	63.3	59.1
03:30 AM - 03:35 AM	60.9	65.7	59.5
03:35 AM - 03:40 AM	61.0	75.8	59.4

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Approved by
Kanokkorn Anek
Senior Manager

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24144528
Date Received : Apr 10, 2025
Date Reported : Apr 22, 2025
Report No. : 3284637-1

Sample No. 24144528-28
Parameter Noise
Location ริมรั้วด้านหน้าโรงงาน (ระยะดำเนินการ) (จุดอ้างอิง) (GPS 47P 726041, 1617960) (Shut down)
Measurement Date Apr 08 - 09, 2025
Measurement by Vanich Phanpipit
Sound Level Meter 00858527

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	61.0	73.5	59.2
03:45 AM - 03:50 AM	60.6	65.6	60.0
03:50 AM - 03:55 AM	62.0	74.6	59.9
03:55 AM - 04:00 AM	64.0	68.6	61.1
04:00 AM - 04:05 AM	62.1	68.5	60.1
04:05 AM - 04:10 AM	62.4	67.3	60.4
04:10 AM - 04:15 AM	62.0	71.0	60.3
04:15 AM - 04:20 AM	61.6	75.2	60.3
04:20 AM - 04:25 AM	61.4	73.3	60.0
04:25 AM - 04:30 AM	60.4	64.6	59.9
04:30 AM - 04:35 AM	61.4	67.4	60.2
04:35 AM - 04:40 AM	62.2	78.7	59.8
04:40 AM - 04:45 AM	61.9	77.6	59.8
04:45 AM - 04:50 AM	60.4	63.6	59.6
04:50 AM - 04:55 AM	60.2	62.4	59.6
04:55 AM - 05:00 AM	60.5	63.9	59.7
05:00 AM - 05:05 AM	60.5	67.0	59.7
05:05 AM - 05:10 AM	60.5	63.4	59.7
05:10 AM - 05:15 AM	60.6	68.4	59.6
05:15 AM - 05:20 AM	59.9	62.3	59.4
05:20 AM - 05:25 AM	60.5	65.1	59.5
05:25 AM - 05:30 AM	60.2	62.5	59.5
05:30 AM - 05:35 AM	64.9	77.9	59.7
05:35 AM - 05:40 AM	60.4	64.4	59.3
05:40 AM - 05:45 AM	60.4	62.8	59.6
05:45 AM - 05:50 AM	61.6	68.9	59.6
05:50 AM - 05:55 AM	60.5	63.9	59.6
05:55 AM - 06:00 AM	62.5	65.3	60.3
06:00 AM - 07:00 AM	63.3	77.8	61.2
07:00 AM - 08:00 AM	61.7	70.8	59.9
08:00 AM - 09:00 AM	64.0	81.4	61.1
09:00 AM - 10:00 AM	65.7	88.8	63.0

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016, ISO 1996-2 : 2017
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Approved by
Kanokkorn Anek
Senior Manager

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ภาคผนวก ค-3

คุณภาพน้ำ

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24136022
Date Received : Jan 08, 2025
Date Reported : Jan 15, 2025
Report Number : 3214593-1

Sample Number	24136022-3
Sampled Date	Jan 08, 2025 10:10 AM
Sample Description	น้ำทิ้งจากการอุปโภคบริโภค
Location	อาคารควบคุมกลาง โรงงาน 2 (CCR building Plant 2)
Date Analysis Commenced	Jan 09, 2025
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	4.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	<25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C		-	-	8.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuk ทะเบียนเลขที่ ว-204-จ-0058

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

Technical Management Siriluk P.
Siriluk Bunnak
Section Head
ทะเบียนเลขที่ ว-204-จ-0013

Approved by Kanokkorn Anek
Kanokkorn Anek
Assistant General Manager
ทะเบียนเลขที่ ว-204-ค-0004

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.
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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24136022
Date Received : Jan 08, 2025
Date Reported : Jan 15, 2025
Report Number : 3214594-1

Sample Number	24136022-4
Sampled Date	Jan 08, 2025 10:15 AM
Sample Description	น้ำทิ้งจากการอุปโภคบริโภค
Location	อาคารซ่อมบำรุง โรงงาน 2 (Workshop Plant 2)
Date Analysis Commenced	Jan 09, 2025
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	<25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C		-	-	8.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuk ทะเบียนเลขที่ ว-204-จ-0058

Remark :
- LOD : Limit of Detection
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- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Siriluk P.
Siriluk Bunnak
Section Head
ทะเบียนเลขที่ ว-204-จ-0013

Approved by Kanokkorn Anek
Kanokkorn Anek
Assistant General Manager
ทะเบียนเลขที่ ว-204-ค-0004

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 258862
Date Received :Feb 10, 2025
Date Reported :Feb 18, 2025
Report Number :3221877-1

Sample Number	258862-3
Sampled Date	Feb 10, 2025 10:00 AM
Sample Description	น้ำทิ้งจากการอุปโภคบริโภค
Location	อาคารควบคุมกลาง โรงงาน 2 (CCR building Plant 2)
Date Analysis Commenced	Feb 11, 2025
Condition of Sample	Contained in three plastic bottles and one amber glass bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	5.6	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	33	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C		-	-	8.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuk ทะเบียนเลขที่ ว-204-จ-0058

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

Technical Management Siriluk P.
Siriluk Bunnak
Section Head
ทะเบียนเลขที่ ว-204-จ-0013

Approved by Kanokkorn Anek
Kanokkorn Anek
Assistant General Manager
ทะเบียนเลขที่ ว-204-ค-0004

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 258862
Date Received :Feb 10, 2025
Date Reported :Feb 18, 2025
Report Number :3221877-1

Sample Number	258862-4
Sampled Date	Feb 10, 2025 10:10 AM
Sample Description	น้ำทิ้งจากการอุปโภคบริโภค
Location	อาคารซ่อมบำรุง โรงงาน 2 (Workshop Plant 2)
Date Analysis Commenced	Feb 11, 2025
Condition of Sample	Contained in three plastic bottles and one amber glass bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	2.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	36	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C		-	-	8.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	8	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuk ทะเบียนเลขที่ ว-204-จ-0058

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

Technical Management Siriluk P.
Siriluk Bunnak
Section Head
ทะเบียนเลขที่ ว-204-จ-0013

Approved by Kanokkorn Anek
Kanokkorn Anek
Assistant General Manager
ทะเบียนเลขที่ ว-204-ค-0004

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2519310
Date Received : Mar 11, 2025
Date Reported : Mar 18, 2025
Report Number : 3260722-1

Sample Number	2519310-3
Sampled Date	Mar 11, 2025 10:55 AM
Sample Description	น้ำทิ้งจากการอุปโภคบริโภค
Location	อาคารควบคุมกลาง โรงงาน 2 (CCR building Plant 2)
Date Analysis Commenced	Mar 12, 2025
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	3.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	<25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C		-	-	8.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	13	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuk

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

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Approved by Siriluk P.
Siriluk Bunnak
Section Head

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2519310
Date Received : Mar 11, 2025
Date Reported : Mar 18, 2025
Report Number : 3260723-1

Sample Number	2519310-4
Sampled Date	Mar 11, 2025 11:00 AM
Sample Description	น้ำทิ้งจากการอุปโภคบริโภค
Location	อาคารซ่อมบำรุง โรงงาน 2 (Workshop Plant 2)
Date Analysis Commenced	Mar 12, 2025
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	<2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C		-	-	7.6	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuk

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Siriluk Bunnak
Section Head

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2529725
Date Received : Apr 01, 2025
Date Reported : Apr 08, 2025
Report Number : 3278704-1

Sample Number	2529725-3
Sampled Date	Apr 01, 2025 10:35 AM
Sample Description	น้ำทิ้งจากการอุปโภคบริโภค
Location	อาคารควบคุมกลาง โรงงาน 2 (CCR building Plant 2)
Date Analysis Commenced	Apr 02, 2025
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	2.7	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	36	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C		-	-	8.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	8	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuk ทะเบียนเลขที่ ว-204-จ-0058

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

Technical Management Siriluk P.
Siriluk Bunnak
Section Head
ทะเบียนเลขที่ ว-204-จ-0013

Approved by Kanokkorn Anek
Kanokkorn Anek
Assistant General Manager
ทะเบียนเลขที่ ว-204-ค-0004

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2529725
Date Received : Apr 01, 2025
Date Reported : Apr 08, 2025
Report Number : 3278705-1

Sample Number	2529725-4
Sampled Date	Apr 01, 2025 10:45 AM
Sample Description	น้ำทิ้งจากการอุปโภคบริโภค
Location	อาคารซ่อมบำรุง โรงงาน 2 (Workshop Plant 2)
Date Analysis Commenced	Apr 02, 2025
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	<2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	38	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C		-	-	7.9	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	14	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuk ทะเบียนเลขที่ ว-204-จ-0058

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Technical Management Siriluk P.
Siriluk Bunnak
Section Head
ทะเบียนเลขที่ ว-204-จ-0013

Approved by Kanokkorn Anek
Kanokkorn Anek
Assistant General Manager
ทะเบียนเลขที่ ว-204-ค-0004

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2538550
Date Received : May 14, 2025
Date Reported : May 21, 2025
Report Number : 3312176-1

Sample Number	2538550-3
Sampled Date	May 13, 2025 3:17 PM
Sample Description	น้ำทิ้งจากการอุปโภคบริโภค
Location	อาคารควบคุมกลาง โรงงาน 2 (CCR building Plant 2)
Date Analysis Commenced	May 15, 2025
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	7.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	46	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C		-	-	8.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuk ทะเบียนเลขที่ ว-204-จ-0058

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

Technical Management Suwimon C.
Suwimon Chairuangwut
Scientist (3)
ทะเบียนเลขที่ ว-204-จ-0018

Approved by Kanokkorn Anek
Kanokkorn Anek
Assistant General Manager
ทะเบียนเลขที่ ว-204-ค-0004

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2538550
Date Received : May 14, 2025
Date Reported : May 21, 2025
Report Number : 3312177-1

Sample Number	2538550-4
Sampled Date	May 13, 2025 3:20 PM
Sample Description	น้ำทิ้งจากการอุปโภคบริโภค
Location	อาคารซ่อมบำรุง โรงงาน 2 (Workshop Plant 2)
Date Analysis Commenced	May 15, 2025
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	4.6	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	53	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C		-	-	8.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuk ทะเบียนเลขที่ ว-204-จ-0058

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Technical Management Suwimon C.
Suwimon Chairuangwut
Scientist (3)
ทะเบียนเลขที่ ว-204-จ-0018

Approved by Kanokkorn Anek
Kanokkorn Anek
Assistant General Manager
ทะเบียนเลขที่ ว-204-ค-0004

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2546892
Date Received : Jun 12, 2025
Date Reported : Jun 19, 2025
Report Number : 3338931-1

Sample Number	2546892-3
Sampled Date	Jun 11, 2025 9:10 AM
Sample Description	น้ำทิ้งจากการอุปโภคบริโภค
Location	อาคารควบคุมกลาง โรงงาน 2 (CCR building Plant 2)
Date Analysis Commenced	Jun 13, 2025
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	7.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	49	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C		-	-	7.9	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	11	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuk ทะเบียนเลขที่ ว-204-จ-0058

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Technical Management Suwimon C.
Suwimon Chairuangwut
Scientist (3)
ทะเบียนเลขที่ ว-204-จ-0018

Approved by Kanokkorn Anek
Kanokkorn Anek
Assistant General Manager
ทะเบียนเลขที่ ว-204-ค-0004

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2546892
Date Received : Jun 12, 2025
Date Reported : Jun 19, 2025
Report Number : 3338932-1

Sample Number	2546892-4
Sampled Date	Jun 11, 2025 9:18 AM
Sample Description	น้ำทิ้งจากการอุปโภคบริโภค
Location	อาคารซ่อมบำรุง โรงงาน 2 (Workshop Plant 2)
Date Analysis Commenced	Jun 13, 2025
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	2.6	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	26	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C		-	-	7.7	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	14	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuk ทะเบียนเลขที่ ว-204-จ-0058

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

Technical Management Suwimon C.
Suwimon Chairuangwut
Scientist (3)
ทะเบียนเลขที่ ว-204-จ-0018

Approved by Kanokkorn Anek
Kanokkorn Anek
Assistant General Manager
ทะเบียนเลขที่ ว-204-ค-0004

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

TESTING
No.0009

Lot ID: 2513387
Date Received : Feb 11, 2025
Date Reported : Feb 18, 2025
Report Number : 3232759-1

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O :
Project Name : Saraburi Factory Plant
Project Location :

Sample Number	2513387-1
Sampled Date	Feb 10, 2025 9:45 AM
Sample Description	น้ำทิ้งจากการอุปโภคบริโภค
Date Analysis Commenced	Feb 11, 2025
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	<2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	<25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C		-	-	7.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuk

Remark :
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Approved by Siriluk P.
Siriluk Bunnak
Section Head

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Analysis / Test Report

TESTING
No.0009

Lot ID: 2529705
Date Received : Apr 01, 2025
Date Reported : Apr 08, 2025
Report Number : 3269162-1

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Sample Number	2529705-1
Sampled Date	Apr 01, 2025 9:50 AM
Sample Description	น้ำทิ้งจากการอุปโภคบริโภค
Location	บ่อพักน้ำทิ้งในโรงงาน (ห้องพักพนักงาน SCP)
Date Analysis Commenced	Apr 02, 2025
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	<2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	<25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C		-	-	7.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuk ทะเบียนเลขที่ ว-204-จ-0058

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

Technical Management Suwimon C.
Suwimon Chairuangwut
Scientist (3)
ทะเบียนเลขที่ ว-204-จ-0018

Approved by Kanokkorn Anek
Kanokkorn Anek
Assistant General Manager
ทะเบียนเลขที่ ว-204-จ-0004

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company
Life Sciences www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2546887
Date Received :Jun 12, 2025
Date Reported :Jun 19, 2025
Report Number :3309246-1

Sample Number	2546887-1
Sampled Date	Jun 11, 2025 10:43 AM
Sample Description	น้ำทิ้งจากการอุปโภคบริโภค
Location	บ่อพักน้ำทิ้งในโรงงาน (ห้องพักพนักงาน SCP)
Date Analysis Commenced	Jun 13, 2025
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	<2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	26	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C		-	-	7.6	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuk ทะเบียนเลขที่ ว-204-จ-0058

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

Technical Management

Suwimon C

Suwimon Chairuangwut
Scientist (3)
ทะเบียนเลขที่ ว-204-จ-0018

Approved by

Kanokkorn Anek
Assistant General Manager
ทะเบียนเลขที่ ว-204-ค-0004

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand · PHONE +66 0 2760 3000 · FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

ภาคผนวก ค-4

คุณภาพสิ่งแวดล้อมในสถานประกอบการ

INSEE Analysis Report

Report number: 202501054
Report date: 18 Jun 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 219 Moo 5 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Noise exposure of employee
Location: Siam City Power K3

Date	Lot. No	Reference No.	Sample	Lmax (dB(A))	TWA (dB(A))	TWA[3] PPE used (dB(A))
12 Jun 2025	H0140047	H0140047-1	Mr.Phaiboon Suwannason Position: Field Operator Working area: WHR Fac 2	112.2	72.7	72.2
			Standard	115[1]	85[2]	

Reference Method:

: Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:

[1]: Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E. 2559, Thailand.

[2]: Notifications of the Department of Labor Protection and Welfare on the standard limit for the noise exposure in a daily average basis B.E. 2561, Thailand.

Remark:

[3]: Notifications of the Department of Labor Protection and Welfare on the calculation method for occupational noise exposure as a personal protective equipment (PPE) used condition B.E. 2561, Thailand.

: Earplug brand: 3M, model: 1292/37186, Noise Reduction Rating 25 Decibel.

[redacted]

INSEE Analysis Report

Report number: 202501054
Report date: 18 Jun 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 219 Moo 5 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Noise exposure of employee
Location: Siam City Power K3

Monitoring device / Calibrator information

Equipment: Sound Calibrator
Approved standard: IEC 60942
Code: E-EN-179
serial No.: 19003471
Brand / Model: DeltaOHM/ HD 2020
Calibration date: 4 July 2024
expire date: 3 July 2025

Please scan QR Code for the certificate

E-EN-179-2024Y

Sample Reference No.
H0140047

Equipment: Noise Dosimeter
Approved standard: IEC 61252
Code: E-EN-191
serial No.: 200300089
Brand / Model: EXTECH/SL400
Calibration date: 4 July 2024
expire date: 3 July 2025

Please scan QR Code for the certificate

E-EN-191-2024Y

Sample Reference No.
H0140047-1

[redacted]

INSEE

Analysis Report

Report number: 202501016

Report date: 14 Mar 2025

Client information

Company: Siam City Cement Public Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 219 Moo 5 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Sound level measurement in workplace
Location: Siam City Power K3

Date	Lot. No.	Reference No.	Location	Leq 8 hr (dB(A))	Lmax (dB(A))
19 Feb 2025	H0140017	H0140017-1	Turbine and Generator	92	95
			Standard	-	115[1]

Reference Method:
: Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
[1]: Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E. 2559, Thailand.

F-ES-074 (V. 1.0 ; 10-08-2565)

INSEE

Analysis Report

Report number: 202501016

Report date: 14 Mar 2025

Client information

Company: Siam City Cement Public Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 219 Moo 5 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com Tel: 08 8594 1565

Sample information

Description: Sound level measurement in workplace
Location: Siam City Power K3

Monitoring device / Calibrator information

Equipment: Sound Calibrator **Approved standard:** IEC 60942 **Code:** E-EN-179 **serial No.:** 19003471 **Brand / Model:** DeltaOHM / HD 2020 **Calibration date:** 4 July 2024 **expire date:** 3 July 2025	**Please scan QR Code for the certificate**	E-EN-179-2024Y	**Sample Reference No.** H0140017
Equipment: Sound Level Meter **Approved standard:** IEC 61672 **Code:** E-EN-200 **serial No.:** 00730560 **Brand / Model:** RION / NL-43 **Calibration date:** 26 March 2024 **expire date:** 25 March 2025	**Please scan QR Code for the certificate**	E-EN-200-2024Y	**Sample Reference No.** H0140017-1

INSEE

Analysis Report

Report number: 202501018
Report date: 14 Mar 2025

Client information

Company: Siam City Cement Public Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 219 Moo 5 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Heat stress measurement in working area.
Location: Siam City Power K3

Date	LOT no.	Reference No.	Location	Temperature [°C]			Working condition	WBGT [°C]
				Wet Bulb	Dry Bulb	Globe		
19 Feb 2025	H0120014	H0120014-1	Turbine and Generator	25.7	43.4	44.1	Indoor	31.3
		H0120014-2	Control room	24.1	27.2	27.5		26.2
20 Feb 2025	H0120015	H0120015-1	Preheater Boiler	26.8	42.7	43.2		31.7
		H0120015-2	Air Quenching Cooler Boiler	25.4	38.7	40.5		29.9

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat, light and noise B.E. 2561, Thailand.

Reference Standard:

[redacted]

F-ES-073 (V. 1.0 ; 15-07-2565)

INSEE

Analysis Report

Report number: 202501018
Report date: 14 Mar 2025

Client information

Company: Siam City Cement Public Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 219 Moo 5 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Heat stress measurement in working area.
Location: Siam City Power K3

Monitoring device / Calibrator information

Equipment: Thermal Environment Monitor
Approved standard: ISO 7243
Code: E-EN-155
serial No.: TPM100026
Brand / Model: 3M / QUESTemp 32
Calibration date: 9 August 2024
expire date: 8 August 2025

Please scan QR Code for the certificate

E-EN-155-2024Y

Sample Reference No.

H0120014-1
H0120014-2
H0120015-1
H0120015-2

Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tabkwang, Khaengkoi, Saraburi 18260. Telephone:036-240-930 EXT.4672

INSEE

Analysis Report

Report number: 202501017

Report date: 13 Mar 2025

Client information

Company: Siam City Cement Public Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 219 Moo 5 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Illumination level measurement at working area.
Location: Siam City Power K3

Area measurement

Date	Sample Lot.ID	Reference Number	Location	Work type / Area	Illumination [Lux]		Standard [Lux]	
					AVG.	Min	AVG.	Min
25 Feb 2025	H0130004	H0130004-1	Turbine and Generator	Boiler building	451	297	100	50
		H0130004-2	Air Quenching Cooler Boiler	Boiler building	384	295	100	50
		H0130004-3	Preheater Boiler	Boiler building	462	318	100	50
		H0130004-4	Control room	Control room	983	942	100	50

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
Notifications of the Department of Labor Protection and Welfare on the Illumination standard B.E. 2561, Thailand.

Remark: dayshift

F-ES-076 (V. 2.0 03-11-2565)

INSEE

Analysis Report

Report number: 202501017

Report date: 13 Mar 2025

Client information

Company: Siam City Cement Public Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 219 Moo 5 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com Tel: 08 8594 1565

Sample information

Description: Illumination level measurement at working area.
Location: Siam City Power K3

Monitoring device / Calibrator information

Equipment: Digital Light Meter
Code: E-EN-184
serial No.: A.043049
Brand / Model: EXTECH / 407026
Calibration date: 10 August 2024
expire date: 9 August 2025

Please scan QR Code for the certificate

E-EN-184-2024Y

Sample Reference No.
H0130004-1
H0130004-2
H0130004-3
H0130004-4

[redacted]

INSEE

Analysis Report

Report number: 202501001
Report date: 5 Feb 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Sound level measurement in workplace
Location: Siam City Power K5+K6

Date	Lot. No.	Reference No.	Location	Leq 8 hr (dB(A))	Lmax (dB(A))
21 Jan 2025	H0140001	H0140001-1	Turbine and Generator	87	91
			Standard	-	**115[1]**

Reference Method:
: Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
[1]: Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E. 2559, Thailand.

[redacted]

INSEE

Analysis Report

Report number: 202501001
Report date: 5 Feb 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Sound level measurement in workplace
Location: Siam City Power K5+K6

Monitoring device / Calibrator information

Equipment: Sound Calibrator
Approved standard: IEC 60942
Code: E-EN-179
serial No.: 19003471
Brand / Model: DeltaOHM / HD 2020
Calibration date: 4 July 2024
expire date: 3 July 2025

Please scan QR Code for the certificate E-EN-179-2024Y

Sample Reference No. H0140001

Equipment: Sound Level Meter
Approved standard: IEC 61672
Code: E-EN-200
serial No.: 00730560
Brand / Model: RION / NL-43
Calibration date: 26 March 2024
expire date: 25 March 2025

Please scan QR Code for the certificate E-EN-200-2024Y

Sample Reference No. H0140001-1

INSEE

Analysis Report

Report number: 202501019
Report date: 17 Mar 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Sound level measurement in workplace
Location: Siam City Power K5+K6

Date	Lot. No.	Reference No.	Location	Leq 8 hr (dB(A))	Lmax (dB(A))
26 Feb 2025	H0140018	H0140018-1	Turbine and Generator	87	92
			Standard	-	115[1]

Reference Method:
[1]: Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
[1]: Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E. 2559, Thailand.

F-ES-074 (V. 1.0 ; 10-08-2565)

INSEE

Analysis Report

Report number: 202501019
Report date: 17 Mar 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Sound level measurement in workplace
Location: Siam City Power K5+K6

Monitoring device / Calibrator information

Equipment: Sound Calibrator
Approved standard: IEC 60942
Code: E-EN-179
serial No.: 19003471
Brand / Model: DeltaOHM / HD 2020
Calibration date: 4 July 2024
expire date: 3 July 2025

Please scan QR Code for the certificate E-EN-179-2024Y

Sample Reference No. H0140018

Equipment: Sound Level Meter
Approved standard: IEC 61672
Code: E-EN-200
serial No.: 00730560
Brand / Model: RION / NL-43
Calibration date: 26 March 2024
expire date: 25 March 2025

Please scan QR Code for the certificate E-EN-200-2024Y

Sample Reference No. H0140018-1

[redacted]

Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tabkwang, Khaengkoi, Saraburi 18260. Telephone:036-240-930 EXT.4672

INSEE

Analysis Report

Report number: 202501030

Report date: 25 Apr 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Sound level measurement in workplace
Location: Siam City Power K5+K6

Date	Lot. No.	Reference No.	Location	Leq 8 hr (dB(A))	Lmax (dB(A))
26 Mar 2025	H0140030	H0140030-1	Turbine and Generator	88	91
			Standard	-	115[1]

Reference Method:

: Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:

[1]: Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E. 2559, Thailand.

[redacted]

F-ES-074 (V. 1.0 ; 10-08-2565)

INSEE

Analysis Report

Report number: 202501030

Report date: 25 Apr 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com Tel: 08 8594 1565

Sample information

Description: Sound level measurement in workplace
Location: Siam City Power K5+K6

Monitoring device / Calibrator information

Equipment:	Sound Calibrator	**Please scan QR Code for the certificate**	E-EN-179-2024Y	**Sample Reference No.** H0140030
Approved standard:	IEC 60942			
Code:	E-EN-179			
serial No.:	19003471			
Brand / Model:	DeltaOHM / HD 2020			
Calibration date:	4 July 2024			
expire date:	3 July 2025			
Equipment:	Sound Level Meter	**Please scan QR Code for the certificate**	E-EN-200-2025Y	**Sample Reference No.** H0140030-1
Approved standard:	IEC 61672			
Code:	E-EN-200			
serial No.:	00730560			
Brand / Model:	RION / NL-43			
Calibration date:	27 February 2025			
expire date:	26 February 2026			

Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tabkwang, Khaengkoi, Saraburi 18260. Telephone:036-240-930 EXT.4672

INSEE

Analysis Report

Report number: 202501041

Report date: 27 May 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Sound level measurement in workplace
Location: Siam City Power K5+K6

Date	Lot. No.	Reference No.	Location	Leq 8 hr (dB(A))	Lmax (dB(A))
22 Apr 2025	H0140038	H0140038-1	Turbine and Generator	86	92
			Standard	-	115[1]

Reference Method:
: Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
[1]: Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E. 2559, Thailand.

INSEE

Analysis Report

Report number: 202501041

Report date: 27 May 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com Tel: 08 8594 1565

Sample information

Description: Sound level measurement in workplace
Location: Siam City Power K5+K6

Monitoring device / Calibrator information

Equipment: Sound Calibrator **Approved standard:** IEC 60942 **Code:** E-EN-179 **serial No.:** 19003471 **Brand / Model:** DeltaOHM / HD 2020 **Calibration date:** 4 July 2024 **expire date:** 3 July 2025	**Please scan QR Code for the certificate**	E-EN-179-2024Y	**Sample Reference No.** H0140038
Equipment: Sound Level Meter **Approved standard:** IEC 61672 **Code:** E-EN-200 **serial No.:** 00730560 **Brand / Model:** RION / NL-43 **Calibration date:** 27 February 2025 **expire date:** 26 February 2026	**Please scan QR Code for the certificate**	E-EN-200-2025Y	**Sample Reference No.** H0140038-1

[redacted]

INSEE

Analysis Report

Report number: 202501047

Report date: 6 Jun 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Sound level measurement in workplace
Location: Siam City Power K5+K6

Date	Lot. No.	Reference No.	Location	Leq 8 hr (dB(A))	Lmax (dB(A))
28 May 2025	H0140041	H0140041-1	Turbine and Generator	84	91
			Standard	-	115[1]

Reference Method:
[1]: Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
[1]: Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E. 2559, Thailand.

INSEE

Analysis Report

Report number: 202501047

Report date: 6 Jun 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com Tel: 08 8594 1565

Sample information

Description: Sound level measurement in workplace
Location: Siam City Power K5+K6

Monitoring device / Calibrator information

Equipment: Sound Calibrator **Approved standard:** IEC 60942 **Code:** E-EN-179 **serial No.:** 19003471 **Brand / Model:** DeltaOHM / HD 2020 **Calibration date:** 4 July 2024 **expire date:** 3 July 2025	**Please scan QR Code for the certificate** E-EN-179-2024Y	**Sample Reference No.** H0140041
Equipment: Sound Level Meter **Approved standard:** IEC 61672 **Code:** E-EN-200 **serial No.:** 00730560 **Brand / Model:** RION / NL-43 **Calibration date:** 27 February 2025 **expire date:** 26 February 2026	**Please scan QR Code for the certificate** E-EN-200-2025Y	**Sample Reference No.** H0140041-1

INSEE

Analysis Report

Report number: 202501055
Report date: 19 Jun 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Sound level measurement in workplace
Location: Siam City Power K5+K6

Date	Lot. No.	Reference No.	Location	Leq 8 hr (dB(A))	Lmax (dB(A))
10 Jun 2025	H0140044	H0140044-1	Turbine and Generator	82	90
			Standard	-	115[1]

Reference Method:
: Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
[1]: Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E. 2559, Thailand.

[redacted]

INSEE

Analysis Report

Report number: 202501055
Report date: 19 Jun 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Sound level measurement in workplace
Location: Siam City Power K5+K6

Monitoring device / Calibrator information

Equipment: Sound Calibrator
Approved standard: IEC 60942
Code: E-EN-179
serial No.: 19003471
Brand / Model: DeltaOHM / HD 2020
Calibration date: 4 July 2024
expire date: 3 July 2025

Please scan QR Code for the certificate

E-EN-179-2024Y

Sample Reference No.
H0140044

Equipment: Sound Level Meter
Approved standard: IEC 61672
Code: E-EN-200
serial No.: 00730560
Brand / Model: RION / NL-43
Calibration date: 27 February 2025
expire date: 26 February 2026

Please scan QR Code for the certificate

E-EN-200-2025Y

Sample Reference No.
H0140044-1

INSEE

Analysis Report

Report number: 202501003

Report date: 5 Feb 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Date	LOT no.	Reference No.	Location	Temperature [°C]			Working condition	WBGT [°C]
				Wet Bulb	Dry Bulb	Globe		
21 Jan 2025	H0120001	H0120001-1	Turbine and Generator	26.5	38.0	38.4	Indoor	30.1
		H0120001-2	Control room	19.8	25.6	25.7		21.6
22 Jan 2025	H0120002	H0120002-1	Preheater Boiler K5	22.2	27.4	27.5		23.8
		H0120002-2	Air Quenching Cooler Boiler K5	21.7	27.7	27.9		23.6
23 Jan 2025	H0120003	H0120003-1	Air Quenching Cooler Boiler K6	21.4	27.2	27.4		23.2
		H0120003-2	Preheater Boiler K6	20.9	27.5	27.8		23.0

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat, light and noise B.E 2561, Thailand.

Reference Standard:

[redacted]

F-ES-073 (V. 1.0 ; 15-07-2565)

INSEE

Analysis Report

Report number: 202501003

Report date: 5 Feb 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com Tel: 08 8594 1565

Sample information

Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Monitoring device / Calibrator information

Equipment: Thermal Environment Monitor
Approved standard: ISO 7243
Code: E-EN-187
serial No.: 19028482
Brand / Model: Delta OHM / HD32.2R
Calibration date: 14 March 2024
expire date: 13 March 2025

Please scan QR Code for the certificate

E-EN-187-2024Y

Sample Reference No.

H0120001-1
H0120001-2
H0120002-1
H0120002-2
H0120003-1
H0120003-2

Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tabkwang, Khaengkoi, Saraburi 18260. Telephone:036-240-930 EXT.4672

INSEE

Analysis Report

Report number: 202501021

Report date: 17 Mar 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Date	LOT no.	Reference No.	Location	Temperature [°C]			Working condition	WBGT [°C]
				Wet Bulb	Dry Bulb	Globe		
26 Feb 2025	H0120016	H0120016-1	Turbine and Generator	27.2	39.4	41.2	Indoor	31.4
		H0120016-2	Control room	20.3	25.8	25.9		22.0
27 Feb 2025	H0120017	H0120017-1	Preheater Boiler K5	25.2	29.4	31.0		26.9
		H0120017-2	Air Quenching Cooler Boiler K5	25.4	29.6	31.2		27.1
28 Feb 2025	H0120018	H0120018-1	Air Quenching Cooler Boiler K6	25.4	29.5	29.8		26.7
		H0120018-2	Preheater Boiler K6	25.5	30.1	31.4		27.3

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat, light and noise B.E.2561, Thailand.

Reference Standard:

[redacted]

F-ES-073 (V. 1.0 ; 15-07-2565)

INSEE

Analysis Report

Report number: 202501021

Report date: 17 Mar 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Monitoring device / Calibrator information

Equipment: Thermal Environment Monitor
Approved standard: ISO 7243
Code: E-EN-187
serial No.: 19028482
Brand / Model: Delta OHM / HD32.2R
Calibration date: 14 March 2024
expire date: 13 March 2025

Please scan QR Code for the certificate

E-EN-187-2024Y

Sample Reference No.

H0120016-1
H0120016-2
H0120017-1
H0120017-2
H0120018-1
H0120018-2

Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tabkwang, Khaengkoi, Saraburi 18260. Telephone:036-240-930 EXT.4672

INSEE

Analysis Report

Report number: 202501032

Report date: 25 Apr 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Date	LOT no.	Reference No.	Location	Temperature [°C]			Working condition	WBGT [°C]
				Wet Bulb	Dry Bulb	Globe		
26 Mar 2025	H0120026	H0120026-1	Turbine and Generator	31.9	42.1	42.6	Indoor	35.1
		H0120026-2	Control room	21.4	26.1	26.3		22.9
27 Mar 2025	H0120027	H0120027-1	Preheater Boiler K5	25.6	32.7	33.0		27.8
		H0120027-2	Air Quenching Cooler Boiler K5	25.4	32.1	32.6		27.6
28 Mar 2025	H0120028	H0120028-1	Air Quenching Cooler Boiler K6	25.1	30.8	31.5		27.0
		H0120028-2	Preheater Boiler K6	24.8	30.5	31.4		26.8

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat, light and noise B.E.2561, Thailand.

Reference Standard:

[redacted]

F-ES-073 (V. 1.0 ; 15-07-2565)

INSEE

Analysis Report

Report number: 202501032

Report date: 25 Apr 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com Tel: 08 8594 1565

Sample information

Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Monitoring device / Calibrator information

Equipment: Thermal Environment Monitor
Approved standard: ISO 7243
Code: E-EN-187
serial No.: 19028482
Brand / Model: Delta OHM / HD32.2R
Calibration date: 14 March 2024
expire date: 13 March 2025

Please scan QR Code for the certificate

Sample Reference No.
H0120026-1
H0120026-2
H0120027-1
H0120027-2
H0120028-1
H0120028-2

Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tabkwang, Khaengkoi, Saraburi 18260. Telephone:036-240-930 EXT.4672

INSEE

Analysis Report

Report number: 202501043

Report date: 27 May 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Date	LOT no.	Reference No.	Location	Temperature [°C]			Working condition	WBGT [°C]
				Wet Bulb	Dry Bulb	Globe		
22 Apr 2025	H0120034	H0120034-1	Turbine and Generator	31.3	42.7	43.2	Indoor	34.9
		H0120034-2	Control room	18.6	22.6	22.9		19.9
23 Apr 2025	H0120035	H0120035-1	Preheater Boiler K5	24.8	30.6	31.2		26.7
		H0120035-2	Air Quenching Cooler Boiler K5	24.4	30.4	31.1		26.4
24 Apr 2025	H0120036	H0120036-1	Air Quenching Cooler Boiler K6	24.3	30.2	30.8		26.3
		H0120036-2	Preheater Boiler K6	24.6	29.9	31.4		26.6

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat, light and noise B.E.2561, Thailand.

Reference Standard:

[redacted]

INSEE

Analysis Report

Report number: 202501043

Report date: 27 May 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Monitoring device / Calibrator information

Equipment: Thermal Environment Monitor
Approved standard: ISO 7243
Code: E-EN-187
serial No.: 19028482
Brand / Model: Delta OHM / HD32.2R
Calibration date: 27 February 2025
expire date: 26 February 2026

Please scan QR Code for the certificate

E-EN-187-2025Y

Sample Reference No.

H0120034-1
H0120034-2
H0120035-1
H0120035-2
H0120036-1
H0120036-2

INSEE

Analysis Report

Report number: 202501049
Report date: 6 Jun 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Date	LOT no.	Reference No.	Location	Temperature [°C]			Working condition	WBGT [°C]
				Wet Bulb	Dry Bulb	Globe		
28 May 2025	H0120039	H0120039-1	Turbine and Generator	29.1	35.4	35.8	Indoor	31.1
		H0120039-2	Control room	19.8	24.2	24.3		21.2
29 May 2025	H0120040	H0120040-1	Preheater Boiler K5	25.2	31.4	31.6		27.1
		H0120040-2	Air Quenching Cooler Boiler K5	24.8	30.8	31.2		26.7
30 May 2025	H0120041	H0120041-1	Air Quenching Cooler Boiler K6	24.6	29.4	29.5		26.1
		H0120041-2	Preheater Boiler K6	25.0	29.7	30.1		26.5

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat, light and noise B.E.2561, Thailand

Reference Standard:

[redacted]

F-ES-073 (V. 1.0 ; 15-07-2565)

INSEE

Analysis Report

Report number: 202501049
Report date: 6 Jun 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com Tel: 08 8594 1565

Sample information

Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Monitoring device / Calibrator information

Equipment: Thermal Environment Monitor
Approved standard: ISO 7243
Code: E-EN-187
serial No.: 19028482
Brand / Model: Delta OHM / HD32.2R
Calibration date: 27 February 2025
expire date: 26 February 2026

Please scan QR Code for the certificate

E-EN-187-2025Y

Sample Reference No.

H0120039-1
H0120039-2
H0120040-1
H0120040-2
H0120041-1
H0120041-2

Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tabkwang, Khaengkoi, Saraburi 18260. Telephone:036-240-930 EXT.4672

INSEE

Analysis Report

Report number: 202501057

Report date: 19 Jun 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Date	LOT no.	Reference No.	Location	Temperature [°C]			Working condition	WBGT [°C]
				Wet Bulb	Dry Bulb	Globe		
9 Jun 2025	H0120044	H0120044-1	Turbine and Generator	31.2	40.1	40.4	Indoor	33.9
		H0120044-2	Control room	18.7	23.8	24.0		20.3
10 Jun 2025	H0120045	H0120045-1	Preheater Boiler K5	24.6	31.3	31.5		26.7
		H0120045-2	Air Quenching Cooler Boiler K5	24.8	31.5	31.6		26.9
11 Jun 2025	H0120046	H0120046-1	Air Quenching Cooler Boiler K6	24.6	30.6	31.4		26.6
		H0120046-2	Preheater Boiler K6	24.4	31.7	32.1		26.7

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat, light and noise B.E. 2561, Thailand

Reference Standard:

[redacted]

F-ES-073 (V. 1.0 ; 15-07-2565)

INSEE

Analysis Report

Report number: 202501057

Report date: 19 Jun 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com Tel: 08 8594 1565

Sample information

Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Monitoring device / Calibrator information

Equipment: Thermal Environment Monitor
Approved standard: ISO 7243
Code: E-EN-187
serial No.: 19028482
Brand / Model: Delta OHM / HD32.2R
Calibration date: 27 February 2025
expire date: 26 February 2026

Please scan QR Code for the certificate

E-EN-187-2025Y

Sample Reference No.

H0120044-1
H0120044-2
H0120045-1
H0120045-2
H0120046-1
H0120046-2

Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tabkwang, Khaengkoi, Saraburi 18260. Telephone:036-240-930 EXT.4672

INSEE

Analysis Report

Report number: 202501002
Report date: 5 Feb 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Illumination level measurement at working area.
Location: Siam City Power K5+K6
Measurement date: 21 January 2025 Sample Lot. ID: H0130001

Area measurement

Reference number	Location	Work type / Area	Illumination [Lux]		Standard [Lux]	
			Average	Min	Average	Min
H0130001-1	Turbine and Generator	Boiler building	212	156	200	100
H0130001-2	Air Quenching Cooler Boiler K5	Boiler building	337	178	200	100
H0130001-3	Air Quenching Cooler Boiler K6	Boiler building	219	155	200	100
H0130001-4	Preheater Boiler K5	Boiler building	210	153	200	100
H0130001-5	Preheater Boiler K6	Boiler building	281	174	200	100
H0130001-6	Control room	Control room	572	543	200	100

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
Notifications of the Department of Labor Protection and Welfare on the Illumination standard B.E. 2561, Thailand.

Remark: dayshift

[redacted]

F-ES-076 (V. 2.0 03-11-2565)

INSEE

Analysis Report

Report number: 202501002
Report date: 5 Feb 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com Tel: 08 8594 1565

Sample information

Description: Illumination level measurement at working area.
Location: Siam City Power K5+K6
Measurement date: 21 January 2025 Sample Lot. ID: H0130001

Monitoring device / Calibrator information

Equipment: Digital Light Meter
Code: E-EN-183
serial No.: A.043068
Brand / Model: EXTECH / 407026
Calibration date: 10 August 2024
expire date: 9 August 2025

Please scan QR Code for the certificate

E-EN-184-2024Y

Sample Reference No.
H0130001-1
H0130001-2
H0130001-3
H0130001-4
H0130001-5
H0130001-6

Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitraparb Road, Tabkwang, Khaengkoi, Saraburi 18260. Telephone:036-240-930 EXT.4672

INSEE

Analysis Report

Report number: 202501020
Report date: 17 Mar 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Illumination level measurement at working area.
Location: Siam City Power K5+K6
Measurement date: 26 February 2025 Sample Lot. ID: H0130005

Area measurement

Reference number	Location	Work type / Area	Illumination [Lux]		Standard [Lux]	
			Average	Min	Average	Min
H0130005-1	Turbine and Generator	Boiler building	228	146	200	100
H0130005-2	Air Quenching Cooler Boiler K5	Boiler building	296	164	200	100
H0130005-3	Air Quenching Cooler Boiler K6	Boiler building	210	147	200	100
H0130005-4	Preheater Boiler K5	Boiler building	206	132	200	100
H0130005-5	Preheater Boiler K6	Boiler building	254	173	200	100
H0130005-6	Control room	Control room	564	537	200	100

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
Notifications of the Department of Labor Protection and Welfare on the Illumination standard B.E. 2561, Thailand.

Remark: dayshift

[redacted]

INSEE

Analysis Report

Report number: 202501020
Report date: 17 Mar 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Illumination level measurement at working area.
Location: Siam City Power K5+K6
Measurement date: 26 February 2025 Sample Lot. ID: H0130005

Monitoring device / Calibrator information

Equipment: Digital Light Meter
Code: E-EN-183
serial No.: A.043068
Brand / Model: EXTECH / 407026
Calibration date: 10 August 2024
expire date: 9 August 2025

Please scan QR Code for the certificate

E-EN-184-2024Y

Sample Reference No.
H0130005-1
H0130005-2
H0130005-3
H0130005-4
H0130005-5
H0130005-6

Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitraparb Road, Tabkwang, Khaengkoi, Saraburi 18260. Telephone:036-240-930 EXT.4672

INSEE

Analysis Report

Report number: 202501031
Report date: 25 Apr 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road. Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Illumination level measurement at working area.
Location: Siam City Power K5+K6
Measurement date: 26 March 2025 Sample Lot. ID: H0130008

Area measurement

Reference number	Location	Work type / Area	Illumination [Lux]		Standard [Lux]	
			Average	Min	Average	Min
H0130008-1	Turbine and Generator	Boiler building	230	153	200	100
H0130008-2	Air Quenching Cooler Boiler K5	Boiler building	322	173	200	100
H0130008-3	Air Quenching Cooler Boiler K6	Boiler building	221	150	200	100
H0130008-4	Preheater Boiler K5	Boiler building	209	148	200	100
H0130008-5	Preheater Boiler K6	Boiler building	276	182	200	100
H0130008-6	Control room	Control room	568	544	200	100

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
Notifications of the Department of Labor Protection and Welfare on the illumination standard B.E. 2561, Thailand.

Remark: dayshift

[redacted]

F-ES-076 (V. 2.0 03-11-2565)

INSEE

Analysis Report

Report number: 202501031
Report date: 25 Apr 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com Tel: 08 8594 1565

Sample information

Description: Illumination level measurement at working area.
Location: Siam City Power K5+K6
Measurement date: 26 March 2025 Sample Lot. ID: H0130008

Monitoring device / Calibrator information

Equipment: Digital Light Meter
Code: E-EN-183
serial No.: A.043068
Brand / Model: EXTECH / 407026
Calibration date: 10 August 2024
axpire date: 9 August 2025

Please scan QR Code for the certificate

E-EN-184-2024Y

Sample Reference No.
H0130008-1
H0130008-2
H0130008-3
H0130008-4
H0130008-5
H0130008-6

Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitraparb Road, Tabkwang, Khaengkoi, Saraburi 18260. Telephone:036-240-930 EXT.4672

INSEE

Analysis Report

Report number: 202501042

Report date: 27 May 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Illumination level measurement at working area.
Location: Siam City Power K5+K6
Measurement date: 22 April 2025 Sample Lot. ID: H0130010

Area measurement

Reference number	Location	Work type / Area	Illumination [Lux]		Standard [Lux]	
			Average	Min	Average	Min
H0130010-1	Turbine and Generator	Boiler building	228	153	200	100
H0130010-2	Air Quenching Cooler Boiler K5	Boiler building	312	167	200	100
H0130010-3	Air Quenching Cooler Boiler K6	Boiler building	222	168	200	100
H0130010-4	Preheater Boiler K5	Boiler building	206	143	200	100
H0130010-5	Preheater Boiler K6	Boiler building	291	170	200	100
H0130010-6	Control room	Control room	588	542	200	100

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
Notifications of the Department of Labor Protection and Welfare on the illumination standard B.E. 2561, Thailand.

Remark: dayshift

[redacted]

INSEE

Analysis Report

Report number: 202501042

Report date: 27 May 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Illumination level measurement at working area.
Location: Siam City Power K5+K6
Measurement date: 22 April 2025 Sample Lot. ID: H0130010

Monitoring device / Calibrator information

Equipment: Digital Light Meter
Code: E-EN-183
serial No.: A.043068
Brand / Model: EXTECH / 407026
Calibration date: 10 August 2024
expire date: 9 August 2025

Please scan QR Code for the certificate

E-EN-184-2024Y

Sample Reference No.
H0130010-1
H0130010-2
H0130010-3
H0130010-4
H0130010-5
H0130010-6

Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitraparb Road, Tabkwang, Khaengkoi, Saraburi 18260. Telephone:036-240-930 EXT.4672

INSEE

Analysis Report

Report number: 202501048
Report date: 6 Jun 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Illumination level measurement at working area.
Location: Siam City Power K5+K6
Measurement date: 28 May 2025 Sample Lot. ID: H0130011

Area measurement

Reference number	Location	Work type / Area	Illumination [Lux]		Standard [Lux]	
			Average	Min	Average	Min
H0130011-1	Turbine and Generator	Boiler building	232	174	200	100
H0130011-2	Air Quenching Cooler Boiler K5	Boiler building	297	153	200	100
H0130011-3	Air Quenching Cooler Boiler K6	Boiler building	218	141	200	100
H0130011-4	Preheater Boiler K5	Boiler building	202	133	200	100
H0130011-5	Preheater Boiler K6	Boiler building	286	164	200	100
H0130011-6	Control room	Control room	575	540	200	100

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
Notifications of the Department of Labor Protection and Welfare on the illumination standard B.E. 2561, Thailand.

Remark: dayshift

[redacted]

F-ES-076 (V. 2.0 03-11-2565)

INSEE

Analysis Report

Report number: 202501048
Report date: 6 Jun 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com Tel: 08 8594 1565

Sample information

Description: Illumination level measurement at working area.
Location: Siam City Power K5+K6
Measurement date: 28 May 2025 Sample Lot. ID: H0130011

Monitoring device / Calibrator information

Equipment: Digital Light Meter
Code: E-EN-183
serial No.: A.043068
Brand / Model: EXTECH / 407026
Calibration date: 10 August 2024
expire date: 9 August 2025

Please scan QR Code for the certificate

E-EN-184-2024Y

Sample Reference No.
H0130011-1
H0130011-2
H0130011-3
H0130011-4
H0130011-5
H0130011-6

Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitraparb Road, Tabkwang, Khaengkoi, Saraburi 18260. Telephone:036-240-930 EXT.4672

INSEE

Analysis Report

Report number: 202501056

Report date: 19 Jun 2025

Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com **Tel:** 08 8594 1565

Sample information

Description: Illumination level measurement at working area.
Location: Siam City Power K5+K6
Measurement date: 10 Jun 2025 Sample Lot. ID: H0130012

Area measurement

Reference number	Location	Work type / Area	Illumination [Lux]		Standard [Lux]	
			Average	Min	Average	Min
H0130012-1	Turbine and Generator	Boiler building	218	142	200	100
H0130012-2	Air Quenching Cooler Boiler K5	Boiler building	287	181	200	100
H0130012-3	Air Quenching Cooler Boiler K6	Boiler building	214	144	200	100
H0130012-4	Preheater Boiler K5	Boiler building	211	164	200	100
H0130012-5	Preheater Boiler K6	Boiler building	285	183	200	100
H0130012-6	Control room	Control room	570	552	200	100

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
Notifications of the Department of Labor Protection and Welfare on the Illumination standard B.E. 2561, Thailand.

Remark: dayshift

[redacted]

INSEE

Analysis Report

F-ES-076 (V. 2.0 03-11-2565)
Report number: 202501056
Report date: 19 Jun 2025

Client information
Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com Tel: 08 8594 1565

Sample information
Description: Illumination level measurement at working area.
Location: Siam City Power K5+K6
Measurement date: 10 Jun 2025 Sample Lot. ID: H0130012

Monitoring device / Calibrator information

Equipment: Digital Light Meter
Code: E-EN-183
serial No.: A.043068
Brand / Model: EXTECH / 407026
Calibration date: 10 August 2024
expire date: 9 August 2025

Please scan QR Code for the certificate

E-EN-184-2024Y

Sample Reference No.
H0130012-1
H0130012-2
H0130012-3
H0130012-4
H0130012-5
H0130012-6

Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitraparb Road, Tabkwang, Khaengkoi, Saraburi 18260. Telephone:036-240-930 EXT.4672

ภาคผนวก ง

ใบรับรองการสอบเทียบเครื่องมือ

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รายการเครื่องมือที่ใช้ในการวิเคราะห์ / ทดสอบ

Sample Name	Parameter	Equipment Name	ID No.	Calibrated Date	Next Cal	Freq. Calibrate (Months)
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS0389	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS0374	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS0381	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS1063	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS0381	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS0374	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS0388	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS1063	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS0389	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS0383	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS1061	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS0381	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	Digital Balance	BKK_EN0403	3-Jun-24	3-Jun-25	12
Ambient	Particulate Matter (PM-10)	Digital Balance	BKK_EN0403	30-May-25	30-May-26	12
Ambient	Total Suspended Particulate	High Volume	BKK_FS0373	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS0358	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS0363	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS1059	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS0363	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS0358	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS1058	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS1059	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS1057	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS0367	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS0373	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS0363	-	-	On site Calibration
Ambient	Total Suspended Particulate	Digital Balance	BKK_EN0403	3-Jun-24	3-Jun-25	12
Ambient	Total Suspended Particulate	Digital Balance	BKK_EN0403	30-May-25	30-May-26	12
Ambient	Nitrogen Dioxide	NO_2 Analyzer	BKK_FS1090	3-Jan-25	3-Jul-25	6
Ambient	Nitrogen Dioxide	NO_2 Analyzer	BKK_FS0800	3-Jan-25	3-Jul-25	6
Ambient	Nitrogen Dioxide	NO_2 Analyzer	BKK_FS0794	3-Jan-25	3-Jul-25	6
Ambient	Nitrogen Dioxide	NO_2 Analyzer	BKK_FS0785	3-Jan-25	3-Jul-25	6
Ambient	Nitrogen Dioxide	NO_2 Analyzer	BKK_FS0794	3-Jan-25	3-Jul-25	6
Ambient	Nitrogen Dioxide	NO_2 Analyzer	BKK_FS0800	3-Jan-25	3-Jul-25	6
Ambient	Nitrogen Dioxide	NO_2 Analyzer	BKK_FS1072	3-Jan-25	3-Jul-25	6
Ambient	Nitrogen Dioxide	NO_2 Analyzer	BKK_FS0785	3-Jan-25	3-Jul-25	6
Ambient	Nitrogen Dioxide	NO_2 Analyzer	BKK_FS1092	3-Jan-25	3-Jul-25	6
Ambient	Nitrogen Dioxide	NO_2 Analyzer	BKK_FS0803	3-Jan-25	3-Jul-25	6
Ambient	Nitrogen Dioxide	NO_2 Analyzer	BKK_FS1072	3-Jan-25	3-Jul-25	6
Ambient	Nitrogen Dioxide	NO_2 Analyzer	BKK_FS0794	3-Jan-25	3-Jul-25	6
Ambient	Sulfur Dioxide	SO_2 Analyzer	BKK_FS1089	3-Jan-25	3-Jul-25	6
Ambient	Sulfur Dioxide	SO_2 Analyzer	BKK_FS0799	3-Jan-25	3-Jul-25	6
Ambient	Sulfur Dioxide	SO_2 Analyzer	BKK_FS0793	3-Jan-25	3-Jul-25	6
Ambient	Sulfur Dioxide	SO_2 Analyzer	BKK_FS0784	3-Jan-25	3-Jul-25	6
Ambient	Sulfur Dioxide	SO_2 Analyzer	BKK_FS0793	3-Jan-25	3-Jul-25	6
Ambient	Sulfur Dioxide	SO_2 Analyzer	BKK_FS0799	3-Jan-25	3-Jul-25	6
Ambient	Sulfur Dioxide	SO_2 Analyzer	BKK_FS0802	3-Jan-25	3-Jul-25	6
Ambient	Sulfur Dioxide	SO_2 Analyzer	BKK_FS0784	3-Jan-25	3-Jul-25	6
Ambient	Sulfur Dioxide	SO_2 Analyzer	BKK_FS1091	3-Jan-25	3-Jul-25	6
Ambient	Sulfur Dioxide	SO_2 Analyzer	BKK_FS0802	3-Jan-25	3-Jul-25	6
Ambient	Sulfur Dioxide	SO_2 Analyzer	BKK_FS1071	3-Jan-25	3-Jul-25	6
Ambient	Sulfur Dioxide	SO_2 Analyzer	BKK_FS0793	3-Jan-25	3-Jul-25	6

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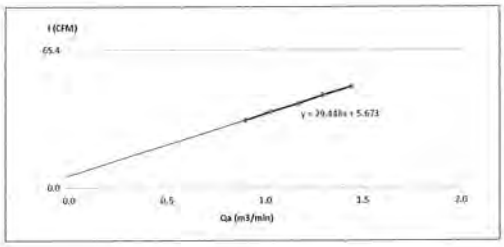
รายการเครื่องมือที่ใช้ในการวิเคราะห์ / ทดสอบ

Sample Name	Parameter	Equipment Name	ID No.	Calibrated Date	Next Cal	Freq. Calibrate (Months)
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS0917	25-Nov-24	25-May-26	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS1369	26-Nov-24	26-May-26	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS0920	16-Dec-24	16-Jun-26	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS1441	18-Sep-24	18-Mar-26	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS1213	21-May-24	21-Nov-25	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS1369	26-Nov-24	26-May-26	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS1371	27-Dec-24	27-Jun-26	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS1212	21-May-24	21-Nov-25	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	SGK_FS0039	14-Jan-25	13-Jul-26	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS1213	21-May-24	21-Nov-25	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	RYG_FS0436	19-Dec-24	19-Dec-25	12
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS1369	26-Nov-24	26-May-26	18
Noise	Leq 24 hrs	Sound Calibrator	BKK_FS0631	16-Dec-24	16-Dec-25	18
Noise	Leq 24 hrs	Sound Level Meter	BKK_FS0995	12-Nov-24	12-Nov-25	12
Noise	Leq 24 hrs	Sound Level Meter	BKK_FS0929	19-Mar-25	19-Mar-26	12
Noise	Leq 24 hrs	Sound Level Meter	BKK_FS0926	12-Nov-24	12-Nov-25	12
Noise	Leq 24 hrs	Sound Level Meter	BKK_FS0115	27-Jan-25	27-Jan-26	12
Noise	Noise Annoyance	Sound Calibrator	BKK_FS0631	16-Dec-24	16-Dec-25	18
Noise	Noise Annoyance	Sound Level Meter	BKK_FS0995	12-Nov-24	12-Nov-25	12
Noise	Noise Annoyance	Sound Level Meter	BKK_FS0929	19-Mar-25	19-Mar-26	12
Noise	Noise Annoyance	Sound Level Meter	BKK_FS0926	12-Nov-24	12-Nov-25	12
Noise	Noise Annoyance	Sound Level Meter	BKK_FS0115	27-Jan-25	27-Jan-26	12
Noise	Noise Annoyance	Sound Level Meter	BKK_FS0923	9-Jan-25	9-Jan-26	12
Noise	Noise Annoyance	Sound Level Meter	BKK_FS0877	3-Dec-24	3-Dec-25	12
Noise	Noise Annoyance	Sound Level Meter	BKK_FS0924	9-Jan-25	9-Jan-26	12
Noise	Noise Annoyance	Sound Level Meter	BKK_FS0117	13-Dec-24	13-Dec-25	12
Water Lab	pH at 25 °C	pH meter	BKK_EN0342	17-Oct-24	17-Oct-25	12
Water Lab	Conductivity	Conductivity meter	BKK_EN0373	26-Dec-24	26-Dec-25	12
Water Lab	BOD	DO Meter	BKK_EN0205	2-Feb-24	2-Aug-25	18
Water Lab	BOD	Incubator	BKK_EN0272	22-Aug-24	22-Aug-25	12
Water Lab	BOD	Burette	BKK_EN0171	27-Feb-24	27-Aug-25	18
Water Lab	COD	Hot Block	BKK_EN0370	2-Jan-25	2-Jan-26	12
Water Lab	COD	Spectrophotometer	BKK_EN0018	13-Sep-24	13-Sep-25	12
Water Lab	Total Suspended Solids	Electronic Top-Loading Balance	BKK_EN0003	2-Aug-24	2-Aug-25	12
Water Lab	Total Suspended Solids	Oven	BKK_EN0273	14-May-24	14-Nov-25	18
Water Lab	Oil & Grease	Electronic Top-Loading Balance	BKK_EN0003	2-Aug-24	2-Aug-25	12
Water Lab	Oil & Grease	Water Bath	BKK_EN0439	29-Oct-24	29-Oct-25	12

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited	Barometric Pressure (mm Hg) :	744.9
Calibrate Location :	ปางสีทอง	Temperature (°C) :	36.5
Calibrate Date :	2-Apr-25	High Volume ID :	BKK_FS0389
CalibrationSheet No.:	C-020425-BKK_FS0389	High Volume Model :	TE-5009X
Calibrator ID:	BKK_FS0624	High Volume S/N :	5329
Calibrator Model :	TE-5028A	Calibrator Slope :	1.03002
Calibrator S/N :	2584	Calibrator Intercept :	-0.01418

Test No.	Delta H_2O (inch)	Qa (m^3/min)	I : Chart (CFM)	Linear Regression	
1	2.0	0.899	32	Slope :	29.4478
2	2.6	1.023	36	Intercept :	5.6730
3	3.4	1.168	40	Correlation Coefficient :	0.9992
4	4.2	1.297	44		
5	5.2	1.441	48		



Calibrated by _____ (Mr. Winyou Boontanai)
Field Scientist(2)

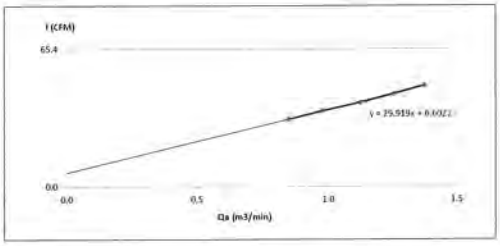
Approved by : _____ (Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist (3)

FORM NO.: F 06-074 REVISION NO.:2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited.	Barometric Pressure (mm Hg) :	752.8
Calibrate Location :	โรงงานบางบัวทอง	Temperature (°C) :	35.2
Calibrate Date :	2-Apr-25	High Volume ID :	BKK_FS0374
CalibrationSheet No.:	C-020425-BKK_FS0374	High Volume Model :	TE-5009X
Calibrator ID:	BKK_FS0624	High Volume S/N :	5195
Calibrator Model :	TE-5028A	Calibrator Slope :	1.03002
Calibrator S/N :	2584	Calibrator Intercept :	-0.01418

Test No.	Delta H_2O (inch)	Qa (m^3/min)	I : Chart (CFM)	Linear Regression	
1	1.8	0.848	32	Slope :	29.9194
2	2.4	0.977	36	Intercept :	-6.6022
3	3.2	1.125	40	Correlation Coefficient :	0.9993
4	4.0	1.257	44		
5	4.8	1.375	48		



Calibrated by _____ (Mr. Winyou Boontanai)
Field Scientist(2)

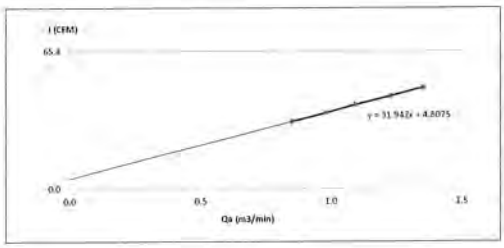
Approved by : _____ (Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist (3)

FORM NO.: F 06-074 REVISION NO.:2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited.	Barometric Pressure (mm Hg) :	754
Calibrate Location :	จังหวัดสระ	Temperature (°C) :	38.3
Calibrate Date :	2-Apr-25	High Volume ID :	BKK_FS0381
CalibrationSheet No.:	C-020425-BKK_FS0381	High Volume Model :	TE-5009X
Calibrator ID:	BKK_FS0624	High Volume S/N :	4161
Calibrator Model :	TE-5028A	Calibrator Slope :	1.03002
Calibrator S/N :	2584	Calibrator Intercept :	-0.01418

Test No.	Delta H_2O (inch)	Qa (m^3/min)	I : Chart (CFM)	Linear Regression	
1	1.8	0.851	32	Slope :	31.9425
2	2.4	0.981	36	Intercept :	4.8075
3	3.0	1.095	40	Correlation Coefficient :	0.9998
4	3.8	1.230	44		
5	4.6	1.352	48		



Calibrated by _____ (Mr. Winyou Boontanai)
Field Scientist(2)

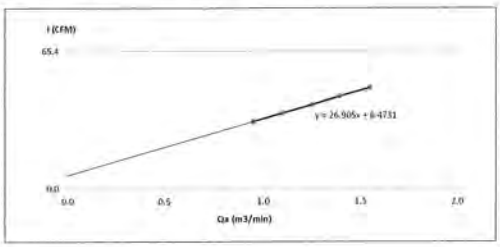
Approved by : _____ (Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist (3)

FORM NO.: F 06-074 REVISION NO.:2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited	Barometric Pressure (mm Hg) :	753
Calibrate Location :	จังหวัดกาฬ	Temperature (°C) :	33.8
Calibrate Date :	2-May-25	High Volume ID :	BKK_FS1063
CalibrationSheet No.:	C-020525-BKK_FS1063	High Volume Model :	TE-5009X
Calibrator ID:	RYG_FS0415	High Volume S/N :	5605
Calibrator Model :	TE-5028A	Calibrator Slope :	1.0401
Calibrator S/N :	3494	Calibrator Intercept :	-0.0183

Test No.	Delta H_2O (inch)	Qa (m^3/min)	I : Chart (CFM)	Linear Regression	
1	2.3	0.949	32	Slope :	26.9054
2	3.1	1.099	36	Intercept :	6.4731
3	4.0	1.246	40	Correlation Coefficient :	0.9999
4	5.0	1.391	44		
5	6.2	1.546	48		



Calibrated by _____ (Mr. Teeravut Sukdee)
XXX Field Services Scientist (2)

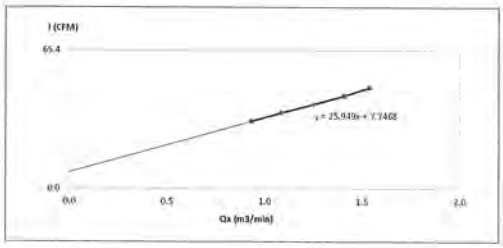
Approved by : _____ (Mr. Noppong Juntarupan)
BKK Field Coordinator Scientist (3)

FORM NO.: F 06-074 REVISION NO.:2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited	Barometric Pressure (mm Hg) :	748.6
Calibrate Location :	สถานีไฟฟ้าแรงสูง (สระบุรี)	Temperature (°C) :	34.1
Calibrate Date :	2-May-25	High Volume ID :	BKK_FS0381
CalibrationSheet No.:	C-020525-BKK_FS0381	High Volume Model :	TE-5009X
Calibrator ID:	RYG_FS0415	High Volume S/N :	4161
Calibrator Model :	TE-5028A	Calibrator Slope :	1.0401
Calibrator S/N :	3494	Calibrator Intercept :	-0.0183

Test No.	Delta H_2O (inch)	Qa (m^3/min)	I : Chart (CFM)	Linear Regression
1	2.2	0.932	32	Slope : 25.9493
2	3.0	1.085	36	Intercept : 7.7468
3	4.0	1.250	40	Correlation Coefficient : 0.9992
4	5.1	1.409	44	
5	6.1	1.539	48	



Calibrated by: (Mr. Teeravut Sukdee)
XXX Field Services Scientist (2)

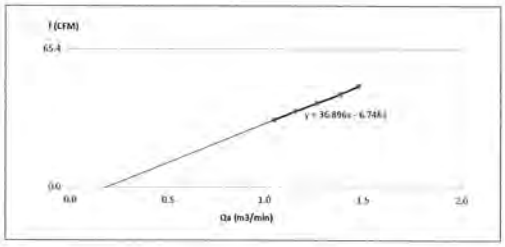
Approved by: (Mr. Noppong Juntarupan)
BKK Field Coordinator Scientist (3)

FORM NO.: F 06-074 REVISION NO.:2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited	Barometric Pressure (mm Hg) :	744.4
Calibrate Location :	บ้านผาเสด็จ	Temperature (°C) :	33.4
Calibrate Date :	2-May-25	High Volume ID :	BKK_FS0374
CalibrationSheet No.:	C-020525-BKK_FS0374	High Volume Model :	TE-5009X
Calibrator ID:	RYG_FS0415	High Volume S/N :	5195
Calibrator Model :	TE-5028A	Calibrator Slope :	1.0401
Calibrator S/N :	3494	Calibrator Intercept :	-0.0183

Test No.	Delta H_2O (inch)	Qa (m^3/min)	I : Chart (CFM)	Linear Regression
1	2.8	1.050	32	Slope : 36.8960
2	3.4	1.156	36	Intercept : -6.7482
3	4.1	1.267	40	Correlation Coefficient : 0.9995
4	4.9	1.384	44	
5	5.6	1.470	48	



Calibrated by: (Mr. Teeravut Sukdee)
XXX Field Services Scientist (2)

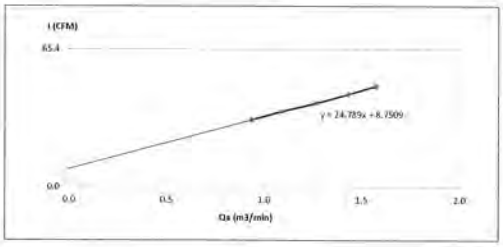
Approved by: (Mr. Noppong Juntarupan)
BKK Field Coordinator Scientist (3)

FORM NO.: F 06-074 REVISION NO.:2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited	Barometric Pressure (mm Hg) :	741.2
Calibrate Location :	วัดจันทึก	Temperature (°C) :	34.5
Calibrate Date :	2-May-25	High Volume ID :	BKK_FS0388
CalibrationSheet No.:	C-020525-BKK_FS0388	High Volume Model :	TE-5009X
Calibrator ID:	RYG_FS0415	High Volume S/N :	5328
Calibrator Model :	TE-5028A	Calibrator Slope :	1.0401
Calibrator S/N :	3494	Calibrator Intercept :	-0.0183

Test No.	Delta H_2O (inch)	Qa (m^3/min)	I : Chart (CFM)	Linear Regression
1	2.2	0.937	32	Slope : 24.7888
2	3.0	1.091	36	Intercept : 8.7509
3	4.1	1.272	40	Correlation Coefficient : 0.9992
4	5.2	1.430	44	
5	6.3	1.573	48	



Calibrated by: (Mr. Teeravut Sukdee)
XXX Field Services Scientist (2)

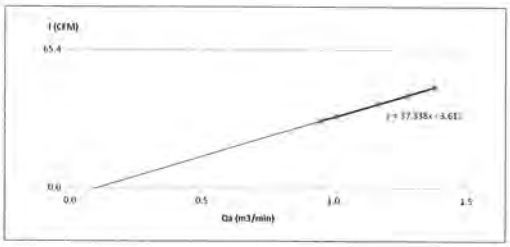
Approved by: (Mr. Noppong Juntarupan)
BKK Field Coordinator Scientist (3)

FORM NO.: F 06-074 REVISION NO.:2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited	Barometric Pressure (mm Hg) :	750.0
Calibrate Location :	โรงเรียนสุขบริบูรณ์ศึกษาวงสมเดชาฯ	Temperature (°C) :	33.7
Calibrate Date :	17-Jun-25	High Volume ID :	BKK_FS1063
CalibrationSheet No.:	C-170625-BKK_FS1063	High Volume Model :	TE-5009X
Calibrator ID:	RYG_FS0415	High Volume S/N :	5685
Calibrator Model :	TE-5028A	Calibrator Slope :	1.0401
Calibrator S/N :	3494	Calibrator Intercept :	-0.0183

Test No.	Delta H_2O (inch)	Qa (m^3/min)	I : Chart (CFM)	Linear Regression
1	2.3	0.951	32	Slope : 37.3376
2	2.6	1.016	34	Intercept : -3.6119
3	3.5	1.169	40	Correlation Coefficient : 0.9999
4	4.2	1.278	44	
5	4.9	1.379	48	



Calibrated by: (Mr. Teeravut Sukdee)
BKK Field Services Scientist (2)

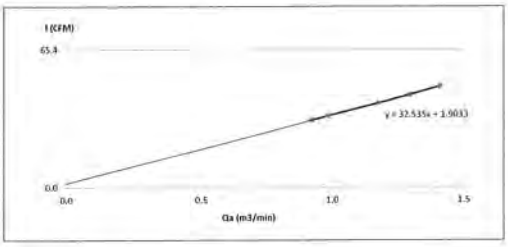
Approved by: (Mr. Warakorn Punkrab)
Field Service Supervisor

FORM NO.: F 06-074 REVISION NO.:2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited	Barometric Pressure (mm Hg) :	754.0
Calibrate Location :	โรงเจียระไน	Temperature (°C) :	31.0
Calibrate Date :	17-Jun-25	High Volume ID :	BKK_FS0389
CalibrationSheet No.:	C-170625-BKK_FS0389	High Volume Model :	TE-5009X
Calibrator ID:	RYG_FS0415	High Volume S/N :	5329
Calibrator Model :	TE-5028A	Calibrator Slope :	1.0401
Calibrator S/N :	3494	Calibrator Intercept :	-0.0183

Test No.	Delta H_2O (inch)	Qa (m^3/min)	I : Chart (CFM)	Linear Regression	
1	2.2	0.924	32	Slope :	32.5349
2	2.5	0.984	34	Intercept :	1.9033
3	3.6	1.177	40	Correlation Coefficient :	0.9997
4	4.4	1.299	44		
5	5.2	1.410	48		



Calibrated by: (Mr. Teeravut Sukdee) BKK Field Services Scientist (2)

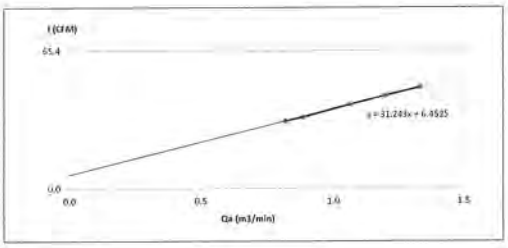
Approved by: (Mr. Warakorn Pookrak) Field Services Supervisor

FORM NO.: F06-074 REVISION NO.:2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited	Barometric Pressure (mm Hg) :	753.0
Calibrate Location :	วัดวาตุตาลาย (ข้างหน้าอดีตปูน)	Temperature (°C) :	34.2
Calibrate Date :	17-Jun-25	High Volume ID :	BKK_FS0383
CalibrationSheet No.:	C-170625-BKK_FS0383	High Volume Model :	TE-5009X
Calibrator ID:	RYG_FS0415	High Volume S/N :	4787
Calibrator Model :	TE-5028A	Calibrator Slope :	1.0401
Calibrator S/N :	3494	Calibrator Intercept :	-0.0183

Test No.	Delta H_2O (inch)	Qa (m^3/min)	I : Chart (CFM)	Linear Regression	
1	1.7	0.819	32	Slope :	31.2432
2	2.0	0.887	34	Intercept :	6.4525
3	2.9	1.064	40	Correlation Coefficient :	0.9996
4	3.7	1.208	44		
5	4.6	1.335	48		



Calibrated by: (Mr. Teeravut Sukdee) BKK Field Services Scientist (2)

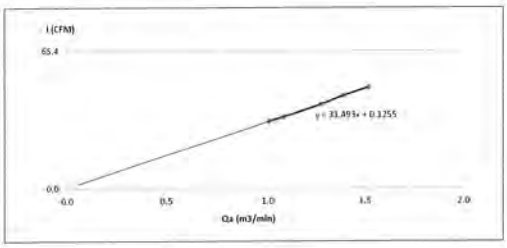
Approved by: (Mr. Warakorn Pookrak) Field Services Supervisor

FORM NO.: F06-074 REVISION NO.:2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited	Barometric Pressure (mm Hg) :	754.0
Calibrate Location :	สถานีบำรุงรักษาอดีตตึกา	Temperature (°C) :	32.0
Calibrate Date :	17-Jun-25	High Volume ID :	BKK_FS1061
CalibrationSheet No.:	C-170625-BKK_FS1061	High Volume Model :	TE-5009X
Calibrator ID:	RYG_FS0415	High Volume S/N :	5504
Calibrator Model :	TE-5028A	Calibrator Slope :	1.0401
Calibrator S/N :	3494	Calibrator Intercept :	-0.0183

Test No.	Delta H_2O (inch)	Qa (m^3/min)	I : Chart (CFM)	Linear Regression	
1	2.6	1.006	32	Slope :	31.4925
2	3.0	1.080	34	Intercept :	0.1255
3	4.2	1.274	40	Correlation Coefficient :	0.9996
4	5.0	1.388	44		
5	6.0	1.519	48		



Calibrated by: (Mr. Teeravut Sukdee) BKK Field Services Scientist (2)

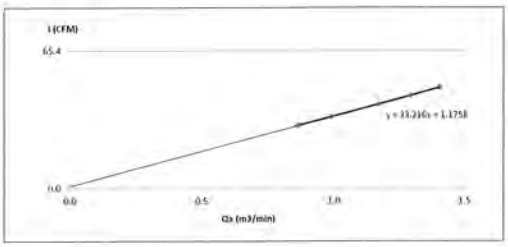
Approved by: (Mr. Warakorn Pookrak) Field Services Supervisor

FORM NO.: F06-074 REVISION NO.:2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited	Barometric Pressure (mm Hg) :	746.6
Calibrate Location :	ริมถนนประชา	Temperature (°C) :	32.2
Calibrate Date :	17-Jun-25	High Volume ID :	BKK_FS0381
CalibrationSheet No.:	C-170625-BKK_FS0381	High Volume Model :	TE-5009X
Calibrator ID:	RYG_FS0415	High Volume S/N :	4161
Calibrator Model :	TE-5028A	Calibrator Slope :	1.0401
Calibrator S/N :	3494	Calibrator Intercept :	-0.0183

Test No.	Delta H_2O (inch)	Qa (m^3/min)	I : Chart (CFM)	Linear Regression	
1	1.9	0.866	30	Slope :	33.2163
2	2.5	0.990	34	Intercept :	1.1758
3	3.5	1.168	40	Correlation Coefficient :	0.9999
4	4.3	1.293	44		
5	5.1	1.407	48		



Calibrated by: (Mr. Teeravut Sukdee) BKK Field Services Scientist (2)

Approved by: (Mr. Warakorn Pookrak) Field Services Supervisor

FORM NO.: F06-074 REVISION NO.:2 ISSUE DATE: 20/11/23

PLAY SOLUTION

PLAY SOLUTION TECHNOLOGY COMPANY LIMITED
179/75 Nawang Pracha Pattana Road, Sikan, Donmuang, Bangkok 10210
Tel.+66 2 011 0505, Fax.+66 2 010 7700
www.playsolutc.com

NSC-TISI-TIS17025 CALIBRATION 0219

CERTIFICATE OF CALIBRATION

Certificate No. : PST-0126-24 W/O No. : WO-0051-24

Customer

Page no. 1 of 2

Company	: ALS LABORATORY GROUP (THAILAND) CO., LTD.
Address	: 104 Phatthanakarn 40, Phatthanakarn Road, Khwaeng Phatthanakarn
City / Province	: Khet Suan Luang, Bangkok
Zip/Postal	: 10250

Device

Equipment	: Electronic Balance	Capacity	: 220 / 220 g
Manufacturer	: OHAUS	Readability	: 0.00001 / 0.0001 g
Model	: EX225D/AD	ID No.	: BKK_EN0403
Serial No.	: C309774648		
Condition	: Normal		

Environment Conditions

Location of Calibration	: Environment Lab			
Ambient Temperature	: 20.1	(°C)	± 3	°C
Relative Humidity	: 70.3	(%RH)	± 15	%RH
Barometric Pressure	: 1011.1	(mba)	± 10	hPa
Comment	:			

REVIEW BY Jinda K.
APPROVED BY Siriluk P.
NEXT CAL DATE 03/06/25

Date of Receipt	June 3, 2024
Date of Calibration	June 3, 2024
Issue Date	June 5, 2024

Calibrated by: Mr.Kittinai Rattanatham, Calibrator

Approved by: Mr.Kittinai Rattanatham, Approved Signature

The reported measurement result relates only to the measurand and applies only at the time of measurement.

This Certificate is issued in accordance with the conditions of accreditation granted by Thai Laboratory Accreditation scheme which has assessed the measurement capability of the laboratory and is traceability to recognize national standards and to the unit of measurements realized at the corresponding national standard laboratory. This certificate may not be reproduced other than in full except with the prior written approval prior written approval of the calibration centre, Play Solution Technology Co.,Ltd.

F-030 REV.03 30/08/66

PLAY SOLUTION

PLAY SOLUTION TECHNOLOGY COMPANY LIMITED
179/75 Nawang Pracha Pattana Road, Sikan, Donmuang, Bangkok 10210
Tel.+66 2 011 0505, Fax.+66 2 010 7700
www.playsolutc.com

NSC-TISI-TIS17025 CALIBRATION 0219

CERTIFICATE OF CALIBRATION

Certificate No. : PST-0126-24 W/O No. : WO-0051-24

Result of Calibration : Without Adjustment

Page no. 2 of 2

1. Repeatability

Weighing Range : g	Nominal Value g	Standard Deviation g
Max capacity 220	50	0.000012
	200	0.000018

2. Linearity, Departure of Indication from nominal value

Weighing Range 1

Nominal Value g	Standard Value g	Indication g	Error of Indication g	Expanded Uncertainty g	Factor k
0.05	0.05000	0.05000	0.000001	0.000082	2.87
0.1	0.10001	0.10001	0.000004	0.000082	2.87
0.5	0.50000	0.50001	0.000012	0.00008	2.87
1	1.00001	1.00002	0.000013	0.00008	2.87
5	5.00002	5.00003	0.000009	0.00008	2.52
10	9.99999	9.99999	0.000013	0.00008	2.28
50	50.00001	49.99998	-0.000027	0.00016	2.00
100	100.00002	100.00002	0.000004	0.00030	2.00
150	150.00002	150.00021	0.000373	0.00045	2.00
200	200.00003	200.00012	0.000069	0.00050	2.00

F-030 REV.03 30/08/66

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NSC-TISI-TIS17025 CALIBRATION 0219

CERTIFICATE OF CALIBRATION

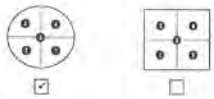
Certificate No. : PST-0126-24 W/O No. : WO-0051-24

Result of Calibration

Page no. 3 of 3

3. Eccentricity

Test load 21 Unit 1/3 of the maximum capacity (): Div Step Between 1/3 and 2/3 of the 2 positions from the centre of the load receptor to the edge



☑ ☐

Weighing Range 1
Test Load : 100 g

Position	Indication g
1	100.00004
2	100.00005
3	100.00003
4	100.00004
5	100.00001
Max Deviation	0.00003

Standard method

The calibration was performed by using calibration laboratory's in-house calibration method CD-M-001 based on "LKAS LAB 14 : Calibration of weighing machine" Issue 6 | October 2019

Reference standards instrument

Instrument	OIML Class	S/N	Cert/Track No.	Cal Date
Standard Weight Set	E2	4000031552	22-138725	November 03, 2023
Standard Weight Set				
Standard Weight Set				
Standard Weight Set				

Measurement Uncertainty

The given measurement uncertainty is the standard of the measurement multiplied by an extension factor k, which corresponds to a confidence level of about 95% for a normal distribution. The standard uncertainty was calculated according to LKAS M002.

Traceability : The measurement is traceable to national standard, which realize the physical unit of measurement (SI) through the reference calibration laboratory of Asia Medical and Agricultural Laboratory and Research Center Co.,Ltd.

End of report

F-039 REV.03 30/08/66

SARTORIUS

Accredited by
NSC-TISI-TIS 17025
Calibration 0426

NSC-TISI-TIS 17025 CALIBRATION 0426

Calibration certificate

Calibration Certificate No. 25BCI0197

Object	Electronic non-automatic weighing instrument	This calibration certificate documents the traceability to national standards
Manufacturer	Ohaus	Uncertainties of measurements are taken into account when only statements of compliance are made.
Type	EX225D/AD	This certificate was prepared by Sartorius Corporation in accordance to the current ISO/IEC 17025 2017 standard and Sartorius Work Instruction (Method) SOP WI 08
Serial | QM Ident. no.	C309774648 | BKK_EN0403	This certificate relate and apply this equipment only.
Customer	ALS Laboratory Group (Thailand)Co., Ltd.	
	104 Phatthanakarn 40,Phattanakarn Rd.,Khwaeng Phatthanakarn ,Khet Suan Luang,Bangkok 10250	
Order no.	261969	
Number of pages	6	
Date of calibration	30 May 2025	

REVIEW BY Jinda K.
APPROVED BY Siriluk P.
NEXT CAL DATE 30/05/26

This calibration certificate may not be reproduced other than in full except with the permission of NSC-TISI-TIS-17025 and the issuing laboratory. Calibration certificates without signature are not valid.

The user is obliged to have the object recalibrated at appropriate intervals.

Date	Approval of the Calibration Certificate	Person in charge
30 May 2025	Mr. Chonchai Inthana	Chonchai Inthana

Calibration object

Multi range instrument

Model	EX225D/AD	
Serial Number	C309774648	
QM Ident. no | Inventory no.	BKK_EN0403 | ---	
Range	1	2
Maximum capacity (Max. load)	120.00000 g	220.0000 g
Measured range	120.00000 g	220.0000 g
Scale interval	0.00001 g	0.0001 g

Place of calibration

Address	According to page 1
Department | Cost center	Environment Department. | ---
Building | Floor	--- | 1st Floor.
Room	Laboratory Room.
Maximum temperature variation at place of calibration	5 K

Calibration procedure

EURAMET cg-18. V4.0 - Guidelines on the Calibration of Non-Automatic Weighing Instruments

Test equipment

Test equipment type	Test equipment ID	Valid until
Thermometer	Testo 174(Traceable to SI unit through ENTECH)	11 Nov 2025
Test weight set OIML R111 E2	Certificate No.M2308197S ,E2(Traceable to SI unit through TCS)	23 Aug 2025

Range 1

Adjustment Status

The measuring device was internally adjusted before the calibration.

Environmental and measuring conditions

Date of calibration	30 May 2025
Temperature at place of calibration | Temp. diff. $T_{weights} - T_{place}$	21.7 °C | 0.5 K
Measuring conditions	The installation site is suitable. The device was levelled. Balance was loaded up to Max before test.
Comments	Humidity 60.0 %RH.

Measurement results | Measurement uncertainties

Repeatability

Test load (nominal): 1 g | 100 g		
	1 g	100 g
1	0.99993 g	99.99971 g
2	0.99991 g	99.99971 g
3	0.99992 g	99.99974 g
4	0.99993 g	99.99973 g
5	0.99992 g	99.99974 g
6	0.99991 g	99.99970 g
7	0.99993 g	99.99973 g
8	0.99994 g	99.99972 g
9	0.99995 g	99.99971 g
10	0.99995 g	99.99969 g
	s = 0.000014 g	s = 0.000017 g

Eccentricity

Test load (nominal):	50 g
Center	49.99995 g
Front left	49.99993 g
Back left	49.99993 g
Back right	49.99994 g
Front right	49.99990 g

Maximum deviation from centric loading indication:
$|\Delta I_{ecc}|_{max}$ = 0.00006 g

Error of indication

Testload L	Indication I	Error E	Expansion factor k	Uncertainty $U(E)$	Uncertainty relative $U_{rel}(E)$
0.00000 g	0.00000 g	0.00000 g	2.00	0.000030 g	---
0.01000 g	0.00995 g	-0.00005 g	2.00	0.000037 g	0.37 %
0.10000 g	0.09991 g	-0.00009 g	2.00	0.000038 g	0.038 %
0.50000 g	0.49985 g	-0.00015 g	2.00	0.000040 g	0.0080 %
1.00000 g	0.99991 g	-0.00009 g	2.00	0.000041 g	0.0041 %
5.00002 g	4.99997 g	-0.00005 g	2.00	0.000050 g	0.0010 %
10.00002 g	10.00003 g	0.00001 g	2.00	0.000069 g	0.00069 %
50.00002 g	49.99972 g	-0.00030 g	2.00	0.000091 g	0.00018 %
70.00004 g	69.99975 g	-0.00029 g	2.00	0.00017 g	0.00024 %
100.00001 g	99.99958 g	-0.00043 g	2.00	0.00017 g	0.00017 %
115.00005 g	114.99965 g	-0.00040 g	2.00	0.00028 g	0.00024 %
Maximum error of indication		$\lvert E\rvert_{max}$ = 0.00043 g			

$U_{rel}(E)$ is the quotient of $U(E)$ and test load L. The uncertainty of measurement $U(E)$ is valid only if error E is considered. You will find reference notes on the uncertainty of measurement in use under: Appendix to the calibration certificate | Interpretation of measurement results
Reference note: The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the documented Expansion factor, determined in accordance with the European Calibration Guideline EURAMET cg-18. V4.0. There is a 95 % probability that the value of the measurand will be in the assigned value range.

Range 2

Adjustment Status

The measuring device was internally adjusted before the calibration.

Environmental and measuring conditions

Date of calibration	30 May 2025
Temperature at place of calibration | Temp. diff. $T_{weights} - T_{place}$	21.7 °C | 0.5 K
Measuring conditions	The installation site is suitable. The device was levelled. Balance was loaded up to Max before test.
Comments	Humidity 60.0 %RH.

Measurement results | Measurement uncertainties

Repeatability

Test load (nominal): 200 g	
	200 g
1	199.9998 g
2	199.9998 g
3	199.9998 g
4	200.0000 g
5	199.9998 g
6	199.9999 g
7	199.9999 g
8	200.0000 g
9	199.9998 g
10	199.9999 g
	s = 0.00008 g

Eccentricity

Test load (nominal):	100 g
Center	99.99984 g
Front left	99.99990 g
Back left	99.99983 g
Back right	99.99979 g
Front right	99.99979 g

Maximum deviation from centric loading indication
$|\Delta I_{ecc}|_{max}$ = 0.00006 g

Error of indication

Testload L	Indication I	Error E	Expansion factor k	Uncertainty $U(E)$	Uncertainty relative $U_{rel}(E)$
0.00000 g	0.00000 g	0.00000 g	2.00	0.000030 g	---
20.00002 g	19.99986 g	-0.00016 g	2.00	0.000069 g	0.00034 %
50.00002 g	49.99978 g	-0.00024 g	2.00	0.000091 g	0.00018 %
70.00004 g	69.99981 g	-0.00023 g	2.00	0.00017 g	0.00024 %
90.00007 g	89.99976 g	-0.00031 g	2.00	0.00018 g	0.00020 %
110.00003 g	109.99986 g	-0.00017 g	2.00	0.00028 g	0.00025 %
130.0001 g	129.9999 g	-0.0002 g	2.00	0.00028 g	0.00022 %
150.0000 g	149.9999 g	-0.0001 g	2.00	0.00028 g	0.00019 %
170.0000 g	170.0000 g	0.0000 g	2.00	0.00028 g	0.00016 %
200.0000 g	199.9998 g	-0.0002 g	2.00	0.00028 g	0.00014 %
220.0000 g	219.9999 g	-0.0001 g	2.00	0.00028 g	0.00013 %
Maximum error of indication		$\lvert E\rvert_{max}$ = 0.0003 g			

$U_{rel}(E)$ is the quotient of $U(E)$ and test load L. The uncertainty of measurement $U(E)$ is valid only if error E is considered. You will find reference notes on the uncertainty of measurement in use under: Appendix to the calibration certificate | Interpretation of measurement results
Reference note: The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the documented Expansion factor, determined in accordance with the European Calibration Guideline EURAMET cg-18. V4.0. There is a 95 % probability that the value of the measurand will be in the assigned value range.

End of calibration certificate

Uncertainty of measurement in use

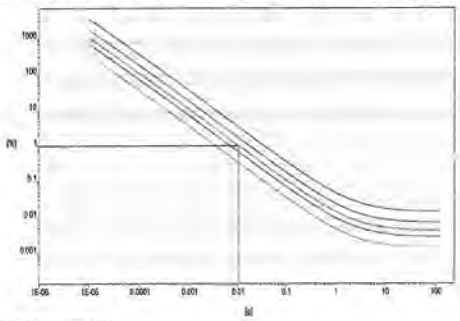
Range 1

Device adjusted before measurement	Yes
Temperature deviation considered	5 K
Temperature coefficient considered	$2 \cdot 10^{-5}$ /K
Uncertainty of the weighing result $U_{gl}(W)$	$U_{gl}(W) = 0.000035\ g + 1.38 \cdot 10^{-5} \cdot R$

Reference note: The current uncertainty of measurement is calculated by entering of the reading R into this formula. In relation to this, there is no need for a correction of the indication error. The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied with an Expansion factor of 2, determined in accordance with the European Calibration Guideline EURAMET cg-18. V4.0. There is a 95 % probability that the value of the measurand will be in the assigned value range.

Indication in % from max load	Net Indication R	Uncertainty $U_{gl}(W)$	Uncertainty relative $U_{gl}(W)_{rel}$
1 %	1.20000 g	0.000052 g	0.0043 %
25 %	30.00000 g	0.00045 g	0.0015 %
50 %	60.00000 g	0.00086 g	0.0014 %
75 %	90.00000 g	0.0013 g	0.0014 %
100 %	120.00000 g	0.0017 g	0.0014 %

Graphic realization of the relative uncertainty of measurement | process accuracy



Safety factor
10
5
3
2
1

Displayed example

Process accuracy	1.00 %
Safety factor	3
Minimum sample weight	0.01045 g

Uncertainty of measurement in use

Range 2

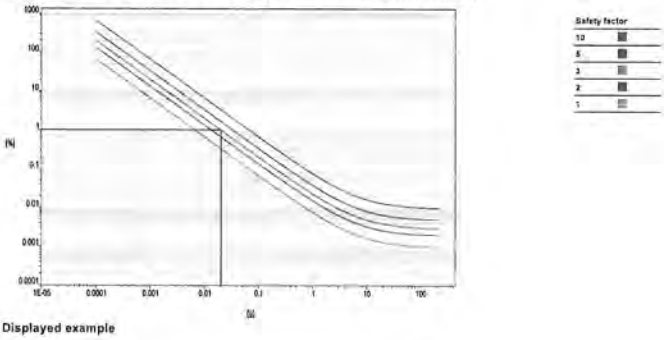
Device adjusted before measurement	Yes
Temperature deviation considered	5 K
Temperature coefficient considered	2 · 10^{-6}/K

Uncertainty of the weighing result $U_{gl}(W)$ $U_{gl}(W) = 0.000067\ g + 9.52 \cdot 10^{-6} \cdot R$

Reference note: The current uncertainty of measurement is calculated by entering of the reading R into this formula. In relation to this, there is no need for a correction of the indication error. The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied with an Expansion factor of 2, determined in accordance with the European Calibration Guideline EURAMET cg-18, V4.0. There is a 95 % probability that the value of the measurand will be in the assigned value range.

Indication in % from max load	Net indication R	Uncertainty $U_{gl}(W)$	Uncertainty relative $U_{gl}(W)_{rel}$
1 %	2.20000 g	0.000088 g	0.0040 %
25 %	55.00000 g	0.00059 g	0.0011 %
50 %	110.00000 g	0.0011 g	0.0010 %
75 %	165.0000 g	0.0016 g	0.00099 %
100 %	220.0000 g	0.0022 g	0.00098 %

Graphic realization of the relative uncertainty of measurement | process accuracy



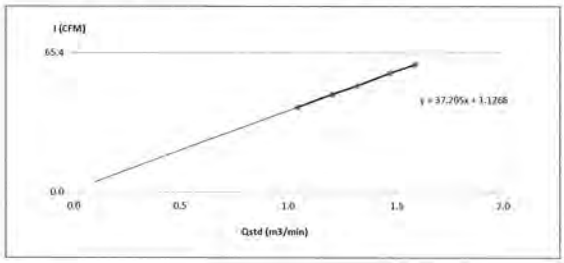
Displayed example

Process accuracy	1.00 %
Safety factor	3
Minimum sample weight	0.02019 g

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited.	Barometric Pressure (mm Hg) :	744.9
Calibrate Location :	ปากช่องบอน	Temperature (°C) :	36.5
Calibrate Date :	2-Apr-25	High Volume ID :	BKK_FS0373
CalibrationSheet No.:	C-020425-BKK_FS0373	High Volume Model :	G1051
Calibrator ID:	BKK_FS0624	High Volume S/N :	1330
Calibrator Model :	TE-5028A	Calibrator Slope :	1.64456
Calibrator S/N :	2584	Calibrator Intercept :	-0.02267

Test No.	Delta H_2O (inch)	Q_{std} (m^3/min)	I : Chart (CFM)	Linear Regression	
1	3.0	1.0458	40	Slope :	37.2053
2	4.0	1.2041	46	Intercept :	1.1268
3	4.8	1.3168	50	Correlation Coefficient :	0.9999
4	6.0	1.4696	56		
5	7.0	1.5855	60		



Calibrated by _____ (Mr. Winyou Boontanai) Field Scientist(2)

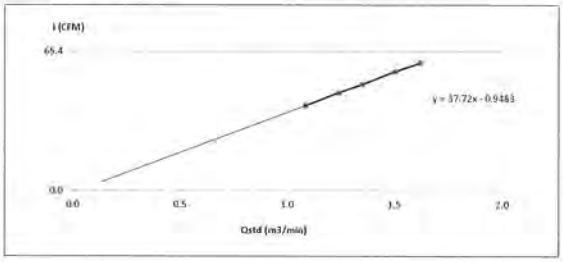
Approved by : _____ (Mr. Noppong Juntarupan) Enviro Field Coordinator Scientist (3)

FORM NO.: F 06-073 REVISION NO.: 2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited.	Barometric Pressure (mm Hg) :	752.8
Calibrate Location :	โรงเรียนอนุบาลพิมพ์กาวง	Temperature (°C) :	35.2
Calibrate Date :	2-Apr-25	High Volume ID :	BKK_FS0358
CalibrationSheet No.:	C-020425-BKK_FS0358	High Volume Model :	TE-5009X
Calibrator ID:	BKK_FS0624	High Volume S/N :	5193
Calibrator Model :	TE-5028A	Calibrator Slope :	1.64456
Calibrator S/N :	2584	Calibrator Intercept :	-0.02267

Test No.	Delta H_2O (inch)	Q_{std} (m^3/min)	I : Chart (CFM)	Linear Regression	
1	3.2	1.0872	40	Slope :	37.7200
2	4.2	1.2422	46	Intercept :	-0.9483
3	5.0	1.3533	50	Correlation Coefficient :	0.9998
4	6.2	1.5044	56		
5	7.2	1.6194	60		



Calibrated by _____ (Mr. Winyou Boontanai) Field Scientist(2)

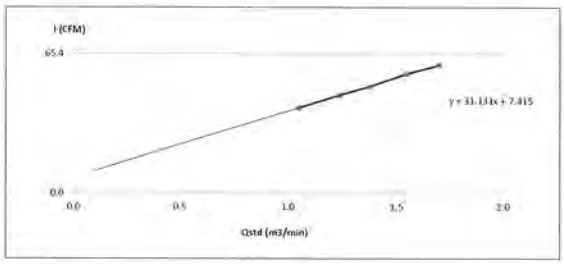
Approved by : _____ (Mr. Noppong Juntarupan) Enviro Field Coordinator Scientist (3)

FORM NO.: F 06-073 REVISION NO.: 2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited.	Barometric Pressure (mm Hg) :	754
Calibrate Location :	รัตนาเสา	Temperature (°C) :	38.3
Calibrate Date :	2-Apr-25	High Volume ID :	BKK_FS0363
CalibrationSheet No.:	C-020425-BKK_FS0363	High Volume Model :	TE-5009X
Calibrator ID:	BKK_FS0624	High Volume S/N :	4160
Calibrator Model :	TE-5028A	Calibrator Slope :	1.64456
Calibrator S/N :	2584	Calibrator Intercept :	-0.02267

Test No.	Delta H_2O (inch)	Q_{std} (m^3/min)	I : Chart (CFM)	Linear Regression	
1	3.0	1.0490	40	Slope :	31.1312
2	4.2	1.2371	46	Intercept :	7.4150
3	5.2	1.3740	50	Correlation Coefficient :	0.9993
4	6.6	1.5450	56		
5	8.0	1.6987	60		



Calibrated by _____ (Mr. Winyou Boontanai) Field Scientist(2)

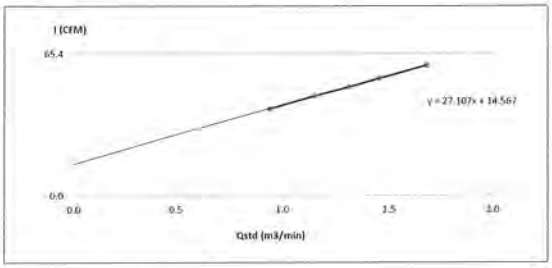
Approved by : _____ (Mr. Noppong Juntarupan) Enviro Field Coordinator Scientist (3)

FORM NO.: F 06-073 REVISION NO.: 2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited	**Barometric Pressure (mm Hg) :**	753
Calibrate Location :	วัดพิกกวาง	**Temperature (°C) :**	33.8
Calibrate Date :	2-May-25	**High Volume ID :**	BKK_FS1059
CalibrationSheet No.:	C-020525-BKK_FS1059	**High Volume Model :**	TE-5009X
Calibrator ID:	RYG_FS0415	**High Volume S/N :**	5693
Calibrator Model :	TE-5028A	**Calibrator Slope :**	1.66057
Calibrator S/N :	3494	**Calibrator Intercept :**	-0.02926

Test No.	Delta H_2O (inch)	Q_{std} (m^3/min)	I : Chart (CFM)	Linear Regression	
1	2.4	0.9445	40	Slope :	27.1074
2	3.6	1.1501	46	Intercept :	14.5665
3	4.7	1.3100	50	Correlation Coefficient :	0.9998
4	5.8	1.4520	54		
5	7.8	1.6792	60		



Calibrated by: (Mr. Teeravut Sukdee)
XXX Field Services Scientist (2)

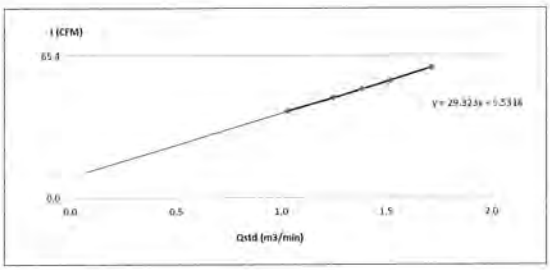
Approved by: (Mr. Noppong Juntarupan)
BKK Field Coordinator Scientist (3)

FORM NO.: F 06-073 REVISION NO.:2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited	**Barometric Pressure (mm Hg) :**	748.6
Calibrate Location :	สถานีไฟฟ้าบางสูง (สระบุรี)	**Temperature (°C) :**	34.1
Calibrate Date :	2-May-25	**High Volume ID :**	BKK_FS0363
CalibrationSheet No.:	C-020525-BKK_FS0363	**High Volume Model :**	TE-5009X
Calibrator ID:	RYG_FS0415	**High Volume S/N :**	4160
Calibrator Model :	TE-5028A	**Calibrator Slope :**	1.66057
Calibrator S/N :	3494	**Calibrator Intercept :**	-0.02926

Test No.	Delta H_2O (inch)	Q_{std} (m^3/min)	I : Chart (CFM)	Linear Regression	
1	2.9	1.0319	40	Slope :	29.3228
2	4.3	1.2501	46	Intercept :	9.5318
3	5.3	1.3846	50	Correlation Coefficient :	0.9997
4	6.4	1.5187	54		
5	8.2	1.7152	60		



Calibrated by: (Mr. Teeravut Sukdee)
XXX Field Services Scientist (2)

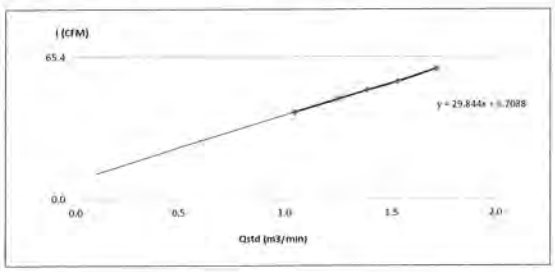
Approved by: (Mr. Noppong Juntarupan)
BKK Field Coordinator Scientist (3)

FORM NO.: F 06-073 REVISION NO.:2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited	**Barometric Pressure (mm Hg) :**	744.4
Calibrate Location :	น้ำผนวกสด้ง	**Temperature (°C) :**	33.4
Calibrate Date :	2-May-25	**High Volume ID :**	BKK_FS0358
CalibrationSheet No.:	C-020525-BKK_FS0358	**High Volume Model :**	TE-5009X
Calibrator ID:	RYG_FS0415	**High Volume S/N :**	5193
Calibrator Model :	TE-5028A	**Calibrator Slope :**	1.66057
Calibrator S/N :	3494	**Calibrator Intercept :**	-0.02926

Test No.	Delta H_2O (inch)	Q_{std} (m^3/min)	I : Chart (CFM)	Linear Regression	
1	3.0	1.0473	40	Slope :	29.8439
2	4.3	1.2481	46	Intercept :	8.7088
3	5.3	1.3824	50	Correlation Coefficient :	0.9997
4	6.5	1.5278	54		
5	8.2	1.7123	60		



Calibrated by: (Mr. Teeravut Sukdee)
XXX Field Services Scientist (2)

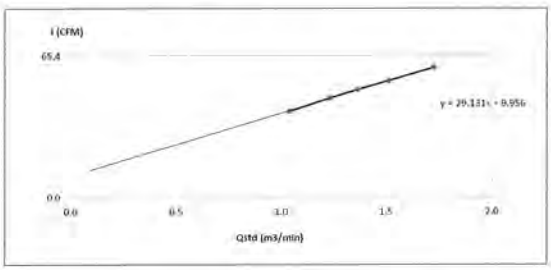
Approved by: (Mr. Noppong Juntarupan)
BKK Field Coordinator Scientist (3)

FORM NO.: F 06-073 REVISION NO.:2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited	**Barometric Pressure (mm Hg) :**	741.2
Calibrate Location :	วัดห้นอับ	**Temperature (°C) :**	34.5
Calibrate Date :	2-May-25	**High Volume ID :**	BKK_FS1058
CalibrationSheet No.:	C-020525-BKK_FS1058	**High Volume Model :**	TE-5009X
Calibrator ID:	RYG_FS0415	**High Volume S/N :**	5689
Calibrator Model :	TE-5028A	**Calibrator Slope :**	1.66057
Calibrator S/N :	3494	**Calibrator Intercept :**	-0.02926

Test No.	Delta H_2O (inch)	Q_{std} (m^3/min)	I : Chart (CFM)	Linear Regression	
1	3.0	1.0433	40	Slope :	29.1314
2	4.2	1.2291	46	Intercept :	9.9560
3	5.2	1.3643	50	Correlation Coefficient :	0.9993
4	6.4	1.5103	54		
5	8.4	1.7260	60		



Calibrated by: (Mr. Teeravut Sukdee)
XXX Field Services Scientist (2)

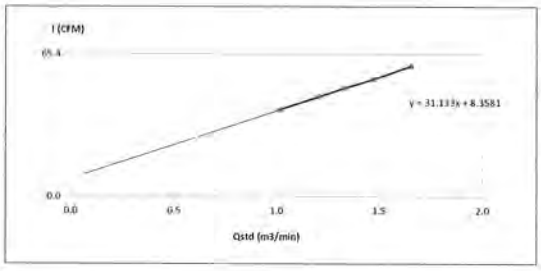
Approved by: (Mr. Noppong Juntarupan)
BKK Field Coordinator Scientist (3)

FORM NO.: F 06-073 REVISION NO.:2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited	Barometric Pressure (mm Hg) :	750.0
Calibrate Location :	โรงเรียนชุมชนนิคมทับกวางสงเคราะห์	Temperature (°C) :	33.7
Calibrate Date :	17-Jun-25	High Volume ID :	BKK_FS1059
CalibrationSheet No.:	C-170625-BKK_FS1059	High Volume Model :	TE-5009X
Calibrator ID:	RYG_FS0415	High Volume S/N :	5693
Calibrator Model :	TE-5028A	Calibrator Slope :	1.66057
Calibrator S/N :	3494	Calibrator Intercept :	-0.02926

Test No.	Delta H_2O (inch)	Q_{std} (m^3/min)	I : Chart (CFM)	Linear Regression
1	2.8	1.0160	40	Slope : 31.1331
2	4.0	1.2086	46	Intercept : 8.3581
3	4.9	1.3346	50	Correlation Coefficient : 0.9998
4	6.0	1.4737	54	
5	7.6	1.6549	60	



Calibrated by: (Mr. Teeravut Sukdee)
BKK Field Services Scientist (2)

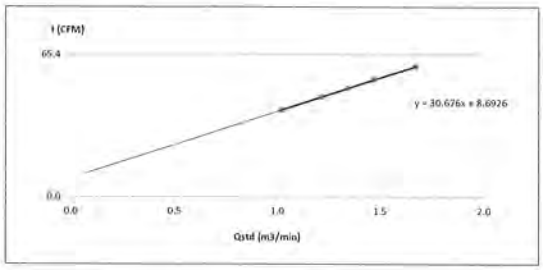
Approved by: (Mr. Warakorn Pookrak)
Field Services Supervisor

FORM NO.: F 06-073 REVISION NO.:2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited	Barometric Pressure (mm Hg) :	754.0
Calibrate Location :	โรงเรียนป่าไผ่	Temperature (°C) :	31.0
Calibrate Date :	17-Jun-25	High Volume ID :	BKK_FS1057
CalibrationSheet No.:	C-170625-BKK_FS1057	High Volume Model :	TE-5009X
Calibrator ID:	RYG_FS0415	High Volume S/N :	5500
Calibrator Model :	TE-5028A	Calibrator Slope :	1.66057
Calibrator S/N :	3494	Calibrator Intercept :	-0.02926

Test No.	Delta H_2O (inch)	Q_{std} (m^3/min)	I : Chart (CFM)	Linear Regression
1	2.8	1.0230	40	Slope : 30.6764
2	4.0	1.2170	46	Intercept : 8.6926
3	4.9	1.3438	50	Correlation Coefficient : 0.9999
4	5.9	1.4718	54	
5	7.7	1.6772	60	



Calibrated by: (Mr. Teeravut Sukdee)
BKK Field Services Scientist (2)

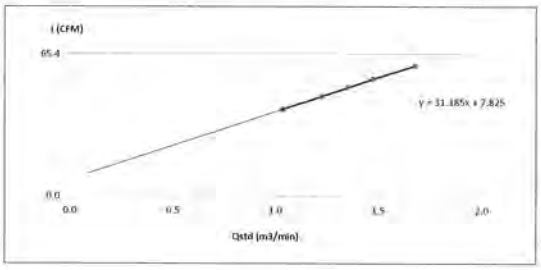
Approved by: (Mr. Warakorn Pookrak)
Field Services Supervisor

FORM NO.: F 06-073 REVISION NO.:2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited	Barometric Pressure (mm Hg) :	753.0
Calibrate Location :	วัดวาลการาม (วัดหนองศิกใจ)	Temperature (°C) :	34.2
Calibrate Date :	17-Jun-25	High Volume ID :	BKK_FS0367
CalibrationSheet No.:	C-170625-BKK_FS0367	High Volume Model :	TE-5009X
Calibrator ID:	RYG_FS0415	High Volume S/N :	4162
Calibrator Model :	TE-5028A	Calibrator Slope :	1.66057
Calibrator S/N :	3494	Calibrator Intercept :	-0.02926

Test No.	Delta H_2O (inch)	Q_{std} (m^3/min)	I : Chart (CFM)	Linear Regression
1	2.9	1.0346	40	Slope : 31.1846
2	4.1	1.2247	46	Intercept : 7.8250
3	5.0	1.3494	50	Correlation Coefficient : 0.9999
4	6.0	1.4754	54	
5	7.8	1.6781	60	



Calibrated by: (Mr. Teeravut Sukdee)
BKK Field Services Scientist (2)

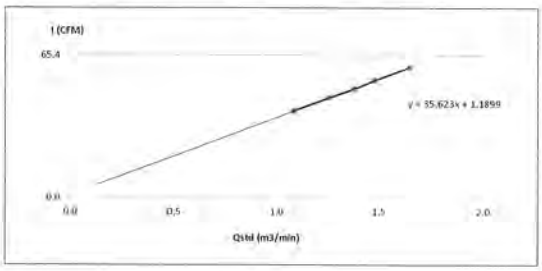
Approved by: (Mr. Warakorn Pookrak)
Field Services Supervisor

FORM NO.: F 06-073 REVISION NO.:2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited	Barometric Pressure (mm Hg) :	751.0
Calibrate Location :	สถานีบำรุงพันธ์สัตว์	Temperature (°C) :	32.0
Calibrate Date :	17-Jun-25	High Volume ID :	BKK_FS0373
CalibrationSheet No.:	C-170625-BKK_FS0373	High Volume Model :	G1051
Calibrator ID:	RYG_FS0415	High Volume S/N :	1330
Calibrator Model :	TE-5028A	Calibrator Slope :	1.66057
Calibrator S/N :	3494	Calibrator Intercept :	-0.02926

Test No.	Delta H_2O (inch)	Q_{std} (m^3/min)	I : Chart (CFM)	Linear Regression
1	3.2	1.0877	40	Slope : 35.6227
2	4.3	1.2563	46	Intercept : 1.1899
3	5.2	1.3786	50	Correlation Coefficient : 0.9997
4	6.0	1.4787	54	
5	7.5	1.6497	60	



Calibrated by: (Mr. Teeravut Sukdee)
BKK Field Services Scientist (2)

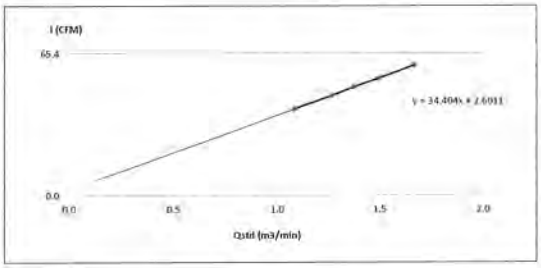
Approved by: (Mr. Warakorn Pookrak)
Field Services Supervisor

FORM NO.: F 06-073 REVISION NO.:2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Siam City Cement Public Company Limited.	Barometric Pressure (mm Hg) :	746.6
Calibrate Location :	[illegible]	Temperature (°C) :	32.2
Calibrate Date :	17-Jun-25	High Volume ID :	BKK_FS0363
CalibrationSheet No.:	C-170625-BKK_FS0363	High Volume Model :	TE-5009X
Calibrator ID:	RYG_FS0415	High Volume S/N :	4160
Calibrator Model :	TE-5028A	Calibrator Slope :	1.66057
Calibrator S/N :	3494	Calibrator Intercept :	-0.02926

Test No.	Delta H_2O (inch)	Q_{std} (m^3/min)	I : Chart (CFM)	Linear Regression
1	3.2	1.0843	40	Slope : 34.4042
2	4.4	1.2664	46	Intercept : 2.6011
3	5.2	1.3742	50	Correlation Coefficient : 0.9998
4	6.2	1.4978	54	
5	7.7	1.6658	60	



Calibrated by : (Mr. Teeravut Sukdee)
BKK Field Services Scientist (2)

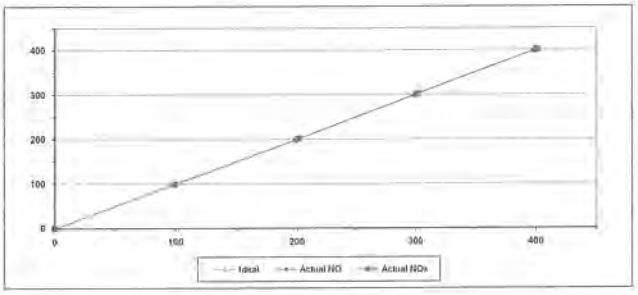
Approved by : (Mr. Warakorn Pooltrak)
Field Services Supervisor

FORM NO.: F 06-073 REVISION NO.: 2 ISSUE DATE: 20/11/23

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	NOx Analyzer
Manufacturer	HORIBA	Model	APNA-370
Serial No.	SUDL58MU	Equipment ID	BKK_FS1090
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	55.88	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	98.70	-1.30	-1.30	99.10	-0.90	-0.90
2	200.00	198.30	-1.70	-0.85	201.50	1.50	0.75
3	300.00	299.30	-0.70	-0.23	302.10	2.10	0.70
4	400.00	398.30	-1.70	-0.42	401.20	1.20	0.30
AVERAGE (%)				-0.54			0.19



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

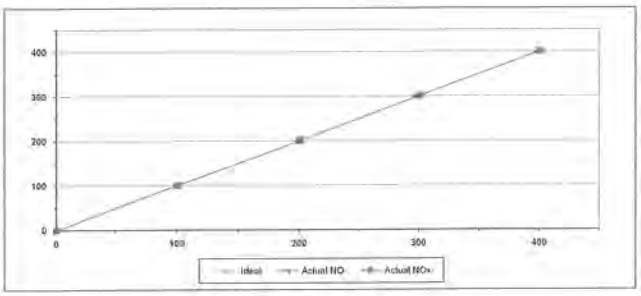
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	NOx Analyzer
Manufacturer	HORIBA	Model	APNA-370
Serial No.	HCWSR681	Equipment ID	BKK_FS0800
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	55.88	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	99.10	-0.90	-0.90	100.50	0.50	0.50
2	200.00	198.60	-1.40	-0.70	201.40	1.40	0.70
3	300.00	298.00	-2.00	-0.67	302.30	2.30	0.77
4	400.00	398.70	-1.30	-0.33	401.30	1.30	0.33
AVERAGE (%)				-0.50			0.48



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

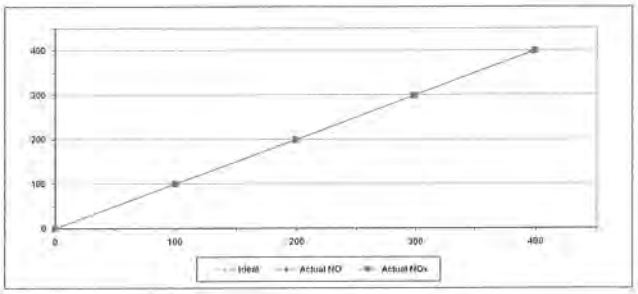
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	NOx Analyzer
Manufacturer	HORIBA	Model	APNA-370
Serial No.	R0A0GWJC	Equipment ID	BKK_FS0794
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	55.88	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	99.40	-0.60	-0.60	100.20	0.20	0.20
2	200.00	198.50	-1.50	-0.75	198.80	-1.20	-0.60
3	300.00	298.50	-1.50	-0.50	298.70	-1.30	-0.43
4	400.00	396.70	-3.30	-0.83	399.50	-0.50	-0.13
AVERAGE (%)				-0.51			-0.17



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

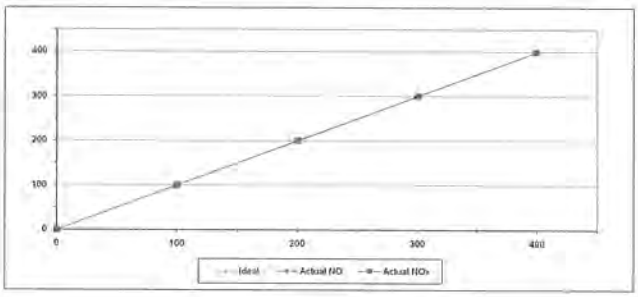
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	NOx Analyzer
Manufacturer	HORIBA	Model	APNA-370
Serial No.	TLTATGDW	Equipment ID	BKK_FS0765
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	55.88	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	99.00	-1.00	-1.00	100.30	0.30	0.30
2	200.00	199.40	-0.60	-0.30	200.50	0.50	0.25
3	300.00	299.00	-1.00	-0.33	301.10	1.10	0.37
4	400.00	398.70	-1.30	-0.33	399.30	-0.70	-0.17
AVERAGE (%)				-0.37			0.17



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

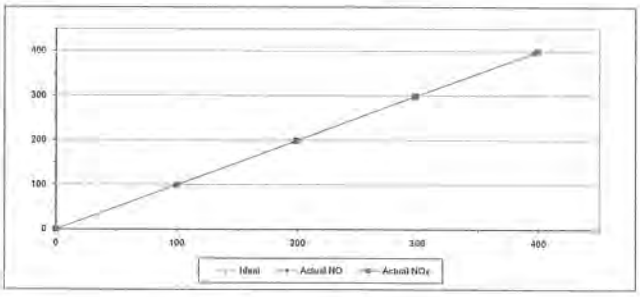
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	NOx Analyzer
Manufacturer	HORIBA	Model	APNA-370
Serial No.	R0A0GWJC	Equipment ID	BKK_FS0794
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	55.88	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	99.40	-0.60	-0.60	100.20	0.20	0.20
2	200.00	198.50	-1.50	-0.75	198.80	-1.20	-0.60
3	300.00	298.50	-1.50	-0.50	298.70	-1.30	-0.43
4	400.00	396.70	-3.30	-0.83	399.50	-0.50	-0.13
AVERAGE (%)				-0.51			-0.17



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

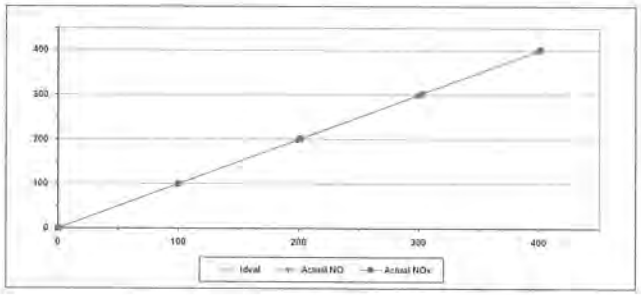
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	NOx Analyzer
Manufacturer	HORIBA	Model	APNA-370
Serial No.	HCWSR681	Equipment ID	BKK_FS0800
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	55.88	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	99.10	-0.90	-0.90	100.50	0.50	0.50
2	200.00	198.60	-1.40	-0.70	201.40	1.40	0.70
3	300.00	298.00	-2.00	-0.67	302.30	2.30	0.77
4	400.00	398.70	-1.30	-0.33	401.30	1.30	0.33
AVERAGE (%)				-0.50			0.48



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

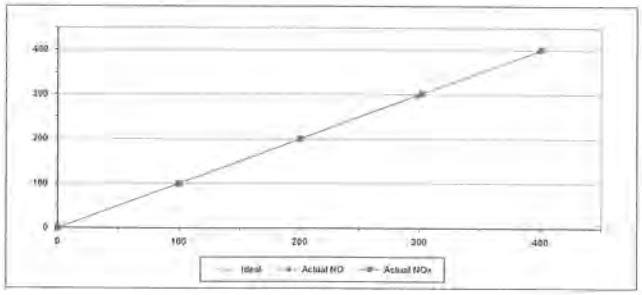
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	NOx Analyzer
Manufacturer	HORIBA	Model	APNA-370
Serial No.	PHD13MC7	Equipment ID	BKK_FS1072
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	55.88	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	98.80	-1.20	-1.20	100.50	0.50	0.50
2	200.00	201.40	1.40	0.70	200.50	0.50	0.25
3	300.00	298.30	-1.70	-0.57	302.20	2.20	0.73
4	400.00	398.50	-1.50	-0.38	401.40	1.40	0.35
AVERAGE (%)				-0.27			0.39



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

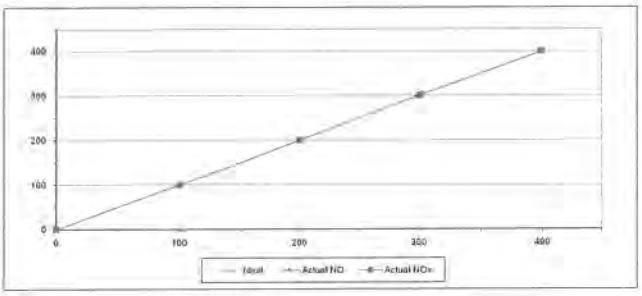
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	NOx Analyzer
Manufacturer	HORIBA	Model	APNA-370
Serial No.	TLTATGDW	Equipment ID	BKK_FS0785
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	55.88	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	99.00	-1.00	-1.00	100.30	0.30	0.30
2	200.00	199.40	-0.60	-0.30	200.50	0.50	0.25
3	300.00	299.00	-1.00	-0.33	301.10	1.10	0.37
4	400.00	398.70	-1.30	-0.33	399.30	-0.70	-0.17
AVERAGE (%)				-0.37			0.17



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

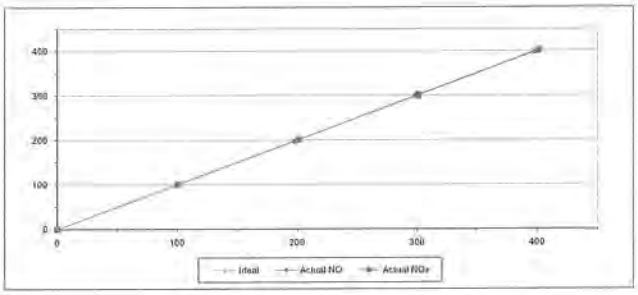
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO. F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	NOx Analyzer
Manufacturer	HORIBA	Model	APNA-370
Serial No.	XLTWRBSJ	Equipment ID	BKK_FS1092
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	55.88	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	99.70	-0.30	-0.30	101.00	1.00	1.00
2	200.00	198.10	-1.90	-0.95	201.20	1.20	0.60
3	300.00	299.20	-0.80	-0.27	301.40	1.40	0.47
4	400.00	398.20	-1.80	-0.45	401.80	1.80	0.45
AVERAGE (%)				-0.37			0.52



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

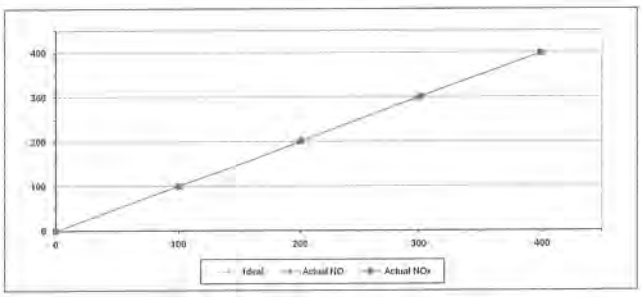
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	NOx Analyzer
Manufacturer	HORIBA	Model	APNA-370
Serial No.	X9RAXH0D	Equipment ID	BKK_FS0803
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	55.88	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	98.80	-1.20	-1.20	100.50	0.50	0.50
2	200.00	201.50	1.50	0.75	201.20	1.20	0.60
3	300.00	298.40	-1.60	-0.53	302.10	2.10	0.70
4	400.00	398.50	-1.50	-0.38	398.70	-1.30	-0.33
AVERAGE (%)				-0.25			0.32



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

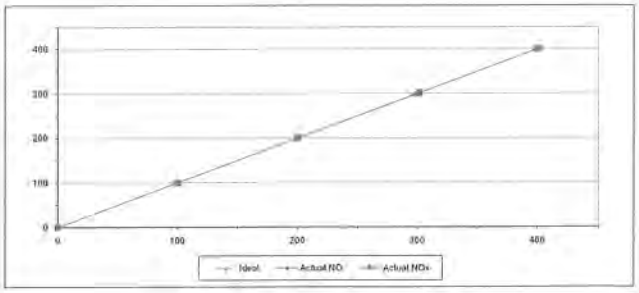
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	NOx Analyzer
Manufacturer	HORIBA	Model	APNA-370
Serial No.	PHD13MC7	Equipment ID	BKK_FS1072
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	55.88	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	98.80	-1.20	-1.20	100.50	0.50	0.50
2	200.00	201.40	1.40	0.70	200.50	0.50	0.25
3	300.00	298.30	-1.70	-0.57	302.20	2.20	0.73
4	400.00	398.50	-1.50	-0.38	401.40	1.40	0.35
AVERAGE (%)				-0.27			0.39



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

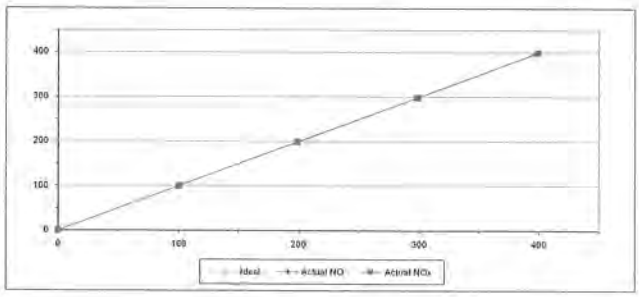
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	NOx Analyzer
Manufacturer	HORIBA	Model	APNA-370
Serial No.	R0A0GWJC	Equipment ID	BKK_FS0784
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	55.88	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	99.40	-0.60	-0.60	100.20	0.20	0.20
2	200.00	198.50	-1.50	-0.75	198.80	-1.20	-0.60
3	300.00	298.50	-1.50	-0.50	298.70	-1.30	-0.43
4	400.00	396.70	-3.30	-0.83	399.50	-0.50	-0.13
AVERAGE (%)				-0.51			-0.17



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

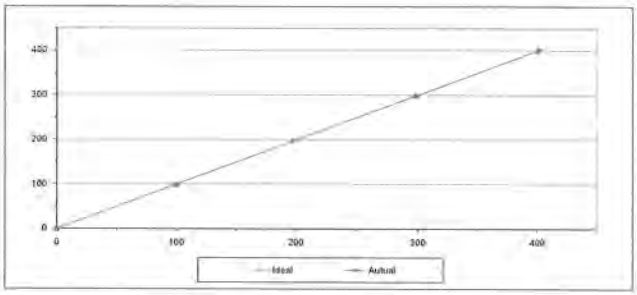
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	SO2 Analyzer
Manufacturer	HORIBA	Model	APSA-370
Serial No.	XGYYV1AU	Equipment ID	BKK_FS1089
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	56.3	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Autual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	98.80	-1.20	-1.20
2	200.00	197.40	-2.60	-1.30
3	300.00	298.30	-1.70	-0.57
4	400.00	401.20	1.20	0.30
AVERAGE (%)				-0.53



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

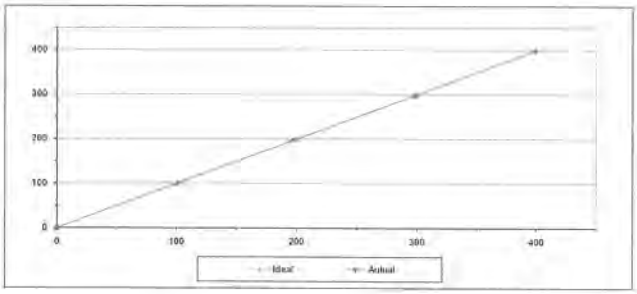
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	SO2 Analyzer
Manufacturer	HORIBA	Model	APSA-370
Serial No.	YU9BY9F9	Equipment ID	BKK_FS0799
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	56.3	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Autual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	101.30	1.30	1.30
2	200.00	198.10	-1.90	-0.95
3	300.00	298.50	-1.50	-0.50
4	400.00	398.60	-1.40	-0.35
AVERAGE (%)				-0.08



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

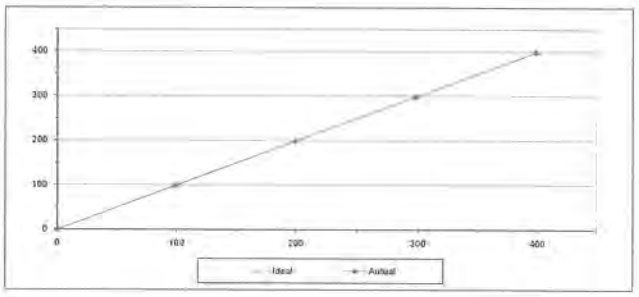
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	SO2 Analyzer
Manufacturer	HORIBA	Model	APSA-370
Serial No.	2BGDABSF	Equipment ID	BKK_FS0793
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	56.3	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Autual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	99.10	-0.90	-0.90
2	200.00	198.70	-1.30	-0.65
3	300.00	298.50	-1.50	-0.50
4	400.00	398.70	-1.30	-0.33
AVERAGE (%)				-0.46



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

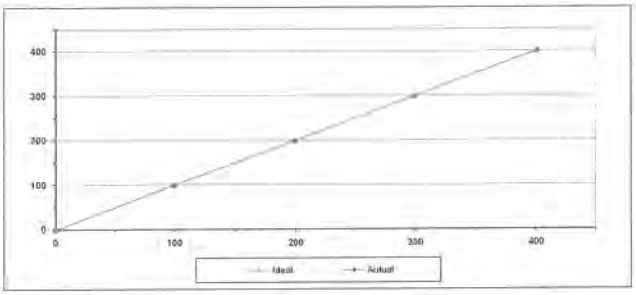
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	SO2 Analyzer
Manufacturer	HORIBA	Model	APSA-370
Serial No.	3C72K8HB	Equipment ID	BKK_FS0784
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	56.3	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Autual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	99.60	-0.40	-0.40
2	200.00	198.60	-1.40	-0.70
3	300.00	298.70	-1.30	-0.43
4	400.00	401.50	1.50	0.38
AVERAGE (%)				-0.21



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

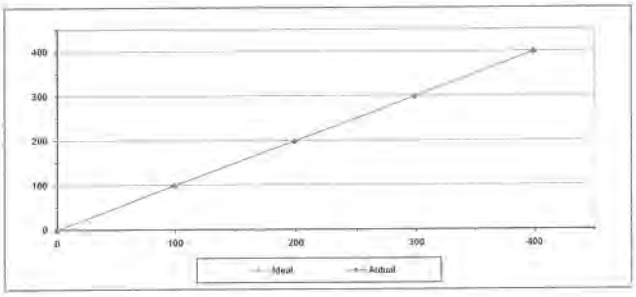
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	SO2 Analyzer
Manufacturer	HORIBA	Model	APSA-370
Serial No.	2BGDABSF	Equipment ID	BKK_FS0793
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	56.3	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Autual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	99.10	-0.90	-0.90
2	200.00	198.70	-1.30	-0.65
3	300.00	298.50	-1.50	-0.50
4	400.00	398.70	-1.30	-0.33
AVERAGE (%)				-0.46



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

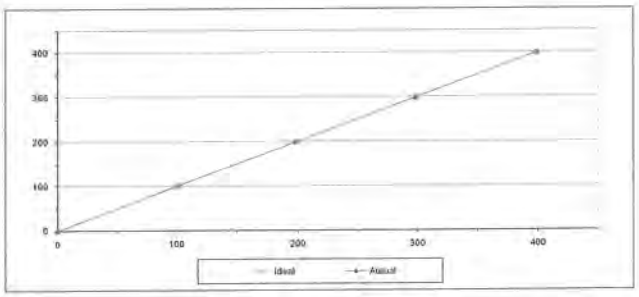
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	SO2 Analyzer
Manufacturer	HORIBA	Model	APSA-370
Serial No.	YU9BY9F9	Equipment ID	BKK_FS0799
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	56.3	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Autual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	101.30	1.30	1.30
2	200.00	198.10	-1.90	-0.95
3	300.00	298.50	-1.50	-0.50
4	400.00	398.60	-1.40	-0.35
AVERAGE (%)				-0.08



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

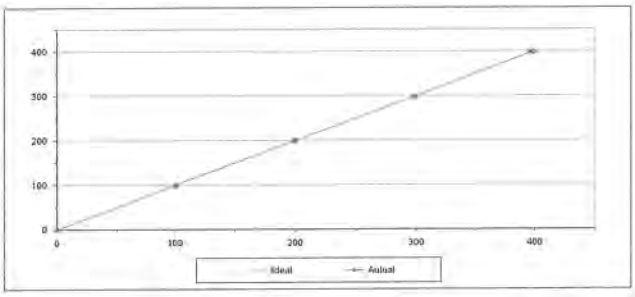
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	SO2 Analyzer
Manufacturer	HORIBA	Model	APSA-370
Serial No.	2SSLA6G0	Equipment ID	BKK_FS0802
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	56.3	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Autual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	101.10	1.10	1.10
2	200.00	199.40	-0.60	-0.30
3	300.00	298.30	-1.70	-0.57
4	400.00	398.30	-1.70	-0.42
AVERAGE (%)				-0.02



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

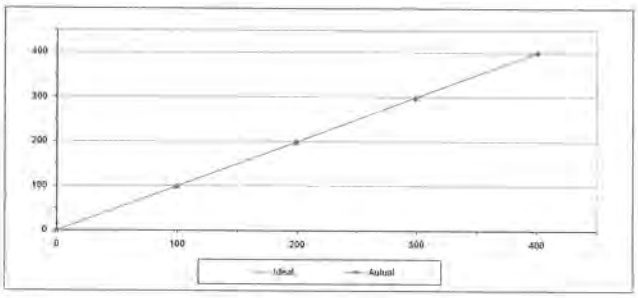
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	SO2 Analyzer
Manufacturer	HORIBA	Model	APSA-370
Serial No.	3C72K8HB	Equipment ID	BKK_FS0784
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	56.3	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Autual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	99.60	-0.40	-0.40
2	200.00	198.60	-1.40	-0.70
3	300.00	298.70	-1.30	-0.43
4	400.00	401.50	1.50	0.38
AVERAGE (%)				-0.21



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

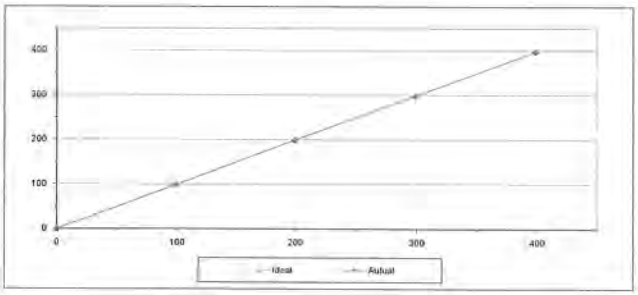
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	SO2 Analyzer
Manufacturer	HORIBA	Model	APSA-370
Serial No.	6BVW9P1K	Equipment ID	BKK_FS1091
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	56.3	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Autual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	98.50	-1.50	-1.50
2	200.00	198.80	-1.20	-0.60
3	300.00	298.70	-1.30	-0.43
4	400.00	398.50	-1.50	-0.38
AVERAGE (%)				-0.56



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

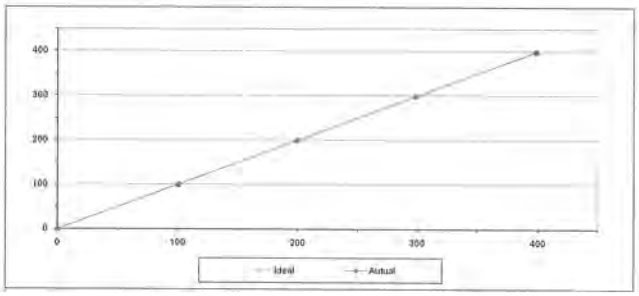
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	SO2 Analyzer
Manufacturer	HORIBA	Model	APSA-370
Serial No.	2SSLA6G0	Equipment ID	BKK_FS0802
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	56.3	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Autual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	101.10	1.10	1.10
2	200.00	199.40	-0.60	-0.30
3	300.00	298.30	-1.70	-0.57
4	400.00	398.30	-1.70	-0.42
AVERAGE (%)				-0.02



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

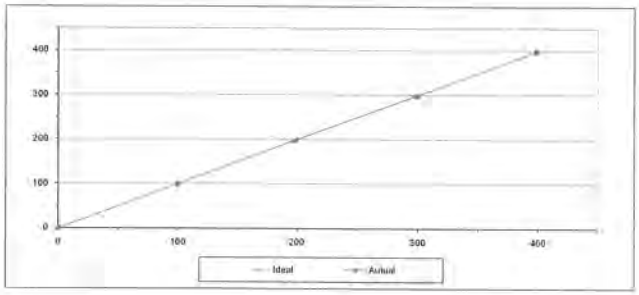
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	SO2 Analyzer
Manufacturer	HORIBA	Model	APSA-370
Serial No.	R0H40S60	Equipment ID	BKK_FS1071
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	56.3	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Autual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	100.20	0.20	0.20
2	200.00	197.30	-2.70	-1.35
3	300.00	298.40	-1.60	-0.53
4	400.00	398.20	-1.80	-0.45
AVERAGE (%)				-0.41



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

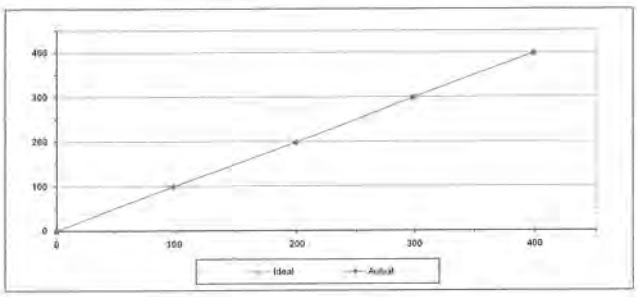
(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	3-Jan-25	Equipment Name	SO2 Analyzer
Manufacturer	HORIBA	Model	APSA-370
Serial No.	2BGDABSF	Equipment ID	BKK_FS0793
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	56.3	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1600	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Autual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	99.10	-0.90	-0.90
2	200.00	198.70	-1.30	-0.65
3	300.00	298.50	-1.50	-0.50
4	400.00	398.70	-1.30	-0.33
AVERAGE (%)				-0.46



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

(Mr.Sarayuth Jittranont)
Assistant General Manager

ALS Laboratory Group

FORM NO.: F 06-056 REVISION NO.: -- ISSUE DATE: 02/04/12

JNAC
JIRANATEE ASSOCIATES CO.,LTD.

Jiranatee Associates Co.,Ltd.
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Mobile: +66(0)000000
E-mail: jnac.calibration@jiranatee.com
Website: www.jiranatee.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Wind direction measurement laboratory
Calibration services department

ilac-MRA
NSC – TISI – TIS 17025
CALIBRATION 0367

Certificate Number
CWD-061-67

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM	: Wind Direction Sensor
MANUFACTURER	: Novalynx
MODEL/TYPE	: Sensor: WS-02F Data logger: 200-WS-25LR
SERIAL NUMBER	: Sensor: WSD-A5377 Data logger: A5377
ID NUMBER	: BKK_FS0917
CONDITION AS RECEIVED	: Used item
CUSTOMER	: ALS laboratory group (Thailand) Co., Ltd. 104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand.
RECEIVED DATE	: 22 Nov 2024
MEASUREMENT DATE	: 25 Nov 2024
ISSUE DATE	: 25 Nov 2024

Calibration procedure:
The wind direction sensor was calibrated against Standard Rotary Encoder model: AK60/05-UMS-P4.5 [illegible] in close test section of Eiffel type wind tunnel with 200 cm. from test section size. The WS-02F was as per ASTM D 5366-93 R 1, Wind energy generation systems – Part 12-1: Power performance measurements of electricity producing wind turbines, March 2017 was similar as reference guideline.

Traceability:
This certificate provides a traceability of the measurement to recognized the national standards, and to realization of the international system of units (SI) through the NMIT (National Metrology Institute of Thailand) via Certificate Number: IM 0087-24 and BM-0055-24

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM "Evaluation of measurement data – Guide to the Expression of Uncertainty in Measurement".

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH
Atmospheric Pressure	: 1010± 10	hPa

PLACE OF CALIBRATION : Eiffel type wind tunnel of Jiranatee Associates Co., Ltd.

CALIBRATION CONDITION

Wind tunnel cross-section area[1]	900	cm^2
Wind direction frontal area[2]	129	cm^2
Diameter of mounting pipe[3]	-	mm
Blockage ratio of test object[4]	0.143	[-]

Preconditioning : 24 hours at ambient conditions
Measurement Condition : The average values during measurement are (24.7)°C, (50.3) %RH and (1007.9) hPa

REVIEW BY
APPROVED BY
NEXT CAL DATE 25/05/26

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibrated by:
(Mr. Sirawut Indrabut)
(Mr. Jirayuth Lekkarnchai)

Approved signatory
(Mr. Teerapat Boonchuen)
(Jiranatee Department Manager)

Remark:
[1] Nozzle cross-section area of the wind tunnel
[2] Projected cross-section area of the tested object include mounting pipe
[3] Diameter of mounting pipe
[4] Ratio [2] to [1]

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Certificate Number
CWD-061-67

Page 2 of 2 Pages

MEASUREMENT RESULTS

The wind direction sensor was calibrated against standard rotary encoder by comparison method. During calibration, the measurement was carried out at 45° intervals in clockwise and counterclockwise directions after offset adjustment has been made. The low speed of wind tunnel (usually 5 m/s) is kept constant while the sensor is rotated around the vertical axis. The results of calibration and associated measurement uncertainties are reported in the table below:

Air speed m/s	D°_{std} Degree (°)	D°_{test} Degree (°)	Error Degree (°)	U (k=2) Degree (°)
	45.000	41	-4	0.80
	90.000	86	-4	0.80
	135.000	132	-3	0.80
	180.000	181	1	0.80
5.00	225.000	229	4	0.80
	270.000	275	5	0.80
	315.000	320	5	0.80
	360.000	359	-1	0.80

Remark:
[1] Calibration was carried out in the indoor environment and environmental conditions during which calibration took place
[2] Direction of standard
[3] Direction of Unit Under Calibration

End of Certificate of Calibration

Jiranatee Associates Co., Ltd.

JNAC
JIRANATEE ASSOCIATES CO.,LTD.

Jiranatee Associates Co.,Ltd.
88/84-85, 87/35-36
Park Future 2, 7/F, Rd. Wutthakat, Bangkhae
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Tel: +66(0)0000000
Mobile: +66(0)000000
E-mail: jnac.calibration@jiranatee.com
Website: www.jiranatee.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Air speed measurement laboratory
Calibration services department

ilac-MRA
NSC – TISI – TIS 17025
CALIBRATION 0367

Certificate Number
CWS-061-67

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM	: Cup anemometer
MANUFACTURER	: Novalynx
MODEL/TYPE	: Sensor: WS-02F Data logger: 200-WS-25LR
SERIAL NUMBER	: Sensor: WSD-A5377 Data logger: A5377
ID NUMBER	: BKK_FS0917
CONDITION AS RECEIVED	: Used item
CUSTOMER	: ALS laboratory group (Thailand) Co., Ltd. 104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand.
RECEIVED DATE	: 22 Nov 2024
MEASUREMENT DATE	: 25 Nov 2024
ISSUE DATE	: 25 Nov 2024

Calibration procedure:
The Cup anemometer was calibrated against Standard of velocity transducer model: 405SA2 and pitot tube with precision differential pressure meter model: DPM700 in an close test section of Eiffel type wind tunnel with 500 cm. close test section size. The WS-02F was based on IEC 61400-12-1, Wind energy generation systems – Part 12-1: Power performance measurements of electricity producing wind turbines, March 2017 was reviewed as reference guideline.

Traceability:
This certificate provides a traceability of the measurement to recognized the national standards, and to realization of the international system of units (SI) through the NMIT (National Metrology Institute of Thailand) via Certificate Number: IM 0087-24 and BM-0055-24

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM "Evaluation of measurement data – Guide to the Expression of Uncertainty in Measurement".

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH
Atmospheric Pressure	: 1010± 10	hPa

PLACE OF CALIBRATION : Eiffel type wind tunnel of Jiranatee Associates Co., Ltd.

CALIBRATION CONDITIONS

Wind tunnel cross-section area[1]	900	cm^2
Wind direction frontal area[2]	100	cm^2
Diameter of mounting pipe[3]	-	mm
Blockage ratio of test object[4]	0.111	[-]

Preconditioning : 24 hours at ambient conditions
Measurement Condition : The average values during measurement are (24.9) °C, (63.1) %RH and (1008.2) hPa

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibrated by:
(Mr. Sirawut Indrabut)
(Mr. Jirayuth Lekkarnchai)

Approved signatory
(Mr. Teerapat Boonchuen)
(Jiranatee Department Manager)

Remark:
[1] Nozzle cross-section area of the wind tunnel
[2] Projected cross-section area of the tested object include mounting pipe
[3] Diameter of mounting pipe
[4] Ratio [2] to [1]

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Certificate Number
CWS-061-67

MEASUREMENT RESULTS [3]

The Cup anemometer, Unit Under Calibration (UUC) was exercise at 10 m/s for 5 minutes prior to calibration being performed. The standard air velocity 0.5 m/s to 5 m/s was calculated by a standard air velocity transducer which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section and the standard air velocity 5 m/s to 30 m/s was calculated by a pitot tube with precision differential pressure meter which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section. UUC was mounted on a round vertical tube of the lower plate at center of test section. The calibration was carried out under both rising and falling air velocity in the range of 1 m/s to 16 m/s at calibration interval of 1 m/s. The results of calibration and associated measurement uncertainties are reported in the table below.

v_{std} [1] (m/s)	Temp. wind tunnel (°C)	Temp. room (°C)	v_{uuc} [2] (m/s)	Error (m/s)	U (k=2) (m/s)
1.012	24.10	24.90	0.9	-0.2	0.31
2.218	25.58	24.60	2.0	-0.2	0.31
3.050	24.10	24.90	2.9	-0.1	0.31
4.223	24.10	24.50	4.0	-0.2	0.31
4.94	24.10	24.90	5.0	0.0	0.31
5.96	24.60	24.90	6.0	0.0	0.31
7.03	24.10	24.90	7.2	0.1	0.31
7.96	24.34	24.90	8.1	0.1	0.31
8.97	24.10	24.90	9.0	0.1	0.31
9.97	24.18	24.90	9.9	-0.1	0.31
11.09	24.12	24.90	11.2	0.1	0.31
12.03	24.10	24.90	12.1	0.1	0.31
12.92	24.18	24.90	13.0	0.1	0.33
13.92	24.10	24.90	14.0	0.1	0.31
14.98	24.30	24.90	15.1	0.1	0.31
15.98	24.10	24.90	16.1	0.1	0.35

Remark:

[3] Calibration results only count for the tested circumstances and environmental conditions during which calibration took place

[1] Velocity of standard

[2] Velocity of Unit Under Calibration

PHOTO OF CALIBRATION SET-UP

Calibration setup of the Cup anemometer calibration in the wind tunnel of Jiranatee Associates Co., Ltd. [illegible]

End of Certificate of Calibration

JIRANATEE ASSOCIATES CO., LTD.

JNAC

JIRANATEE ASSOCIATES CO., LTD.

Jiranatee Associates Co., Ltd.
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CALIBRATION 0367

Air speed measurement laboratory
Calibration services department

ilac-MRA
NSC – TISI – TIS 17025
CALIBRATION 0367

Certificate Number
CWS-062-67

CERTIFICATE OF CALIBRATION

MEASUREMENT ITEM	: Cup anemometer
MANUFACTURER	: Novalynx
MODEL/TYPE	: Sensor: WS-02F Data logger: 110-WS-25DL-D
SERIAL NUMBER	: Sensor: WSD-A5964 Data logger: A5964
ID NUMBER	: BKK_FS1369
CONDITION AS RECEIVED	: Used item
CUSTOMER	: ALS laboratory group (Thailand) Co., Ltd 104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand
RECEIVED DATE	: 22 Nov 2024
MEASUREMENT DATE	: 26 Nov 2024
ISSUE DATE	: 26 Nov 2024

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH
Atmospheric Pressure	: 1010 ± 10	hPa

PLACE OF CALIBRATION : Eiffel type wind tunnel of Jiranatee Associates Co., Ltd.

CALIBRATION CONDITIONS

Wind tunnel cross-section area [1]	900	cm²
Wind direction frontal area [2]	100	cm²
Diameter of mounting pipe [3]		mm
Blockage ratio of test object [4]	0.111	[-]

Preconditioning : 24 hours at Ambient conditions.
Measurement Condition : The average values during measurement are (23.7) °C, (49.7) %RH and (1008.0) hPa.

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibration procedure:
The Cup anemometer was calibrated against Standard air velocity transducer model: [illegible]55-12 and pitot tube with precision differential pressure meter model: DPM2500 in an Eiffel test section of Eiffel type wind tunnel with 900 cm² cross test section area. The WI CL 007 based on IEC 61400-12-1, Wind energy generation systems – Part 12-1: Power performance measurements of electricity producing wind turbines, March 2017 was used as a calibration guideline.

Traceability:
This certificate provides a traceability of the measurement to recognized the national standards, and to realization of the international system of units (SI) through the NIMT (National Metrology Institute of Thailand) via Certificate Number: MW 0007 24 and MW 0065 24

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM "Evaluation of measurement data – Guide to the expression of uncertainty in measurement"

REVIEW BY
APPROVED BY
NEXT CAL DATE 26/05/26

Calibrated by:
1) Mr. Sorawit [illegible]
2) [illegible]

JNAC JIRANATEE ASSOCIATES CO., LTD.

Approved signatory:
Mr. [illegible]
Calibration Department Manager

Remark:
[1] Nozzle cross-section area of the wind tunnel
[2] Projected cross-section area of the tested object include mounting pipe
[3] Diameter of mounting pipe
[4] Ratio [2] to [1]

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Certificate Number
CWS-062-67

MEASUREMENT RESULTS [3]

The Cup anemometer, Unit Under Calibration (UUC) was exercise at 10 m/s for 5 minutes prior to calibration being performed. The standard air velocity 0.5 m/s to 5 m/s was calculated by a standard air velocity transducer which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section and the standard air velocity 5 m/s to 30 m/s was calculated by a pitot tube with precision differential pressure meter which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section. UUC was mounted on a round vertical tube of the lower plate at center of test section. The calibration was carried out under both rising and falling air velocity in the range of 1 m/s to 16 m/s at calibration interval of 1 m/s. The results of calibration and associated measurement uncertainties are reported in the table below.

v_{std} [1] (m/s)	Temp. wind tunnel (°C)	Temp. room (°C)	v_{uuc} [2] (m/s)	Error (m/s)	U (k=2) (m/s)
1.012	23.70	23.65	0.9	-0.1	0.31
2.206	23.68	23.65	2.0	-0.2	0.31
3.050	23.70	23.65	2.9	-0.1	0.31
4.196	23.70	23.65	4.0	-0.2	0.31
4.95	23.50	23.65	4.9	-0.1	0.31
5.94	23.70	23.65	5.8	-0.1	0.31
7.04	23.40	23.65	7.0	-0.1	0.31
7.95	23.70	23.65	7.9	-0.1	0.31
8.97	23.40	23.65	8.9	-0.1	0.31
9.95	23.60	23.65	9.9	0.0	0.31
11.09	23.50	23.65	11.1	0.0	0.31
12.02	23.50	23.65	12.0	0.0	0.31
12.93	23.50	23.65	13.0	0.1	0.31
13.93	23.50	23.65	14.1	0.2	0.31
14.97	23.50	23.65	15.0	0.0	0.31
15.97	23.40	23.65	16.1	0.2	0.32

Remark:

[3] Calibration results only count for the tested circumstances and environmental conditions during which calibration took place

[1] Velocity of standard

[2] Velocity of Unit Under Calibration

PHOTO OF CALIBRATION SET-UP

Calibration set-up of the Cup anemometer calibration in the wind tunnel of Jiranatee Associates Co., Ltd. [illegible]

End of Certificate of Calibration

JIRANATEE ASSOCIATES CO., LTD.

JNAC

JIRANATEE ASSOCIATES CO., LTD.

Jiranatee Associates Co., Ltd.
53/14 15, [illegible]
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Accredited calibration laboratory
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CALIBRATION 0367

Temperature measurement laboratory
Calibration services department

ilac-MRA
NSC – TISI – TIS 17025
CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No. : CDT-202-67

MEASUREMENT ITEM	: Data Logger with Temperature sensor
MANUFACTURER	: Novalynx
MODEL/TYPE	: 110-WS-25DL-D
SERIAL NUMBER	: A5964
ID NUMBER	: BKK_FS1369
CONDITION AS-RECEIVED	: Used item
CUSTOMER	: ALS laboratory group (thailand) Co., Ltd 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand.
RECEIVED DATE	: 21 Nov 2024
MEASUREMENT DATE	: 26 Nov 2024
ISSUE DATE	: 26 Nov 2024

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH

***NOTED:** The certificate is valid only to the item calibrated on date and place of calibration.*

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibration procedure:
The temperature calibration was done by In-House calibration method no. WI-CL-[illegible] according to comparison method with Standard digital temperature indicator and standard temperature probe. The temperature scale use was based on ITS-90.

Traceability:
The measurement results are traceable to the International System of Units (SI) through National Institute of Metrology Thailand (NIMT) Certificate number: TI-0047-24, Certificate number: TR-0113-24

Reference Used During Calibration:
1. Standard Temperature Probe
Model: STS-100 A500, Serial No.: 667692-10
Due date: 26 Mar 2025
2. Digital Temperature Indicator
Model: DTI 1000 A [illegible], Serial No.: [illegible]-00591 Due date: 21 Oct 2025

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM "Evaluation of measurement data – Guide to the expression of uncertainty in measurement"

Calibrated by:
1) Mr. Sorawit [illegible]
2) Miss [illegible]

JNAC

Approved signatory:
Mr. [illegible]
Calibration Department Manager

THIS CERTIFICATE MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

JIRANATEE ASSOCIATES CO.,LTD.

Continuation of Certificate of Calibration Number CDT-202-67

Result of Calibration: ☑ Without Adjustment ☐ With Adjustment

Calibration Range: 20 °C to 60 °C

Function:

Table 3: This equipment was connected with temperature sensor Model: HMP60S/N: U3911251.
Dimension: Diameter 12 mm, Length 80 mm.

Immersion Depth (mm)	Standard Reading (°C)	UUC Reading (°C)	Error (°C)	Uncertainty (°C)
80	20.000	19.8	0.3	0.14
80	25.053	24.6	0.5	0.050
80	30.045	29.7	0.3	0.14
80	35.079	34.6	0.4	0.090
80	40.015	39.5	0.5	0.090

UUC*: Unit Under Calibration

Remark: The reported uncertainty of measurement is 0.14, based on standard uncertainty multiplied by a coverage factor k=2.11 providing a level of confidence of approximately 95%.

End of Certificate of Calibration

Jiranatee Associates Co.,Ltd.

JIRANATEE ASSOCIATES CO.,LTD.

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Pressure measurement laboratory
Calibration services department

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NSC - TISI - TIS 17025
CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No. : CPR-030-67

MEASUREMENT ITEM	: Digital barometer
MANUFACTURER	: Novalynx
MODEL/TYPE	: Sensor: 110-WS-250B Data logger: 110-WS-250B-D
SERIAL NUMBER	: Sensor: BF A5963 Data logger: A5964
ID NUMBER	: BKK_FS1369
CONDITION AS-RECEIVED	: Used item
CUSTOMER	: ALS laboratory group (Thailand) Co., Ltd. 105 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand
RECEIVED DATE	: 22 Nov 2024
MEASUREMENT DATE	: 26 Nov 2024
ISSUE DATE	: 26 Nov 2024

Calibration procedure:
The Digital barometer was calibrated against Digital pressure calibrator. The JIS C1509 was used as a calibration guideline.

Traceability:
The measurement results are traceable to the International system of units (SI) through the NIMT (National Metrology Institute of Thailand) via Certificate number: MP-0509-24

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM "Evaluation of measurement data - Guide to the expression of uncertainty in measurement"

CONDITION OF THIS RESULT OF CALIBRATION:

1. Reference Standard Instrument.

Instrument	Model	Serial No.	Certificate No.	Due Date
Absolute Pressure Transducer	CFG7500	61001269	MP-0509-24	27 Dec 2024

2. Calibration effort for calibration sequence C
3. The UUC was installed in vertical orientation above reference standard instrument, measurement of UUC was done in the reference level.
4. Calibration conditions:
5. Condition : ☑ Normal ☐ Abnormal
   - Pressure (corresponding to 0 m) : Approx. 1,000 mbar
   - (t_0 100°C, 1 bar) : 1,000 mbar
   - H_{rel} : 15.0 - 75.0 %
   - t_{amb} : 17.0 - 27.0 °C
   - p_{amb} : 1000-1010 mbar
6. The certificate is valid only to the items calibrated on date and place of calibration.

Calibrated by:
(Mr. Sorawit Thachathai)
Technical Officer

Approved signatory:
(Mr. Pariya Bhanthumnavin)
Technical Department Manager

THIS CERTIFICATE REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

JIRANATEE ASSOCIATES CO.,LTD.

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CALIBRATION 0367

Pressure measurement laboratory
Calibration services department

ilac-MRA THAILAND
NSC - TISI - TIS 17025
CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No. : CPR-030-67

MEASUREMENT RESULTS : ☐ Without adjustment ☑ With adjustment

CALIBRATION IN THE RANGE OF : 950 mbar to 1050 mbar

The results of calibration and associated measurement uncertainty are reported in the table below:

STD (mbar)	UUC* (mbar)	Error (mbar)	Uncertainty (k=2) (mbar)
950.00	951.0	[illegible]	0.37
960.00	961.0	1.0	0.39
990.00	990.6	0.6	0.37
1010.00	1010.1	0.1	0.40
1049.97	1049.4	[illegible]	0.37
1050.56	1049.6	0.9	0.40

Note: UUC* Unit Under Calibration
To convert the results in report unit to Pa should be multiply by 100

End of certificate

Jiranatee Associates Co.,Ltd.

JIRANATEE ASSOCIATES CO.,LTD.

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ISO/IEC 17025:2017
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CALIBRATION 0367

Relative humidity and Air Temperature measurement laboratory
Calibration services department.

CERTIFICATE OF CALIBRATION

Certificate No. : CHT-054-67

MEASUREMENT ITEM	: Relative humidity with data logger
MANUFACTURER	: Novalynx
MODEL/TYPE	: Data Logger: 110-WS-250L-D Sensor: HMP60
SERIAL NUMBER	: Data Logger: A5964 Sensor: U3911251
ID NUMBER	: BKK_FS1369
CONDITION AS-RECEIVED	: New item
CUSTOMER	: ALS laboratory group (Thailand) Co., Ltd. 105 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand
RECEIVED DATE	: 21 Nov 2024
MEASUREMENT DATE	: 26 Nov 2024
ISSUE DATE	: 26 Nov 2024

Calibration procedure:
The Relative humidity and Air Temperature calibration was done by in-house calibration method in WI-C-006 and WI-T-010 according to equipment manual with Standard Chilled Mirror hygrometer with Temperature sensor and standard Humidity standard chamber.

Traceability:
The measurements are traceable to the International system of units (SI) through National Institute of Metrology (Thailand) (NIMT). Certificate number: "HR-0035-24" and through Metrolab Associates Co., Ltd. Certificate number: CDT-001-67

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM "Evaluation of measurement data - Guide to the expression of uncertainty in measurement"

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH

NOTED: The certificate is valid only to the item calibrated on date and place of calibration.

TABULATION OF RESULTS:
The table on next page give the measured values

Calibrated by:
(Mr. Sorawit Thachathai)
Technical Officer

Approved signatory:
(Mr. Pariya Bhanthumnavin)
Calibration Department Manager

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

JIRANATEE ASSOCIATES CO.,LTD.

Continuation of Certificate of Calibration Number: CRT-054-67

Measurement Results:

The results of calibration and associated measurement uncertainties are reported in the table below.

Result of Calibration: ☑ Without Adjustment ☐ With Adjustment

Table 1: The [illegible] at 30 °C are reported in table below.
Calibration Range: 200 RPM to 8000 RPM

Air Temperature (°C)	Standard Reading (RPM)	UUC Reading (RPM)	Error (RPM)	Uncertainty (±RPM)
29.51	39.51	38.3	1.4	0.39
29.82	59.61	60.6	-1.0	1.3
29.83	67.00	68.5	-0.5	2.1

UUC = UNC Under Calibration

End of Certificate of Calibration

JIRANATEE ASSOCIATES CO.,LTD.

Jiranatee Associates Co., Ltd.
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CALIBRATION 0367

Wind direction measurement laboratory
Calibration services department

ilac-MRA
NSC – TISI – TIS 17025
CALIBRATION 0367

Certificate Number
CWD-062-67

CERTIFICATE OF CALIBRATION

MEASUREMENT ITEM : Wind Direction Sensor
MANUFACTURER : Novalynx
MODEL/TYPE : Sensor: WS-02F
Data logger: 130 WS-250U-D
SERIAL NUMBER : Sensor: WSD A5064
Data logger: A5964
ID NUMBER : IRKK_FS1369
CONDITION AS-RECEIVED : Used item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand

RECEIVED DATE : 22 Nov 2024
MEASUREMENT DATE : 26 Nov 2024
ISSUE DATE : 26 Nov 2024

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH
Atmospheric Pressure	: 1010± 10	hPa

PLACE OF CALIBRATION : Eiffel type wind tunnel at Jiranatee Associates Co., Ltd

CALIBRATION CONDITION

Wind tunnel cross section area[1]	900	cm²
Wind direction frontal area[2]	129	cm²
Diameter of mounting pipe[3]	-	mm
Blockage ratio of test object[4]	0.143	[-]

Preconditioning : 24 hours at ambient conditions.
Measurement Condition : The average values during measurement are 23.9 °C, (49.7) %RH and (1008.8) hPa

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibrated by:
Mr. Sorasak Tubsuda
Miss Jittapath Lertkaewkit

Approved signatory:
Mr. Pairoj Bhiochatum
Calibration Department Manager

Remark:
[1] Nozzle cross section area of the wind tunnel
[2] Projected cross section area of the tested object include mounting pipe
[3] Diameter of mounting pipe
[4] Ratio [2]/[1]

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Certificate Number
CWD-062-67

MEASUREMENT RESULTS [5]

The wind direction sensor was calibrated against standard rotary encoder by comparison method. During calibration, the measurement was carried out at 45° intervals in clockwise and counterclockwise directions after offset adjustment has been made. The fan speed of wind tunnel (mostly 5 m/s) is kept constant while the sensor is mounted on its vertical axis. The results of calibration and associated measurement uncertainties are reported in the table below.

Air speed m/s	D'_{ref} Degree (°)	D'_{uut} Degree (°)	Error Degree (°)	U (k=2) Degree (°)
4.99	0.000	0	0	0.000
	45.000	42	3	45.000
	90.000	87	3	90.000
	135.000	133	-2	135.000
	180.000	181	1	180.000
	225.000	227	2	225.000
	270.000	273	3	270.000
	315.000	318	3	315.000

Remark:
[5] Calibration results only valid for the tested circumstances and environmental conditions during which calibration took place
[6] Direction of standard
[7] Directional Unit Under Calibration

End of Certificate of Calibration

JIRANATEE ASSOCIATES CO.,LTD.

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Web site: www.jiranatee.com

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CALIBRATION 0367

Air speed measurement laboratory
Calibration services department

ilac-MRA
NSC – TISI – TIS 17025
CALIBRATION 0367

Certificate Number
CWS-066-67

CERTIFICATE OF CALIBRATION

MEASUREMENT ITEM : Cup anemometer
MANUFACTURER : Novalynx
MODEL/TYPE : Sensor: WS-02F
Data logger: 200 WS-250U
SERIAL NUMBER : Sensor: WSD A5380
Data logger: A5380
ID NUMBER : IRKK_FS0920
CONDITION AS-RECEIVED : Used item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand.

RECEIVED DATE : 03 Dec 2024
MEASUREMENT DATE : 16 Dec 2024
ISSUE DATE : 19 Dec 2024

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH
Atmospheric Pressure	: 1010± 10	hPa

PLACE OF CALIBRATION : Eiffel type wind tunnel at Jiranatee Associates Co., Ltd.

CALIBRATION CONDITIONS

Wind tunnel cross section area[1]	900	cm²
Wind direction frontal area[2]	100	cm²
Diameter of mounting pipe[3]	-	mm
Blockage ratio of test object[4]	0.111	[-]

Preconditioning : 24 hours at ambient conditions.
Measurement Condition : The average values during measurement are (25.1) °C, (44) %RH and (1004.5) hPa

REVIEW BY
APPROVED BY
NEXT C/D DATE 16/06/26

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibrated by:
Mr. Sorasak Tubsuda
Miss Jittapath Lertkaewkit

Approved signatory:
Mr. Pairoj Bhiochatum
Calibration Department Manager

Remark:
[1] Nozzle cross section area of the wind tunnel
[2] Projected cross section area of the tested object include mounting pipe
[3] Diameter of mounting pipe
[4] Ratio [2]/[1]

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Jiranatee Associates Co., Ltd.

Certificate Number
CWS 066-67

MEASUREMENT RESULTS [1]

[illegible]

v_{std} [2] (m/s)	Temp. wind tunnel (°C)	Temp. room (°C)	v_{uuc} [3] (m/s)	Error (m/s)	U (k=2) (m/s)
1.005	24.82	25.05	0.8	0.2	0.31
2.199	25.02	25.05	2.0	-0.2	0.31
3.017	24.96	25.05	3.0	0.0	0.31
4.230	24.92	25.05	4.0	-0.2	0.31
4.93	24.80	25.05	5.0	0.1	0.31
5.95	24.98	25.05	5.9	-0.1	0.31
7.00	24.60	25.05	7.1	0.1	0.31
7.95	24.70	25.05	8.1	0.1	0.31
8.96	24.62	25.05	9.2	0.2	0.31
9.97	24.60	25.05	10.0	0.0	0.31
11.08	24.70	25.05	11.2	0.1	0.31
11.99	24.60	25.05	12.2	0.3	0.31
12.93	24.70	25.05	13.3	0.3	0.31
13.97	24.60	25.05	14.3	0.4	0.31
14.96	24.60	25.05	15.3	0.3	0.31
15.96	24.60	25.05	16.2	0.3	0.31

Remark:
[1] Calibration results only count for the tested circumstances and environmental conditions during which calibration took place
[2] Velocity of standard
[3] Velocity of Unit Under Calibration

PHOTO OF CALIBRATION SET-UP

[illegible] due to mounting geometry.

End of Certificate of Calibration

JIRANATEE ASSOCIATES CO., LTD.

JNAC JIRANATEE ASSOCIATES CO., LTD.

[illegible]

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Wind direction measurement laboratory
Calibration services department

NSC – TISI – TIS 17025
CALIBRATION 0367

Certificate Number
CWD 066-67

CERTIFICATE OF CALIBRATION

MEASUREMENT ITEM	: Wind Direction Sensor
MANUFACTURER	: Novalynx
MODEL/TYPE	: Sensor: WS-02F Data logger: 200 WS-25LB
SERIAL NUMBER	: Sensor: WSD-A5380 Data logger: A5380
ID NUMBER	: BKK_F50920
CONDITION AS-RECEIVED	: Used item
CUSTOMER	: ALS laboratory group (Thailand) Co., Ltd. 104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand
RECEIVED DATE	: 04 Dec 2024
MEASUREMENT DATE	: 16 Dec 2024
ISSUE DATE	: 19 Dec 2024

Calibration procedure: [illegible]

Traceability: [illegible]

Uncertainty of Measurement: [illegible]

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH
Atmospheric Pressure	: 1010± 10	hPa

PLACE OF CALIBRATION : Eiffel-type wind tunnel of Jiranatee Associates Co., Ltd.

CALIBRATION CONDITION			
	: Wind tunnel cross-section area [1]	900	cm²
	Wind direction frontal area [2]	129	cm²
	Diameter of mounting pipe [3]		mm
	Blockage ratio of test object [4]	0.143	[-]

Preconditioning : 24 hours at ambient conditions
Measurement Condition : The average values during measurement are (24.7)°C, (54.5) %RH and (1003.2) hPa

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibrated by: [illegible]

JIRANATEE ASSOCIATES CO., LTD.

Approved signatory [illegible]

Remark:
[1] Nozzle cross-section area of the wind tunnel
[2] Projected cross-section area of the tested object include mounting pipe
[3] Diameter of mounting pipe
[4] Ratio [2] to [1]

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Certificate Number
CWD 066-67

MEASUREMENT RESULTS [1]

[illegible] The results of calibration and associated uncertainties are reported in the table below.

Air speed m/s	D'_{std} Degree (°)	D'_{uuc} Degree (°)	Error Degree (°)	U (k=2) Degree (°)
5.01	45.000	42	-3	0.80
	90.000	87	-3	0.80
	135.000	133	-3	0.80
	180.000	179	-1	0.80
	225.000	227	2	0.80
	270.000	274	4	0.80
	315.000	320	5	0.80
	360.000	359	1	0.80

Remark:
[1] Calibration results only count for the tested circumstances and environmental conditions during which calibration took place
[2] Direction of standard
[3] Direction of Unit Under Calibration

End of Certificate of Calibration

JIRANATEE ASSOCIATES CO., LTD.

JNAC JIRANATEE ASSOCIATES CO., LTD.

[illegible]

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Air speed measurement laboratory
Calibration services department

NSC – TISI – TIS 17025
CALIBRATION 0367

Certificate Number
CWS-044-67

CERTIFICATE OF CALIBRATION

MEASUREMENT ITEM	: Cup anemometer
MANUFACTURER	: Novalynx
MODEL/TYPE	: Sensor: WS-02FA Data logger: 110-WS-25DL-D
SERIAL NUMBER	: Sensor: WSD-A6067 Data logger: A6067
ID NUMBER	: BKK_F51441
CONDITION AS-RECEIVED	: New item
CUSTOMER	: ALS laboratory group (Thailand) Co., Ltd. 104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand
RECEIVED DATE	: 17 Sep 2024
MEASUREMENT DATE	: 18 Sep 2024
ISSUE DATE	: 01 Oct 2024

Calibration procedure: [illegible]

Traceability: [illegible]

Uncertainty of Measurement: [illegible]

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH
Atmospheric Pressure	: 1010± 10	hPa

PLACE OF CALIBRATION : Eiffel-type wind tunnel of Jiranatee Associates Co., Ltd.

CALIBRATION CONDITIONS			
	: Wind tunnel cross-section area [1]	900	cm²
	Wind direction frontal area [2]	100	cm²
	Diameter of mounting pipe [3]	-	mm
	Blockage ratio of test object [4]	0.111	[-]

REVIEW BY [signature]
APPROVED BY [signature]
NEXT CAL DATE 18/03/26

Preconditioning : 24 hours at ambient conditions.
Measurement Condition : The average values during measurement are (25.0) °C, (51.7) %RH and (1008.9) hPa.

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibrated by: [illegible]

JIRANATEE ASSOCIATES CO., LTD.

Approved signatory [illegible]

Remark:
[1] Nozzle cross-section area of the wind tunnel
[2] Projected cross-section area of the tested object include mounting pipe
[3] Diameter of mounting pipe
[4] Ratio [2] to [1]

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Certificate Number
CWS-044-67

MEASUREMENT RESULTS [1]

The Cup anemometer, Unit Under Calibration (UUC) was exercise at 10 m/s for 5 minutes prior to calibration being performed. The standard air velocity 0.5 m/s to 5 m/s was calculated by a standard air velocity transducer which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section and the standard air velocity 5 m/s to 30 m/s was calculated by a pitot tube with precision differential pressure meter which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section. UUC was mounted on a round vertical tube of the front plane at center of test section. The calibration was carried out over both rising and falling [2] velocity in the range of 1 m/s to 16 m/s at calibration interval of 1 m/s. The results of calibration and associated measurement uncertainties are reported in the table below.

V_{std} [3] (m/s)	Temp. wind tunnel (°C)	Temp. room (°C)	V_{uuc} [3] (m/s)	Error (m/s)	U (k=2) (m/s)
0.998	24.95	25.15	0.9	-0.1	0.31
2.193	25.12	25.15	2.0	-0.2	0.31
3.061	25.05	25.15	3.0	-0.1	0.31
4.232	25.02	25.15	4.0	-0.2	0.31
4.95	24.80	25.15	5.0	0.0	0.31
5.95	25.16	25.15	6.0	0.0	0.31
6.91	24.86	25.15	7.0	0.1	0.31
7.89	25.04	25.15	8.0	0.1	0.31
8.99	25.10	25.15	9.0	0.0	0.31
9.97	24.74	25.15	10.0	0.1	0.31
10.98	25.02	25.15	11.0	0.1	0.31
12.03	24.90	25.15	12.0	0.0	0.31
12.96	24.72	25.15	13.0	0.1	0.31
14.00	25.18	25.15	14.0	0.0	0.31
14.97	24.82	25.15	15.1	0.1	0.31
15.89	25.00	25.15	16.0	0.1	0.31

Remark:
[1] Calibration results only count for the tested environmences and environmental conditions during which calibration took place
[2] Velocity of standard
[3] Velocity of Unit Under Calibration

PHOTO OF CALIBRATION SET-UP

Calibration was carried out in the wind tunnel of Jiranatee Associates Co., Ltd. Further information about the calibration set-up is available upon request. The calibration was carried out in the test section of the wind tunnel.

End of Certificate of Calibration

J NAC
JIRANATEE ASSOCIATES CO., LTD.

Jiranatee Associates Co., Ltd.
Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Wind direction measurement laboratory
Calibration services department.

NSC – TISI – TIS 17025
CALIBRATION 0367

Certificate Number
CWD-044-67

CERTIFICATE OF CALIBRATION

MEASUREMENT ITEM	: Wind Direction Sensor	
MANUFACTURER	: Novalynx	
MODEL/TYPE	: Sensor: WS-021A Data logger: 110-WS-25DL-D	
SERIAL NUMBER	: Sensor: WSD-A6067 Data logger: A6067	
ID NUMBER	: DKK_FS1441	
CONDITION AS-RECEIVED	: New item	
CUSTOMER	: ALS laboratory group (Thailand) Co., Ltd. 104 Phaltthanakan 40, Phaltthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand.	
RECEIVED DATE	: 12 Sep 2024	
MEASUREMENT DATE	: 18 Sep 2024	
ISSUE DATE	: 01 Oct 2024	

Calibration procedure:
[illegible]

Traceability:
[illegible]

Uncertainty of Measurement:
[illegible]

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH
Atmospheric Pressure	: 1010 ± 10	hPa

PLACE OF CALIBRATION	: Eiffel-type wind tunnel of Jiranatee Associates Co., Ltd.		
CALIBRATION CONDITION	: Wind tunnel cross section area [1]	900	cm²
	Wind direction frontal area [2]	129	cm²
	Diameter of mounting pipe [3]		mm
	Blockage ratio of test object [4]	0.143	[-]
Preconditioning	: 24 hours at ambient conditions.		
Measurement Condition	: The average values during measurement are (27.0)°C, (52.8) %RH and (1000.1) hPa.		

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibrated by:
[illegible]

Approved signatory:
[illegible]

Remark:
[1] Nominal cross section area of the wind tunnel
[2] Projected cross section area of the tested object inside mounting pipe
[3] Diameter of mounting pipe
[4] Ratio [2]/[1]

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Certificate Number
CWD-044-67

MEASUREMENT RESULTS [1]

The wind direction sensor was calibrated against standard primary encoder by comparison method. During calibration, the sensor under test was carried out at 45° intervals in clockwise and counterclockwise directions. After effect adjustment has been made. The five speed levels (approx. 5 m/s) that consists of the center to extend 20° on clockwise and counterclockwise. The calibration results and associated measurement uncertainties are reported in the table below.

Air speed m/s	D'_{std} Degree (°)	D'_{uuc} Degree (°)	Error Degree (°)	U (k=2) Degree (°)
5.02	0.000	0	0	0.80
	45.000	42	-3	0.80
	90.000	87	-3	0.80
	135.000	132	-3	0.80
	180.000	181	1	0.80
	225.000	227	2	0.80
	270.000	273	3	0.80
	315.000	319	4	0.80

Remark:
[1] Calibration results only count for the tested circumstances and environmental conditions during which calibration took place
[2] Direction of standard
[3] Direction of Unit Under Calibration

End of Certificate of Calibration

J NAC
JIRANATEE ASSOCIATES CO., LTD.

Jiranatee Associates Co., Ltd.
Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Temperature measurement laboratory
Calibration services department.

NSC – TISI – TIS 17025
CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No. : CDT-170-67

MEASUREMENT ITEM	: Data Logger with Temperature sensor
MANUFACTURER	: Novalynx
MODEL/TYPE	: 110-WS-25DL-D
SERIAL NUMBER	: A6067
ID NUMBER	: DKK_FS1441
CONDITION AS-RECEIVED	: New item
CUSTOMER	: ALS laboratory group (thailand) Co., Ltd. 104 Phaltthanakan 40, Phaltthanakan Rd., Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand.
RECEIVED DATE	: 12 Sep 2024
MEASUREMENT DATE	: 14 Sep 2024
ISSUE DATE	: 01 Oct 2024

Calibration procedure:
[illegible]

Traceability:
[illegible]

Reference thermometer calibration:
1. Standard temperature bath
[illegible]
2. Digital temperature indicator
[illegible]

Uncertainty of Measurement:
[illegible]

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH

NOTED: The certificate is valid only to the item calibrated on date and place of calibration.

TABULATION OF RESULTS:
The table on next page give the measured values

Calibrated by:
[illegible]

Approved signatory:
[illegible]

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JIRANATEE ASSOCIATES CO.,LTD.

Continuation of Certificate of Calibration Number CDT-170-67

Result of Calibration: [✓] Without Adjustment [ ] With Adjustment

Calibration Range: 20 °C to 60 °C

Function:

Table 3: This equipment was connected with temperature sensor Model: HMP60/S/N:W2920791.
Dimension: Diameter 12 mm. Length 80 mm.

Immersion Depth (mm)	Standard Reading (°C)	UUC Reading (°C)	Error (°C)	Uncertainty (°C)
80	20.051	19.5	-0.7	0.050
50	25.054	24.9	0.2	0.035
60	30.057	29.8	0.3	0.040
65	35.078	34.6	0.5	0.030
70	40.075	39.9	0.2	0.035

Note *: UUC Under Calibration

End of Certificate of Calibration

JIRANATEE ASSOCIATES CO.,LTD.

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Relative humidity and Air Temperature measurement laboratory
Calibration services department

CERTIFICATE OF CALIBRATION

Certificate No. : CRT-039-67

MEASUREMENT ITEM	: Relative humidity with data logger
MANUFACTURER	: Novalynx
MODEL/TYPE	: Data Logger: 110-WS-250L-D Sensor: HMP60
SERIAL NUMBER	: Data Logger: A6067 Sensor: W2920791
ID NUMBER	: BKK_FS1441
CONDITION AS-RECEIVED	: New item
CUSTOMER	: ALS laboratory group (Thailand) Co., Ltd. 104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand
RECEIVED DATE	: 12 Sep 2024
MEASUREMENT DATE	: 18 Sep 2024
ISSUE DATE	: 01 Oct 2024

Calibration procedure:
[illegible]

Traceability:
[illegible]

Uncertainty of Measurement:
[illegible]

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH

NOTED: The certificate is valid only to the item calibrated on date and place of calibration.

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibrated by:
[illegible]

Approved signatory:
Mr. [illegible]
[illegible]

THIS CERTIFICATE REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

JIRANATEE ASSOCIATES CO.,LTD.

Continuation of Certificate of Calibration Number: CRT-039-67

Measurement Results:

The results of calibration and associated measurement uncertainty are presented in the table below.

Result of Calibration: [✓] Without Adjustment [ ] With Adjustment

Table 3: The results of calibration of relative humidity at 25 °C are presented in table below.
Calibration Range: 20.0 RH to 80.0 RH

Air Temperature (°C)	Standard Reading (%RH)	UUC Reading (%RH)	Error (%RH)	Uncertainty (%RH)
20.02	49.96	51.[illegible]	1.0	0.82
30.02	60.45	59.[illegible]	-0.5	1.[illegible]
39.82	70.50	76.[illegible]	[illegible]	1.[illegible]

Note: UUC = Under Calibration

End of Certificate of Calibration

JIRANATEE ASSOCIATES CO.,LTD.

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Pressure measurement laboratory
Calibration services department.

NSC - TISI - TIS 17025
CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No. : CPS-017-67

MEASUREMENT ITEM	: Digital barometer
MANUFACTURER	: [illegible]
MODEL/TYPE	: Sensor: EL-WS-250P Data logger: EL-WS-250L-D
SERIAL NUMBER	: Sensor: BK-A6067 Data logger: A6067
ID NUMBER	: BKK_FS1441
CONDITION AS-RECEIVED	: New item
CUSTOMER	: ALS laboratory group (Thailand) Co., Ltd. 104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand
RECEIVED DATE	: 12 Sep 2024
MEASUREMENT DATE	: 26 Sep 2024
ISSUE DATE	: 01 Oct 2024

Calibration procedure:
[illegible]

Traceability:
[illegible]

Uncertainty of Measurement:
[illegible]

CONDITION OF THIS RESULT OF CALIBRATION:
[illegible]

Instruments	Model	Serial No.	Certificate No.	Due Date
Absolute Pressure Transducer	CPG2500	A1013269	[illegible]	27 Dec 2024

1. Calibration effect for environmental conditions: [illegible]
2. The UUC was installed in vertical orientation with reference standard [illegible] the reference [illegible]
3. [illegible]
4. Condition: [✓] Normal [ ] Abnormal
   [illegible] 9.82 %
   [illegible] 755.1 hPa
   [illegible] 27.11 °C
   [illegible] Temperature
5. [illegible] Traceable to the [illegible] Standard [illegible] Calibrated Value

Calibrated by:
Mr. [illegible]
[illegible]

Approved signatory:
Mr. [illegible]
[illegible]

THIS CERTIFICATE REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

JIRANATEE ASSOCIATES CO., LTD.
Jiranatee Associates Co., Ltd.
G/2/F 15, 6/F3, 3b
Soi Ratchaprarop 7, Ratchaprarop, Pathumwan,
Bangkok 10400 (Thailand)
Tel: +6289 666 2
Mobile: +6665579459
E-mail: jnac.calibration@jiranatee.com
Website: www.jiranatee.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Pressure measurement laboratory
Calibration services department

ilac-MRA
NSC - TISI - TIS 17025
CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No: CVR-017-67

MEASUREMENT RESULTS : ☐ Without adjustment ☑ With adjustment

CALIBRATION IN THE RANGE OF : 850 mbar to 1,050 mbar

The results of calibration and associated measurement uncertainties are reported in the table below:

STD [mbar]	UUC* [mbar]	Error [mbar]	Uncertainty (k=2) [mbar]
950.03	950.0	0.2	0.17
970.04	970.5	-0.5	0.17
990.05	990.4	0.6	0.17
1010.03	1010.0	0.0	0.17
1030.03	1029.9	0.1	0.17
1049.07	1049.7	-0.3	0.17

Note: UUC* Unit Under Calibration
Uncertainty the result in report high digits should be multiply by 100

"End of certificate"

jiranatee Associates Co., Ltd.

J NAC
JIRANATEE ASSOCIATES CO., LTD.
Jiranatee Associates Co., Ltd.
G/2/F 15, 6/F3, 3b
Soi Ratchaprarop 7, Ratchaprarop, Pathumwan,
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Tel: +6289 666 2
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Website: www.jiranatee.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Air speed measurement laboratory
Calibration services department

ilac-MRA
NSC – TISI – TIS 17025
CALIBRATION 0367

Certificate Number
CWS-014-67

CERTIFICATE OF CALIBRATION

MEASUREMENT ITEM : Cup anemometer
MANUFACTURER : Novalynx
MODEL/TYPE : Sensor: WS-02F
Data logger: 110-WS-250L-D
SERIAL NUMBER : Sensor: WS0-A5908
Data logger: A5908
ID NUMBER : BKK_FS1213
CONDITION AS-RECEIVED : Used item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand.

RECEIVED DATE : 17 May 2024
MEASUREMENT DATE : 21 May 2024
ISSUE DATE : 21 May 2024

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	23.0 ± 5.0	°C
Relative Humidity	55.0 ± 15.0	%RH
Atmospheric Pressure	1010 ± 10	hPa

PLACE OF CALIBRATION : Effel-type wind tunnel of Jiranatee Associates Co., Ltd

CALIBRATION CONDITIONS

Wind tunnel cross-section area[1]	900	cm²	
Wind direction frontal area[2]	100	cm²	
Diameter of mounting pipe[3]	-	mm	
Blockage ratio of test object[4]	0.111	[-]	

Preconditioning : 24 hours at ambient conditions
Measurement Condition : The average values during measurement are (24.2) °C, (42.0) %RH and (1006.4) hPa

TABULATION OF RESULTS:
The table on next page give the measured values

Calibrated by:
(Mr. Sonnet Yingchad)
(Mr. Chitsanon Lertsarojchai)

Approved signatory:
Mr. Panya Boonkanon
Calibration Department Manager

21/5/24

Remark:
[1] Nozzle cross-section area of the wind tunnel
[2] Projected cross-section area of the tested object include mounting pipe
[3] Diameter of mounting pipe
[4] Ratio [2]/[1]

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Certificate Number
CWS-014-67

MEASUREMENT RESULTS [1]

The Cup anemometer, Unit Under Calibration (UUC) was exercise at 10 m/s for 5 minutes prior to calibration being performed. The standard air velocity 0.5 m/s to 5 m/s was calculated by a standard air velocity transducer which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section, and the standard air velocity 5 m/s to 30 m/s was calculated by a pitot tube with precision differential pressure meter which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section. UUC was mounted on a round vertical tube of the beam plate at center of test section. The calibration was carried out under both rising and falling air velocity in the range of 1 m/s to 30 m/s at calibration interval of 1 m/s. The results of calibration and associated measurement uncertainties are reported in the table below:

v_{std}[2] (m/s)	Temp. wind tunnel (°C)	Temp. room (°C)	v_{uuc}[3] (m/s)	Error (m/s)	U (k=2) (m/s)
1.016	24.10	24.20	0.7	-0.3	0.31
2.017	24.30	24.20	1.7	-0.3	0.31
3.018	24.30	24.20	2.8	-0.2	0.31
4.042	24.20	24.20	3.7	-0.3	0.31
4.96	24.20	24.20	4.8	-0.2	0.31
5.99	24.23	24.20	5.9	-0.1	0.31
7.02	24.24	24.20	7.0	0.0	0.31
7.98	24.14	24.20	8.0	0.0	0.31
8.98	24.34	24.20	8.9	0.0	0.31
9.99	24.00	24.20	9.9	-0.1	0.31
11.07	24.48	24.20	11.1	0.0	0.31
12.00	23.97	24.20	12.1	0.1	0.31
13.00	24.48	24.20	13.2	0.1	0.31
14.00	24.06	24.20	14.0	0.0	0.31
15.01	24.34	24.20	15.1	0.1	0.31
16.00	24.16	24.20	16.1	0.0	0.31

Remark:
[1] Calibration results only apply for the tested circumstances and environmental conditions during which calibration took place
[2] Velocity of standard
[3] Velocity of Unit Under Calibration

PHOTO OF CALIBRATION SET-UP

Photo shows one of the Cup anemometer calibration in the wind tunnel of Jiranatee Associates Co., Ltd. The Cup anemometer shown may differ from the calibrated one. Remark: The proportion of this photo can be distorted due to lensing geometry

"End of Certificate of Calibration"

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CALIBRATION 0367

Wind direction measurement laboratory
Calibration services department

ilac-MRA
NSC – TISI – TIS 17025
CALIBRATION 0367

Certificate Number
CWD-014-67

CERTIFICATE OF CALIBRATION

MEASUREMENT ITEM : Wind Direction Sensor
MANUFACTURER : Novalynx
MODEL/TYPE : Sensor: WS-02F
Data logger: 110-WS-250L-D
SERIAL NUMBER : Sensor: WS0-A5908
Data logger: A5908
ID NUMBER : BKK_FS1213
CONDITION AS-RECEIVED : Used item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand.

RECEIVED DATE : 17 May 2024
MEASUREMENT DATE : 21 May 2024
ISSUE DATE : 21 May 2024

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	23.0 ± 5.0	°C
Relative Humidity	55.0 ± 15.0	%RH
Atmospheric Pressure	1010 ± 10	hPa

PLACE OF CALIBRATION : Effel-type wind tunnel of Jiranatee Associates Co., Ltd

CALIBRATION CONDITION

Wind tunnel cross-section area[1]	900	cm²	
Wind direction frontal area[2]	120	cm²	
Diameter of mounting pipe[3]	-	mm	
Blockage ratio of test object[4]	0.133	[-]	

Preconditioning : 24 hours at ambient conditions
Measurement Condition : The average values during measurement are (23.7)°C, (49.8)%RH and (1005.7) hPa.

TABULATION OF RESULTS
The table on next page give the measured values

Calibrated by:
(Mr. Sonnet Yingchad)
(Mr. Chitsanon Lertsarojchai)

Approved signatory:
Mr. Panya Boonkanon
Calibration Department Manager

Remark:
[1] Nozzle cross-section area of the wind tunnel
[2] Projected cross-section area of the tested object include mounting pipe
[3] Diameter of mounting pipe
[4] Ratio [2]/[1]

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Certificate Number
CWD-014-67

MEASUREMENT RESULTS [1]

The wind direction sensor was calibrated against standard rotary encoder by comparison method. During calibration, the measurements was carried out at 45° intervals in clockwise and counter clockwise directions after offset adjustment has been made. The flow speed of wind tunnel (usually 5 m/s) is kept constant while the sensor is rotated around its vertical axis. The results of calibration & associated measurement uncertainties are reported in the table below.

Air speed	D'_{ref}	D'_{act}	Error	U (k=2)
m/s	Degree (°)	Degree (°)	Degree (°)	Degree (°)
	0.000	0	0	0.80
	45.000	45	0	0.80
	90.000	90	0	0.80
5.00	135.000	135	0	0.80
	180.000	181	1	0.80
	225.000	226	1	0.80
	270.000	271	1	0.80
	315.000	316	1	0.80

Remark:

[1] Calibration results only valid for the listed instruments and environmental conditions during which calibration took place

[2] Direction of standard

[3] Used in all Unit Under Calibration

End of Certificate of Calibration

Jiranatee Associates Co., Ltd.

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CALIBRATION 0367

Temperature measurement laboratory
Calibration services department

ilac-MRA
NSC – TISI – TIS 17025
CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No. : CDT-087-67

MEASUREMENT ITEM : Data Logger with Temperature sensor
MANUFACTURER : Novalynx
MODEL/TYPE : 110 WS-250c D
SERIAL NUMBER : A5908
ID NUMBER : BKK_FS1213
CONDITION AS-RECEIVED : Used item
CUSTOMER : ALS laboratory group (thailand) Co., Ltd
104 Phatthanakan 40, Phatthanakan Rd.,
Khwaeng Suan Luang, Khet Suan Luang,
Bangkok 10250 Thailand.

RECEIVED DATE : 17 May 2024
MEASUREMENT DATE : 21 May 2024
ISSUE DATE : 21 May 2024

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:
Temperature : 23.0 ± 3.0 °C
Relative Humidity : 55.0 ± 15.0 %RH

NOTED: The certificate is valid only to the item calibrated on date and place of calibration.

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibration procedure:
The temperature calibration was done by In House calibration method as WI-CL-001 according to comparison method with standard digital temperature indicator and standard temperature probe. The temperature scale use was based on ITS-90.

Traceability:
The measurement results are traceable to the international system of units (SI) through National Institute of Metrology Thailand (NIMT) Certificate number: TT-0047-24, Certificate number: EN-9201-23.

Reference Used During Calibration:
1. Standard Temperature Probe
Model: STS-500-A500, Serial No. M-0007-05, Due date: 28 Mar 2025
2. Digital Temperature Indicator
Model: DTI-1000-A MK II, Serial No.: 671407-00591 Due date: 14 Sep 2024

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM "Evaluation of measurement data – Guide to the expression of uncertainty in measurement".

Calibrated by:
☐ Mr. Sorawit Thachalad
☐ Miss Nitraporn Eertsomphet
☑ Miss Rungrampai Phoomnak

Approved signatory

Mr. Pannya Booncharoen
Calibration Department Manager

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Continuation of Certificate of Calibration Number CDT-087-67

Result of Calibration: ☑ Without Adjustment ☐ With Adjustment

Calibration Range: 20 °C to 40 °C

Function:

Table 3: This equipment was connected with temperature sensor Model: HMP60 S/N. U3041221.
Dimension: Diameter 12 mm. Length 80 mm.

Immersion Depth	Standard Reading	UUC Reading	Error	Uncertainty
(mm)	(°C)	(°C)	(°C)	(°C)
70	20.038	19.6	0.4	0.099
70	25.056	24.6	-0.5	0.099
70	30.042	29.7	-0.3	0.099
70	35.032	34.5	-0.5	0.099
70	40.021	39.4	-0.6	0.099

UUC*: Unit Under Calibration

End of Certificate of Calibration

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Accredited calibration laboratory
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CALIBRATION 0367

Relative Humidity and Air Temperature measurement laboratory
Calibration services department

CERTIFICATE OF CALIBRATION

Certificate No. : CRT-010-67

MEASUREMENT ITEM : Relative Humidity with data logger
MANUFACTURER : Novalynx
MODEL/TYPE : Data Logger: 110 WS-250c D
Sensor: HMP60
SERIAL NUMBER : Data Logger: A5908
Sensor: U3041221
ID NUMBER : BKK_FS1213
CONDITION AS-RECEIVED : Used item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd. Khwaeng Suan Luang
Khet Suan Luang, Bangkok 10250 Thailand.

RECEIVED DATE : 17 May 2024
MEASUREMENT DATE : 21 May 2024
ISSUE DATE : 21 May 2024

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:
Temperature : 23.0 ± 3.0 °C
Relative Humidity : 55.0 ± 15.0 %RH

NOTED: The certificate is valid only to the item calibrated on date and place of calibration.

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibration procedure:
The Relative Humidity and Air Temperature calibration was done by In House calibration method as WI-CL-008 and WI-CL-010 according to comparison method with standard Chilled Mirror Hygrometer with Temperature sensor and standard Humidity generator chamber.

Traceability:
The measurements are traceable to the international system of units (SI) through National Institute of Metrology Thailand (NIMT) Certificate number: TH-0179-23 and through Jiranatee Associates Co. Ltd. Certificate Number: 101-002-67.

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM "Evaluation of measurement data – Guide to the expression of uncertainty in measurement".

Calibrated by:
☐ Mr. Sorawit Thachalad
☐ Miss Nitraporn Eertsomphet
☑ Miss Rungrampai Phoomnak

Approved signatory

Mr. Pannya Booncharoen
Calibration Department Manager

THIS CERTIFICATE REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Continuation of Certificate of Calibration Number: CKF-010-67

Measurement Results:

[illegible]

Result of Calibration: [illegible] Without Adjustment [illegible] With Adjustment

Table 1: The results of calibration of [illegible] Cup anemometer [illegible]
Calibration Range: 20KPH to 80KPH

Air Temperature (°C)	Standard Reading (KPH)	UUC Reading (KPH)	Error (KPH)	Uncertainty (±KPH)
29.50	18.81	17.0	-0.8	0.47
29.64	51.51	47.0	-4.0	1.1
29.62	[illegible]	76.5	-5.5	1.7

REMARK: [illegible] Not Calibration

End of Certificate of Calibration

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CALIBRATION 0367

Air speed measurement laboratory
Calibration services department

ilac-MRA
NSC – TISI – TIS 17025
CALIBRATION 0367

Certificate Number
CWS-071-67

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM : Cup anemometer
MANUFACTURER : Novalynx
MODEL/TYPE : Sensor: WS-02FA
Data logger: 110-WS-250IL-D
SERIAL NUMBER : Sensor: WSD A5966
Data logger: A5966
ID NUMBER : BKK_FS1371
CONDITION AS-RECEIVED : Used item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand

RECEIVED DATE : 24 Dec 2024
MEASUREMENT DATE : 27 Dec 2024
ISSUE DATE : 27 Dec 2024

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH
Atmospheric Pressure	: 1010 ± 10	hPa

PLACE OF CALIBRATION : Eiffel type wind tunnel of Jiranatee Associates Co., Ltd.

CALIBRATION CONDITIONS

Wind tunnel cross-section area[1]	900	cm²
Wind direction frontal area[2]	100	cm²
Diameter of mounting pipe[3]	-	mm
Blockage ratio of test object[4]	0.111	(-)

Preconditioning : 24 hours at ambient conditions.
Measurement Condition : The average values during measurement are (24.6) °C, (50.6) %RH and (1015.0) hPa.

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibrated by:
1. Mr. Sirawit Chaiyakul
2. Miss Pitiporn Lertpoonchai

Approved signatory:
Ms. Tanya Bunchuen
Calibration Department Manager

REVIEW BY
APPROVED BY
NEXT CAL DATE: 27/06/26

Remark:
[1] Inside cross-section area of the wind tunnel
[2] Projected cross-section area of the tested object including mounting pipe
[3] Diameter of mounting pipe
[4] Ratio [2] to [1]

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Certificate Number
CWS-071-67

MEASUREMENT RESULTS[1]

The Cup anemometer, Unit Under Calibration (UUC) was exercise at 10 m/s for 5 minutes prior to calibration being performed. The standard air velocity 0.5 m/s to 5 m/s was calculated by a circular air velocity transducer which was installed 50 mm away from the blind nozzle and installed 40 mm away from top of the test section and the standard air velocity 5 m/s to 30 m/s was calculated by a pitot tube with precision differential pressure meter which was installed 50 mm away from wind tunnel outlet and installed 40 mm away from top of the test section. UUC was mounted on a mounting of lateral shadow plate at center of test section. The calibration was carried out under both rising and falling air velocity in the range of 1 m/s to 30 m/s at calibration points of 1 m/s. The results of calibration and uncertainty measurement are reported in the table below.

V_{std}[2] (m/s)	Temp. wind tunnel (°C)	Temp. room (°C)	V_{uuc}[3] (m/s)	Error (m/s)	U (k=2) (m/s)
1.002	24.60	24.55	0.9	-0.1	0.31
2.192	24.66	24.55	2.0	-0.2	0.31
3.062	24.60	24.55	2.9	-0.1	0.31
4.226	24.44	24.55	4.0	-0.2	0.31
4.96	24.40	24.55	5.0	0.0	0.31
5.95	24.30	24.55	5.9	0.0	0.31
7.00	24.28	24.55	7.1	0.1	0.31
7.94	24.50	24.55	8.1	0.2	0.31
8.96	24.14	24.55	9.1	0.1	0.31
9.95	24.00	24.55	9.9	0.0	0.31
11.02	24.34	24.55	11.2	0.2	0.32
12.03	24.44	24.55	12.3	0.3	0.33
12.98	24.50	24.55	13.3	0.3	0.34
13.97	24.48	24.55	14.3	0.3	0.36
14.99	24.66	24.55	15.3	0.3	0.33
15.97	24.08	24.55	16.3	0.3	0.31

Remark:
[1] Calibration results only pertain to the instrument/sensor and environmental condition during which calibration took place
[2] Velocity of standard
[3] Velocity of test object under calibration

PHOTO OF CALIBRATION SET-UP

Calibration set up of Cup anemometer Unit Under Calibration (UUC) Wind tunnel of Jiranatee Associates Co., Ltd. The UUC was mounted on a mounting of lateral shadow plate at center of test section. Remark: The propeller of the UUC not covered the cup to hanging accuracy.

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Calibration services department

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CALIBRATION 0367

Certificate Number
CWD-071-67

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM : Wind Direction Sensor
MANUFACTURER : Novalynx
MODEL/TYPE : Sensor: WS-02FA
Data logger: 110-WS-250IL-D
SERIAL NUMBER : Sensor: WSD A5966
Data logger: A5966
ID NUMBER : BKK_FS1371
CONDITION AS-RECEIVED : Used item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand

RECEIVED DATE : 24 Dec 2024
MEASUREMENT DATE : 27 Dec 2024
ISSUE DATE : 27 Dec 2024

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH
Atmospheric Pressure	: 1010 ± 10	hPa

PLACE OF CALIBRATION : Eiffel type wind tunnel of Jiranatee Associates Co., Ltd.

CALIBRATION CONDITION

Wind tunnel cross-section area[1]	900	cm²
Wind direction frontal area[2]	129	cm²
Diameter of mounting pipe[3]	-	mm
Blockage ratio of test object[4]	0.143	(-)

Preconditioning : 24 hours at ambient conditions.
Measurement Condition : The average values during measurement are (24.4) °C, (58.1) %RH and (1011.1) hPa.

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibrated by:
1. Mr. Sorawit Boonkhai
2. Miss Pitiporn Lertpoonchai

Approved signatory:
Ms. Tanya Bunchuen
Calibration Department Manager

Remark:
[1] Inside cross-section area of the wind tunnel
[2] Projected cross-section area of the tested object include mounting pipe
[3] Diameter of mounting pipe
[4] Ratio [2] to [1]

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Certificate Number
CWD 071-67

MEASUREMENT RESULTS [1]

The wind direction meter was calibrated against standard rotary encoder by comparison method. During calibration, the measurement was carried out at 45 intervals in clockwise and counterclockwise directions after offset adjustment has been made. The fan speed of wind tunnel (nominally 5 m/s) is kept constant while the vane is rotated around the axis of the shaft. The results of calibration and measurement uncertainties are reported in the table below.

Air speed m/s	D'_{std} Degree (°)	D'_{WD} Degree (°)	Error Degree (°)	U (k=2) Degree (°)
5.00	0.000	0	0	0.80
	45.000	41	-4	0.80
	90.000	87	-3	0.80
	135.000	131	-4	0.80
	180.000	182	2	0.80
	225.000	228	3	0.80
	270.000	274	4	0.80
	315.000	319	4	0.80

Remark:

[1] Calibration results only occur for the tested circumstances and environmental conditions during which calibration took place

[2] Direction of Standard

[3] Direction of Unit Under Calibration

End of Certificate of Calibration

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CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No. : CDT-223-67

MEASUREMENT ITEM : Data Logger with Temperature sensor
MANUFACTURER : Novalynx
MODEL/TYPE : 110-WS-25DL-D
SERIAL NUMBER : A5966
ID NUMBER : BKK_FS1371
CONDITION AS RECEIVED : Used Item
CUSTOMER : ALS laboratory group (thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd.,
Khwaeng Suan Luang, Khet Suan Luang,
Bangkok 10250 Thailand.

RECEIVED DATE : 24 Dec 2024
MEASUREMENT DATE : 27 Dec 2024
ISSUE DATE : 27 Dec 2024

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH

NOTED: *The certificate is valid only to the item calibrated on date and place of calibration.*

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibration procedure:
The temperature calibration was done by in house calibration method as WI-CD according to comparison method with standard digital temperature probe. The temperature sensor was simulated by RTS 90.

Traceability:
The measurement results are traceable to the international system of units (SI) through National Institute of Metrology Thailand (NIMT) certificate number: 11-0012-24, Certificate number: ED-0113-20.

Reference Used During Calibration:
1. Standard Temperature Probe
Model: STS-100-A500, Serial No.: 687692-00
Due date: 26 Mar 2025
2. Digital Temperature Indicator
Model: DTI-1000-A-MC-R, Serial No.: 671692-0591 Due date: 21 Oct 2025

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM 'Evaluation of measurement data – Guide to the expression of uncertainty in measurement'.

Calibrated by:
(Mr. Sawit Thathaib)
Technical Manager

J NAC
JIRANATEE ASSOCIATES CO.,LTD.

Approved signatory:
(Mr. Teerayut Bunchorntavit)
Technical Department Manager

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Continuation of Certificate of Calibration Number CDT-223-67

Result of Calibration: ☑ Without Adjustment ☐ With Adjustment

Calibration Range: 20 °C to 60 °C

Location:
Table 1: this equipment was connected with Jensen Alure-sense Model: HMP60 S/N: V1920207
Dimension: Diameter 12 mm. Length 80 mm

Immersion Depth (mm)	Standard Reading (°C)	UUC Reading (°C)	Error (°C)	Uncertainty (°C)
80	20.072	19.9	0.2	0.089
80	25.063	25.0	0.1	0.16
80	30.050	29.9	0.1	0.16
80	35.047	34.8	0.2	0.099
80	40.030	39.9	0.1	0.09

[1] UUC = Unit Under Calibration
Remark: The reported uncertainty of measurement is 0.2°C, based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%

End of Certificate of Calibration

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Jiranatee Associates Co.,Ltd.
44/14-15, 44/16-20
Soi Phatthanakan 40, Phatthanakan Road, Suan Luang District,
Bangkok 10250 (Thailand)
Tel. 0 2722 9111-12
Mobile: 0 9648 9991-53
E-mail: jnac-calibration@jiranatee.com
Website: www.jiranatee.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Relative humidity and Air Temperature measurement laboratory
Calibration services department

CERTIFICATE OF CALIBRATION

Certificate No. : CRT-064-67

MEASUREMENT ITEM : Relative humidity with data logger
MANUFACTURER : Novalynx
MODEL/TYPE : Data Logger: 110-WS-25DL-D
Sensor: HMP60
SERIAL NUMBER : Data Logger: A5966
Sensor: V1920207
ID NUMBER : BKK_FS1371
CONDITION AS RECEIVED : Used Item
CUSTOMER : ALS Laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang,
Khet Suan Luang, Bangkok 10250 Thailand.

RECEIVED DATE : 26 Dec 2024
MEASUREMENT DATE : 27 Dec 2024
ISSUE DATE : 27 Dec 2024

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH

NOTED: *The certificate is valid only to the item calibrated on date and place of calibration.*

TABULATION OF RESULTS:
The table on next page give the measured values

Calibration procedure:
The relative humidity and the temperature calibration was done by in house calibration method as WI-CD and WI-CD according to comparison method with Standard Digital Hygrometer with temperature sensor and standard thermometer probe.

Traceability:
The measurements are traceable to the international system of units (SI) through National Institute of Metrology Thailand (NIMT) certificate number: TH-0001-21 and Hygrometer Accuracy Co., Ltd certificate number: CHT 001-67.

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM 'Evaluation of measurement data – Guide to the expression of uncertainty in measurement'.

Calibrated by:
(Mr. Sawit Thathaib)
Technical Manager

J NAC
JIRANATEE ASSOCIATES CO.,LTD.

Approved signatory:
(Mr. Teerayut Bunchorntavit)
Technical Department Manager

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

JIRANATEE ASSOCIATES CO.,LTD.

Continuation of Certificate of Calibration Number: CRT-064-67

Measurement Results:

The results of calibration and associated measurement uncertainties are reported in the table below:

Result of Calibration: ☑ Without Adjustment ☐ With Adjustment

Table 3: The results of calibration of relative humidity sensor at 30 °C are reported in the table below:
Calibration Range: 20.00 to 80.00 %

Air Temperature (°C)	Standard Reading (%RH)	UUC Reading (%RH)	Error (%RH)	Uncertainty (%RH)
30.00	19.65	18.[illegible]	[illegible]	0.70
50.00	49.66	48.[illegible]	[illegible]	1.3
80.00	79.50	78.[illegible]	[illegible]	2.1

UUC = Unit Under Calibration

*** End of Certificate of Calibration ***

JIRANATEE ASSOCIATES CO.,LTD.

Jiranatee Associates Co.,Ltd.

JIRANATEE ASSOCIATES CO.,LTD.

Jiranatee Associates Co.,Ltd.
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Petchkasem 120, Ko Wat Sorn, Sampheng
Bangkok 10600 (Thailand)
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Mobile 0628399651
E-mail: jnac.calibration@jiranatee.com
Website: www.jiranatee.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Pressure measurement laboratory
Calibration services department.

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NSC - TISI - TIS 17025
CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No. : CPR-009-67

MEASUREMENT ITEM	: Digital barometer
MANUFACTURER	: Novalynx
MODEL/TYPE	: Sensor: 110-WS-2500 Data logger: 110-WS-2500-D
SERIAL NUMBER	: Sensor: BP-A5966 Data logger: A5966
ID NUMBER	: RKK_FS1371
CONDITION AS-RECEIVED	: Used item
CUSTOMER	: AIS Laboratory group (Thailand) Co., Ltd 104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand.
RECEIVED DATE	: 24 Dec 2024
MEASUREMENT DATE	: 27 Dec 2024
ISSUE DATE	: 27 Dec 2024

Calibration procedure:
The Digital barometer was calibrated against Digital pressure calibrator. The JJN-CP-003 was used as a calibration guideline.

Traceability:
The measurement results are traceable to the International system of units (SI) through the NMIT (National Metrology Institute of Thailand) via Certificate number: MP-6009-24

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM "Evaluation of measurement data - Guide to the expression of uncertainty in measurement"

CONDITION OF THIS RESULT OF CALIBRATION:

1. Reference Standard Instrument:

Instrument	Model	Serial No.	Certificate No.	Due Date
Absolute Pressure Transducer	CPG2500	6100128P	MP-6009-24	27 Dec 2024

2. Calibration effect for calibration sequence C
3. The UUC* was installed in vertical orientation above reference standard instrument and the UUC* was used as the reference in
4. Calibration condition:
5. Condition: ☑ Normal ☐ Abnormal
   Pressure transducing medium: Air
   p_1 (70 °C, 1 bar): 1.19 kg/m³
   H_{r1}: (52.032.0) %
   T_{a1}: (23.0±0.5) °C
   P_{a1}: (1008.1±1.0) mbar
6. The certificate is valid only for the item calibrated on date and place of calibration.

Calibrated by:
Mr. Sorawit Tipsakhai
Analyst Approved signatory

JIRANATEE ASSOCIATES CO.,LTD.

Approved signatory:
Mr. Pariya Boonphuthong
Calibration Department Manager

THIS CERTIFICATE REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

JIRANATEE ASSOCIATES CO.,LTD.

Jiranatee Associates Co.,Ltd.
Unit 15, 6/105-6
Petchkasem 120, Ko Wat Sorn, Sampheng
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Tel. 0626061612
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E-mail: jnac.calibration@jiranatee.com
Website: www.jiranatee.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Pressure measurement laboratory
Calibration services department.

ilac-MRA

NSC - TISI - TIS 17025
CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No. : CPR-035-67

MEASUREMENT RESULTS : ☐ Without adjustment ☑ With adjustment

CALIBRATION IN THE RANGE OF : 950 mbar to 1050 mbar

The results of calibration and associated measurement uncertainties are reported in the table below:

SID (mbar)	UUC* (mbar)	Error (mbar)	Uncertainty (k=2) (mbar)
950.00	951.1	1.1	0.[illegible]
970.00	970.7	0.6	0.36
990.00	990.2	0.2	0.36
1010.00	1010.0	0.0	0.37
1029.99	1029.5	-0.5	0.37
1049.98	1049.0	-0.9	0.37

Note: UUC* Unit Under Calibration
: To convert the result in report unit to Pa should be multiply by 100

*** End of certificate ***

JIRANATEE ASSOCIATES CO.,LTD.

Jiranatee Associates Co.,Ltd.

JIRANATEE ASSOCIATES CO.,LTD.

Jiranatee Associates Co.,Ltd.
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Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Pressure measurement laboratory
Calibration services department.

ilac-MRA

NSC - TISI - TIS 17025
CALIBRATION 0367

Certificate Number
CWS-019-67

CERTIFICATE OF CALIBRATION

MEASUREMENT ITEM	: Cup anemometer
MANUFACTURER	: Novalynx
MODEL/TYPE	: Sensor: WS-02P Data logger: 110-WS-2500-D
SERIAL NUMBER	: Sensor: WSD-A5907 Data logger: A5907
ID NUMBER	: RKK_FS1212
CONDITION AS-RECEIVED	: Used item
CUSTOMER	: AIS laboratory group (Thailand) Co., Ltd 104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand
RECEIVED DATE	: 23 May 2024
MEASUREMENT DATE	: 23 May 2024
ISSUE DATE	: 23 May 2024

Calibration procedure:
The Cup anemometer was calibrated against Standard air velocity transducer model: 8455-32 and pitot tube with inclined differential pressure meter model: DPM5000 in air flow test section of Effective wind tunnel with 500 cm² cross test section area. The JJN-CP-007 based on IEC 61400-12-1, Wind energy generation systems – Part 12-1: Power performance measurements of electricity producing wind turbines. Mode 2017 was used as a calibration guideline.

Traceability:
This certificate provides a traceability of the measurement to recognized the SI units Handbook, and to realization of the International system of units (SI) through the NMIT (National Metrology Institute of Thailand) via Certificate Number: MW-0007-24 and MW-0055-23

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM "Evaluation of measurement data - Guide to the expression of uncertainty in measurement"

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follows:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH
Atmospheric Pressure	: 1010.1 ± 1.0	hPa

PLACE OF CALIBRATION	: Effect-type wind tunnel of Jiranatee Associates Co.,Ltd		
CALIBRATION CONDITIONS	: Wind tunnel cross-section area[1]	500	cm²
	Wind direction frontal area[2]	100	cm²
	Diameter of mounting pipe[3]	[illegible]	mm
	Blockage ratio of test object[4]	0.1[illegible]	[illegible]
Preconditioning	: 24 hours at ambient conditions		
Measurement Condition	: The average values during measurement are 23.4 °C, 143.0 %RH and 1002.5 hPa		

TABULATION OF RESULTS:
The table on next page gives the measured values.

Calibrated by
Mr. Sorawit Tipsakhai
Mr. Bhuwanon Lertkongkhin

JIRANATEE ASSOCIATES CO.,LTD.

Approved signatory
Mr. Pariya Boonphuthong
Calibration Department Manager

Remark:
[1] Nominal cross section area of the wind tunnel
[2] Projected frontal section area of the tested object include mounting pipe
[3] Diameter of mounting pipe
[4] Ratio "[illegible]"

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Certificate Number
CWS-013-67

MEASUREMENT RESULTS [1]

The Cup Anemometer, Unit Under Calibration (UUC) was exercise at 10 m/s for 5 minutes prior to calibration being performed. The standard air velocity 0.5 m/s to 5 m/s was tabulated by a standard air velocity transducer which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section and the standard air velocity 5 m/s to 30 m/s was calculated by a pitot tube with pressure differential pressure meter which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section. UUC was mounted on a round vertical tube of the lower plate at center of test section. The calibration was carried out under both rising and falling air velocity in the range of 1 m/s to 16 m/s at calibration interval of 1 m/s. The results of calibration and associated measurement uncertainties are reported in the table below.

v_{ref} [2] (m/s)	Temp. wind tunnel (°C)	Temp. room (°C)	v_{UUC} [3] (m/s)	Error (m/s)	U (k=2) (m/s)
0.993	23.50	23.50	0.7	-0.3	0.31
2.023	23.54	23.50	1.8	-0.2	0.31
3.028	23.63	23.50	2.9	-0.1	0.31
4.119	23.64	23.50	3.9	-0.2	0.31
4.96	23.56	23.50	5.0	0.0	0.31
5.98	23.72	23.50	6.1	0.1	0.31
7.03	23.54	23.50	7.1	0.1	0.31
7.99	23.56	23.50	8.1	0.1	0.56
8.99	23.56	23.50	9.2	0.2	0.31
10.01	23.46	23.50	10.3	0.3	0.31
11.05	23.72	23.50	11.3	0.3	0.31
12.01	23.42	23.50	12.4	0.4	0.31
13.06	23.70	23.50	13.4	0.3	0.31
14.01	23.40	23.50	14.4	0.4	0.31
14.99	23.62	23.50	15.4	0.4	0.31
16.06	23.52	23.50	16.5	0.4	0.31

Remark:

[1] Calibration results only valid for the tested circumstances and environmental conditions during which calibration took place

[2] Value of standard

[3] Value of Unit Under Calibration

PHOTO OF CALIBRATION SET-UP

Calibration set-up of the Cup Anemometer calibration in the wind tunnel of Jiranatee Associates Co., Ltd. The Cup Anemometer flow was refer from the calibrated one. Remark: The proportion of the set-up is not true to scale due to imaging geometry.

End of Certificate of Calibration

J NAC (THAILAND) ASSOCIATES CO., LTD.

Jiranatee Associates Co., Ltd.
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Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Wind direction measurement laboratory
Calibration services department

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Certificate Number
CWD-013-67

CERTIFICATE OF CALIBRATION

MEASUREMENT ITEM	: Wind Direction Sensor
MANUFACTURER	: Novalynx
MODEL/TYPE	: Sensor: WS-02F Data logger: 110-WS-250L-D
SERIAL NUMBER	: Sensor: WSD/A5907 Data logger: A5907
ID NUMBER	: BKK_FS1212
CONDITION AS-RECEIVED	: Used item
CUSTOMER	: ALS laboratory group (Thailand) Co., Ltd. 104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand
RECEIVED DATE	: 17 May 2024
MEASUREMENT DATE	: 21 May 2024
ISSUE DATE	: 21 May 2024

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH
Atmospheric Pressure	: 1010 ± 10	hPa

PLACE OF CALIBRATION	: Eiffel-type wind tunnel of Jiranatee Associates Co., Ltd.		
CALIBRATION CONDITION	: Wind tunnel cross-section area[1]	900	cm^2
	Wind direction frontal area[2]	120	cm^2
	Diameter of mounting pipe[3]		mm
	Blockage ratio of test object[4]	0.143	[-]

Preconditioning : 24 hours at ambient conditions
Measurement Condition : The average values during measurement are (23.6) °C, (42.1) %RH and (1000.9) hPa

TABULATION OF RESULTS:
The table on next page give the measured values

Calibrated by:
☐ Mr. Sorawit Thachalad
☐ Miss Jutraporn Lertsomkul
☐ Miss Ruangrongpat Phoomnil

Approved signatory

Mr. Pornpol Boonchoksan
Calibration Department Manager

Remark:

[1] Active cross-section area of the wind tunnel
[2] Projected cross-section area of the test object outside mounting pipe
[3] Diameter of mounting pipe
[4] Ratio [2]/[1]

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Certificate Number
CWD-013-67

MEASUREMENT RESULTS [1]

The wind direction sensor was calibrated against standard rotary encoder by condensation method. During calibration, the measurement was carried out at 45° intervals in clockwise and counterclockwise directions after offset adjustment has been made. The flow speed of wind tunnel (using 5 m/s) was made constant while the sensor is rotated around its vertical axis. The results of calibration and associated measurement uncertainties are reported in the table below.

Air speed m/s	D'_{ref} Degree (°)	D'_{UUC} Degree (°)	Error Degree (°)	U (k=2) Degree (°)
5.00	0.000	0	0	0.80
	45.000	44	-2	0.80
	90.000	88	-2	0.80
	135.000	132	-3	0.80
	180.000	177	-3	0.80
	225.000	223	-2	0.80
	270.000	271	1	0.80
	315.000	316	1	0.80

Remark:

[1] Calibration results only valid for the tested circumstances and environmental conditions during which calibration took place

[2] Direction of wind

[3] Unit Under Calibration

End of Certificate of Calibration

Jiranatee Associates Co., Ltd.

J NAC (THAILAND) ASSOCIATES CO., LTD.

Jiranatee Associates Co., Ltd.
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Accredited calibration laboratory
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NSC-TISI-TIS 17025
CALIBRATION 0367

Temperature measurement laboratory
Calibration services department

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CERTIFICATE OF CALIBRATION

Certificate No. : CDT-086-67

MEASUREMENT ITEM	: Data Logger with Temperature sensor
MANUFACTURER	: Novalynx
MODEL/TYPE	: 110-WS-250L-D
SERIAL NUMBER	: A5907
ID NUMBER	: BKK_FS1212
CONDITION AS-RECEIVED	: Used item
CUSTOMER	: ALS laboratory group (thailand) Co., Ltd. 104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand.
RECEIVED DATE	: 17 May 2024
MEASUREMENT DATE	: 21 May 2024
ISSUE DATE	: 21 May 2024

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH

NOTED: *The certificate is valid only to the item calibrated on date and place of calibration*

TABULATION OF RESULTS:
The table on next page give the measured values

Calibration procedure:
The temperature calibration was done by In-House calibration method as WI-CL-001 according to comparison method with standard digital temperature indicator and standard temperature probe. The temperature scale used was based on ITS-90.

Traceability:
The measurement results are traceable to the international system of units (SI) through National Institute of Metrology Thailand (NIMT). Certificate number: TT-0047-24, Certificate number: ER 0301-23

Reference Used During Calibration:
1. Standard Temperature Probe:
Model: STS-100 ASCO, Serial No.: 687661-09, Due date: 26 Mar 2025
2. Digital Temperature Indicator
Model: DTI-1000-A Kit II, Serial No.: 671107-00597 Due date: 14 Sep 2024

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2. Which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the EURA 'Evaluation of measurement data – Guide to the expression of uncertainty in measurement'

Calibrated by:
☐ Mr. Sorawit Thachalad
☐ Miss Jutraporn Lertsomkul
☐ Miss Ruangrongpat Phoomnil

Approved signatory

Mr. Pornpol Boonchoksan
Calibration Department Manager

THIS CERTIFICATE MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

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JIRANATEE ASSOCIATES CO.,LTD.

Continuation of Certificate of Calibration Number CDT-086-67

Result of Calibration: ☑ Without Adjustment ☐ With Adjustment

Calibration Range: 20 °C to 40 °C

Function:

Table 3: This equipment was connected with temperature sensor Model: HMP60 S/N: U3641224.
Dimension: Diameter 12 mm. length 80 mm.

Immersion Depth (mm)	Standard Reading (°C)	UUC Reading (°C)	Error (°C)	Uncertainty (°C)
70	20.080	19.8	0.2	0.059
70	25.060	24.6	-0.5	0.059
70	30.042	29.7	-0.3	0.059
70	35.031	34.5	-0.5	0.059
70	40.021	39.5	-0.5	0.059

UUC*: Unit Under Calibration

End of Certificate of Calibration

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JIRANATEE ASSOCIATES CO.,LTD.

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI TIS 17025
CALIBRATION 0367

Relative humidity and Air Temperature measurement laboratory
Calibration services department

CERTIFICATE OF CALIBRATION

Certificate No. : CRT-009-67

MEASUREMENT ITEM : Relative humidity with data logger
MANUFACTURER : Novalynx
MODEL/TYPE : Data logger: 110-WS-250L-D
Sensor: HMP60
SERIAL NUMBER : Data Logger: A5607
Sensor: U3641224
ID NUMBER : BRK_FS1212
CONDITION AS RECEIVED : Used item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd.
10/ Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand

RECEIVED DATE : 17 May 2024
MEASUREMENT DATE : 21 May 2024
ISSUE DATE : 23 May 2024

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:
Temperature : 23.0 ± 3.0 °C
Relative Humidity : 55.0 ± 15.0 %RH

NOTED: The certificate is valid only to the item calibrated on date and place of calibration.

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibration procedure:
The Relative humidity and Air Temperature calibration was done by In-House calibration method as WI CL-001 and WI CL-030 according to comparison method with Standard Chilled Mirror Equipment with Temperature sensor and Standard Humidity generator chamber.

Traceability:
The measurement are traceable to the international System of units (SI) through Thailand Institute of Metrology, Thailand (TIMET), Certificate number: TM-0070-23 and through Jiranatee Associates Co., Ltd. Certificate number CDT-001-67.

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2. With for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM "Evaluation of measurement data – Guide to the expression of uncertainty in measurement".

Calibrated by:
Mr. Sirawat Thanalad
Mr. Jittipanit Lertjunthod
Mrs. Thanyaporn Chaidee

JNAC
JIRANATEE ASSOCIATES CO.,LTD.

Approved signatory: Mr. Panya Eoachanan
Calibration Department Manager

THIS CERTIFICATE REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

JNAC
JIRANATEE ASSOCIATES CO.,LTD.

Continuation of Certificate of Calibration Number: CRT-009-67

Measurement Results:

The results of calibration and associated measurement uncertainties are reported in the table below.

Result of Calibration: ☑ Without Adjustment ☐ With Adjustment

Table 1: The results of calibration of relative humidity at 40 °C are reported in table below.
Calibration Range: 20%RH to 80%RH.

Air Temperature (°C)	Standard Reading (%RH)	UUC Reading (%RH)	Error (%RH)	Uncertainty (%RH)
39.50	59.93	58.1	1.8	0.52
39.45	54.02	46.1	3.0	1.1
39.43	42.06	37.7	4.4	1.2

UUC*: Unit Under Calibration

End of Certificate of Calibration

JNAC
JIRANATEE ASSOCIATES CO.,LTD.

JNAC
JIRANATEE ASSOCIATES CO.,LTD.

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E-mail: jnac.calibration@jiranatee.com
Web site: www.jiranatee.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI TIS 17025
CALIBRATION 0367

Air speed measurement laboratory
Calibration services department

NSC – TISI – TIS 17025
CALIBRATION 0367

Certificate Number
CWS-003.68

CERTIFICATE OF CALIBRATION

MEASUREMENT ITEM : Cup anemometer
MANUFACTURER : Novalynx
MODEL/TYPE : Sensor: WS 02F
Data logger: 110 WS-250L-D
SERIAL NUMBER : Sensor: WSO-A5447
Data logger: A5447
ID NUMBER : SGK_FS0039
CONDITION AS RECEIVED : Used item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd.
10/ Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand.

RECEIVED DATE : 10 Jan 2025
MEASUREMENT DATE : 14 Jan 2025
ISSUE DATE : 20 Jan 2025

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:
Temperature : 23.0 ± 3.0 °C
Relative Humidity : 55.0 ± 15.0 %RH
Atmospheric Pressure : 1010 ± 10 hPa

PLACE OF CALIBRATION : Eiffel-type wind tunnel of Jiranatee Associates Co., Ltd.

CALIBRATION CONDITIONS :
Wind tunnel cross-section area[1] : 900 cm²
Wind direction frontal area[2] : 100 cm²
Diameter of mounting pipe[3] : - mm
Blockage ratio of test object[4] : 0.111 [-]

Preconditioning : 24 hours at Ambient conditions
Measurement Condition : The average values during measurement are (24.4) °C, (59.8) %RH and (1012.7) hPa.

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibration procedure:
The Cup anemometer was calibrated against Standard air velocity transducer model: 8455B2 and pitot tube with a combination differential pressure meter model: DP8350 in a wind tunnel of Eiffel type wind tunnel with 900 cm² cross section area. The WI CL-002 based on IEC 61400-12-1, Wind energy generation systems – Part 12-1: Power performance measurements of electricity producing wind turbines, March 2011 was used as a calibration guideline.

Traceability:
The complete traceability of the measurements to represent the national standard and to validate of the International system of units (SI) through the NIMT (National Metrology Institute of Thailand) the Certificate number: MW 0097-24 and MW 0085-23.

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2. With for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM "Evaluation of measurement data – Guide to the expression of uncertainty in measurement".

Calibrated by:
Mr. Sirawat Thanalad
Mrs. Thanyaporn Chaidee

JNAC
JIRANATEE ASSOCIATES CO.,LTD.

Approved signatory: Mr. Panya Eoachanan
Calibration Department Manager

REVIEW BY
APPROVED BY
NEXT CAL DATE: 13/07/26

Remark:
[1] Nozzle cross section area of the wind tunnel
[2] Projected cross-section area of the tested object include mounting pipe
[3] Diameter of mounting pipe
[4] Ratio [1]/[2]

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Certificate Number
CWS-003-68

MEASUREMENT RESULTS [1]

[illegible] Pitot-tube Calibrator (PTC) was exercised 10 times for [illegible] performed. The standard air velocity 0.5 m/s [illegible] was installed in a standard air velocity [illegible] which was installed 20 mm away from [illegible] and installed 40 mm away from [illegible] the standard air velocity 5 m/s or 10 m/s was estimated by a pitot tube was position of [illegible] pressure pulse which was installed 50 mm away from [illegible] and [illegible] 40 mm away from top of the [illegible] PTC was [illegible] vertical side of the [illegible] [illegible] was [illegible] both using [illegible] [illegible]

V_{std} [2] (m/s)	Temp. wind tunnel (°C)	Temp. room (°C)	V_{cal} [3] (m/s)	Error (m/s)	U (k=2) (m/s)
0.996	24.22	24.40	0.9	0.1	0.31
2.217	24.46	24.40	2.0	-0.2	0.31
3.010	24.22	24.40	2.9	0.1	0.31
4.218	24.22	24.40	4.0	-0.2	0.31
4.94	24.30	24.40	4.9	0.0	0.31
5.95	24.22	24.40	6.0	0.1	0.31
7.02	24.36	24.40	7.1	0.1	0.31
7.96	24.22	24.40	8.0	0.0	0.31
9.03	24.38	24.40	9.2	0.2	0.31
10.01	24.30	24.40	10.2	0.2	0.31
11.12	24.40	24.40	11.2	0.1	0.31
11.99	24.16	24.40	12.2	0.2	0.31
13.02	24.20	24.40	13.2	0.2	0.31
14.00	24.36	24.40	14.2	0.2	0.31
15.00	24.20	24.40	15.2	0.2	0.31
15.98	24.48	24.40	16.3	0.3	0.31

Remark:
[1] Calibration results only valid for the tested circumstances under environmental conditions during which calibration took place
[2] Velocity of standard
[3] Velocity of Unit Under Calibration

PHOTO OF CALIBRATED STAND:

[illegible] Wind Tunnel of Jiranatee Associates Co., Ltd. [illegible]

J NAC JIRANATEE ASSOCIATES CO.,LTD

J NAC
JIRANATEE ASSOCIATES CO.,LTD.

[illegible]
Bangkok [illegible]
Tel. [illegible]
Mobile: [illegible]
E-mail: [illegible]
Website: www.jnacalib.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Wind direction measurement laboratory
Calibration services department

ilac-MRA NSC – TISI – TIS 17025 CALIBRATION 0367

Certificate Number
CWD-003-68

CERTIFICATE OF CALIBRATION

MEASUREMENT ITEM : Wind Direction Sensor
MANUFACTURER : Novalynx
MODEL/TYPE : Sensor: WS-02F
Data logger: 110-WS-25DL-D
SERIAL NUMBER : Sensor: WSD-A5447
Data logger: A5447
ID NUMBER : SGK_FS0039
CONDITION AS-RECEIVED : Used item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand.

RECEIVED DATE : 10 Jan 2025
MEASUREMENT DATE : 14 Jan 2025
ISSUE DATE : 20 Jan 2025

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH
Atmospheric Pressure	: 1010 ± 10	hPa

PLACE OF CALIBRATION : Eiffel type wind tunnel of Jiranatee Associates Co., Ltd.

CALIBRATION CONDITION

Wind tunnel cross-section area [1]	900	cm^2
Wind direction frontal area [2]	129	cm^2
Diameter of mounting pipe [3]	[illegible]	mm
Blockage ratio of test object [4]	0.143	[-]

Preconditioning : 24 hours at ambient conditions.
Measurement Condition : The average values during measurement are [illegible] hPa and [illegible] hPa.

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibrated by:
(*) Mr. [illegible]
(*) Miss [illegible]

J NAC JIRANATEE ASSOCIATES CO.,LTD

Approved signatory
Mr. [illegible]
Calibration Department Manager

Calibration procedure:
The wind direction sensor was compared against standard rotary [illegible] model: [illegible] (ISO/IEC 17025 as your [illegible] of Eiffel type wind tunnel with 900 cm² cross section area. The WD-Cl-008 Rev. 00 is [illegible] IEC 61400-12-1 Wind energy generation systems – Part 12-1: Power performance measurements of electricity producing wind turbines, March 2017 was used as a calibration guideline.

Traceability:
The reference [illegible] is traceability of the measurement to [illegible] the [illegible] standards are traceable to the International system of units (SI) through National Institute of Metrology (Thailand) (NIMT) Certificate number: [illegible].

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM 'Evaluation of measurement data – Guide to the expression of uncertainty in measurement'.

Remark:
[1] Inside cross-section area of the wind tunnel
[2] Projected cross-section area of the extended cylindrical mounting pipe
[3] Diameter of mounting pipe
[4] Ratio [2]/[1]

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Certificate Number
CWD-003-68

MEASUREMENT RESULTS [1]

The wind direction sensor was calibrated against standard rotary, accurate by comparison method. During calibration, the measurement was carried out in AV intervals to check the wind direction sensor disorders after pitot accident has been made. The rate speed of wind tunnel (approx. 5 m/s) is kept constant [illegible] the sensor is rotated round in revolution. The results of calibration and uncertainty measurement uncertainties are reported in the table below.

Air speed m/s	D'_{std} [2] Degree (°)	D'_{cal} Degree (°)	Error Degree (°)	U (k=2) Degree (°)
5.01	45.000	41	-4	0.80
	90.000	87	-3	0.80
	135.000	132	-3	0.80
	180.000	181	1	0.80
	225.000	229	4	0.80
	270.000	275	5	0.80
	315.000	320	5	0.80
	360.000	359	-1	0.80

Remark:
[1] Calibration results only valid for the tested circumstances and environmental conditions during which calibration took place
[2] Direction of standard
[3] Direction of Unit Under Calibration

End of Certificate of Calibration

J NAC JIRANATEE ASSOCIATES CO.,LTD

J NAC
JIRANATEE ASSOCIATES CO.,LTD.

[illegible]
Bangkok [illegible]
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Mobile: [illegible]
E-mail: [illegible]
Website: www.jnacalib.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Temperature measurement laboratory
Calibration services department

ilac-MRA NSC – TISI – TIS 17025 CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No. : CDT-022-68

MEASUREMENT ITEM : Data Logger with Temperature sensor
MANUFACTURER : Novalynx
MODEL/TYPE : 110-WS-25DL-D
SERIAL NUMBER : A5447
ID NUMBER : SGK_FS0039
CONDITION AS-RECEIVED : Used item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand

RECEIVED DATE : 10 Jan 2025
MEASUREMENT DATE : 14 Jan 2025
ISSUE DATE : 20 Jan 2025

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH

NOTED: *The certificate is valid only to the item calibrated on date and place of calibration.*

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibration procedure:
The temperature calibration was done by In-House calibration method as WI-CL-001 according to comparison method with standard digital temperature indicator and standard temperature probe. The temperature scale use was based on ITS-90.

Traceability:
The measurement results are traceable to the International system of units (SI) through National Institute of Metrology Thailand (NIMT) Certificate number: TI-0047-24, Certificate number: ER-0113-24

Reference Used During Calibration:
1. Standard Temperature Probe
Model: STS 100 A500, Serial No.: 667682-05, Due date: 26 Mar 2025
2. Digital Temperature Indicator
Model: DIS-1000-A MK II, Serial No.: 671402-00591 Due date: 21 Oct 2025

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM 'Evaluation of measurement data – Guide to the expression of uncertainty in measurement'

Calibrated by:
(*) Mr. Sorawit Thachalad
(*) Miss Uthraporn Lertsomphol
(*) Miss Buangrumpai Phoomsak

J NAC JIRANATEE ASSOCIATES CO.,LTD

Approved signatory
Mr. Panya Booncharoen
Calibration Department Manager

THIS CERTIFICATE MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

JIRANATEE ASSOCIATES CO.,LTD.

Continuation of Certificate of Calibration Number CDT-027-68

Result of Calibration: ☑ Without Adjustment ☐ With Adjustment

Calibration Range: 20 °C to 40 °C

Function:

Table 1: This equipment was connected with temperature sensor Model: HMP60 S/N: R1131114. Dimension: Diameter 12 mm. Length 80 mm.

Immersion Depth (mm)	Standard Reading (°C)	UUC Reading (°C)	Error (°C)	Uncertainty (°C)
80	20.077	19.6	-0.5	0.099
80	25.066	24.8	-0.3	0.099
80	30.054	29.6	-0.5	0.099
80	35.035	34.6	-0.4	0.099
80	40.019	39.5	-0.5	0.099

UUC*: Unit Under Calibration

*****End of Certificate of Calibration*****

JIRANATEE ASSOCIATES CO.,LTD.

Jiranatee Associates Co.,Ltd.

JIRANATEE ASSOCIATES CO.,LTD.

[illegible]
Tel. [illegible]
Mobile: [illegible]
E-mail: [illegible]
Website: www.jnac.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Relative humidity and Air Temperature measurement laboratory
Calibration services department

CERTIFICATE OF CALIBRATION

Certificate No. : **CRT-001-68**

MEASUREMENT ITEM : Relative humidity with data logger
MANUFACTURER : Novalynx
MODEL/TYPE : Data Logger: 110-WS-250U-D
Sensor: HMP60
SERIAL NUMBER : Data Logger: A5447
Sensor: R1131114
ID NUMBER : SGK_F50039
CONDITION AS-RECEIVED : Used item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand

RECEIVED DATE : 10 Jan 2025
MEASUREMENT DATE : 14 Jan 2025
ISSUE DATE : 20 Jan 2025

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:
Temperature : 23.0 ± 3.0 °C
Relative Humidity : 55.0 ± 15.0 %RH

NOTED: *The certificate is valid only to the item calibrated on date and place of calibration.*

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibration procedure:
The Relative humidity and Air Temperature calibration was done by in House calibration method as WI CL 009 and WI CL 010 according to comparison method with Standard Chilled Mirror hygrometer with Temperature sensor and standard Humidity generator chamber.

Traceability:
The measurements are traceable to the International system of units (SI) through National Institute of Metrology Thailand (NIMT). Certificate number: TH-0146-24 and Jiranatee Associates Co., Ltd. Certificate number: CDT-026-68.

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the guide 'Evaluation of measurement data - Guide to the expression of uncertainty in measurement'.

Calibrated by
☐ Mr. Sopwit Thachalad
☑ Miss Pitrapim Lertsumphol
☐ Miss Puangpop Prasomnit

JIRANATEE ASSOCIATES CO.,LTD.

Approved signatory: Ms. Pariya Boonchanom
Calibration Department Manager

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

JIRANATEE ASSOCIATES CO.,LTD.

Continuation of Certificate of Calibration Number: CRT-001-68

Measurement Results:

The results of calibration and associated measurement uncertainties are reported in the table below.

Result of Calibration: ☐ Without Adjustment ☑ With Adjustment

Table 1: The results of calibration of relative humidity at 30 °C are reported in table below.
Calibration Range: 20%RH to 80%RH

Air Temperature (°C)	Standard Reading (%RH)	UUC Reading (%RH)	Error (%RH)	Uncertainty ±(%RH)
29.77	19.80	18.3	-1.5	0.78
29.80	51.28	48.9	-2.4	1.8
29.90	82.93	80.0	-3.0	7.1

UUC*: Unit Under Calibration.

*****End of Certificate of Calibration*****

JIRANATEE ASSOCIATES CO.,LTD.

Jiranatee Associates Co.,Ltd.

JIRANATEE ASSOCIATES CO.,LTD.

[illegible]
Tel. [illegible]
Mobile: [illegible]
E-mail: [illegible]
Website: [illegible]

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Pressure measurement laboratory
Calibration services department

ilac-MRA
NSC - TISI - TIS 17025
CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No. [illegible]

MEASUREMENT ITEM : Digital barometer
MANUFACTURER : Novalynx
MODEL/TYPE : Sensor: 110-WS-25BP
Data logger: 110-WS-250U-D
SERIAL NUMBER : Sensor: BP-A5447
Data logger: A5447
ID NUMBER : SGK_F50039
CONDITION AS-RECEIVED : Used item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd.
Khwaeng Suan Luang, Khet Suan Luang,
Bangkok 10250 Thailand

RECEIVED DATE : 10 Jan 2025
MEASUREMENT DATE : 14 Jan 2025
ISSUE DATE : 20 Jan 2025

Calibration procedure:
[illegible]

Traceability:
[illegible]

Reference Used During Calibration:
[illegible]

Uncertainty of Measurement:
[illegible]

CONDITION OF THIS RESULT OF CALIBRATION:
1. Calibration effort for calibration sequence C
2. The UUC* was installed in vertical orientation above reference standard instrument and center of UUC* was used as the reference level
3. Calibration conditions:
4. Condition ☑ Normal ☐ Abnormal
Pressure transmitting medium : Air
ρ_a (20°C, 1 bar) : 1.19 kg/m^3
H_{min} : (51.3±4.9) %
t_{min} : (23.2±0.3) °C
P_{min} : (1007.2±0.7) mbar
5. The certificate is valid only to the item calibrated on date and place of calibration

Calibrated by [illegible]

JIRANATEE ASSOCIATES CO.,LTD.

Approved signatory [illegible]

THIS CERTIFICATE REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

JRANATEE ASSOCIATES CO.,LTD.

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI TIS 17025
CALIBRATION 0367

Pressure measurement laboratory
Calibration services department

NSC - TISI - TIS 17025
CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No.

MEASUREMENT RESULTS : ☐ Without adjustment ☑ With adjustment

CALIBRATION IN THE RANGE OF : 950 mbar to 1050 mbar

The results of calibration and associated measurement uncertainties are reported in the table below.

STD (mbar)	UUC* (mbar)	Error (mbar)	Uncertainty (k=2) (mbar)
949.99	951.1	1.1	0.37
969.98	970.8	0.8	0.37
990.06	990.2	0.2	0.38
1010.03	1009.9	-0.1	0.37
1030.05	1029.6	-0.4	0.37
1050.03	1049.0	-1.0	0.37

Note: UUC* Unit Under Calibration
: To convert the result in report unit to Pa should be multiply by 100

End of certificate

JRANATEE ASSOCIATES CO.,LTD

63/14-15,67/35-36, Soi Petchkasem7/1, Petchkasem Rd,
Wattlapra, Bangkokyai,Bangkok 10600 Thailand
Tel: (66) 02-8680812#13 Fax: (66) 02-8680860 www.jranatee.com

CALIBRATION REPORT

Calibration Number: 00.010.2025
Page 1 of 2 Pages

Measurement Item:

Manufacturer:

Model/Type:

Serial Number:

ID NO.:

Customer:

Environmental Condition:

Measurement Method:

Note: This gauge is fully standardized before the calibration performed

Measurement Date:
Issued Date:

JRANATEE ASSOCIATES CO.,LTD

Performed by

Approved Signatory

63/14-15,67/35-36, Soi Petchkasem7/1, Petchkasem Rd,
Wattlapra, Bangkokyai,Bangkok 10600 Thailand
Tel: (66) 02-8680812#13 Fax: (66) 02-8680860 www.jranatee.com

Continuation of Calibration of Calibration Number

Calibration Number: 00.010.2025
Page 2 of 2 Pages

Result of Calibration: ☑ With Adjustment ☐ Without Adjustment

Quantity of F.O (ml)	Deflection Tipping	Tipping count	Acceptable Tipping count
900	[illegible]	[illegible]	[illegible]
900	[illegible]	[illegible]	[illegible]
900	[illegible]	[illegible]	[illegible]
900	[illegible]	[illegible]	[illegible]
900	[illegible]	[illegible]	[illegible]
900	[illegible]	[illegible]	[illegible]

Remark: [illegible]

End of Calibration report

JRANATEE ASSOCIATES CO.,LTD

JRANATEE ASSOCIATES CO.,LTD.
[illegible]
Tel: [illegible]
Mobile: [illegible]
E-mail: jrana@hotmail.com
Website: www.jranatee.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Air speed measurement laboratory
Calibration services department

NSC – TISI – TIS 17025
CALIBRATION 0367

Certificate Number
CWS-069-67

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM : Cup anemometer
MANUFACTURER : Novalynx
MODEL/TYPE : Sensor: WS-02F
Data logger: 110 WS 250L D
SERIAL NUMBER : Sensor: WSD A5445
Data logger: A5445
ID NUMBER : RYG_F50436
CONDITION AS RECEIVED : Used Item
CUSTOMER : AES laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 60, Phatthanakan Rd, Khwaeng Suan Luang,
Khet Suan Luang, Bangkok 10250 Thailand

RECEIVED DATE : 04 Dec 2024
MEASUREMENT DATE : 19 Dec 2024
ISSUE DATE : 19 Dec 2024

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH
Atmospheric Pressure	: 1010 ± 10	hPa

PLACE OF CALIBRATION : Hilfe type wind tunnel of Jranatee Associates Co., Ltd.

CALIBRATION CONDITIONS

Wind tunnel cross-section area[1]	900	cm²
Wind direction frontal area[2]	100	cm²
Diameter of mounting pipe[3]	-	mm
Blockage ratio of test object[4]	0.111	[-]

Preconditioning : 24 hours at ambient conditions
Measurement Condition : The average values during measurement are (24.3) °C, (47.6) %RH and (1008.3) hPa

TABULATION OF RESULTS:
The table on next page give the measured values

Calibrated by:
Mr. Somsak Nonpho
Technical Officer, Mechanical

JRANATEE ASSOCIATES CO.,LTD

Approved signatory

Technical Department Manager

Calibration procedure:
The Cup anemometer was calibrated against Standard or which, anemometer (model: EC9-1) and pitot tube with pressure differential gauge (model: 8160SC) was used to measure a proportion of Hilfe type wind tunnel was 900 cm² cross test section area. The WT-01-007 being in IEC 61400-12-1, Wind energy generation systems – Part 12-1: Power performance measurements of electricity producing wind turbines, March 2017 was used as a calibration guide.

Traceability:
This certificate provides a traceability of the measurement to recognized the national standards and to realization of the international system of units (SI) through the NIMT National Metrology Institute of Thailand's the Certificate number: MW-0002-24 and MW-0065-24

Measurement Uncertainty of Measurement:
The expanded uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM "Evaluation of measurement data – Guide to the expression of uncertainty in measurement"

REVIEW BY
APPROVED BY
NEXT CAL DATE 19/12/25

Remark:
[1] Nozzle cross-section area of the wind tunnel
[2] Projected cross-section area of the tested object include mounting pipe
[3] Diameter of mounting pipe
[4] ratio [2]/[1]

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Certificate Number
CWS-[illegible] 67

MEASUREMENT RESULTS [1]

The Cup anemometer, Unit Under Calibration (UUC) was exercise at 10 m/s for 5 minutes prior to calibration being performed. The standard air velocity 0.5 m/s to 5 m/s was calculated by a standard air velocity transducer which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section and the standard air velocity 5 m/s to 30 m/s was calculated by a pitot tube with [illegible] differential pressure meter which was installed 50 mm away from [illegible] tunnel nozzle and installed [illegible] away from top of the test section. UUC was mounted on a round [illegible] tube of the [illegible] center of test section. The calibration was carried out under both rising and falling air velocity in the range of 1 m/s to 16 m/s [illegible] interval of 1 m/s. The results of calibration and associated [illegible] are reported in the table below.

v_{std} [2] (m/s)	Temp. wind tunnel (°C)	Temp. room (°C)	v_{uuc} [3] (m/s)	Error (m/s)	U (k=2) (m/s)
1.004	24.50	24.65	0.9	-0.1	0.31
2.150	24.68	24.65	2.0	-0.2	0.31
2.995	24.60	24.65	3.0	0.0	0.31
4.132	24.58	24.65	3.9	-0.2	0.31
4.95	24.28	24.65	5.0	0.0	0.31
5.95	24.74	24.65	6.0	0.0	0.31
7.03	24.20	24.65	7.0	0.0	0.31
7.95	24.70	24.65	8.1	0.2	0.31
8.97	24.30	24.65	9.1	0.1	0.31
9.96	24.54	24.65	10.2	0.2	0.31
11.09	24.40	24.65	11.3	0.2	0.31
12.00	24.40	24.65	12.2	0.2	0.31
12.95	24.56	24.65	13.2	0.3	0.31
13.97	24.30	24.65	14.3	0.3	0.31
14.97	24.70	24.65	15.3	0.3	0.31
15.95	24.48	24.65	16.2	0.2	0.47

Remark:

[1] Calibration results only count for the tested circumstances and environmental conditions during which calibration took place

[2] Velocity of standard

[3] Velocity of Unit Under Calibration

PHOTO OF CALIBRATION SETUP

[illegible] wind tunnel of Jiranatee Associates Co., Ltd. [illegible]

*** End of Certificate of Calibration ***

JNAC JIRANATEE ASSOCIATES CO., LTD.

JNAC JIRANATEE ASSOCIATES CO., LTD.

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Wind direction measurement laboratory
Calibration services department

NSC – TISI – TIS 17025
CALIBRATION 0367

Certificate Number
CWD-069-67

CERTIFICATE OF CALIBRATION

MEASUREMENT ITEM	: Wind Direction Sensor
MANUFACTURER	: Novalynx
MODEL/TYPE	: Sensor: WS 02F Data logger: 110-WS-25DL-D
SERIAL NUMBER	: Sensor: WSD-A5445 Data logger: A5445
ID NUMBER	: RYG_FS0436
CONDITION AS-RECEIVED	: Used item
CUSTOMER	: ALS laboratory group (Thailand) Co., Ltd. 104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand.
RECEIVED DATE	: 04 Dec 2024
MEASUREMENT DATE	: 19 Dec 2024
ISSUE DATE	: 19 Dec 2024

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH
Atmospheric Pressure	: 1010± 10	hPa

PLACE OF CALIBRATION : Eiffel-type wind tunnel of Jiranatee Associates Co., Ltd.

CALIBRATION CONDITION

: Wind tunnel cross-section area [1]	900	cm^2
Wind direction frontal area [2]	129	cm^2
Diameter of mounting pipe [3]	-	mm
Blockage ratio of test object [4]	0.143	[-]

Preconditioning : 24 hours at ambient conditions.
Measurement Condition : The average values during measurement are (24.8)°C, (57.0) %RH and (1006.1) hPa.

Calibration procedure:
The wind direction sensor was calibrated against Standard Rotary Encoder [illegible] in the test section of Eiffel type wind tunnel with 900 cm² cross test section [illegible] based on IEC 61400-12-1, Wind energy generation systems – Part 12-1: Power performance measurements of electricity producing wind turbines, March 2017 [illegible]

Traceability:
This certificate provides a traceability of the measurement to recognized the national standards, and to realization of the international system of units (SI) through the NIMT (National Institute of Metrology (Thailand)) [illegible] number: DA 0077-24.

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM "Evaluation of measurement data – Guide to the expression of uncertainty in measurement".

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibrated by: [illegible]

JNAC JIRANATEE ASSOCIATES CO., LTD.

Approved signatory: [illegible]

Remark:
[1] Nozzle cross-section area of the wind tunnel
[2] Projected cross-section area of the tested object beside mounting pipe
[3] Diameter of mounting pipe
[4] Ratio [2]/[1]

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Certificate Number
CWD-069 67

MEASUREMENT RESULTS [1]

The wind direction sensor was calibrated against standard rotary encoder by comparison method. During calibration, the measurements were carried out at 45° intervals in clockwise and counterclockwise directions after offset adjustment has been made. The flow speed of wind tunnel (usually 5 m/s) is kept constant while the sensor is rotated around its vertical axis. The results of calibration and associated uncertainties are reported in the table below.

Air speed m/s	D_{std} [2] Degree (°)	D_{uuc} [3] Degree (°)	Error Degree (°)	U (k=2) Degree (°)
4.97	45.000	41	-4	0.80
	90.000	86	-4	0.80
	135.000	131	-4	0.80
	180.000	180	0	0.80
	225.000	226	1	0.80
	270.000	275	5	0.80
	315.000	320	5	0.80
	360.000	359	-1	0.80

Remark:

[1] Calibration results only count for the tested circumstances and environmental conditions during which calibration took place

[2] Direction of standard

[3] Direction of Unit Under Calibration

*** End of Certificate of Calibration ***

JNAC JIRANATEE ASSOCIATES CO., LTD.

JNAC JIRANATEE ASSOCIATES CO., LTD.

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Temperature measurement laboratory
Calibration services department

NSC – TISI – TIS 17025
CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No. : CDT-214-67

MEASUREMENT ITEM	: Data Logger with Temperature sensor
MANUFACTURER	: Novalynx
MODEL/TYPE	: 110-WS-25DL-D
SERIAL NUMBER	: A5445
ID NUMBER	: RYG_FS0436
CONDITION AS-RECEIVED	: Used item
CUSTOMER	: ALS laboratory group (thailand) Co., Ltd 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand.
RECEIVED DATE	: 04 Dec 2024
MEASUREMENT DATE	: 19 Dec 2024
ISSUE DATE	: 19 Dec 2024

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH

***NOTED:** The certificate is valid only to the item calibrated on date and place of calibration.*

Calibration procedure:
The temperature calibration was done by in-house calibration method [illegible] according to comparison method with standard digital temperature indicator and standard temperature probe. The temperature [illegible]

Traceability:
The measurement results are traceable to the international system of units (SI) through National Institute of Metrology Thailand (NIMT) Certificate number: [illegible]

Reference Used During Calibration:
1. Standard Temperature Probe
Model: [illegible] Due date: [illegible] 2025
2. Digital Temperature Indicator
Model: [illegible] Due date: 21 Oct 2025

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM "Evaluation of measurement data – Guide to the expression of uncertainty in measurement".

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibrated by: [illegible]

JNAC JIRANATEE ASSOCIATES CO., LTD.

Approved signatory: [illegible]

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

JRANATEE ASSOCIATES CO.,LTD.

Continuation of Certificate of Calibration Number CDT-214-67

Result of Calibration: (✓) Without Adjustment ( ) With Adjustment

Calibration Ranges: 20 °C to 60 °C

Function:

Table 1: This equipment was connected with temperature sensor Model: HMP60/SN: R1131113.
Dimension: Diameter 12 mm. Length 80 mm.

Immersion Depth (mm)	Standard Reading (°C)	UUC Reading (°C)	Error (°C)	Uncertainty (°C)
80	20.005	19.9	0.2	0.095
80	25.004	24.9	0.2	0.095
80	30.002	29.8	0.2	0.095
80	35.001	34.7	0.3	0.095
80	40.000	39.5	0.5	0.095

UUC* : Unit Under Calibration

End of Certificate of Calibration

JRANATEE ASSOCIATES CO.,LTD.

Jranatee Associates Co.,Ltd.
62/94-95, 6/430-31
Pruchabut 1, Soi 19, Wattharn, Rd.,
Bangkok 10500 Thailand
Tel. : 0966 [illegible]
Mobile : 0966 [illegible]
Email : pao-calibration@jranatee.com
Web : www.jranatee.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI TIS 17025
CALIBRATION 0367

Relative humidity and Air Temperature measurement laboratory
Calibration services department.

CERTIFICATE OF CALIBRATION

Certificate No. : CRT-060-67

MEASUREMENT ITEM : Relative humidity with data logger
MANUFACTURER : Novalynx
MODEL/TYPE : Data Logger: 110 WS 250L-D
Sensor: HMP60
SERIAL NUMBER : Data Logger: A5445
Sensor: R1131113
ID NUMBER : RVG_150436
CONDITION AS RECEIVED : Used item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand

RECEIVED DATE : 04 Dec 2024
MEASUREMENT DATE : 19 Dec 2024
ISSUE DATE : 19 Dec 2024

Calibration procedure:
The Relative humidity and Air temperature calibration was done by Jranatee Calibration method WI-CL-004 and WI-CL-016 according to comparison method with Standard Chilled Mirror hygrometer with temperature probe and reference thermohygrometer (Dew-Day).

Traceability:
The measurement are traceable to the Laboratory system of ALS (SG Group). National Institute of Metrology Thailand (NIMT) Certificate number: TH-0023-21 and Through Jranatee Associates Co., Ltd. Certificate number: CDT-059-67

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM Evaluation of measurement data - Guide to the expression of uncertainty in measurement.

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH

NOTED: The certificate is valid only to the item calibrated on date and place of calibration.

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibrated by:
(Mr. Sornpol Thachalee)
Calibration Officer

JRANATEE ASSOCIATES CO.,LTD.

Approved signatory:
Mr. [illegible]
Calibration Department Manager

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

JRANATEE ASSOCIATES CO.,LTD.

Continuation of Certificate of Calibration Number: CRT-060-67

Measurement Results:

The accuracy of calibration and associated uncertainty of measurement are reported in the table below.

Result of Calibration: (✓) Without Adjustment ( ) With Adjustment

Table 1: [illegible]
Calibration Range: [illegible]

Air temperature (°C)	Standard Reading (%RH)	UUC Reading (%RH)	Error (%RH)	Uncertainty (%RH)
10.01	19.5	17.7	1.8	0.7
10.02	49.05	48.1	0.9	1.8
10.03	78.52	75.4	3.1	2.1

UUC* : Unit Under Calibration

End of Certificate of Calibration

JRANATEE ASSOCIATES CO.,LTD.

Jranatee Associates Co.,Ltd.
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Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Pressure measurement laboratory
Calibration services department.

ilac-MRA

THAILAND

NSC - TISI - TIS 17025
CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No. : CPR-046-67

MEASUREMENT ITEM : Digital Barometer
MANUFACTURER : Novalynx
MODEL/TYPE : Sensor: 110 WS 250D
Data logger: 110 WS 250L-D
SERIAL NUMBER : Sensor: BF-A5445
Data logger: A5445
ID NUMBER : RVG_150436
CONDITION AS RECEIVED : Used item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd.,
Khwaeng Suan Luang, Khet Suan Luang,
Bangkok 10250 Thailand.

RECEIVED DATE : 04 Dec 2024
MEASUREMENT DATE : 19 Dec 2024
ISSUE DATE : 19 Dec 2024

Calibration procedure:
The Digital barometer was calibrated against Digital pressure calibrator. The WI-CL-007 was used as a calibration guideline.

Traceability:
The measurement results are traceable to the laboratory system of ALS (SG Group) and the NIMT (National Metrology Institute of Thailand) via Certificate number: MP-0050-24

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM Evaluation of measurement data - Guide to the expression of uncertainty in measurement.

CONDITION OF THIS RESULT OF CALIBRATION:

1. Reference Standard Instrument:

Instrument	Model	Serial No.	Certificate No.	Due Date
Absolute Pressure Transducer	CPG2500	410012E0	MP-0005-24	22 Dec 2024

2. Calibration effect for calibration procedure: [illegible]
3. The UUC* was installed in vertical orientation during calibration. Reference standard instrument and center of UUC* was used as the reference level.
4. Calibration conditions:
5. Results: ☑ Normal ☐ Abnormal

Pressure Hysteresis (maximum)	[illegible]
p_0 (at 0 °C, 1 bar)	1.19 kPa
R_0	(51.0943.1)
t_0	(22.2±0.2) °C
F	(1607.3±0.6) mbar

6. The calibration value only to the item calibrated on date and place of calibration.

Calibrated by:
(Mr. Sornpol Thachalee)
Calibration Officer

JRANATEE ASSOCIATES CO.,LTD.

Approved signatory:
Mr. [illegible]
Calibration Department Manager

THIS CERTIFICATE REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

J NAC
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[illegible]
63/14-15,67/35-36
[illegible]
Bangkok 10600 [illegible]
Tel. [illegible]
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E-mail: jnac.calibration@jiranatee.com
Website: www.jiranatee.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC TISI TIS 17025
CALIBRATION 0367

Pressure measurement laboratory
Calibration services department

NSC - TISI - TIS 17025
CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No. CPR-035-67

MEASUREMENT RESULTS (L) Without adjustment (R) With adjustment

CALIBRATION IN THE RANGE OF 950 mbar to 1050 mbar

The results of calibration and associated measurement uncertainties are reported in the table below.

STD. (mbar)	UUC* (mbar)	Error (mbar)	Uncertainty (k=2) (mbar)
949.95	951.3	1.3	0.37
950.98	950.9	0.0	0.37
954.06	954.5	0.5	0.37
1010.01	1010.2	0.2	0.37
1010.05	1009.9	0.2	0.37
1050.03	1049.5	-0.5	0.37

Note: UUC* Unit Under Calibration
: To convert the result in report with to Pa should be multiply by 100

"End of certificate"

J NAC
JIRANATE ASSOCIATES CO., LTD.

J NAC
63/14-15,67/35-36, Soi Petchkasem7,7/1, Petchkasem Rd,
Wallhapra, Bangkokyai,Bangkok 10600 Thailand.
Tel.: (66) 02-8680812-13 Fax: (66) 02-8680860 www.jiranatee.com

CALIBRATION REPORT

Calibration Number: RE-001/2024

Measurement Item: [illegible]

Manufacturer: [illegible]

Model/type: [illegible]

Serial Number: [illegible]

ID No.: [illegible]

Location: [illegible]

Environmental Condition
[illegible]

Measurement Method
[illegible]

Note: New gauge is fully cleaned and having good B. Calibration performance

Measurement Date [illegible]
Next Date [illegible]

Performed by [illegible]

J NAC
JIRANATE ASSOCIATES CO., LTD.

Approved Signatory [illegible]

J NAC
63/14-15,67/35-36, Soi Petchkasem7,7/1, Petchkasem Rd,
Wallhapra, Bangkokyai,Bangkok 10600 Thailand.
Tel.: (66) 02-8680812-13 Fax: (66) 02-8680860 www.jiranatee.com

Continuation of Calibration of Calibration Number

Calibration Number: RE-001/2024

Result of Calibration: (L) Without Adjustment (R) With Adjustment
The results of calibration are presented in table below.

Quantity of H2O (ml)	Dimensional Tipping	Tipping Count	Acceptable Tipping Count
500	[illegible]	59	[illegible]
800	[illegible]	60	[illegible]
800	[illegible]	60	[illegible]
[illegible]	[illegible]	60	[illegible]
800	[illegible]	60	[illegible]

Remark: [illegible]

"End of calibration report"

J NAC
JIRANATE ASSOCIATES CO., LTD.

SITHIPORN ASSOCIATES CO., LTD.
CALIBRATION LABORATORY
451-457/1 Sirindhorn Road, Bangkunni, Bangplad, Bangkok, 10700 Thailand
Tel. +66 2433 8333 Email : calibration@sithiporn.com

SITHIPORN

Cert. No. : ACC24077
Pages : 1 of 3

Calibration Certificate

Equipment : SOUND CALIBRATOR
Manufacturer : RION
Model : NC-74
Serial No.: 34178118
ID No.: BKK_FS0631

Condition As Found : GOOD

Customer : ALS LABORATORY GROUP (THAILAND) CO., LTD.
104 PHATTHANAKAN 40, PHATTHANAKAN ROAD,
KHWAENG PHATTHANAKAN, KHET SUAN LUANG,
BANGKOK, 10250 THAILAND.

Location : -
Ambient Temperature : (23.0 ± 3) °C
Pressure : (101.3 ± 3) kPa
Relative Humidity : (50.0 ± 20) %

Received Date : 06 DECEMBER 2024
Calibration Date : 16 DECEMBER 2024
Date of Issue : 17 DECEMBER 2024

REVIEW BY: Thanakorn P.
APPROVED BY: [illegible]
NEXT CAL DATE: 16/12/25

Calibrated by : Nathakorn Pisutpoisan

Approved by : T. Petch.
(Thanakul Petchurai)

This certificate is issued in accordance with the requirements of ISO/IEC 17025 standard, may not be reproduced other than in full, except with the prior written approval of the head of Calibration Laboratory.

Cert. No. : ACC24077
Job No. : VC68AC0045
Pages : 2 of 3

Calibration Procedure : CP-AC-03

Calibration Method :

This equipment was calibrated by follow on IEC-60942-2003 Standard.

The sound pressure level, frequency and total distortion of the sound calibrator was measured using the reference microphone.

Condition of this result of calibration :

1. Reference Standard Instruments :

Instrument	Model	Serial No.	Cert. No.	Due Date
Waveform Generator	33511B	MY52302742	EF-0007-24	05-FEB-25
Digital Multimeter	33461A	MY53220104	EEL.BP 21/0267	13-FEB-25
Digital Multimeter	33461A	MY53220076	EEL.BP 20/0267	15-FEB-25
Digital Multimeter	33461A	MY60024273	EEL.BP 22/0267	15-FEB-25
Programmable Attenuator	MAT-1070	62100114	EF-0008-24	05-FEB-25
Condenser Microphone	4180	2977900	AA-1001-24	12-FEB-25
Measuring Amplifier	NA-42KAI	34560495	AA-3001-24	05-FEB-25
Audio Analyzer	AVR-3360A	V744B6069	EF-0009-24	09-FEB-25

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.
3. This certificate is traceable to the international system of unit maintained at :
   3.1 National Institute of Metrology (Thailand).
   3.2 Thailand Institute of Scientific and Technological Research (TISTR).

T. Petch

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SITHIPORN associates
NSC-TISI-TS 17025 CALIBRATION 0194

Cert. No. : ACC24077
Job No. : VC68AC0045
Pages : 3 of 3

Result of calibration :

1. Sound pressure level

Specified sound pressure level (dB)	Measured value (dB)	Deviated value (dB)	Uncertainty (dB)	Acceptance limit (dB)
94	93.97	-0.03	0.14	0.40

2. Frequency

Specified Frequency (Hz)	Measured value (Hz)	Devinted value (%)	Uncertainty (%)	Acceptance limit (%)
1000	1001.7	0.2	0.1	1.0

3. Total distortion

Measured value (%)	Uncertainty (%)	Acceptance limit (%)
1.63	0.10	3.0

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor $k = 2$ or any value following calculation,providing a level of confidence of approximately 95 %

End of Calibration Certificate

T. Petch

SITHIPORN ASSOCIATES CO., LTD.
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ilac-MRA
NSC-TISI-TS 17025 CALIBRATION 0194

Cert. No. : ACL24345
Pages : 1 of 8

Calibration Certificate

Equipment : SOUND LEVEL METER
Manufacturer : RION
Model : NL-42 / Microphone UC-52 / Preamplifier NH-24
Serial No.: 00597159 / 180402 / 88172
ID No.: BKK FS0995

Condition As Found : GOOD

Customer : ALS LABORATORY GROUP (THAILAND) CO., LTD.
104 PHATTHANAKAN 40, PHATTHANAKAN ROAD,
KHWAENG PHATTHANAKAN, KHET SUAN LUANG,
BANGKOK, 10250 THAILAND.

Location : -
Ambient Temperature : (23.0 ± 3) °C
Pressure : (101.3 ± 3) kPa
Relative Humidity : (50.0 ± 20) %

Received Date : 01 NOVEMBER 2024
Calibration Date : 12 NOVEMBER 2024
Date of Issue : 13 NOVEMBER 2024

REVIEW BY : Thanakul P.
APPROVED BY :
NEXT CAL DATE : 12/11/25

Calibrated by : Nathakorn Pisutpaisan

Approved by : T. Petch
(Thanakul Petchurai)

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NSC-TISI-TS 17025 CALIBRATION 0194

Cert. No. : ACL24345
Job No. : VC68AC0027
Pages : 2 of 8

Calibration Procedure : CP-AC-01

Calibration Method :

This equipment was calibrated by follow on IEC-61672-3 (2013) Standard for sound level meter (SLM).

The SLM had tests to Acoustical and Electrical signal tests of frequency weighting with Anechoic chamber and Reference Standard Instruments.

For tests results of each items were made by observation of each Instruments display and also with SLM's display.

Condition of this result of calibration :

1. Reference Standard Instruments :

Instrument	Model	Serial No.	Cert. No.	Due Date
Waveform Generator	33210A	MY48017076	EF-0009-24	05-FEB-25
Waveform Generator	33511B	MY52302742	EF-0007-24	05-FEB-25
Digital Multimeter	33461A	MY53220104	EEL.BP 21/0267	13-FEB-25
Digital Multimeter	33461A	MY53220076	EEL.BP 20/0267	15-FEB-25
Digital Multimeter	33461A	MY60024273	EEL.BP 22/0267	15-FEB-25
Programmable Attenuator	MAT-1070	62100114	EF-0008-24	05-FEB-25
Condenser Microphone	4180	2977900	AA-1001-24	12-FEB-25
Measuring Amplifier	NA-42KAI	34560495	AA-3001-24	05-FEB-25

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.
3. This certificate is traceable to the international system of unit maintained at
   3.1 National Institute of Metrology (Thailand).
   3.2 Thailand Institute of Scientific and Technological Research (TISTR).

T. Petch

Cert. No. : ACL24345
Job No. : VC68AC0027
Pages : 3 of 8

Summary of Measurement Result :

Parameter	Uncertainty (dB)	Maximum-permitted uncertainty of measurement (dB)
1. Absolute sensitivity	0.2	N/A
2. Self-generated noise	0.2	N/A
3. Acoustical signal tests of frequency weightings		
125 Hz	0.3	0.6
1000 Hz	0.3	0.6
8000 Hz	0.3	0.7
4. Electrical signal tests of frequency weightings		
For 10 Hz to 4 kHz	0.3	0.6
For > 4 kHz to 10 kHz	0.3	0.7
For > 10 kHz to 20 kHz	0.3	1.0
5. Frequency and time weightings at 1 kHz	0.2	0.2
6. Long - term stability	0.1	0.1
7. Level linearity on the reference level range	0.2	0.3
8. Level linearity including the level range control	0.2	0.3
9. Tone burst response	0.2	0.3
10. Peak C sound level	0.2	0.35
11. Overload indication	0.2	0.25
12. High level stability	0.1	0.1

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NSC-TISI-TIS 17025 CALIBRATION 0394

Cert. No. : ACL24345
Job No. : VC68AC0027
Page : 4 of 8

Result of calibration :

1. Absolute sensitivity

Reference Acoustic Signal (dB)	Measured Value (dB)	Deviation (dB)	Acceptance Limit (dB)
93.9 (93.94)	93.9	0.0	±0.3

2. Self-generated noise

2.1 Normal test

Measured Value (dB)
15.7

2.2 The microphone of the sound level meter was replaced by electrical signal input device.

Frequency Weighting	Weighting (dB)
A - weight	14.8
C - weight	20.9
Flat	26.4

3. Acoustical signal tests of frequency weightings

Meter free-field acoustic response at a level of 84 dB

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
125	0.2	0.3	0.3	± 1.5
1000	0.1	0.1	0.1	± 1.0
8000	2.4	2.5	2.5	±5.0

T. Petch

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SITHIPORN associates
NSC-TISI-TIS 17025 CALIBRATION 0394

Cert. No. : ACL24345
Job No. : VC68AC0027
Pages : 5 of 8

4. Electrical signal tests of frequency weightings

Weighting network response with relative to 1 kHz.

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
63	-0.1	-0.1	-0.1	±2.0
125	-0.1	0.0	-0.1	±1.5
250	0.0	0.0	-0.1	±1.5
500	0.0	0.0	-0.1	±1.5
1000	0.0	0.0	0.0	±1.0
2000	0.0	0.0	0.0	±2.0
4000	0.0	0.0	0.0	±3.0
8000	0.0	0.0	0.1	±5.0

5. Frequency and time weightings at 1 kHz

5.1 Frequency weightings at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.2
C - weight	94.0	94.0	0.0	± 0.2
Flat	94.0	94.0	0.0	± 0.2

5.2 Time weighting at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	94.0	94.0	0.0	± 0.1
Slow	94.0	94.0	0.0	± 0.1
Leq	94.0	94.0	0.0	± 0.1

6. Long - term stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.3

T. Petch

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Cert. No. : ACL24345
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Pages : 6 of 8

7. Level linearity on the reference level range

Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
137.0	137.0	0.0	± 1.1
136.0	136.0	0.0	± 1.1
135.0	135.0	0.0	± 1.1
134.0	134.0	0.0	± 1.1
133.0	132.9	-0.1	± 1.1
132.0	131.9	-0.1	± 1.1
131.0	130.9	-0.1	± 1.1
129.0	129.0	0.0	± 1.1
124.0	124.0	0.0	± 1.1
119.0	119.0	0.0	± 1.1
114.0	114.0	0.0	± 1.1
109.0	109.0	0.0	± 1.1
104.0	104.0	0.0	± 1.1
99.0	99.0	0.0	± 1.1
94.0	94.0	0.0	± 1.1
89.0	89.0	0.0	± 1.1
84.0	84.0	0.0	± 1.1
79.0	79.0	0.0	± 1.1
74.0	74.0	0.0	± 1.1
69.0	69.0	0.0	± 1.1
64.0	64.0	0.0	± 1.1
59.0	59.0	0.0	± 1.1
54.0	54.0	0.0	± 1.1
49.0	49.0	0.0	± 1.1
44.0	44.0	0.0	± 1.1
39.0	39.0	0.0	± 1.1
34.0	34.0	0.0	± 1.1
30.0	30.1	0.1	± 1.1
29.0	29.1	0.1	± 1.1
28.0	28.0	0.0	± 1.1
27.0	27.1	0.1	± 1.1
26.0	26.2	0.2	± 1.1
25.0	25.1	0.1	± 1.1

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8. Level linearity including the level range control

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
130	94.0	94.0	0.0	±1.1

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
130	29.0	29.1	0.1	±1.1

9. Tone burst response

Time Weighting	Tone burst duration, Tb (ms)	Cycle	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	0.25	1	108.0	107.9	-0.1	1.5 ; -5.0
	2	8	117.0	117.0	0.0	1.0 ; -2.5
	200	800	134.0	134.0	0.0	±1.0
Slow	2	8	108.0	108.0	0.0	1.5 ; -5.0
	200	800	127.6	127.6	0.0	±1.0
Sel.	0.25	1	99.0	98.9	-0.1	1.5 ; -5.0
	2	8	108.0	108.0	0.0	1.0 ; -2.5
	200	800	128.0	128.0	0.0	±1.0

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10. Peak C sound level

Number of cycle in test signal	Anticipated Value (dB)	Measured Value, Lcpeak (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	130.0	130.0	0.0	±3.0
One	133.4	133.4	0.0	±3.0

Number of cycle in test signal	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	±2.0
Positive half cycle	135.4	135.1	-0.3	±2.0
Negative half cycle	135.4	135.1	-0.3	±2.0

11. Overload indication

Measured value (dB)		Deviated Value (dB)	Acceptance Limits (dB)
Positive one-half cycle	Negative one-half cycle		
89.5	89.5	0.0	±1.5

12. High level stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	137.0	137.0	0.0	±0.3

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor $k = 2$ or any value following calculation,providing a level of confidence of approximately 95 %

End of Calibration Certificate

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TEL. 0009-2116-5960-1 FAX. 0009-2116-7140

Certificate of Calibration

Customer

Name : ALS Laboratory Group Thailand Co., Ltd.
Address : 101 Soi Phatthanakan 40, Phatthanakan Road, Suan Luang, Bangkok 10250

Certificate No : 25-SLM-115
Request No : Req-2025-0603

Unit Under Calibration Details

Measurement item : Sound Level Meter
Manufacturer : RION
Model : NL-42
Serial Number : 00672789
ID : BKK_FS0929
Resolution : 0.1 dB

Microphone Class : 2
Microphone Model : UC-52
Microphone S/N : 158775
Preamplifier Model : NH-24
Preamplifier S/N : 58775
Instrument Status : Used

Calibration Environment and Details

Temperature : 23 °C ± 2 °C
Humidity : 50 %RH ± 20 %RH
Barometric Pressure : 1013 hPa ± 10 hPa
Received Date : 6 March 2025
Calibrated Date : 19 March 2025
Calibration Procedure : In-house method CP-SLM-01 based on IEC 61672-3 : 2013 Electroacoustics - Sound level meters - Part 3: Periodic tests
Location of Calibration : Lab Acoustic

REVIEW BY : Narakon P.
APPROVED BY :
NEXT CAL DATE : 19/03/26

Reference Standard

Instrument	Brand	Model	SN.	Due calibration	Traceability
Standard Microphone	Brüel & Kjær	4192	2294985	25 June 2025	NIMT
Audio Generator	Svantek	Svan401	131	15 October 2025	WK Electric

Note

The reported uncertainty is based on standard uncertainty multiplied by the Coverage Factor $k = 2$, providing a level of confidence approximately 95 %

Calibrated By : Mr. Noppadon Eiangart
Service Calibration Engineer

Approved By : Mr. Pacit Malhavorn
Calibration Engineer Supervisor

Issue Date : 19 March 2025

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Certificate No. : 25-SLM-115
Request No : Req-2025-0603

1. Indication at the calibration check frequency

UUC Setting	Nominal Level (dB)	Before Adjust		After Adjust		UNCERTAINTY (± dB)	Acceptance Limit (± dB)	Result
FAST / A / 30-130		UUC (dB)	ERR (dB)	UUC (dB)	ERR (dB)			
Calibrator Setting								
1000 Hz 94 dB	94.00	93.7	-0.36	94.1	-0.04	0.20	0.30	Pass

Note : Absolute sensitivity was established by the use of Sound Calibrator Brand RION, Model NC-75, SN.35002736

2. Self-generated noise, Microphone installed

UUC Setting	Measured (dB)	UNCERTAINTY (± dB)
FAST / 30-130		
UUC Weighting		
A	14.3	0.10

3. Self-generated noise, Microphone replaced by the electrical input signal device

UUC Setting	Measured (dB)	UNCERTAINTY (± dB)
FAST / 30-130		
UUC Weighting		
A	10.1	0.10
C	15.1	0.10
Z	18.2	0.10

4. Acoustic signal test of frequency weightings (Without Windscreen)

UUC Setting	Deviation from various Frequency Weighting Response curve			UNCERTAINTY (± dB)	Acceptance Limit (± dB)	Result
FAST / 30-130	A	C	Z			
STD Setting	(dB)	(dB)	(dB)			
125 Hz	0.5	0.6	0.8	0.60	1.5	Pass
1000 Hz	0.0	0.0	0.0	0.60	1.0	Pass
4000 Hz	-2.2	-2.2	-2.2	0.60	3.0	Pass
8000 Hz	-3.6	-3.5	-3.6	0.70	5.0	Pass1

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Certificate No : 25-SLM-115
Request No : Req-2025-0603

5. Electrical signal test of frequency weightings, Weighting network respone with relative to 1 kHz

UUC Setting	Deviation from various Frequency Weighting Respone curve			UNCERTAINTY	Acceptance Limit	Result
FAST / 30-130						
STD Setting	A (dB)	C (dB)	Z (dB)	(± dB)	(± dB)	
63 Hz	-0.1	0.1	0.0	0.20	2.0	Pass
125 Hz	0.0	0.1	0.1		1.5	Pass
250 Hz	0.0	0.1	0.1		1.5	Pass
500 Hz	0.0	0.1	0.1		1.5	Pass
1000 Hz	0.0	0.0	0.0		1.0	Pass
2000 Hz	-0.1	-0.1	-0.1		2.0	Pass
4000 Hz	-0.3	-0.3	-0.3		3.0	Pass
8000 Hz	0.0	0.0	0.0		5.0	Pass
16000 Hz	-1.9	-1.9	-0.5		+5, -INF	Pass

6. Frequency and time weightings at 1kHz

UUC Setting	STD	Measured		UNCERTAINTY	Acceptance Limit	Result
FAST / 30-130	REF	UUC	ERR			
UUC Weighting	(dB)	(dB)	(dB)	(± dB)	(± dB)	
A	114.00	114.0	0.0	0.20	0.20	Pass
C	114.00	114.0	0.0		0.20	Pass
Z	114.00	114.0	0.0		0.20	Pass

UUC Setting	STD	Measured		UNCERTAINTY	Acceptance Limit	Result
30-130 / A	REF	UUC	ERR			
UUC Time Respone	(dB)	(dB)	(dB)	(± dB)	(± dB)	
Fast	114.00	114.0	0.0	0.20	0.10	Pass1
Slow	114.00	114.0	0.0		0.10	Pass1
Leq	114.00	114.0	0.0		0.10	Pass1

Certificate No : 25-SLM-115
Request No : Req-2025-0603

7. Long Term Stability

UUC Setting	Measured	UNCERTAINTY	Acceptance Limit	Result
FAST / A / 30-130	UUC			
STD Setting	(dB)	(± dB)	(± dB)	
Initial	114.0			
Final	114.0			
Deviated	0.0	0.10	0.30	Pass

8. Level linearity on the reference level range

UUC Setting	Anticipated	Deviation		UNCERTAINTY	Acceptance Limit	Result
FAST / A / 30-130	REF	UUC	ERR			
STD dB	(dB)	(dB)	(dB)	(± dB)	(± dB)	
138.00	138	138.0	0.0	0.50	1.1	Pass
134.00	134	134.0	0.0		1.1	Pass
129.00	129	129.0	0.0		1.1	Pass
124.00	124	124.0	0.0		1.1	Pass
119.00	119	119.0	0.0		1.1	Pass
114.00	114	114.0	0.0		1.1	Pass
109.00	109	109.0	0.0		1.1	Pass
104.00	104	104.0	0.0		1.1	Pass
99.00	99	99.0	0.0		1.1	Pass
94.00	94	94.0	0.0		1.1	Pass
89.00	89	89.0	0.0		1.1	Pass
84.00	84	84.0	0.0		1.1	Pass
79.00	79	79.0	0.0		1.1	Pass
74.00	74	74.0	0.0		1.1	Pass
69.00	69	69.0	0.0		1.1	Pass
64.00	64	64.0	0.0		1.1	Pass
59.00	59	59.1	0.1		1.1	Pass
54.00	54	54.0	0.0		1.1	Pass
49.00	49	49.0	0.0		1.1	Pass
44.00	44	44.0	0.0		1.1	Pass
39.00	39	39.0	0.0		1.1	Pass
34.00	34	34.0	0.0		1.1	Pass
29.00	29	29.0	0.0		1.1	Pass
24.00	24	24.0	0.0		1.1	Pass

Certificate No : 25-SLM-115
Request No : Req-2025-0603

9. Level linearity including the level range control

UUC Setting	STD	Measured		UNCERTAINTY	Acceptance Limit	Result
FAST / A	REF	UUC	ERR			
UUC Range	(dB)	(dB)	(dB)	(± dB)	(± dB)	
30-130	29.50	29.6	0.1	0.30	1.1	Pass
	114	114.0	0.0		1.1	Pass

10. Tone burst response

UUC Setting	STD	Anticipated	Measured		UNCERTAINTY	Acceptance Limit	Result
A / 30-130	Toneburst	Ref	UUC	ERR			
UUC Time Respone	(ms)	(dB)	(dB)	(dB)	(± dB)	(± dB)	
Fast	200	126.0	126.0	0.0	0.20	1.0	Pass
	2	109.0	109.0	0.0		+1.0, -2.5	Pass
	0.25	100.0	100.0	0.0		+1.5, -5.0	Pass
Slow	200	119.6	119.6	0.0		1.0	Pass
	2	100.0	100.0	0.0		+1.0, -5.0	Pass
SEL	200	120.0	120.0	0.0		1.0	Pass
	2	100.0	100.0	0.0		+1.0, -2.5	Pass
	0.25	91.0	90.9	-0.1		+1.5, -5.0	Pass

11. Peak C Sound level

UUC Setting	Anticipated	Measured		UNCERTAINTY	Acceptance Limit	Result
FAST / C / 55-141	REF	UUC	ERR			
STD Setting	(dB)	(dB)	(dB)	(± dB)	(± dB)	
Complete cycle	136.4	136.2	-0.20	0.20	3.0	Pass
Positive half cycle	135.4	135.1	-0.30		2.0	Pass
Negative half cycle	135.4	135.1	-0.30		2.0	Pass

Certificate No : 25-SLM-115
Request No : Req-2025-0603

12. Overload indication

UUC Setting	Measured	UNCERTAINTY	Acceptance Limit	Result
FAST / A / 30-130	UUC			
STD Setting	(dB)	(± dB)	(± dB)	
Positive one-half cycle	139.2			
Negative one-half cycle	139.1			
Deviated	0.1	0.20	1.5	Pass

13. High Level Stability

UUC Setting	Measured	UNCERTAINTY	Acceptance Limit	Result
FAST / A / 30-130	UUC			
STD Setting	(dB)	(± dB)	(± dB)	
Initial	129.0			
Final	129.0			
Deviated	0.0	0.10	0.30	Pass

Note :

Function	Maximum-permitted Uncertainty of measurement
1. Indication at the calibration check frequency	Not applicable
2. Self-generated noise, Microphone installed	Not applicable
3. Self-generated noise, Microphone replaced by the electrical input signal device	Not applicable
4. Acoustic signal test of frequency weightings at 10 Hz to 4 kHz	0.60 dB
4. Acoustic signal test of frequency weightings at >4 kHz to 10 kHz	0.70 dB
5. Electrical signal test of frequency weightings, Weighting network respone with relative to 1 kHz	0.20 dB
6. Frequency and time weightings at 1kHz	0.20 dB
7. Long Term Stability	0.10 dB
8. Level linearity on the reference level range	0.30 dB
9. Level linearity including the level range control	0.30 dB
10. Tone burst response	0.30 dB
11. Peak C Sound level	0.35 dB
12. Overload indication	0.25 dB
13. High Level Stability	0.10 dB

- Acceptance Limit and Maximum-permitted Uncertainty was IEC 61672-1:2013

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Certificate No : 25-SLM-113

Request No : Req-2025-0603

Decision Rule for Statements of Conformity

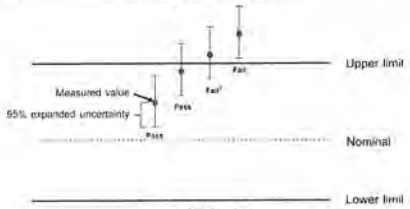
The standard decision rule employed for the statements of conformity to each calibration result will be applied using ILAC-G8:09/2019, Guidelines on the Reporting of Compliance with Specification as following Fig. and statement

Rm = The measurement result plus the expanded uncertainty with a 95% coverage probability were within the limit

Rm[1] = The measurement result was within the limit. However, a portion of the expanded uncertainty to measurement at 95% exceeds the limit

Rm[2] = The measurement result was out of the limit. However, a portion of the expanded uncertainty of measurement at 95% is within the limit

Rm[3] = The measurement result plus the expanded uncertainty with a 95% coverage probability were outside the limit



End of Certificate

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Cert. No. : ACL24343
Pages : 1 of 8

Calibration Certificate

Equipment :	SOUND LEVEL METER
Manufacturer :	RION
Model :	NL-42 / Microphone UC-52 / Preamplifier NH-24
Serial No.:	00584983 / 136777 / 58778
ID No.:	BKK_FS0926
Condition As Found :	GOOD
Customer :	ALS LABORATORY GROUP (THAILAND) CO., LTD. 104 PHATTHANAKAN 40, PHATTHANAKAN ROAD, KHWAENG PHATTHANAKAN, KHET SUAN LUANG, BANGKOK, 10250 THAILAND.
Location :	-
Ambient Temperature :	(23.0 ± 3) °C
Pressure :	(101.3 ± 3) kPa
Relative Humidity :	(50.0 ± 20) %
Received Date :	01 NOVEMBER 2024
Calibration Date :	12 NOVEMBER 2024
Date of Issue :	13 NOVEMBER 2024

REVIEW BY
APPROVED BY
NEXT CAL DATE 12/11/25

Calibrated by : Nathakom Pisutpaisan

Approved by : (Thanakul Petchurai)

This certificate is issued in accordance with the requirements of ISO/IEC 17025 standard, may not be reproduced other than in full, except with the prior written approval of the head of Calibration Laboratory.

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Cert. No. : ACL24343
Job No. : VC68AC0027
Pages : 2 of 8

Calibration Procedure : CP-AC-01

Calibration Method :

This equipment was calibrated by follow on IEC-61672-3 (2013) Standard for sound level meter (SLM).
The SLM had tests to Acoustical and Electrical signal tests of frequency weighting with Anechoic chamber and Reference Standard Instruments.
For tests results of each items were made by observation of each Instruments display and also with SLM's display.

Condition of this result of calibration :

1. Reference Standard Instruments :

Instrument	Model	Serial No.	Cert. No.	Due Date
Waveform Generator	33210A	MY48017076	EF-0009-24	05-FEB-25
Waveform Generator	33511B	MY52302742	EF-0007-24	05-FEB-25
Digital Multimeter	33461A	MY53220104	EEL.BP 21/0267	13-FEB-25
Digital Multimeter	33461A	MY53220076	EEL.BP 20/0267	15-FEB-25
Digital Multimeter	34461A	MY60024273	EEL.BP 22/0267	15-FEB-25
Programmable Attenuator	MAT-1070	62100114	EF-0008-24	05-FEB-25
Condenser Microphone	4180	2977900	AA-1001-24	12-FEB-25
Measuring Amplifier	NA-42KAI	34560495	AA-3001-24	05-FEB-25

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.
3. This certificate is traceable to the international system of unit maintained at :
   3.1 National Institute of Metrology (Thailand).
   3.2 Thailand Institute of Scientific and Technological Research (TISTR).

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Summary of Measurement Result :

Parameter	Uncertainty (dB)	Maximum-permitted uncertainty of measurement (dB)
1. Absolute sensitivity	0.2	N/A
2. Self-generated noise	0.2	N/A
3. Acoustical signal tests of frequency weightings		
125 Hz	0.3	0.6
1000 Hz	0.3	0.6
8000 Hz	0.3	0.7
4. Electrical signal tests of frequency weightings		
For 10 Hz to 4 kHz	0.3	0.6
For > 4 kHz to 10 kHz	0.3	0.7
For > 10 kHz to 20 kHz	0.3	1.0
5. Frequency and time weightings at 1 kHz	0.2	0.2
6. Long - term stability	0.1	0.1
7. Level linearity on the reference level range	0.2	0.3
8. Level linearity including the level ranges control	0.2	0.3
9. Tone burst response	0.2	0.3
10. Peak C sound level	0.2	0.35
11. Overload indication	0.2	0.75
12. High level stability	0.1	0.1

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Result of calibration :

1. Absolute sensitivity

Reference Acoustic Signal (dB)	Measured Value (dB)	Deviation (dB)	Acceptance Limit (dB)
93.9 (93.94)	93.9	0.0	±0.3

2. Self-generated noise

2.1 Normal test

Measured Value (dB)
13.8

2.2 The microphone of the sound level meter was replaced by electrical signal input device.

Frequency Weighting	Weighting (dB)
A - weight	12.6
C - weight	19.1
Flat	24.6

3. Acoustical signal tests of frequency weightings

Meter free-field acoustic response at a level of 84 dB

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
125	0.6	0.7	0.7	± 1.5
1000	0.1	0.1	0.1	± 1.0
8000	-1.5	-1.4	-1.4	±5.0

T. Retch.

SITHIPORN ASSOCIATES CO., LTD.
CALIBRATION LABORATORY
451-451/1 Sirinthorn Road, Bangbumru, Bangplud, Bangkok, 10700 Thailand
Tel. +66 2433 8331 Email : calibration@sithiphorn.com

SITHIPORN associates
NSC-TISI-TIS 17025 CALIBRATION 0394

Cert. No. : ACL24343
Job No. : VC68AC0027
Pages : 5 of 8

4. Electrical signal tests of frequency weightings

Weighting network response with relative to 1 kHz.

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
63	-0.1	-0.1	0.0	±2.0
125	0.0	0.0	0.0	±1.5
250	0.0	0.0	-0.1	±1.5
500	0.0	0.0	-0.1	±1.5
1000	0.0	0.0	0.0	±1.0
2000	0.0	0.0	0.0	±2.0
4000	0.0	0.0	0.0	±3.0
8000	0.0	0.1	0.1	±5.0

5. Frequency and time weightings at 1 kHz

5.1 Frequency weightings at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.2
C - weight	94.0	94.0	0.0	± 0.2
Flat	94.0	94.0	0.0	± 0.2

5.2 Time weighting at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	94.0	94.0	0.0	± 0.1
Slow	94.0	94.0	0.0	± 0.1
Leq	94.0	94.0	0.0	± 0.1

6. Long - term stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Devinted Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.3

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NSC-TISI-TIS 17025 CALIBRATION 0394

Cert. No. : ACL24343
Job No. : VC68AC0027
Pages : 6 of 8

7. Level linearity on the reference level range

Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
137.0	137.0	0.0	± 1.1
136.0	136.0	0.0	± 1.1
135.0	135.0	0.0	± 1.1
134.0	134.0	0.0	± 1.1
133.0	132.9	-0.1	± 1.1
132.0	131.9	-0.1	± 1.1
131.0	130.9	-0.1	± 1.1
129.0	129.0	0.0	± 1.1
124.0	124.0	0.0	± 1.1
119.0	119.0	0.0	± 1.1
114.0	114.0	0.0	± 1.1
109.0	109.0	0.0	± 1.1
104.0	104.0	0.0	± 1.1
99.0	99.0	0.0	± 1.1
94.0	94.0	0.0	± 1.1
89.0	89.0	0.0	± 1.1
84.0	84.0	0.0	± 1.1
79.0	79.0	0.0	± 1.1
74.0	74.0	0.0	± 1.1
69.0	69.0	0.0	± 1.1
64.0	64.0	0.0	± 1.1
59.0	59.0	0.0	± 1.1
54.0	54.0	0.0	± 1.1
49.0	49.0	0.0	± 1.1
44.0	44.0	0.0	± 1.1
39.0	39.0	0.0	± 1.1
34.0	34.0	0.0	± 1.1
30.0	30.0	0.0	± 1.1
29.0	29.0	0.0	± 1.1
28.0	28.0	0.0	± 1.1
27.0	27.0	0.0	± 1.1
26.0	26.0	0.0	± 1.1
25.0	24.9	-0.1	± 1.1

T. Retch.

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Cert. No. : ACL24343
Job No. : VC68AC0027
Pages : 7 of 8

8. Level linearity including the level range control

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
130	94.0	94.0	0.0	±1.1

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
130	29.0	29.0	0.0	±1.1

9. Tone burst response

Time Weighting	Tone burst duration, Tb (ms)	Cycle	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	0.25	1	108.0	107.9	-0.1	1.5 ; -5.0
	2	8	117.0	117.0	0.0	1.0 ; -2.5
	200	800	134.0	134.0	0.0	±1.0
Slow	2	8	108.0	108.0	0.0	1.5 ; -5.0
	200	800	127.6	127.6	0.0	±1.0
SEL	0.25	1	99.0	98.9	-0.1	1.5 ; -5.0
	2	8	108.0	108.0	0.0	1.0 ; -2.5
	200	800	128.0	128.0	0.0	±1.0

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Cert. No. : ACL24343
Job No. : VC68AC0027
Pages : 8 of 8

10. Peak C sound level

Number of cycle in test signal	Anticipated Value (dB)	Measured Value, Lcpeak (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	130.0	130.0	0.0	±3.0
One	133.4	133.4	0.0	±3.0

Number of cycle in test signal	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	±2.0
Positive half cycle	135.4	135.1	-0.3	±2.0
Negative half cycle	135.4	135.1	-0.3	±2.0

11. Overload indication

Measured value (dB)		Deviated Value (dB)	Acceptance Limits (dB)
Positive one half cycle	Negative one-half cycle		
89.5	89.5	0.0	±1.5

12. High level stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	137.0	137.0	0.0	±0.3

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor $k = 2$ or any value following calculation,providing a level of confidence of approximately 95 %

End of Calibration Certificate

T. Petch

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Cert. No. : ACL25095
Pages : 1 of 8

Calibration Certificate

Equipment : SOUND LEVEL METER
Manufacturer : RION
Model : NL-42 / Microphone UC-52 / Preamplifier NH-24
Serial No.: 00858525 / 170383 / 72089
ID No.: BKK_FS0115

Condition As Found : GOOD

Customer : ALS LABORATORY GROUP (THAILAND) CO., LTD.
104 PHATTHANAKAN 40, PHATTHANAKAN ROAD,
KHWAENG PHATTHANAKAN, KHET SUAN LUANG,
BANGKOK, 10250 THAILAND.

Location : -
Ambient Temperature : (23.0 ± 3) °C
Pressure : (101.3 ± 3) kPa
Relative Humidity : (50.0 ± 20) %

Received Date : 14 JANUARY 2025
Calibration Date : 27-29 JANUARY 2025
Date of Issue : 30 JANUARY 2025

REVIEW BY Nanakorn P.
APPROVED BY
NEXT CAL DATE 27/01/26

Calibrated by : Nattakorn Pisanjaisan

Approved by : T. Petchurai
(Thanakul Petchurai)

This certificate is issued in accordance with the requirements of ISO/IEC 17025 standard, may not be reproduced other than in full, except with the prior written approval of the head of Calibration Laboratory.

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CALIBRATION LABORATORY

Cert. No. : ACL25095
Job No. : VC68AC0063
Pages : 2 of 8

Calibration Procedure : CP-AC-01

Calibration Method :
This equipment was calibrated by follow on IEC-61672-3 (2013) Standard for sound level meter (SLM).
The SLM had tests to Acoustical and Electrical signal tests of frequency weighting with Anechoic chamber and Reference Standard Instruments.
For tests results of each items were made by observation of each Instruments display and also with SLM's display.

Condition of this result of calibration :
1. Reference Standard Instruments :

Instrument	Model	Serial No.	Cert. No.	Due Date
Waveform Generator	33210A	MY48017076	EF-0009-24	05-FEB-25
Waveform Generator	33511B	MY52302742	EF-0007-24	05-FEB-25
Digital Multimeter	33461A	MY53220104	EEL.BP 21/0267	13-FEB-25
Digital Multimeter	33461A	MY53220076	EEL.BP 20/0267	15-FEB-25
Digital Multimeter	34461A	MY60024273	EEL.BP 22/0267	15-FEB-25
Programmable Attenuator	MAT-1070	62100114	EF-0008-24	05-FEB-25
Condenser Microphone	4180	2977900	AA-1001-24	12-FEB-25
Measuring Amplifier	NA-42KAI	34560495	AA-3001-24	05-FEB-25

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.
3. This certificate is traceable to the international system of unit maintained at :
   3.1 National Institute of Metrology (Thailand).
   3.2 Thailand Institute of Scientific and Technological Research (TISTR).

T. Petch

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CALIBRATION LABORATORY

Cert. No. : ACL25095
Job No. : VC68AC0063
Pages : 3 of 8

Summary of Measurement Result :

Parameter	Uncertainty (dB)	Maximum-permitted uncertainty of measurement (dB)
1. Absolute sensitivity	0.2	N/A
2. Self-generated noise	0.2	N/A
3. Acoustical signal tests of frequency weightings		
125 Hz	0.3	0.6
1000 Hz	0.3	0.6
8000 Hz	0.3	0.7
4. Electrical signal tests of frequency weightings		
For 10 Hz to 4 kHz	0.3	0.6
For > 4 kHz to 10 kHz	0.3	0.7
For > 10 kHz to 20 kHz	0.3	1.0
5. Frequency and time weightings at 1 kHz	0.2	0.2
6. Long - term stability	0.1	0.1
7. Level linearity on the reference level range	0.2	0.3
8. Level linearity including the level range control	0.2	0.3
9. Tone burst response	0.2	0.3
10. Peak C sound level	0.2	0.35
11. Overload indication	0.2	0.25
12. High level stability	0.1	0.1

T. Petch

Cert. No. : ACL25095
Job No. : VC68AC0063
Page : 4 of 8

Result of calibration :

1. Absolute sensitivity

Reference Acoustic Signal (dB)	Measured Value (dB)	Deviation (dB)	Acceptance Limit (dB)
93.9 (93.94)	93.9	0.0	±0.3

2. Self-generated noise

2.1 Normal test

Measured Value (dB)
15.1

2.2 The microphone of the sound level meter was replaced by electrical signal input device.

Frequency Weighting	Weighting (dB)
A - weight	12.6
C - weight	18.5
Flat	24.1

3. Acoustical signal tests of frequency weightings

Meter free-field acoustic response at a level of 84 dB

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
125	0.4	**0.4**	**0.4**	± 1.5
1000	0.1	**0.1**	**0.1**	± 1.0
8000	-1.0	**-1.0**	**-1.0**	±5.0

T. Petch.

Cert. No. : ACL25095
Job No. : VC68AC0063
Pages : 5 of 8

4. Electrical signal tests of frequency weightings

Weighting network response with relative to 1 kHz.

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
63	**0.0**	**-0.1**	-0.1	**±2.0**
125	**0.0**	**0.0**	0.0	**±1.5**
250	**0.0**	**0.0**	0.0	**±1.5**
500	**0.0**	**0.0**	0.0	**±1.5**
1000	**0.0**	**0.0**	0.0	**±1.0**
2000	**0.0**	**0.0**	0.0	**±2.0**
4000	**0.0**	**0.0**	0.0	**±3.0**
8000	**0.0**	**0.1**	0.1	**±5.0**

5. Frequency and time weightings at 1 kHz

5.1 Frequency weightings at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.2
C - weight	94.0	94.0	0.0	± 0.2
Flat	94.0	94.0	0.0	± 0.2

5.2 Time weighting at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	94.0	94.0	0.0	± 0.1
Slow	94.0	94.0	0.0	± 0.1
Leq	94.0	94.0	0.0	± 0.1

6. Long - term stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.3

T. Petch.

Cert. No. : ACL25095
Job No. : VC68AC0063
Pages : 6 of 8

7. Level linearity on the reference level range

Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
137.0	137.0	0.0	± 1.1
136.0	136.0	0.0	± 1.1
135.0	135.0	0.0	± 1.1
134.0	134.0	0.0	± 1.1
133.0	133.0	0.0	± 1.1
132.0	132.0	0.0	± 1.1
131.0	131.0	0.0	± 1.1
129.0	129.0	0.0	± 1.1
124.0	124.0	0.0	± 1.1
119.0	119.0	0.0	± 1.1
114.0	114.0	0.0	± 1.1
109.0	109.0	0.0	± 1.1
104.0	104.0	0.0	± 1.1
99.0	99.0	0.0	± 1.1
94.0	94.0	0.0	± 1.1
89.0	89.0	0.0	± 1.1
84.0	84.0	0.0	± 1.1
79.0	79.0	0.0	± 1.1
74.0	74.0	0.0	± 1.1
69.0	69.0	0.0	± 1.1
64.0	64.0	0.0	± 1.1
59.0	59.0	0.0	± 1.1
54.0	53.9	-0.1	± 1.1
49.0	49.0	0.0	± 1.1
44.0	44.0	0.0	± 1.1
39.0	38.9	-0.1	± 1.1
34.0	34.0	0.0	± 1.1
30.0	30.0	0.0	± 1.1
29.0	29.0	0.0	± 1.1
28.0	28.0	0.0	± 1.1
27.0	27.0	0.0	± 1.1
26.0	26.0	0.0	± 1.1
25.0	25.0	0.0	± 1.1

T. Petch.

Cert. No. : ACL25095
Job No. : VC68AC0063
Pages : 7 of 8

8. Level linearity including the level range control

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
130	94.0	94.0	0.0	±1.1

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
140	29.0	28.9	-0.1	±1.1

9. Tone burst response

Time Weighting	Tone burst duration, Th (ms)	Cycle	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	0.25	1	108.0	107.9	-0.1	1.5 ; -5.0
	2	8	117.0	117.0	**0.0**	1.0 ; -2.5
	200	800	134.0	134.0	**0.0**	±1.0
Slow	2	8	108.0	108.0	**0.0**	1.5 ; -5.0
	200	800	127.6	127.6	**0.0**	±1.0
SEL	0.25	1	99.0	98.9	**-0.1**	1.5 ; -5.0
	2	8	108.0	108.0	**0.0**	1.0 ; -2.5
	200	800	128.0	128.0	**0.0**	±1.0

T. Petch.

Cert. No. : ACL25095
Job No. : VC68AC0063
Pages : 8 of 8

10. Peak C sound level

Number of cycle in test signal	Anticipated Value (dB)	Measured Value, Lcpeak (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	130.0	130.0	0.0	±3.0
One	133.4	133.3	-0.1	±3.0

Number of cycle in test signal	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	±2.0
Positive half cycle	135.4	135.2	-0.2	±2.0
Negative half cycle	135.4	135.2	-0.2	±2.0

11. Overload indication

Measured value (dB)		Deviated Value (dB)	Acceptance Limits (dB)
Positive one-half cycle	Negative one-half cycle		
89.5	89.6	0.1	±1.5

12. High level stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	137.0	137.0	0.0	±0.3

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor $k = 2$ or any value following calculation providing a level of confidence of approximately 95 %

End of Calibration Certificate

T. Retch.

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Tel. +66 2433 8331 Email : calibration@sithiphorn.com

Cert. No. : ACL25009
Pages : 1 of 8

Calibration Certificate

Equipment : SOUND LEVEL METER
Manufacturer : RION
Model : NL-42 / Microphone UC-52 / Preamplifier NH-24
Serial No.: 00572457 / 170214 / 72795
ID No.: BKK_FS0923

Condition As Found : GOOD

Customer : ALS LABORATORY GROUP (THAILAND) CO., LTD.
104 PHATTHANAKAN 40, PHATTHANAKAN ROAD,
KHWAENG PHATTHANAKAN, KHET SUAN LUANG,
BANGKOK, 10250 (THAILAND).

Location : -
Ambient Temperature : (23.0 ± 3) °C
Pressure : (101.3 ± 3) kPa
Relative Humidity : (50.0 ± 20) %

Received Date : 19 DECEMBER 2024
Calibration Date : 09 - 10 JANUARY 2025
Date of Issue : 13 JANUARY 2025

REVIEW BY
APPROVED BY
NEXT CAL DATE 09/01/26

Calibrated by : Nathakorn Pisutpaisan

Approved by : T. Retch.
(Thanakul Petchurai)

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Cert. No. : ACL25009
Job No. : VC68AC0052
Pages : 2 of 8

Calibration Procedure : CP-AC-01

Calibration Method :

This equipment was calibrated by follow on IEC-61672-3 (2013) Standard for sound level meter (SLM).
The SLM had tests in Acoustical and Electrical signal tests of frequency weighting with Anechoic chamber and Reference Standard Instruments.
For tests results of each items were made by observation of each Instruments display and also with SLM's display.

Condition of this result of calibration :

1. Reference Standard Instruments :

Instrument	Model	Serial No.	Cert. No.	Due Date
Waveform Generator	33210A	MY48017076	EF-0009-24	05-FEB-25
Waveform Generator	33511B	MY52302742	EF-0007-24	05-FEB-25
Digital Multimeter	33461A	MY53220104	EEL.BP 21/0267	13-FEB-25
Digital Multimeter	33461A	MY53220046	EEL.BP 20/0267	15-FEB-25
Digital Multimeter	34461A	MY60024273	EEL.BP 22/0267	15-FEB-25
Programmable Attenuator	MAT-1070	62100114	EF-0008-24	05-FEB-25
Condenser Microphone	4180	2977900	AA-1001-24	12-FEB-25
Measuring Amplifier	NA-42KAI	34560495	AA-3001-24	05-FEB-25

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.
3. This certificate is traceable to the international system of unit maintained at :
   3.1 National Institute of Metrology (Thailand).
   3.2 Thailand Institute of Scientific and Technological Research (TISTR).

T. Retch

Cert. No. : ACL25009
Job No. : VC68AC0052
Pages : 3 of 8

Summary of Measurement Result :

Parameter	Uncertainty (dB)	Maximum-permitted uncertainty of measurement (dB)
1. Absolute sensitivity	0.2	N/A
2. Self-generated noise	0.2	N/A
3. Acoustical signal tests of frequency weightings		
125 Hz	0.3	0.6
1000 Hz	0.3	0.6
8000 Hz	0.3	0.7
4. Electrical signal tests of frequency weightings		
For 10 Hz to 4 kHz	0.3	0.6
For > 4 kHz to 10 kHz	0.3	0.7
For > 10 kHz to 20 kHz	0.3	1.0
5. Frequency and time weightings at 1 kHz	0.2	0.2
6. Long - term stability	0.1	0.1
7. Level linearity on the reference level range	0.2	0.3
8. Level linearity including the level range control	0.2	0.3
9. Tone burst response	0.2	0.3
10. Peak C sound level	0.2	0.35
11. Overload indication	0.2	0.25
12. High level stability	0.1	0.1

T. Retch

Cert. No. : ACL25009
Job No. : VC68AC0052
Page : 4 of 8

Result of calibration :

1. Absolute sensitivity

Reference Acoustic Signal (dB)	Measured Value (dB)	Deviation (dB)	Acceptance Limit (dB)
93.9 (93.94)	93.9	0.0	±0.3

2. Self-generated noise

2.1 Normal test

Measured Value (dB)
18.4

2.2 The microphone of the sound level meter was replaced by electrical signal input device.

Frequency Weighting	Weighting (dB)
A - weight	9.9
C - weight	16.5
Flat	22.4

3. Acoustical signal tests of frequency weightings

Meter free-field acoustic response at a level of 88 dB

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
125	0.6	0.7	0.7	± 1.5
1000	0.1	0.1	0.1	± 1.0
8000	-2.0	-1.9	-1.9	±5.0

T. Petch

Cert. No. : ACL25009
Job No. : VC68AC0052
Pages : 5 of 8

4. Electrical signal tests of frequency weightings

Weighting network response with relative to 1 kHz.

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
63	0.0	-0.1	-0.1	±2.0
125	0.0	0.0	0.0	±1.5
250	0.0	0.0	0.0	±1.5
500	0.0	0.1	0.0	±1.5
1000	0.0	0.0	0.0	±1.0
2000	0.0	0.1	0.0	±2.0
4000	0.0	0.0	0.0	±3.0
8000	0.0	0.1	0.1	±5.0

5. Frequency and time weightings at 1 kHz

5.1 Frequency weightings at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.2
C - weight	94.0	94.0	0.0	± 0.2
Flat	94.0	94.0	0.0	± 0.2

5.2 Time weighting at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	94.0	94.0	0.0	± 0.1
Slow	94.0	94.0	0.0	± 0.1
Leq	94.0	94.0	0.0	± 0.1

6. Long - term stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	±0.3

T. Petch

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Job No. : VC68AC0052
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7. Level linearity on the reference level range

Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
137.0	137.0	0.0	± 1.1
136.0	136.0	0.0	± 1.1
135.0	135.0	0.0	± 1.1
134.0	134.0	0.0	± 1.1
133.0	133.0	0.0	± 1.1
132.0	132.0	0.0	± 1.1
131.0	131.0	0.0	± 1.1
129.0	129.0	0.0	± 1.1
124.0	124.0	0.0	± 1.1
119.0	119.0	0.0	± 1.1
114.0	114.0	0.0	± 1.1
109.0	109.0	0.0	± 1.1
104.0	104.0	0.0	± 1.1
99.0	99.0	0.0	± 1.1
94.0	94.0	0.0	± 1.1
89.0	89.0	0.0	± 1.1
84.0	84.0	0.0	± 1.1
79.0	79.0	0.0	± 1.1
74.0	74.0	0.0	± 1.1
69.0	69.0	0.0	± 1.1
64.0	64.0	0.0	± 1.1
59.0	59.0	0.0	± 1.1
54.0	54.0	0.0	± 1.1
49.0	49.0	0.0	± 1.1
44.0	44.0	0.0	± 1.1
39.0	39.0	0.0	± 1.1
34.0	34.0	0.0	± 1.1
30.0	29.9	-0.1	± 1.1
29.0	28.9	-0.1	± 1.1
28.0	28.0	0.0	± 1.1
27.0	27.0	0.0	± 1.1
26.0	26.0	0.0	± 1.1
25.0	24.9	-0.1	± 1.1

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8. Level linearity including the level range control

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
130	94.0	94.0	0.0	±1.1

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
130	29.0	28.9	-0.1	±1.1

9. Tone burst response

Time Weighting	Tone burst duration, Tb (ms)	Cycle	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	0.25	1	108.0	107.9	-0.1	1.5 ; -5.0
	2	8	117.0	117.0	0.0	1.0 ; -2.5
	200	800	134.0	134.1	0.1	±1.0
Slow	2	8	108.0	108.0	0.0	1.5 ; -5.0
	200	800	127.6	127.6	0.0	±1.0
SEL	0.25	1	99.0	98.9	-0.1	1.5 ; -5.0
	2	8	108.0	108.0	0.0	1.0 ; -2.5
	200	800	128.0	128.1	0.1	±1.0

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10. Peak C sound level

Number of cycle in test signal	Anticipated Value (dB)	Measured Value, Lcpeak (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	130.0	130.0	0.0	±3.0
One	133.4	133.3	-0.1	±3.0

Number of cycle in test signal	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	±2.0
Positive half cycle	135.4	135.2	-0.2	±2.0
Negative half cycle	135.4	135.2	-0.2	±2.0

11. Overload indication

Measured value (dB)		Deviated Value (dB)	Acceptance Limits (dB)
Positive one-half cycle	Negative one-half cycle		
89.5	89.6	0.1	±1.5

12. High level stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	137.0	137.0	0.0	±0.3

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor $k = 2$ or any value following calculation,providing a level of confidence of approximately 95 %

End of Calibration Certificate

T. Petch.

SITHIPORN ASSOCIATES CO., LTD.
CALIBRATION LABORATORY
451-451/1 Sinthorn Road, Bangbumru, Bangplad, Bangkok, 10700 Thailand
Tel. +66 2433 8331 Email : calibration@sithiphorn.com

Cert. No. : ACL24379
Pages : 1 of 8

Calibration Certificate

Equipment : SOUND LEVEL METER
Manufacturer : RION
Model : NL-42 / Microphone UC-52 / Preamplifier NH-24
Serial No.: 00572552 / 170384 / 72890
ID No.: BKK_FS0877

Condition As Found : GOOD

Customer : ALS LABORATORY GROUP (THAILAND) CO., LTD.
104 PHATTHANAKAN 40, PHATTHANAKAN ROAD,
KHWAENG PHATTHANAKAN, KHET SUAN LUANG,
BANGKOK, 10250 THAILAND.

Location : -
Ambient Temperature : (23.0 ± 3) °C
Pressure : (101.3 ± 3) kPa
Relative Humidity : (50.0 ± 20) %

REVIEW BY
APPROVED BY
NEXT CAL DATE 03/12/25

Received Date : 15 NOVEMBER 2024
Calibration Date : 03-04 DECEMBER 2024
Date of Issue : 04 DECEMBER 2024

Calibrated by : Tanadej Chaimongkol

Approved by : T. Petch.
(Thanakul Petchurai)

This certificate is issued in accordance with the requirements of ISO/IEC 17025 standard, may not be reproduced other than in full, except with the prior written approval of the head of Calibration Laboratory.

SITHIPORN ASSOCIATES CO., LTD.
CALIBRATION LABORATORY
451-451/1 Sinthorn Road, Bangbumru, Bangplad, Bangkok, 10700 Thailand
Tel. +66 2433 8331 Email : calibration@sithiphorn.com

Cert. No. : ACL24379
Job No. : VC68AC0032
Pages : 2 of 8

Calibration Procedure : CP-AC-01

Calibration Method :
This equipment was calibrated by follow on IEC-61672-3 (2013) Standard for sound level meter (SLM).
The SLM had tests to Acoustical and Electrical signal tests of frequency weighting with Anechoic chamber and Reference Standard Instruments.
For tests results of each items were made by observation of each Instruments display and also with SLM's display.

Condition of this result of calibration :
1. Reference Standard Instruments :

Instrument	Model	Serial No.	Cert. No.	Due Date
Waveform Generator	33210A	MY48017076	EF-0009-24	05-FEB-25
Waveform Generator	33511B	MY52302742	EF-0007-24	05-FEB-25
Digital Multimeter	33461A	MY53220104	EEL.BP 21/0267	13-FEB-25
Digital Multimeter	33461A	MY53220076	EEL.BP 20/0267	15-FEB-25
Digital Multimeter	34461A	MY60024273	EEL.BP 22/0267	15-FEB-25
Programmable Attenuator	MAT-1070	621000114	EF-0008-24	05-FEB-25
Condenser Microphone	4180	2977900	AA-1001-24	12-FEB-25
Measuring Amplifier	NA-42KAI	34560495	AA-3001-24	05-FEB-25

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.
3. This certificate is traceable to the international system of unit maintained at :
   3.1 National Institute of Metrology (Thailand).
   3.2 Thailand Institute of Scientific and Technological Research (TISTR).

T. Petch.

SITHIPORN ASSOCIATES CO., LTD.
CALIBRATION LABORATORY
451-451/1 Sinthorn Road, Bangbumru, Bangplad, Bangkok, 10700 Thailand
Tel. +66 2433 8331 Email : calibration@sithiphorn.com

Cert. No. : ACL24379
Job No. : VC68AC0032
Pages : 3 of 8

Summary of Measurement Result :

Parameter	Uncertainty (dB)	Maximum-permitted uncertainty of measurement (dB)
1. Absolute sensitivity	0.2	N/A
2. Self-generated noise	0.2	N/A
3. Acoustical signal tests of frequency weightings		
125 Hz	0.3	0.6
1000 Hz	0.3	0.6
8000 Hz	0.3	0.7
4. Electrical signal tests of frequency weightings		
For 10 Hz to 4 kHz	0.3	0.6
For > 4 kHz to 10 kHz	0.3	0.7
For > 10 kHz to 20 kHz	0.3	1.0
5. Frequency and time weightings at 1 kHz	0.2	0.2
6. Long - term stability	0.1	0.1
7. Level linearity on the reference level range	0.2	0.3
8. Level linearity including the level range control	0.2	0.3
9. Tone burst response	0.2	0.3
10. Peak C sound level	0.2	0.35
11. Overload indication	0.2	0.25
12. High level stability	0.1	0.1

T. Petch.

Cert. No. : ACL24379
Job No. : VC68AC0032
Page : 4 of 8

Result of calibration :

1. Absolute sensitivity

Reference Acoustic Signal (dB)	Measured Value (dB)	Deviation (dB)	Acceptance Limit (dB)
93.9 (93.94)	93.9	0.0	±0.3

2. Self-generated noise

2.1 Normal test

Measured Value (dB)
14.2

2.2 The microphone of the sound level meter was replaced by electrical signal input device.

Frequency Weighting	Weighting (dB)
A - weight	10.8
C - weight	17.4
Flat	23.2

3. Acoustical signal tests of frequency weightings

Meter free-field acoustic response at a level of 84 dB

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
125	0.4	0.4	0.4	± 1.5
1000	0.0	0.0	0.0	± 1.0
8000	-1.2	-1.1	-1.1	±5.0

T. Petch

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Job No. : VC68AC0032
Pages : 5 of 8

4. Electrical signal tests of frequency weightings

Weighting network response with relative to 1 kHz.

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
63	0.0	0.0	0.0	±2.0
125	0.0	0.1	0.0	±1.5
250	0.0	0.0	0.0	±1.5
500	0.0	0.1	0.0	±1.5
1000	0.0	0.0	0.0	±1.0
2000	0.0	0.1	0.0	±2.0
4000	0.0	0.1	0.0	±3.0
8000	0.1	0.1	0.1	±5.0

5. Frequency and time weightings at 1 kHz

5.1 Frequency weightings at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.2
C - weight	94.0	94.0	0.0	± 0.2
Flat	94.0	94.0	0.0	± 0.2

5.2 Time weighting at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	94.0	94.0	0.0	± 0.1
Slow	94.0	94.0	0.0	± 0.1
Leq	94.0	94.0	0.0	± 0.1

6. Long - term stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.1	0.1	± 0.3

T. Petch

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Job No. : VC68AC0032
Pages : 6 of 8

7. Level linearity on the reference level range

Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
137.0	137.0	0.0	± 1.1
136.0	136.0	0.0	± 1.1
135.0	135.0	0.0	± 1.1
134.0	134.0	0.0	± 1.1
133.0	133.0	0.0	± 1.1
132.0	132.0	0.0	± 1.1
131.0	131.0	0.0	± 1.1
129.0	129.0	0.0	± 1.1
124.0	124.0	0.0	± 1.1
119.0	119.1	0.1	± 1.1
114.0	114.0	0.0	± 1.1
109.0	109.0	0.0	± 1.1
104.0	104.1	0.1	± 1.1
99.0	99.0	0.0	± 1.1
94.0	94.0	0.0	± 1.1
89.0	89.0	0.0	± 1.1
84.0	84.0	0.0	± 1.1
79.0	79.0	0.0	± 1.1
74.0	74.0	0.0	± 1.1
69.0	69.0	0.0	± 1.1
64.0	64.0	0.0	± 1.1
59.0	59.0	0.0	± 1.1
54.0	54.0	0.0	± 1.1
49.0	49.0	0.0	± 1.1
44.0	44.0	0.0	± 1.1
39.0	39.0	0.0	± 1.1
34.0	34.0	0.0	± 1.1
30.0	30.0	0.0	± 1.1
29.0	29.0	0.0	± 1.1
28.0	28.0	0.0	± 1.1
27.0	27.0	0.0	± 1.1
26.0	26.0	0.0	± 1.1
25.0	24.9	-0.1	± 1.1

T. Petch

Cert. No. : ACL24379
Job No. : VC68AC0032
Pages : 7 of 8

8. Level linearity including the level range control

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
130	94.0	94.0	0.0	±1.1

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
130	29.0	29.0	0.0	±1.1

9. Tone burst response

Time Weighting	Tone burst duration, Tb (ms)	Cycle	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	0.25	1	108.0	108.0	0.0	1.5 ; -5.0
	2	8	117.0	117.0	0.0	1.0 ; -2.5
	200	800	134.0	134.1	0.1	±1.0
Slow	2	8	108.0	108.0	0.0	1.5 ; -5.0
	200	800	127.6	127.6	0.0	±1.0
SEL	0.25	1	99.0	98.9	-0.1	1.5 ; -5.0
	2	8	108.0	108.0	0.0	1.0 ; -2.5
	200	800	128.0	128.0	0.0	±1.0

T. Petch

10. Peak C sound level

Number of cycle in test signal	Anticipated Value (dB)	Measured Value_1 cpeak (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	130.0	130.0	0.0	±3.0
One	133.4	133.3	-0.1	±3.0

Number of cycle in test signal	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	132.9	-0.1	±2.0
Positive half cycle	135.4	135.1	-0.3	±2.0
Negative half cycle	135.4	135.1	-0.3	±2.0

11. Overload indication

Measured value (dB)		Deviated Value (dB)	Acceptance Limits (dB)
Positive one-half cycle	Negative one-half cycle		
89.5	89.5	0.0	±1.5

12. High level stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	137.1	137.1	0.0	±0.3

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor $k = 2$ or any value following calculation,providing a level of confidence of approximately 95 %

End of Calibration Certificate

T. Petch.

Calibration Certificate

Equipment : SOUND LEVEL METER
Manufacturer : RION
Model : NL-42 / Microphone UC-52 / Preamplifier NH-24
Serial No.: 00572609 / 170133 / 72947
ID No.: BKK_FS0924

Condition As Found : GOOD

Customer : ALS LABORATORY GROUP (THAILAND) CO., LTD.
104 PHATTHANAKAN 40, PHATTHANAKAN ROAD,
KHWAENG PHATTHANAKAN, KHET SUAN LUANG,
BANGKOK, 10250 THAILAND.

Location : -
Ambient Temperature : (23.0 ± 3) °C
Pressure : (101.3 ± 3) kPa
Relative Humidity : (50.0 ± 20) %

Received Date : 19 DECEMBER 2024
Calibration Date : 09 - 10 JANUARY 2025
Date of Issue : 13 JANUARY 2025

REVIEW BY
APPROVED BY
NEXT CAL DATE 09/01/26

Calibrated by : Nathakorn Pisutpaisan

Approved by : T. Petch.
(Thanakul Petchurai)

This certificate is issued in accordance with the requirements of ISO/IEC 17025 standard, may not be reproduced other than in full, except with the prior written approval of the head of Calibration Laboratory.

Calibration Procedure : CP-AC-01

Calibration Method :

This equipment was calibrated by follow on IEC 61672-3 (2013) Standard for sound level meter (SLM).
The SLM had tests to Acoustical and Electrical signal tests of frequency weighting with Anechoic chamber and Reference Standard Instruments.
For tests results of each items were made by observation of each Instruments display and also with SLM's display.

Condition of this result of calibration :

1. Reference Standard Instruments :

Instrument	Model	Serial No.	Cert. No.	Due Date
Waveform Generator	33210A	MY48017076	EF-0009-24	05-FEB-25
Waveform Generator	33511B	MY52302742	EF-0007-24	05-FEB-25
Digital Multimeter	33461A	MY53220104	EEL_BP 21/0267	13-FEB-25
Digital Multimeter	33461A	MY53220076	EEL_BP 20/0267	15-FEB-25
Digital Multimeter	34461A	MY60024273	EEL_BP 22/0267	15-FEB-25
Programmable Attenuator	MAT-1070	62100114	EF-0008-24	05-FEB-25
Condenser Microphone	4180	2977900	AA-1001-24	12-FEB-25
Measuring Amplifier	NA-42KAJ	34560495	AA-3001-24	05-FEB-25

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.
3. This certificate is traceable to the international system of unit maintained at :
   3.1 National Institute of Metrology (Thailand).
   3.2 Thailand Institute of Scientific and Technological Research (TISTR).

T. Petch

Summary of Measurement Result :

Parameter	Uncertainty (dB)	Maximum-permitted uncertainty of measurement (dB)
1. Absolute sensitivity	0.2	N/A
2. Self-generated noise	0.2	N/A
3. Acoustical signal tests of frequency weightings		
125 Hz	0.3	0.6
1000 Hz	0.3	0.6
8000 Hz	0.3	0.7
4. Electrical signal tests of frequency weightings		
For 10 Hz to 4 kHz	0.3	0.6
For > 4 kHz to 10 kHz	0.3	0.7
For > 10 kHz to 20 kHz	0.3	1.0
5. Frequency and time weightings at 1 kHz	0.2	0.2
6. Long - term stability	0.1	0.1
7. Level linearity on the reference level range	0.2	0.3
8. Level linearity including the level range control	0.2	0.3
9. Tone burst response	0.2	0.3
10. Peak C sound level	0.2	0.35
11. Overload indication	0.2	0.25
12. High level stability	0.1	0.1

T. Petch

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Job No. : VC68AC0052
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Result of calibration :

1. Absolute sensitivity

Reference Acoustic Signal (dB)	Measured Value (dB)	Deviation (dB)	Acceptance Limit (dB)
93.9 (93.94)	93.9	0.0	±0.3

2. Self-generated noise

2.1 Normal test

Measured Value (dB)
14.8

2.2 The microphone of the sound level meter was replaced by electrical signal input device.

Frequency Weighting	Weighting (dB)
A - weight	11.6
C - weight	17.5
Flat	23.4

3. Acoustical signal tests of frequency weightings

Meter free-field acoustic response at a level of 84 dB

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
125	0.2	0.2	0.2	± 1.5
1000	0.1	0.1	0.1	± 1.0
8000	0.7	0.8	0.8	±5.0

T. Petch

Cert. No. : ACL25010
Job No. : VC68AC0052
Pages : 5 of 8

4. Electrical signal tests of frequency weightings

Weighting network response with relative to 1 kHz

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
63	0.0	-0.1	0.0	±2.0
125	0.0	0.0	0.0	±1.5
250	0.0	0.0	-0.1	±1.5
500	0.0	0.0	-0.1	±1.5
1000	0.0	0.0	0.0	±1.0
2000	0.0	0.0	0.0	±2.0
4000	0.0	0.0	0.0	±3.0
8000	0.0	0.1	0.1	±5.0

5. Frequency and time weightings at 1 kHz

5.1 Frequency weightings at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.2
C - weight	94.0	94.0	0.0	± 0.2
Flat	94.0	94.0	0.0	± 0.2

5.2 Time weighting at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	94.0	94.0	0.0	± 0.1
Slow	94.0	94.0	0.0	± 0.1
Leq	94.0	94.0	0.0	± 0.1

6. Long - term stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.3

T. Petch

Cert. No. : ACL25010
Job No. : VC68AC0052
Pages : 6 of 8

7. Level linearity on the reference level range

Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
137.0	137.0	0.0	± 1.1
136.0	136.0	0.0	± 1.1
135.0	135.0	0.0	± 1.1
134.0	134.0	0.0	± 1.1
133.0	132.9	-0.1	± 1.1
132.0	131.9	-0.1	± 1.1
131.0	130.9	-0.1	± 1.1
129.0	129.0	0.0	± 1.1
124.0	124.0	0.0	± 1.1
119.0	119.0	0.0	± 1.1
114.0	114.0	0.0	± 1.1
109.0	109.0	0.0	± 1.1
104.0	104.0	0.0	± 1.1
99.0	99.0	0.0	± 1.1
94.0	94.0	0.0	± 1.1
89.0	89.0	0.0	± 1.1
84.0	84.0	0.0	± 1.1
79.0	79.0	0.0	± 1.1
74.0	74.0	0.0	± 1.1
69.0	69.0	0.0	± 1.1
64.0	64.0	0.0	± 1.1
59.0	59.0	0.0	± 1.1
54.0	54.0	0.0	± 1.1
49.0	49.0	0.0	± 1.1
44.0	44.0	0.0	± 1.1
39.0	39.0	0.0	± 1.1
34.0	34.0	0.0	± 1.1
30.0	30.1	0.1	± 1.1
29.0	29.0	0.0	± 1.1
28.0	28.0	0.0	± 1.1
27.0	27.1	0.1	± 1.1
26.0	26.1	0.1	± 1.1
25.0	25.1	0.1	± 1.1

T. Petch

Cert. No. : ACL25010
Job No. : VC68AC0052
Pages : 7 of 8

8. Level linearity including the level range control

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
130	94.0	94.0	0.0	±1.1

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
130	29.0	29.0	0.0	±1.1

9. Tone burst response

Time Weighting	Tone burst duration, Tb (ms)	Cycle	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	0.25	1	108.0	107.9	-0.1	1.5 ; -5.0
	2	8	117.0	117.0	0.0	1.0 ; -2.5
	200	800	134.0	134.0	0.0	±1.0
Slow	2	8	108.0	108.0	0.0	1.5 ; -5.0
	200	800	127.6	127.6	0.0	±1.0
SEL	0.25	1	99.0	98.9	-0.1	1.5 ; -5.0
	2	8	108.0	108.0	0.0	1.0 ; -2.5
	200	800	128.0	128.0	0.0	±1.0

T. Petch

10. Peak C sound level

Number of cycle in test signal	Anticipated Value (dB)	Measured Value, Lcpeak (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	130.0	130.0	0.0	±3.0
One	133.4	133.4	0.0	±3.0

Number of cycle in test signal	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	±2.0
Positive half cycle	135.4	135.2	-0.2	±2.0
Negative half cycle	135.4	135.2	-0.2	±2.0

11. Overload indication

Measured value (dB)		Deviated Value (dB)	Acceptance Limits (dB)
Positive one-half cycle	Negative one-half cycle		
89.5	89.5	0.0	±1.5

12. High level stability

Frequency Weighing	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	137.0	137.0	0.0	±0.3

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor $k = 2$ or any value following calculation,providing a level of confidence of approximately 95 %

End of Calibration Certificate

T. Petch

SITHIPORN ASSOCIATES CO., LTD.
CALIBRATION LABORATORY
451-451/1 Sirinthorn Road, Bangbumru, Bangplud, Bangkok 10700 Thailand
Tel. +66 2433 8331 Email: calibration@sithiphorn.com

SITHIPORN associates

ilac-MRA

NSC-TISI-TIS 17025 CALIBRATION 0394

Cert. No. : ACL24401
Pages : 1 of 8

Calibration Certificate

Equipment : SOUND LEVEL METER
Manufacturer : RION
Model : NL-42 / Microphone UC-52 / Preamplifier NH-24
Serial No.: 00858527 / 157781 / 48096
ID No.: BKK_FS0117

Condition As Found : GOOD

Customer : ALS LABORATORY GROUP (THAILAND) CO., LTD.
104 PHATTHANAKAN 40, PHATTHANAKAN ROAD,
KHWAENG PHATTHANAKAN, KHET SUAN LUANG,
BANGKOK, 10250 THAILAND.

Location : -
Ambient Temperature : (23.0 ± 3) °C
Pressure : (101.3 ± 3) kPa
Relative Humidity : (50.0 ± 20) %

Received Date : 06 DECEMBER 2024
Calibration Date : 13-16 DECEMBER 2024
Date of Issue : 16 DECEMBER 2024

REVIEW BY
APPROVED BY
NEXT CAL DATE 13/12/25

Calibrated by : Nathakorn Pisutpaisan

Approved by : T. Petch
(Thanakul Petchurai)

This certificate is issued in accordance with the requirements of ISO/IEC 17025 standard, may not be reproduced other than in full, except with the prior written approval of the head of Calibration Laboratory.

SITHIPORN ASSOCIATES CO., LTD.
CALIBRATION LABORATORY
451-451/1 Sirinthorn Road, Bangbumru, Bangplud, Bangkok 10700 Thailand
Tel +66 2433 8331 Email : calibration@sithiphorn.com

Calibration Procedure : CP-AC-01

Calibration Method :

This equipment was calibrated by follow on IEC-61672-3 (2013) Standard for sound level meter (SLM).
The SLM had tests to Acoustical and Electrical signal tests of frequency weighting with Anechoic chamber and Reference Standard Instruments.
For tests results of each items were made by observation of each Instruments display and also with SLM's display.

Condition of this result of calibration :

1. Reference Standard Instruments :

Instrument	Model	Serial No.	Cert. No.	Due Date
Waveform Generator	33210A	MY48017076	EE-0009-24	05-FEB-25
Waveform Generator	33511B	MY52302742	EE-0007-24	05-FEB-25
Digital Multimeter	33461A	MY53220104	EEL.BP 21/0267	15-FEB-25
Digital Multimeter	33461A	MY53220076	EEL.BP 20/0267	15-FEB-25
Digital Multimeter	34461A	MY60024273	EEL.BP 22/0267	15-FEB-25
Programmable Attenuator	MAT-1070	62100114	EE-0008-24	05-FEB-25
Condenser Microphone	4180	2977900	AA-1001-24	12-FEB-25
Measuring Amplifier	NA-42KAI	34560495	AA-3001-24	05-FEB-25

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.
3. This certificate is traceable to the international system of unit maintained at :
   3.1 National Institute of Metrology (Thailand).
   3.2 Thailand Institute of Scientific and Technological Research (TISTR).

T. Petch

SITHIPORN ASSOCIATES CO., LTD.
CALIBRATION LABORATORY
451-451/1 Sirinthorn Road, Bangbumru, Bangplud, Bangkok 10700 Thailand
Tel +66 2433 8331 Email : calibration@sithiphorn.com

Summary of Measurement Result :

Parameter	Uncertainty (dB)	Maximum-permitted uncertainty of measurement (dB)
1. Absolute sensitivity	0.2	N/A
2. Self-generated noise	0.2	N/A
3. Acoustical signal tests of frequency weightings		
125 Hz	0.3	0.6
1000 Hz	0.3	0.6
8000 Hz	0.3	0.7
4. Electrical signal tests of frequency weightings		
For 10 Hz to 4 kHz	0.3	0.6
For > 4 kHz to 10 kHz	0.3	0.7
For > 10 kHz to 20 kHz	0.3	1.0
5. Frequency and time weightings at 1 kHz	0.2	0.2
6. Long - term stability	0.1	0.1
7. Level linearity on the reference level range	0.2	0.3
8. Level linearity including the level range control	0.2	0.3
9. Tone burst response	0.2	0.3
10. Peak C sound level	0.2	0.35
11. Overload indication	0.2	0.25
12. High level stability	0.1	0.1

T. Petch

Cert. No. : ACL24401
Job No. : VC68AC0045
Page : 4 of 8

Result of calibration :

1. Absolute sensitivity

Reference Acoustic Signal (dB)	Measured Value (dB)	Deviation (dB)	Acceptance Limit (dB)
93.9 (93.94)	93.9	0.0	±0.3

2. Self-generated noise

2.1 Normal test

Measured Value (dB)
16.5

2.2 The microphone of the sound level meter was replaced by electrical signal input device.

Frequency Weighting	Weighting (dB)
A - weight	13.1
C - weight	19.0
Flat	24.6

3. Acoustical signal tests of frequency weightings

Meter free-field acoustic response at a level of 84 dB

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
125	0.7	0.7	0.7	± 1.5
1000	0.3	0.3	0.3	± 1.0
8000	-0.6	-0.5	-0.5	±5.0

T. Petch.

Cert. No. : ACL24401
Job No. : VC68AC0045
Pages : 5 of 8

4. Electrical signal tests of frequency weightings

Weighting network response with relative to 1 kHz.

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
63	0.0	0.0	0.1	±2.0
125	0.0	0.1	0.0	±1.5
250	0.0	0.1	0.0	±1.5
500	0.1	0.1	0.0	±1.5
1000	0.0	0.0	0.0	±1.0
2000	0.0	0.1	0.0	±2.0
4000	0.0	0.1	0.0	±3.0
8000	0.0	0.1	0.1	±5.0

5. Frequency and time weightings at 1 kHz

5.1 Frequency weightings at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.2
C - weight	94.0	94.0	0.0	± 0.2
Flat	94.0	94.0	0.0	± 0.2

5.2 Time weighting at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	94.0	94.0	0.0	± 0.1
Slow	94.0	94.0	0.0	± 0.1
Leq	94.0	94.0	0.0	± 0.1

6. Long - term stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.1	0.1	± 0.3

T. Petch.

Cert. No. : ACL24401
Job No. : VC68AC0045
Pages : 6 of 8

7. Level linearity on the reference level range

Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
137.0	137.0	0.0	± 1.1
136.0	136.0	0.0	± 1.1
135.0	135.0	0.0	± 1.1
134.0	134.0	0.0	± 1.1
133.0	133.0	0.0	± 1.1
132.0	132.0	0.0	± 1.1
131.0	131.0	0.0	± 1.1
129.0	129.0	0.0	± 1.1
124.0	124.0	0.0	± 1.1
119.0	119.0	0.0	± 1.1
114.0	114.0	0.0	± 1.1
109.0	109.0	0.0	± 1.1
104.0	104.0	0.0	± 1.1
99.0	99.0	0.0	± 1.1
94.0	94.0	0.0	± 1.1
89.0	89.0	0.0	± 1.1
84.0	84.0	0.0	± 1.1
79.0	79.0	0.0	± 1.1
74.0	74.0	0.0	± 1.1
69.0	69.0	0.0	± 1.1
64.0	64.0	0.0	± 1.1
59.0	59.0	0.0	± 1.1
54.0	54.0	0.0	± 1.1
49.0	49.0	0.0	± 1.1
44.0	44.0	0.0	± 1.1
39.0	39.0	0.0	± 1.1
34.0	34.0	0.0	± 1.1
30.0	30.0	0.0	± 1.1
29.0	29.0	0.0	± 1.1
28.0	28.1	0.1	± 1.1
27.0	27.1	0.1	± 1.1
26.0	26.1	0.1	± 1.1
25.0	25.1	0.1	± 1.1

T. Petch.

Cert. No. : ACL24401
Job No. : VC68AC0045
Pages : 7 of 8

8. Level linearity including the level range control

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
130	94.0	94.0	0.0	±1.1

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
130	29.0	29.0	0.0	±1.1

9. Tone burst response

Time Weighting	Tone burst duration, Tb (ms)	Cycle	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	0.25	1	108.0	107.9	-0.1	1.5 ; -5.0
	2	8	117.0	117.0	0.0	1.0 ; -2.5
	200	800	134.0	134.1	0.1	±1.0
Slow	2	8	108.0	108.0	0.0	1.5 ; -5.0
	200	800	127.6	127.6	0.0	±1.0
SEL	0.25	1	99.0	98.9	-0.1	1.5 ; -5.0
	2	8	108.0	108.0	0.0	1.0 ; -2.5
	200	800	128.0	128.0	0.0	±1.0

T. Petch.

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NSC-TISI-TIS 17025 CALIBRATION 0394

10. Peak C sound level

Number of cycle in test signal	Anticipated Value (dB)	Measured Value, Lcpeak (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	130.0	130.0	0.0	±3.0
One	133.4	133.4	0.0	±3.0

Number of cycle in test signal	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	±2.0
Positive half cycle	135.4	135.1	-0.3	±2.0
Negative half cycle	135.4	135.1	-0.3	±2.0

11. Overload indication

Measured value (dB)		Deviated Value (dB)	Acceptance Limits (dB)
Positive one-half cycle	Negative one-half cycle		
89.6	89.5	-0.1	±1.5

12. High level stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	137.0	137.0	0.0	±0.3

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor $k = 2$ or any value following calculation,providing a level of confidence of approximately 95 %

End of Calibration Certificate

TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
CORPORATE SERVICES 3: EQUIPMENT CALIBRATION AND TESTING SERVICES
534/4 PATTANAKARN ROAD SOI 18, SUANLUANG, SUANLUANG BANGKOK 10250
TEL 0-2717-3000-29 FAX 0-2719-9484

ilac-MRA

NSC-TISI-TIS17025 CALIBRATION 0008

Certificate of Calibration

Equipment :	pH Meter
Manufacturer :	Hach
Model :	HQ411d
Serial No. :	200100031163
ID No. :	BKK_EN0342
Condition As-Received:	Used Item
Received Date :	16 October 2024
Calibration Date :	17 October 2024
Reference :	2410-0548DSC-5
Submitted by :	ALS Laboratory Group (Thailand) Co.,Ltd. 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand
Ambient Temperature :	(25 ± 2.5) °C
Relative Humidity :	(50 ± 15) %
Calibration Procedure :	In - house method - CP-CH5 by direct measurement with certified reference material (CRM) - CP-CH8 by comparison with temperature standard
Calibrated by :	Warakorn Lerngagtrakul
Approved by :	Approved Signatory

REVIEW BY Linda K.
APPROVED BY Siriluk P.
NEXT CAL DATE 17/10/25

( ) Unnopphol Harachai
( ) Ponpan Paipim
(✓) Saithip Meangmai

Issue Date : 21 October 2024

The Uncertainties are for a confidence probability of approximately 95%

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Condition of this calibration result

1. Reference Standard Instrument

Instrument	Serial No.	ID No.	Cert. No.	Due Date
1)Ref. Standard Thermometer	2188080	130RC044	24I1022	16 Sep 2025

- This Certification is traceable to SI Throught Technology Promotion Association (Thailand - Japan)

2. Certified Reference Materials :The measurement results are traceable to SI through Hach Lenge GmbH Ltd. Deutsche Akkreditierungsstelle, Accredited No.D-RM-15184-01-00
:The measurement results are traceable to SI through CPA chem Ltd., ANSI-ASQ National Accreditation Board, Accredited No. AR-1835

Buffer Solution	Manufacturer	Lot No.	Exp. date
pH 4.008	CPA chem	1034203	27 Sep 2026
pH 6.999	Hach Lenge GmbH	C03145	28 Feb 2026
pH 10.010	CPA chem	1034205	27 Sep 2025

3. This certificate is valid only to the item calibrated on date and place of calibration.

Calibration Results

Function : pH Measurement

Performing three buffers standard curve by using buffer nominal pH (4,7,10)

Unit Under Calibration	Standard pH Buffer Solution	Actual pH Reading	Actual mV Reading (mV)	Uncertainty of pH Measurement (±)	Coverage factor k
pH Electrode S/N.: 230473042902	4.008	4.028	174.6	0.0044	2.00
	6.999	7.014	1.4	0.0084	2.05
	10.010	10.018	-172.8	0.0066	2.00

Remark - Can not connect the BNC because the plug does not match with the socket.

Calibration Results

Function : Temperature Measurement

(*) Without adjustment

This equipment was connected with Temperature Probe;

- Model : PHC281
- Serial No. : 230473042902

Dimension of probe

- Length : 103 mm.
- Diameter : 12 mm.
- Immersion Depth : 90 mm.

Calibration Point (°C)	Standard Temperature (°C)	UUC* Reading (°C)	Error (°C)	Uncertainty of measurement (±°C)	Coverage factor k
25.0	25.002	25.0	-0.002	0.13	2.00

Remark : UUC* = Unit Under Calibration

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor k, providing a level of confidence of approximately 95 %.

-oOo-

DKSH

Certificate of Calibration

Equipment: pH METER — Certificate No.: C07240635
Model: TitroLine 7000 — Issued Date: 26 December 2024
Serial No. (or ID.): 10013826 — Job No.: WO-00055577
Manufacturer: SI Analytics — Page: 1 of 3
Electrode Serial No.: BW1-13563 — Model: 6157BNUMD — Brand: Thermo Scientific
Condition: In Condition

Customer: ALS Laboratory Group (Thailand) Co., Ltd.
104 Soi Pattanakarn 40, Pattanakarn Rd.,
Suan Luang, Bangkok 10250 Thailand

REVIEW BY Suda K.
APPROVED BY Siriluk P.
NEXT CAL DATE 26/12/2025

Environment Condition:

Temperature	20.8	°C	±	0.1	°C
Humidity	62.8	%RH	±	0.5	%RH

Calibration Place: ALS Laboratory Group (Thailand) Co., Ltd.(Wet Chemistry Lab 2)
104 Soi Pattanakarn 40, Pattanakarn Rd.,
Suan Luang, Bangkok 10250 Thailand

Calibration By: Mr.Pongpisut Suebchantha
Calibration Date: 26 December 2024
The Method used: In house method, CAL-WI-58, base on ASTM E 70-07
Traceability: This certificate is traceable to SI Units, Sample Test is assured through primary meaurement method Hamed cell, through CPAchem Ltd. (ISO/IEC 17034) Certificate No. 980701, 980704, 980707 And pH Scale traceable to the SI Units maintained by National Institute of Metrology (NIMT), Thailand through Industrial Foundation Electrical and Electronics Institute Certificate No. CA20240267EA

(Mr. Pongpisut Suebchantha)
Person in charge

(Miss Kaewkan Suradech)
Authorized signatory

This certificate is issued the units of measurement according to the International System of Units (SI). It provides traceability of measurement to international standard or other recognized national standard laboratories.
The measurement uncertainty stated is the expanded uncertainty which is obtained from the standard uncertainty multiplied by the coverage factor (k=2) to provide a level of confidence of approximately 95%. It is determined in accordance with the Guide to Expression of Uncertainty in Measurement (GUM).
These results may be affected by deviations from specified conditions. The results relate only to the item(s) tested/calibrated/sampled. This report shall not be reproduced except in full without approval of DKSH Technology Limited.

บริษัท ดีเคเอสเอช เทคโนโลยี จำกัด
DKSH Technology Limited
2531 ถนนบำรุงเมือง แขวงวัดโสมนัส เขตป้อมปราบศัตรูพ่าย กรุงเทพฯ 10100
2531 Bamrungmuang Road, Bangkok, Phrakhanong, Bangkok 10100
Phone +66 2626 7000 Email info.calibration@dksh.com Website www.dksh.com/th-th/thailand

Calibration Results:

pH Scale

Input	pH Meter Reading			Uncertainty of Measurement (mV)	Coverage Factor (k)
(mV)	(mV)	Error (mV)	(pH)		
414.12	413.8	-0.32	0.004	0.065	2.00
354.96	354.7	-0.26	1.003	0.065	2.00
295.8	295.6	-0.20	2.001	0.065	2.00
236.64	236.4	-0.24	3.003	0.065	2.00
177.48	177.3	-0.18	4.002	0.065	2.00
118.32	118.3	-0.02	5.002	0.065	2.00
59.16	59.1	-0.06	6.003	0.065	2.00
0	0.1	0.10	7.000	0.065	2.00
-59.16	-59.1	0.06	8.000	0.065	2.00
-118.32	-118.2	0.12	9.000	0.065	2.00
-177.48	-177.3	0.18	10.002	0.065	2.00
-236.64	-236.6	0.04	11.001	0.065	2.00
-295.8	-295.6	0.20	12.001	0.065	2.00
-354.96	-354.6	0.36	13.001	0.065	2.00
-414.12	-413.9	0.22	14.002	0.065	2.00

บริษัท ดีเคเอสเอช เทคโนโลยี จำกัด
DKSH Technology Limited
2531 ถนนบำรุงเมือง แขวงวัดโสมนัส เขตป้อมปราบศัตรูพ่าย กรุงเทพฯ 10100
2531 Bamrungmuang Road, Bangkok, Phrakhanong, Bangkok 10100
Phone +66 2626 7000 Email info.calibration@dksh.com Website www.dksh.com/th-th/thailand
Delivering Growth – In Asia and Beyond.
CAL-FM-C07-14 8 Apr 2024

Practical slope and zero point*

The three-point calibration using three standard buffer solutions, pH 4.008 , pH 6.986 and pH 9.997
- During calibration, display of pH meter can be adjust to reading; pH 4.008 , pH 6.986 and pH 9.997

The practical slope of the pH electrode; 58.55 (mV/pH), 98.97%
The zero point of the pH electrode: 6.55 (pH)

Sample Test Results

Standard Buffer Solution (pH)	Unit Under Calibration (pH)	Difference (pH)	Uncertainty of Measurement (pH)	Coverage Factor (k)
4.008	4.024	0.016	0.0070	2.03
6.986	6.989	0.003	0.0093	2.00
9.997	10.002	0.005	0.013	2.00

* Calibration Marked * Not TISI Accredited * in this Certificate have been included for completeness.

The End of Certificate

บริษัท ดีเคเอสเอช เทคโนโลยี จำกัด
DKSH Technology Limited
2531 ถนนบำรุงเมือง แขวงวัดโสมนัส เขตป้อมปราบศัตรูพ่าย กรุงเทพฯ 10100
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CAL-FM-C07-14 8 Apr 2024

DKSH

ใบตรวจสอบสภาพเครื่องวัดสิ่งแวดล้อม

เลขที่ใบงาน: WO-00055577

ชนิดเครื่องมือ: pH METER รุ่น: TitroLine 7000 หมายเลขเครื่อง: 10013826

ตรวจสอบ (รับ) 26 Dec 2024 ปกติ	ตรวจสอบ (รับ) 26 Dec 2024 ไม่ปกติ	รายการตรวจเช็ค	ตรวจสอบ (ส่ง) 26 Dec 2024 ปกติ	ตรวจสอบ (ส่ง) 26 Dec 2024 ไม่ปกติ	หมายเหตุ
		General			
☑	☐	1. ความสมบูรณ์เครื่อง	☑	☐	
☑	☐	2. ความสะอาด (ช่องใส่ตัวอย่าง, ภายใน-นอกเครื่อง)	☑	☐	
☑	☐	3. สวิทช์ ปิด – เปิด เครื่อง (On-Off Swicth)	☑	☐	
☑	☐	4. ปุ่มกด (Keypad)	☑	☐	
☑	☐	5. หน้าจอ (Display, Screen Contrast)	☑	☐	
		Spectrophotometer			
☐	☐	6. แรงดันไฟฟ้า (Battery Backup) >= 2.5 VDC	☐	☐	
☐	☐	7. ตัวหมุนเลือกความยาวคลื่น (Wavelength Control)	☐	☐	
☐	☐	8. ความยาวคลื่น (Wavelength Check)	☐	☐	
☐	☐	9. แหล่งกำเนิดแสง (UV < 3,000 hour)	☐	☐	
☐	☐	10. แหล่งกำเนิดแสง (Visible < 5,000 hour)	☐	☐	
☐	☐	11. ช่องวัดหลายตัวอย่าง (Carousel Module)	☐	☐	
		pH Meter and Conductivity Meter			
☑	☐	12. อิเล็คโทรด (Electrode and Connection Cable)	☑	☐	
☑	☐	13. ระดับสารละลายใน Electrode (Level KCl)	☑	☐	
☑	☐	14. ฝาปิดกันปลาย Electrode (Dust Protection Hood)	☑	☐	
☑	☐	15. ขาจับอิเล็คโทรด (Stand)	☑	☐	
		Turbidimeter			
☐	☐	16. ค่าความขุ่นน้ำต่ำสุด (No Sample)	☐	☐	
☐	☐	17. ระดับการส่องสว่างของแสง (>= 2.5 ไม่เกิน 3.0)	☐	☐	
		Automatic titrator			
☐	☐	18. สภาพ Piston Burettes	☐	☐	
☐	☐	19. Function Rinsing and Dosing	☐	☐	
☐	☐	20. ระบบท่อสายยางและอุปกรณ์ประกอบ	☐	☐	

เพิ่มเติม/ข้อแนะนำ

Mr.Pongpisut Suebchantha
Service Engineer

บริษัท ดีเคเอสเอช เทคโนโลยี จำกัด
DKSH Technology Limited
2531 ถนนบำรุงเมือง แขวงวัดโสมนัส เขตป้อมปราบศัตรูพ่าย กรุงเทพฯ 10100
2531 Bamrungmuang Road, Bangkok, Phrakhanong, Bangkok 10100
Phone +66 2626 7000 Email info.calibration@dksh.com Website www.dksh.com/th-th/thailand
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CAL-FM-R31-03 20 Jul 2022

DKSH

Certificate of Calibration

Equipment : Digital Thermometer with Probe
Model : TitroLine 7000
Serial No. : 10013826
Manufacturer : SI Analytics
ID No. : -

Certificate No. : C15241274
Issued Date : 26 December 2024
Job No. : WO-00055577
Page : 1 of 2
Condition : In Condition

Customer : ALS Laboratory Group (Thailand) Co., Ltd.
104 Soi Pattanakarn 40, Pattanakarn Rd.,
Suan Luang, Bangkok 10250 Thailand

Environment Condition :

Temperature:	30 °C	±	10 °C
Humidity:	55 %RH	±	25 %RH
Voltage:	220 VAC	±	10 %

Calibration Place : ALS Laboratory Group (Thailand) Co., Ltd. (Wet Chemistry Lab 2)
104 Soi Pattanakarn 40, Pattanakarn Rd.,
Suan Luang, Bangkok 10250 Thailand

Calibration By : Ms. Kaewkan Suradech
Calibration Date : 26 December 2024
The Method used : In house method, CAL-WI-69, by comparison with standard thermometer
Traceability : This certificate is traceable to the International System of Unit maintained by: Quality Reborn Co.,Ltd. (QR)

(Miss Kaewkan Suradech)
Person in charge

(Mr. Tweewong Thaitnang)
Authorized signatory

This certificate is issued the unit of measurement according to the International System of Units (SI). It provides traceability of measurement to international or national standard or other recognized national standard laboratories.
The measurement uncertainty stated is the expanded uncertainty which is obtained from the standard uncertainty multiplied by the coverage factor (k=2) to provide a level of confidence of approximately 95%. It is determined in accordance with the Guide to Expression of Uncertainty in Measurement (GUM).
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2533 Sukhumvit Road, Bangkok, Phrakhanong, Bangkok 10260
Phone: +66 2678 7300 Email: info.calibration@dksh.com Website: www.dksh.com/th-th/technology-thailand

DKSH

Reference standard equipment:

Equipment	Certificate no	Cal. date	Next Cal. date
Digital Thermometer with Probe	QR24-3149	26 November 2024	26 November 2025

Calibration Results:

Without Adjustment

Sensor Type: RTD Electrode Serial No.: BW1-13563 Channel: -
Diameter (mm): 12 Length (mm): 120 Immersion (mm): 120

Calibrate Point.(°C)	STD. Reading (°C)	UUC. Reading (°C)	Correction of UUC (°C)	Uncertainty (± °C)
25.0	24.904	24.9	0.004	0.20

The End of Certificate

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DKSH Technology Limited
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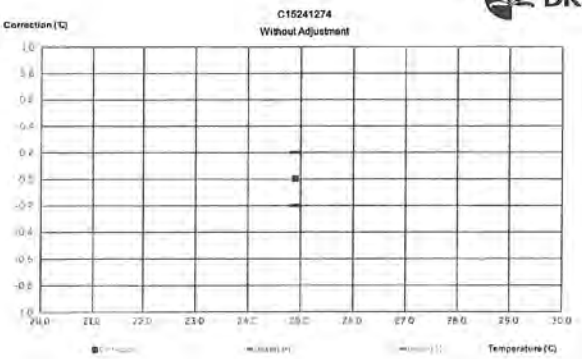
2533 Sukhumvit Road, Bangkok, Phrakhanong, Bangkok 10260
Phone: +66 2678 7300 Email: info.calibration@dksh.com Website: www.dksh.com/th-th/technology-thailand

DKSH



DKSH

ใบตรวจสอบสภาพเครื่องมือวัดอุณหภูมิ

Equipment : Digital Thermometer with Probe
Serial No. : 10013826

Certificate No.: C15241274
Model : TitroLine 7000

ตรวจสอบ (จริง) 26-Dec-2024		รายการตรวจเช็ค	ตรวจสอบ (ส่ง) 26-Dec-2024		หมายเหตุ
ปกติ	ไม่ปกติ		ปกติ	ไม่ปกติ	
		General			
☑	☐	1. สายไฟ	☑	☐	
☑	☐	2. Adapter / Power supply 220 / 110 VAC	☑	☐	
☑	☐	3. การทำงาน Main Switch	☑	☐	
☑	☐	4. การทำงาน Selector Key	☑	☐	
☑	☐	5. การแสดงผล Display	☑	☐	
☐	☐	6. Battery	☐	☐	ไม่มี
☑	☐	7. สภาพตัวเครื่อง	☑	☐	
☑	☐	8. สภาพ Sensor (In / Ex)	☑	☐	

ข้อแนะนำ : _____

Ms. Kaewkan Suradech
Service Engineer

บริษัท ดีเคเอสเอช (ประเทศไทย) จำกัด
DKSH Technology Limited
2533 ถนนสุขุมวิท แขวงพระโขนงใต้ เขตพระโขนง กรุงเทพฯ 10260
2533 Sukhumvit Road, Bangkok, Phrakhanong, Bangkok 10260
Phone: +66 2678 7300 Email: info.calibration@dksh.com Website: www.dksh.com/th-th/technology-thailand

DKSH

Certificate of Calibration

Equipment:	CONDUCTIVITY METER	Certificate No.:	C24240300
Model:	ORION STAR A215	Issued Date:	26 December 2024
Serial No. (or ID.):	X58031	Job No.:	WO-00055577
Manufacturer:	Thermo Scientific	Page:	1 of 2
Electrode Serial No.	YV1-18416	Model : ORION 013005MD	Brand : Thermo Scientific
Condition:	In Condition		

Customer: ALS Laboratory Group (Thailand) Co., Ltd.
104 Soi Pattanakarn 40, Pattanakarn Rd.,
Suan Luang, Bangkok 10250 Thailand

Environment Condition:

Temperature	23	°C	±	2	°C
Humidity	50	%RH	±	15	%RH

Calibration Place: ALS Laboratory Group (Thailand) Co., Ltd. (Wet Chemistry Lab 2)
104 Soi Pattanakarn 40, Pattanakarn Rd.,
Suan Luang, Bangkok 10250 Thailand

Calibration By: Mr. Pongpisut Suebchantha
Calibration Date: 26 December 2024
The Method used: In house method, CAL-WI-49, base on ASTM D 1125-14 and D 5391-14
Traceability: This certificate is traceable to the SI Units maintained by CRM of NIST(SRM) through CPA chem Co., Ltd. (ISO/IEC 17034) Certificate No. 990789, 990790, 990791

(Mr. Pongpisut Suebchantha)
Person in charge

(Miss Kaewkan Suradech)
Authorized signatory

The certificate is issued the units of measurement according to the International System of Units (SI). It also ensures traceability of measurement to international or national standard or other recognized national standard laboratories.
The measurement uncertainty stated is the expanded uncertainty which is obtained from the standard uncertainty multiplied by the coverage factor (k=2) to provide a level of confidence of approximately 95%. It is determined in accordance with the Guide to Expression of Uncertainty in Measurement (GUM).
These results may be affected by deviations from specified conditions. The results relate only to the items tested, calibrated or sampled. The report shall not be reproduced except in full without approval of DKSH Technology Limited.

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2533 Sukhumvit Road, Bangchak, Phrakanong, Bangkok 10260
Phone: +66 26 07000 Email: info.dataprotection@dksh.com Website: www.dksh.com/th-th/contact-us

Calibration Results:

Before Adjustment

Standard Conductivity Solution		Unit Under Calibration Reading		Correction		Coverage Factor (k)	Uncertainty (±)	
84.003	µS/cm	94.79	µS/cm	-10.787	µS/cm	2.00	0.58	µS/cm
1413.1	µS/cm	1427	µS/cm	-13.9	µS/cm	2.00	9.3	µS/cm
12.880	mS/cm	13.02	mS/cm	-0.140	mS/cm	2.00	0.082	mS/cm

After Adjustment ; at 84.003 µS/cm, 1413.1 µS/cm, 12.880 mS/cm

Standard Conductivity Solution		Unit Under Calibration Reading		Correction		Coverage Factor (k)	Uncertainty (±)	
84.003	µS/cm	84.01	µS/cm	-0.007	µS/cm	2.00	0.58	µS/cm
1413.1	µS/cm	1413	µS/cm	0.1	µS/cm	2.00	9.3	µS/cm
12.880	mS/cm	12.87	mS/cm	0.010	mS/cm	2.00	0.082	mS/cm

The End of Certificate

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ใบตรวจสอบสภาพเครื่องวัดสิ่งแวดล้อม

เลขที่งาน: WO-00055577

ชนิดเครื่องมือ: CONDUCTIVITY METER รุ่น: ORION STAR A215 หมายเลขเครื่อง: X58031

ตรวจสอบ (วัน) 26 Dec 2024 ปกติ	ไม่ปกติ	รายการตรวจเช็ค	ตรวจสอบ (ส่ง) 26 Dec 2024 ปกติ	ไม่ปกติ	หมายเหตุ
		General			
☑	☐	1. ความสมบูรณ์เครื่อง	☑	☐	
☑	☐	2. ความสะอาด (ช่องใส่ตัวอย่าง, ภายใน-นอกเครื่อง)	☑	☐	
☑	☐	3. สวิทช์ ปิด – เปิด เครื่อง (On-Off Switch)	☑	☐	
☑	☐	4. ปุ่มกด (Keypad)	☑	☐	
☑	☐	5. หน้าจอ (Display, Screen Contrast)	☑	☐	
		Spectrophotometer			
☐	☐	6. แรงดันไฟฟ้า (Battery Backup) >= 2.5 VDC	☐	☐	
☐	☐	7. ตัวหมุนเลือกความยาวคลื่น (Wavelength Control)	☐	☐	
☐	☐	8. ความยาวคลื่น (Wavelength Check)	☐	☐	
☐	☐	9. แหล่งกำเนิดแสง (UV < 3,000 hour)	☐	☐	
☐	☐	10. แหล่งกำเนิดแสง (Visible < 5,000 hour)	☐	☐	
☐	☐	11. ช่องวัดหลายตัวอย่าง (Carousel Module)	☐	☐	
		pH Meter and Conductivity Meter			
☑	☐	12. อิเล็คโทรด (Electrode and Connection Cable)	☑	☐	
☐	☐	13. ระดับสารละลายใน Electrode (Level KCl)	☐	☐	
☐	☐	14. ฝาปิดกันฝุ่นลาย Electrode (Dust Protection Hood)	☐	☐	
☑	☐	15. ขาจับอิเล็คโทรด (Stand)	☑	☐	
		Turbidimeter			
☐	☐	16. ค่าความขุ่นที่ต่ำสุด (No Sample)	☐	☐	
☐	☐	17. ระดับการส่องสว่างของแสง (>= 2.5 ไม่เกิน 3.0)	☐	☐	
		Automatic titrator			
☐	☐	18. สภาพ Piston Burettes	☐	☐	
☐	☐	19. Function Rinsing and Dosing	☐	☐	
☐	☐	20. ระบบทอสายยางและอุปกรณ์ประกอบ	☐	☐	

ข้อแนะนำ : * ปุ่มกดเลื่อน ขึ้น-ลง,ซ้าย-ขวา กดยาก

Mr. Pongpisut Suebchantha
Service Engineer

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Phone: +66 26 07000 Email: info.dataprotection@dksh.com Website: www.dksh.com/th-th/contact-us

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Certificate of Calibration

Equipment :	Digital Thermometer with Probe	Certificate No. :	C15241275
Model :	ORION STAR A215	Issued Date :	26 December 2024
Serial No. :	X58031	Job No. :	WO-00055577
Manufacturer :	Thermo Scientific	Page :	1 of 2
ID No. :	-	Condition :	In Condition

Customer : ALS Laboratory Group (Thailand) Co., Ltd.
104 Soi Pattanakarn 40, Pattanakarn Rd.,
Suan Luang, Bangkok 10250 Thailand

Environment Condition :

Temperature:	30	°C	±	10	°C
Humidity:	55	%RH	±	25	%RH
Voltage:	220	VAC	±	10	%

Calibration Place : ALS Laboratory Group (Thailand) Co., Ltd.. (Wet Chemistry Lab 2)
104 Soi Pattanakarn 40, Pattanakarn Rd.,
Suan Luang, Bangkok 10250 Thailand

Calibration By : Ms. Kaewkan Suradech
Calibration Date : 26 December 2024
The Method used : In house method, CAL-WI-69, by comparison with standard thermometer
Traceability : This certificate is traceable to the International System of Unit maintained by: Quality Reborn Co.,Ltd. (QR)

(Miss Kaewkan Suradech)
Person in charge

(Mr. Tweewong Thaiksiang)
Authorized signatory

This certificate is issued the units of measurement according to the International System of Units (SI). It provides traceability of measurement to international or national standard or other recognized national standard laboratories.
The measurement uncertainty stated is the expanded uncertainty which is obtained from the standard uncertainty multiplied by the coverage factor (k=2) to provide a level of confidence of approximately 95%. It is determined in accordance with the Guide to Expression of Uncertainty in Measurement (GUM).
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DKSH

Certificate No.: C15241275

Reference standard equipment:

Equipment	Certificate no	Cal. date	Next Cal. date
Digital Thermometer with Probe	QR24-3149	26 November 2024	26 November 2025

Calibration Results:

Without Adjustment

Sensor Type: RTD Electrode Serial No.: YV1-18416 Channel: -

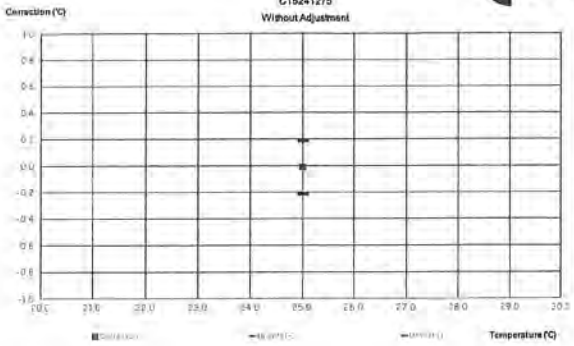
Diameter (mm): 15 Length (mm): 120 Immersion (mm): 120

Calibrate Point.(°C)	STD. Reading (°C)	UUC. Reading (°C)	Correction of UUC (°C)	Uncertainly (± °C)
25.0	24.988	25.0	-0.012	0.20

The End of Certificate

DKSH

C15241275
Without Adjustment



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ใบตรวจสอบสภาพเครื่องมือวัดอุณหภูมิ

Equipment : Digital Thermometer with Probe Certificate No. : C15241275

Serial No. : X58031 Model : ORION STAR A21

ตรวจสอบ (รับ) 26-Dec-2024		รายการตรวจเช็ค	ตรวจสอบ (ส่ง) 26-Dec-2024		หมายเหตุ
ปกติ	ไม่ปกติ		ปกติ	ไม่ปกติ	
		General			
☑	☐	1. สายไฟ	☑	☐	
☑	☐	2. Adapter / Power supply 220 / 110 VAC	☑	☐	
☑	☐	3. การทำงาน Main Switch	☑	☐	
☑	☐	4. การทำงาน Selector Key	☑	☐	
☑	☐	5. การแสดงผล Display	☑	☐	
☐	☐	6. Battery	☐	☐	ไม่มี
☑	☐	7. สภาพตัวเครื่อง	☑	☐	
☑	☐	8. สภาพ Sensor (In. / Ex)	☑	☐	

ข้อแนะนำ : _____

Ms. Kaewkan Suradech

Service Engineer

DKSH

ilac-MRA

Certificate of Calibration

Equipment:	Automatic Titrator	Certificate No.:	C32240068
Model:	TitroLine 7000	Issued Date:	27 December 2024
Serial No.:	10013826	Job No.:	WO-00055577
Type of Titration :	Motor - driven	Page:	1 of 2
Exchange Unit Model :	WA-20	Exchange Unit S/N :	10045524
Burettes Model :	TZ 3920	S/N : Nr : 007734	Nominal Vol.: 20 ml
Manufacturer:	SI Analytics		
Condition:	In condition		

Customer: ALS Laboratory Group (Thailand) Co., Ltd.
104 Soi Pattanakarn 40, Pattanakarn Rd.,
Suan Luang, Bangkok 10250 Thailand

Environment Condition:

Temperature	22	°C	±	0.2 °C
Relative Humidity	60	%RH	±	1.5 %RH
Atmospheric Pressure	1014	mbar	±	0.4 mbar

Calibration Place: ALS Laboratory Group (Thailand) Co., Ltd. (Wet Chemistry Lab 2)
104 Soi Pattanakarn 40, Pattanakarn Rd.,
Suan Luang, Bangkok 10250 Thailand

Calibration By: Mr. Atachai Ngamchanat

Calibration Date: 26 December 2024

The Method used: In house method, CAL-WI-57, base on ISO 8655:2002

Traceability: This certificate is traceable to the SI Units maintained by National Institute of Metrology (NIMT), Thailand through DKSH Technology Limited, Certificate No. C01243206

(Mr. Atachai Ngamchanat)
Person in charge

(Miss Kaewkan Suradech)
Authorized signatory

This certificate is issued the units of measurement according to the International System of Units (SI). It provides traceability of measurement to international or national standards or other recognized national standard laboratories.

The measurement uncertainty stated is the expanded uncertainty which is obtained from the standard uncertainty multiplied by the coverage factor (k=2) to provide a level of confidence of approximately 95%. It is determined in accordance with the Guide to Expression of Uncertainty in Measurement (GUM).

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Certificate No.: C32240068 Page: 2 of 2

Calibration Results:

Nominal Volume 20 ml

Piston burettes of volumetric apparatus for automatic titrator

Volume (%)	Volume (ml)	Measurement Volume (V_{20})	Systematic error (trueness)		Random error (precision)		Measurement Uncertainty	k
		(ml)	es (%)	es (µl)	CV (%)	S_r(µl)	(µl)	
10%	2.0000	2.0005	0.003	0.5	0.003	0.6	0.69	2.03
50%	10.0000	10.0077	0.039	7.7	0.003	0.7	0.92	2.00
100%	20.0000	20.0081	0.040	8.1	0.009	1.7	1.8	2.05

ISO 8655-3:2002(E) Table 1 - Maximum permissible errors for motor-driven piston burettes

Nominal volume	Maximum permissible systematic error		Maximum permissible random error	
ml	± %	± µl [a]	± % [b]	± µl [c]
≤1	0.6	6	0.1	1
2	0.5	10	0.1	2
5	0.3	15	0.1	5
10	0.2	20	0.07	7
20	0.2	40	0.07	14
25	0.2	50	0.07	17.5
50	0.2	100	0.05	25
100	0.2	200	0.03	30

a Expressed as the deviation of the mean of tenfold measurement from the nominal volume or from the selected volume (see ISO 8655-6:2002, 8.4)

b Expressed as the coefficient of variation of a tenfold measurement (see ISO 8655-6:2002, 8.5)

c Expressed as the repeatability standard deviation of a tenfold measurement (see ISO 8655-6:2002, 8.5)

The End of Certificate

บริษัท ดีเคเอสเอช (ประเทศไทย) จำกัด
DKSH Technology Limited
253/1 Soi Ratchadaphisek 18 (Chokchai 4 Soi 19), Ratchadaphisek Road, Khlong Toei District, Bangkok 10110
2631 Sukhumvit Road, Bangkok, Phrakhanong, Bangkok 10260
Phone: +66 2366 1000 Email: phone.sales@dksh.com Website: www.dksh.com/th-th-home

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ใบตรวจสอบสภาพเครื่องวัดสิ่งแวดล้อม

เลขที่ใบงาน: WO-00055577

ชนิดเครื่องมือ: Automatic Titrator รุ่น: TitroLine 7000 หมายเลขเครื่อง: 10013826

ตรวจสอบ (รับ) 26 Dec 2024 ปกติ	ตรวจสอบ (รับ) 26 Dec 2024 ไม่ปกติ	รายการตรวจเช็ค	ตรวจสอบ (ส่ง) 26 Dec 2024 ปกติ	ตรวจสอบ (ส่ง) 26 Dec 2024 ไม่ปกติ	หมายเหตุ
		General			
☑	☐	1. ความสมบูรณ์เครื่อง	☑	☐	
☑	☐	2. ความสะอาด (ช่องใส่ตัวอย่าง, ภายใน-นอกเครื่อง)	☑	☐	
☑	☐	3. สวิทช์ ปิด – เปิด เครื่อง (On-Off Switch)	☑	☐	
☑	☐	4. ปุ่มกด (Keypad)	☑	☐	
☑	☐	5. หน้าจอ (Display, Screen Contrast)	☑	☐	
		Spectrophotometer			
☐	☐	6. แรงดันไฟฟ้า (Battery Backup) >= 2.5 VDC	☐	☐	
☐	☐	7. ตัวหมุนเลือกความยาวคลื่น (Wavelength Control)	☐	☐	
☐	☐	8. ความยาวคลื่น (Wavelength Check)	☐	☐	
☐	☐	9. แหล่งกำเนิดแสง (UV < 3,000 hour)	☐	☐	
☐	☐	10. แหล่งกำเนิดแสง (Visible < 5,000 hour)	☐	☐	
☐	☐	11. ช่องวัดหลายตัวอย่าง (Carousel Module)	☐	☐	
		pH Meter and Conductivity Meter			
☐	☐	12. อิเล็คโทรด (Electrode and Connection Cable)	☐	☐	
☐	☐	13. ระดับสารละลายใน Electrode (Level KCl)	☐	☐	
☐	☐	14. ฝาปิดกันเปลาย Electrode (Dust Protection Hood)	☐	☐	
☐	☐	15. ขาจับอิเล็คโทรด (Stand)	☐	☐	
		Turbidimeter			
☐	☐	16. ค่าความขุ่นที่ต่ำสุด (No Sample)	☐	☐	
☐	☐	17. ระดับการส่องสว่างของแสง (>= 2.5 ไม่เกิน 3.0)	☐	☐	
		Automatic titrator			
☑	☐	18. สภาพ Piston Burettes	☑	☐	
☑	☐	19. Function Rinsing and Dosing	☑	☐	
☑	☐	20. ระบบท่อสายยางและอุปกรณ์ประกอบ	☑	☐	

เพิ่มเติม/ข้อเสนอแนะ :

Mr. Atachai Ngamchanat

Service Engineer

บริษัท ดีเคเอสเอช (ประเทศไทย) จำกัด
DKSH Technology Limited
253/1 Soi Ratchadaphisek 18 (Chokchai 4 Soi 19), Ratchadaphisek Road, Khlong Toei District, Bangkok 10110
2631 Sukhumvit Road, Bangkok, Phrakhanong, Bangkok 10260
Phone: +66 2366 1000 Email: phone.sales@dksh.com Website: www.dksh.com/th-th-home

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Certificate of Calibration

Equipment:	Automatic Titrator	Certificate No.:	C32240069
Model:	TitroLine 7000	Issued Date:	27 December 2024
Serial No.:	10013826	Job No.:	WO-00055577
Type of Titration :	Motor - driven	Page:	1 of 2
Exchange Unit Model	WA-20	Exchange Unit S/N :	10045489
Burettes Model :	TZ 3920	S/N:, Nr : 007773	Nominal Vol.: 20 ml
Manufacturer:	SI Analytics		
Condition:	In condition		

Customer: ALS Laboratory Group (Thailand) Co., Ltd.
104 Soi Pattanakarn 40, Pattanakarn Rd.,
Suan Luang, Bangkok 10250 Thailand

Environment Condition:

Temperature	21	°C	±	0.3 °C
Relative Humidity	61	%RH	±	1.8 %RH
Atmospheric Pressure	1014	mbar	±	0.6 mbar

Calibration Place: ALS Laboratory Group (Thailand) Co., Ltd. (Wet Chemistry Lab 2)
104 Soi Pattanakarn 40, Pattanakarn Rd.,
Suan Luang, Bangkok 10250 Thailand

Calibration By: Mr. Atachai Ngamchanat

Calibration Date: 26 December 2024

The Method used: In house method, CAL-WI-57, base on ISO 8655:2002

Traceability: This certificate is traceable to the SI Units maintained by National Institute of Metrology (NIMT), Thailand through DKSH Technology Limited. Certificate No. C01243206

(Mr. Atachai Ngamchanat)
Person in charge

(Miss Kaewkan Suradech)
Authorized signatory

This certificate is issued the units of measurement according to the International System of Units (SI). It provides traceability of measurement to international or national standards or other recognized national standard laboratories.
The measurement uncertainty stated is the expanded uncertainty which is obtained from the standard uncertainty multiplied by the coverage factor (k=2) to provide a level of confidence of approximately 95%. It is obtained in accordance with the Guide to Expression of Uncertainty in Measurement (GUM).
These results may be affected by deviations from specified conditions. The results relate only to the items tested, calibrated or sampled. This report shall not be reproduced except in full without approval of DKSH Technology Limited.

บริษัท ดีเคเอสเอช (ประเทศไทย) จำกัด
DKSH Technology Limited
253/1 Soi Ratchadaphisek 18 (Chokchai 4 Soi 19), Ratchadaphisek Road, Khlong Toei District, Bangkok 10110
2631 Sukhumvit Road, Bangkok, Phrakhanong, Bangkok 10260
Phone: +66 2366 1000 Email: phone.sales@dksh.com Website: www.dksh.com/th-th-home

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Certificate No.: C32240069 Page: 2 of 2

Calibration Results:

Nominal Volume 20 ml

Piston burettes of volumetric apparatus for automatic titrator

Volume (%)	Volume (ml)	Measurement Volume (V_{20})	Systematic error (trueness)		Random error (precision)		Measurement Uncertainty	k
		(ml)	es (%)	es (µl)	CV (%)	S_r(µl)	(µl)	
10%	2.0000	1.9986	-0.007	-1.4	0.003	0.6	0.70	2.03
50%	10.0000	9.9932	-0.034	-6.8	0.003	0.6	0.90	2.00
100%	20.0000	19.9915	-0.042	-8.5	0.002	0.5	1.5	2.00

ISO 8655-3:2002(E) Table 1 - Maximum permissible errors for motor-driven piston burettes

Nominal volume	Maximum permissible systematic error		Maximum permissible random error	
ml	± %	± µl [a]	± % [b]	± µl [c]
≤1	0.6	6	0.1	1
2	0.5	10	0.1	2
5	0.3	15	0.1	5
10	0.2	20	0.07	7
20	0.2	40	0.07	14
25	0.2	50	0.07	17.5
50	0.2	100	0.05	25
100	0.2	200	0.03	30

a Expressed as the deviation of the mean of tenfold measurement from the nominal volume or from the selected volume (see ISO 8655-6:2002, 8.4)

b Expressed as the coefficient of variation of a tenfold measurement (see ISO 8655-6:2002, 8.5)

c Expressed as the repeatability standard deviation of a tenfold measurement (see ISO 8655-6:2002, 8.5)

The End of Certificate

บริษัท ดีเคเอสเอช (ประเทศไทย) จำกัด
DKSH Technology Limited
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Phone: +66 2366 1000 Email: phone.sales@dksh.com Website: www.dksh.com/th-th-home

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ใบตรวจสอบสภาพเครื่องวัดสิ่งแวดล้อม

เลขที่ใบงาน: WO-00055577

ชนิดเครื่องมือ: Automatic Titrator รุ่น: TitroLine 7000 หมายเลขเครื่อง: 10013826

ตรวจสอบ (รับ) 26 Dec 2024 ปกติ	ตรวจสอบ (รับ) 26 Dec 2024 ไม่ปกติ	รายการตรวจเช็ค	ตรวจสอบ (ส่ง) 26 Dec 2024 ปกติ	ตรวจสอบ (ส่ง) 26 Dec 2024 ไม่ปกติ	หมายเหตุ
		General			
☑	☐	1. ความสมบูรณ์เครื่อง	☑	☐	
☑	☐	2. ความสะอาด (ของไม่ตัวอย่าง, ภายใน-นอกเครื่อง)	☑	☐	
☑	☐	3. สวิทช์ ปิด – เปิด เครื่อง (On-Off Swicth)	☑	☐	
☑	☐	4. ปุ่มกด (Keypad)	☑	☐	
☑	☐	5. หน้าจอ (Display, Screen Contrast)	☑	☐	
		Spectrophotometer			
☐	☐	6. แรงดันไฟฟ้า (Battery Backup) >= 2.5 VDC	☐	☐	
☐	☐	7. ตัวหมุนเลือกความยาวคลื่น (Wavelength Control)	☐	☐	
☐	☐	8. ความยาวคลื่น (Wavelength Check)	☐	☐	
☐	☐	9. แหล่งกำเนิดแสง (UV < 3,000 hour)	☐	☐	
☐	☐	10. แหล่งกำเนิดแสง (Visible < 5,000 hour)	☐	☐	
☐	☐	11. ช่องวัดหลายตัวอย่าง (Carousel Module)	☐	☐	
		pH Meter and Conductivity Meter			
☐	☐	12. อิเล็คโทรด (Electrode and Connection Cable)	☐	☐	
☐	☐	13. ระดับสารละลายใน Electrode (Level KCl)	☐	☐	
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		Automatic titrator			
☑	☐	18. สภาพ Piston Burettes	☑	☐	
☑	☐	19. Function Rinsing and Dosing	☑	☐	
☑	☐	20. ระบบท่อสายยางและอุปกรณ์ประกอบ	☑	☐	

เพิ่มเติม/ข้อแนะนำ :

Mr. Atachai Ngamchanat

Service Engineer

บริษัท ดีเคเอสเฮ ประเทศไทย จำกัด
DKSH Technology Limited
2910 ถนนสุขุมวิท แขวงพระโขนงเหนือ เขตวัฒนา กรุงเทพมหานคร 10260
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CAL-EM-R01-03 20 Jul 2022

TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)

CORPORATE SERVICES 3 : EQUIPMENT CALIBRATION AND TESTING SERVICES

534/4 PATTANAKARN ROAD SOI 18, SUANLUANG, SUANLUANG BANGKOK 10250

TEL. 0-2717-3000 FAX. 0-2719-9484

Cert.No.: 24TW28
Page.: 1 of 2

Certificate of Testing

Equipment :	DO Meter
Manufacturer :	YSI
Model :	5100
Serial No. :	15L103204
ID No. :	BKK_EN0205
Received Date :	01 February 2024
Test Date :	02 February 2024
Reference :	2402-0008DSC-10
Submitted by :	ALS Laboratory Group (Thailand) Co.,Ltd. 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand
Laboratory Condition :	Temperature (25 ± 5) °C Humidity (50 ± 20) %
Test Procedure :	In - house method : CP-CH9 by Comparison Technique with Azide Modification Method
Tested by :	Walalak Sirithean
Approved by :	Approved Signatory

REVIEW BY Linda K

APPROVED BY Karn A.

NEXT CAL DATE 02/08/25

(✓) Saithip Meangmai
( ) Warakorn Lerngagtrakul
( ) Ponpan Paipim

Issue Date : 7 February 2024

Cert.No.: 24TW28
Page.: 2 of 2

Condition of this result of calibration

1. Reference Standard Instruments :
   This certification is traceable to the International System of Unit through the reference standards laboratory of Industrial Calibration Center, Technology Promotion Association (Thailand-Japan).

Instruments	Serial No.	ID No.	Certificate No.	Due Date
1. Burette	-	130BU10	23CG1172	22 Mar 2025
2. Balance	1124013382	140RC006	23MM18	20 Feb 2024

2. Standard Material :-

Material	Manufacturer	Lot.No.	Assay
Sodium Thiosulfate pentahydrate	Merck	AM1763316	100.2%

Result : **Dissolved Oxygen Meter Adjustment With Air 100 %**
Dissolved Oxygen Probe No.: 17A100064

Titration Method (Azide Modification Method) (mg/L)	DO Meter Reading (mg/L)	Standard Deviation (mg/L)
8.18	8.18	0.0055

This report was certified only for the instrument we tested.It is allowable to use for study intend to use for advertising and referral purpose is prohibited.This report may not be reproduced other in full,without written approval of the laboratory

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TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)

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NSC-TISI-TIS17025 CALIBRATION 0505

Certificate of Calibration

Cert. No.: 24LM15
Page.: 1 of 2

Equipment :	DO Meter with Sensor
Manufacturer :	YSI
Model :	5100
Serial No. :	15L103204
ID No. :	BKK_EN0205
Submitted by :	ALS Laboratory Group (Thailand) Co.,Ltd. 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand
Location :	TPA Chemistry Calibration Laboratory
Received Order :	01 February 2024
Calibrated Date :	02 February 2024
Ambient Temperature :	(26 ± 10) °C
Relative Humidity :	(50 ± 30) %
AC Line Voltage :	(220 ± 22) V
Calibrated by :	Warakorn Lerngagtrakul
Approved by :	Approved Signatory

( ) Pomthippa Tameyakul
( ) Ponpan Paipim
(✓) Suwit Imjai

Issue Date : 7 February 2024

The Uncertainties are for a confidence probability of approximately 95%

This certificate may not be reproduced other than in full, except with the prior written Approval of the head of Corporate Services 3 : Equipment Calibration and Testing Services.

Equipment : DO Meter with Sensor **Cert. No.:** 24LM15
Condition As-Received : Used Item **Page.:** 2 of 2
Reference : 2402-0008DSC-13

Procedure Used :-

Calibration were conducted using in-house calibration procedure CP-OT01 according to comparison with Industrial Platinum Resistance Thermometer (IPRT) into Temperature Bath.

The temperature scale used was based on ITS-90.

Condition of this result of calibration

1. Reference standard instrument:-

Instrument	Serial No.	Cert. No.	Traceable	Due Date
1) Digital Thermometer	2188080	23I1216	TPA	11 Oct 2024

2. This certificate is valid only to the item calibrated on date and place of calibration.
3. This certification is traceable to the International System of Unit.

Remark : TPA : Technology Promotion Association (Thailand - Japan)

Result of Calibration :- (*) Without Adjustment

Function : Temperature measurement.

This instrument was connected with temperature sensor, S/N.: 17A100064

Calibration Point (°C)	Immersion Depth (mm)	Standard Temperature (°C)	UUC* Reading (°C)	Error (°C)	Uncertainty (± °C)	Coverage Factor k
20.0	80	20.003	19.92	-0.083	0.15	2.00

UUC* : Unit Under Calibration

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor *k*, providing a level of confidence of approximately 95 %.

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SCG

Metrology

SCI ECO Services Company Limited

33/2 Moo 3, T.Banpa, A.Kaengkhoi, Saraburi 18110, Thailand.

Saraburi Tel : +66 3627 3096 Fax : +66 3627 3100

Bangkok Tel : +668 9205 6851 , +669 8247 2360

Website : www.scieco.co.th E-Mail : calibrate@scg.com

NSC-TISI-TIS 17025 CALIBRATION 0244

Certificate No. T241495 **Page 1 of 4**

Certificate of Calibration

Equipment	:	**Chamber (Incubator)**
Manufacturer	:	**MEMMERT**
Model	:	**ICP 750**
Serial No.	:	**F818.0033**
Customer Code	:	**BKK_EN0272**
ID No.	:	**T8041A4**
Customer	:	**ALS Laboratory Group (Thailand) Co.,Ltd.**
		104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan,
		Khet Suan Luang, Bangkok 10250
Customer Location	:	**Wet Chemistry Lab 2**
Date of Receipt	:	**14 August 2024**
Calibrated By	:	**Sujjar Naknakred (Site Calibration Manager)**
Approved By	:	/ **Boonchai Suriyawong (Assistant Calibration Manager)**
Date of Issue	:	27 AUG 2024

REVIEW BY Sunda K.

APPROVED BY Siriluk P.

NEXT CAL DATE 22/08/25

The uncertainties are for a confidence probability of approximately 95%.

This Certificate is issued in accordance with the conditions of accreditation granted by the Thai Laboratory Accreditation Scheme which has assessed the measurement capability of the laboratory and its traceability to recognized national standards and to the units of measurement realized at the corresponding national standard laboratory. This certificate may not be reproduced other than in full except with the prior written approval of the Metrology.

FM-L13 19/18-08-66

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Metrology

SCI ECO Services Company Limited

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NSC-TISI-TIS 17025 CALIBRATION 0244

Certificate No. T241495 **Page 2 of 4**

Calibration Report

Equipment	:	**Chamber (Incubator)**
Date of Calibration	:	**22 August 2024** **(Finished Time 11:19 AM)**
Environment	:	**Temperature 22.3-23.0 °C**
		Line Voltage 222.5-227.5 V

Condition of this results of test. :

1. This instrument was calibrated by insert 12 standard resistance thermometer into its chamber and test according to WI-T20 (based on ASTM E145-94 (Reapproved 2001) and AS2853-1986.)
   All data show below were final values and the initial data may be obtained upon request.
   The temperature scale used was based on ITS - 90.
2. Reference Standard Instrument :

Instrument	Model	Instrument No.	Certificate No.	Due Date
RTD	100 ohm	27-(CH1-10)	T240709	19 April 2025
RTD	100 ohm	28-(CH1-10)	T240709	19 April 2025
DATA LOGGER	34970A	T149	T240709	19 April 2025

3. This certificate is traceable to :
   National Institute of Metrology (Thailand) through Metrological Center (NSC-TISI-TIS 17025 CALIBRATION 0244)
4. Condition of calibrated item : good
   UUC Description :
   Time Constant 1 Hour 38 Minute At 20 °C
   Fresh Air Damper ☐ Open ☐ Min ☐ Medium ☐ Max
   ☐ Close
   ☒ Not Available
5. Result of test :
   ( ) without adjustment (X) after adjustment

Approved By.

FM-L13 18/18-08-66

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Metrology

SCI ECO Services Company Limited

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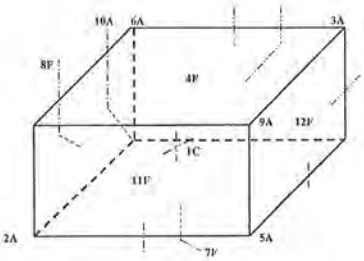
NSC-TISI-TIS 17025 CALIBRATION 0244

Certificate No T241495 **Page 3 of 4**

Calibration Report



C = Centre , F = Centre of Face , A = Corner , E = Centre of Edge

1C	=	27-CH1
2A	=	27-CH2
3A	=	27-CH3
4F	=	27-CH4
5A	=	27-CH5
6A	=	27-CH6
7F	=	27-CH7
8F	=	27-CH8
9A	=	27-CH9
10A	=	27-CH10

11F	=	28-CH1
12F	=	28-CH2

Approved By.

FM-L13 18/18-08-66

SCG

Metrology

SCI ECO Services Company Limited

33/2 Moo 3, T.Banpa, A.Kaengkhoi, Saraburi 18110, Thailand.

Certificate No. T241495

Calibration Report

Measurement Results

Calibration Point	Average Standard Reading at each position (°C)									
	27-CH1	27-CH2	27-CH3	27-CH4	27-CH5	27-CH6	27-CH7	27-CH8	27-CH9	27-CH10
20.0	20.32	20.32	20.29	20.23	20.30	20.34	20.40	20.16	20.34	19.62
	28-CH1	28-CH2								
	19.70	19.65								

Chamber (Incubator)			Temperature Distribution				
Setting (°C)	Reading (°C)		Average (°C)	Stability (±°C)	Uniformity (°C)	Uncertainty (±°C)	Coverage Factor k
	Min , Max	Average					
20.0	19.9 , 20.1	20.0	20.01	0.04	0.19	0.38	2.00

* The quoted uncertainty exclude "uniformity"

The calibration result apply only the above calibrated item.

The result of test was found accurate as shown on date and place of test only.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k which for a t-distribution, providing a level of confidence of approximately 95 % .

Approved By.

FM-L15 110/19-08-66

TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
CORPORATE SERVICES 3: EQUIPMENT CALIBRATION AND TESTING SERVICES
534/4 PATTANAKARN ROAD SOI 18, SUANLUANG, SUANLUANG BANGKOK 10250
TEL.0-2717-3000-29 FAX 0-2719-9484

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Certificate of Calibration

Cert.No.: 24CG952
Page.: 1 of 2

Equipment :	Burette
Capacity :	50 mL
Serial No. :	-
ID. No. :	BKK_EN0171
Manufacturer :	Witeg
Made in :	Germany
Submitted by :	ALS Laboratory Group (Thailand) Co.,Ltd. 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand
Ambient Temperature :	(20 ± 2.5) °C
Relative Humidity :	(50 ± 10) %
Barometric Pressure :	760 mmHg
Calibration Procedure :	ASTM E 542 - 01
Calibrated by :	Natcha Chayyingcheiw
Approved by :	Approved Signatory

( ) Unnopphol Harachai
(√) Srisuda Khamtha
( ) Sa-ngeunkam Wongsa

REVIEW BY
APPROVED BY
NEXT CAL DATE 27/08/25

Issue Date : 27 February 2024

The Uncertainties are for a confidence probability of approximately 95%

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---

Equipment :	Burette
Received Date :	23 February 2024
Condition As-Received :	New Item
Calibration Date :	27 February 2024
Reference :	2402-0757DSC-1

Cert.No.: 24CG952
Page.: 2 of 2

Condition of this result of calibration

1. Reference Standard Instruments :

Instruments	Model	Serial No.	ID. No.	Certificate No.	Traceability	Due date
1) Balance	XP205DR	1126143764	140RC004	23MM538	TPA	15 Sep 2024
2) Thermo-Hygrograph	THDX-CE	00016540	140EC001	23H1275	TPA	09 June 2024
3) Thermometer	-	0834181	140EC005	23I948	TPA	10 Aug 2024

This certification is traceable to SI Unit

2. The certificate is valid only to the item calibrated on date and place of calibration.
3. True value is converted to true volume at the standard temperature of 20 °C

Calibration result :

Nominal capacity (mL)	Reading (mL)	Uncertainty (± mL)	k Factor
50	50.0032	0.010	2.00

Remark mL = cm^3

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor k , providing a level of confidence of approximately 95 %.

-oOo-

SCG

Metrological Center

SCI ECO Services Company Limited

33/2 Moo 3, T.Banpa, A.Kaengkhoi, Saraburi 18110
Telephone : +66 2 586 5792-4 Fax : +66 2 586 5109
Website : www.scieco.co.th E-Mail : calibrate@scg.co.th

Certificate No. T242116

Certificate of Calibration

Equipment	: Hot Block
Manufacturer	: Environmental Express
Model	: B3000-240
Serial No.	: 2021CODW148
Customer Code	: BKK_EN0370
ID No.	: T2940A5
Customer	: ALS Laboratory Group (Thailand) Co.,Ltd. 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250
Customer Location	: Wet Chemistry Lab 2
Date of Receipt	: 25 December 2024
Calibrated By	: Atiphong Rongrat (Technician)
Approved By	: / Boonchai Suriyawong (Site Calibration Manager)
Date of Issue	: 27 JAN 2025

REVIEW BY
APPROVED BY
NEXT CAL DATE 02/01/26

The uncertainties are for a confidence probability of approximately 95%.

This Certificate is issued in accordance with the conditions of accreditation granted by the Thai Laboratory Accreditation Scheme which has assessed the measurement capability of the laboratory and its traceability to recognized national standards and to the units of measurement realized at the corresponding national standard laboratory. This certificate may not be reproduced other than in full except with the prior written approval of the Metrological Center.

FM-L12 109/30-05-57

Calibration Report

Equipment : **Hot Block**
Date of Calibration : **2 January 2025**
Environment : **Temperature : 20.1-23.4 °C**
Line Voltage : 222.1-227.3 V
Relative Humidity : 55 - 65 %RH

Condition of this results of calibration :

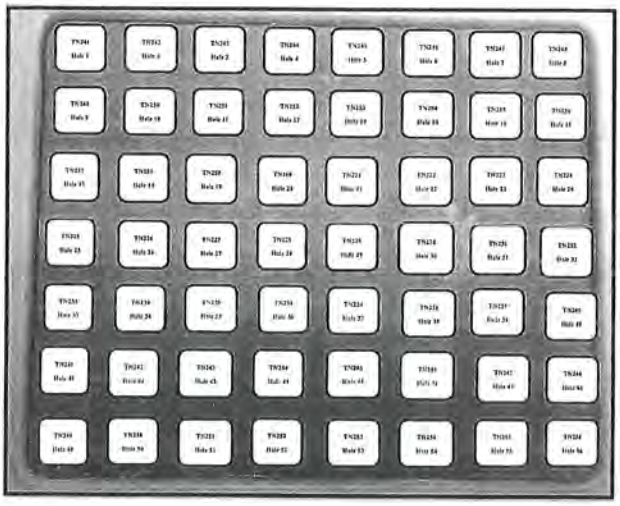
1. This equipment was calibrated by insert 29 standard thermocouples type T into its chamber , the other one standard thermocouples type T use for ambient temperature measurement . The calibration was done in according to WI-T20.
   All data show below were final values and the initial data from customer request . The temperature scale used was based on ITS - 90 .
2. Reference Standard Instrument :

Instrument	Model	Instrument No.	Certificate No.	Due Date
TC	TYPE T	TN241-TN250	T240401	16 March 2025
TC	TYPE T	TN251-TN260	T240401	16 March 2025
TC	TYPE T	TN221-TN230	T240712	19 April 2025
TC	TYPE T	TN231-TN240	T240712	19 April 2025
DATA LOGGER	34970A	T193	T240401	16 March 2025

3. This certificate is traceable to :
   National Institute of Metrology (Thailand) through Metrological Center (NSC-TISI-TIS 17025 CALIBRATION 0244.)
4. Condition of calibrated item : good
   Equipment Description :
   Time Constant 2 Hour 30 Minute At 150 °C
   Fresh Air Damper ☐ Open ☐ Min ☐ Medium ☐ Max
   ☐ Close
   ☒ Not Available
5. Adjustment :
   ( ) without adjustment (X) after adjustment

Approved By.

Calibration Report



FRONT CONTROL

Approved By.

Calibration Report

Measurement Results

		Average Standard Reading at each position (°C)									
		TN240 Hole 1	TN242 Hole 2	TN243 Hole 3	TN244 Hole 4	TN245 Hole 5	TN246 Hole 6	TN247 Hole 7	TN248 Hole 8	TN249 Hole 9	TN250 Hole 10
CAL POINT	Max	149.78	150.22	150.64	150.94	150.79	151.11	149.77	150.20	150.18	150.28
150	Min	149.57	150.52	150.47	150.79	150.65	150.93	149.59	150.06	150.03	150.15
	Average	**150.15**	**150.71**	**150.71**	**150.58**	**150.40**	**150.52**	**150.76**	**150.57**	**150.49**	**150.21**
		TN251 Hole 11	TN252 Hole 12	TN253 Hole 13	TN254 Hole 14	TN255 Hole 15	TN256 Hole 16	TN257 Hole 17	TN258 Hole 18	TN259 Hole 19	TN260 Hole 20
	Max	150.32	150.22	150.60	150.51	150.87	150.45	150.37	149.49	150.18	150.33
	Min	150.19	150.04	150.45	150.40	150.74	150.30	150.26	149.33	150.03	150.18
	Average	**150.25**	**150.13**	**150.53**	**150.46**	**150.80**	**150.37**	**150.31**	**149.41**	**150.11**	**150.26**
		TN221 Hole 21	TN222 Hole 22	TN223 Hole 23	TN224 Hole 24	TN225 Hole 25	TN226 Hole 26	TN227 Hole 27	TN228 Hole 28	TN229 Hole 29	TN230 Hole 30
	Max	150.49	150.80	149.10	149.64	149.41	149.99	149.75	149.82	150.16	150.34
	Min	150.24	150.63	148.90	149.45	148.94	149.54	149.61	149.69	150.07	150.24
	Average	**150.36**	**150.74**	**149.00**	**149.53**	**149.03**	**149.62**	**149.68**	**149.76**	**150.11**	**150.29**
		TN231 Hole 31	TN232 Hole 32	TN233 Hole 33	TN234 Hole 34	TN235 Hole 35	TN236 Hole 36	TN237 Hole 37	TN238 Hole 38	TN239 Hole 39	TN240 Hole 40
	Max	149.91	149.54	149.50	149.49	150.85	150.73	150.02	149.84	150.12	150.09
	Min	148.93	149.43	149.26	150.32	150.72	150.62	149.94	149.78	150.01	149.98
	Average	**148.96**	**149.49**	**149.43**	**150.10**	**150.78**	**150.67**	**149.98**	**149.81**	**150.06**	**150.03**
		TN241 Hole 41	TN242 Hole 42	TN243 Hole 43	TN244 Hole 44	TN245 Hole 45	TN246 Hole 46	TN247 Hole 47	TN248 Hole 48	TN249 Hole 49	TN250 Hole 50
	Max	150.86	150.14	150.35	150.97	151.03	151.09	149.81	150.16	149.49	149.51
	Min	150.80	150.00	150.19	150.81	150.85	150.95	149.60	150.02	149.35	149.35
	Average	**150.83**	**150.07**	**150.27**	**150.89**	**150.94**	**151.02**	**149.75**	**150.09**	**149.42**	**149.43**
		TN251 Hole 51	TN252 Hole 52	TN253 Hole 53	TN254 Hole 54	TN255 Hole 55	TN256 Hole 56				
	Max	149.71	150.32	150.59	149.42	149.87	149.40				
	Min	149.56	150.17	150.49	149.31	149.74	149.29				
	Average	**149.64**	**150.25**	**150.54**	**149.37**	**149.81**	**149.35**				

Hot Block			Temperature Distribution	
Setting (°C)	Reading (°C)		Stability (±°C)	Uncertainty (±°C)
	Min , Max	Average		
148.0	147.9 , 148.1	148.0	0.13	0.84

The calibration result apply only the above calibrated item.
The result of test was found accurate as shown on date and place of test only.
The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k which for a t-distribution, providing a level of confidence of approximately 95 %.

Approved By.

Bara Scientific Co., Ltd.
968 U Chu Liang Building Floor7 Rama4 Road
Sam Bangrak Bangkok Thailand 10500
Tel : 02-6374300 Fax : 02-6375498-7
www.barascientific.com

Certificate of Calibration

Number of Page(s) 1 of 3

Certificate No.	BSCC-UV-374/24
Equipment	UV/Vis Spectrophotometer
Model	UV-1600
Manufacturer	Shimadzu
Serial No.	A11454908633 CD
ID No.	BKK_EN0018
Date of receipt	13 September 2024
Date of calibration	13 September 2024
Date of issue	13 SEP 2024

REVIEW BY Linda K.
APPROVED BY Sirluk P.
NEXT CAL DATE 13/9/2025

Customer name	ALS Laboratory Group (Thailand) Co., Ltd.
Address	104 Soi Phattanakan 40, Phattanakan Road, Phattanakan, Suan Luang, Bangkok 10250
Temperature	(25.3 - 26.7) °C (On site)
Humidity	(50.4 - 55.9) %RH (On site)
Equipment condition	Good Operation
Calibration Location	Organic Preparation Lab
Calibration Procedure	In-house method WI-UV-702-01 based on ASTM E275-01
Traceability	Wavelength Accuracy is traceable to certificate No. 106372 and 106371 Photometric Accuracy is traceable to certificate No. 106384 and 111388 Stray Light is traceable to certificate No. 106377 The above certificate are traceble to SI unit through Siamui Scientific Ltd (UKAS accredited calibration laboratory NO. 0659)
Calibrated by	Mr.Wanchana Janloey

Approved by

Mr.Sonthi Temboonsakdi
Service Manager

The above results are valid exclusively for the calibrated item(s) as mention in this report / certificate. Advertising the report / Certificate and publicity of the results are prohibited and also shall not be reproduced except in full, without written approval of the Bara Scientific Co., Ltd.

Bara Scientific Co., Ltd.
968 U Chu Liang Building Floor7 Rama4 Road
Silom Bangrak Bangkok Thailand 10500
Tel : 02-6324300 Fax : 02-6375496-7
www.barascientific.com

Certificate of Calibration

Certificate No. BSCC-UV-374/24 Number of Page(s) 2 of 3

Calibration Results:

1.Wavelength Accuracy

Certified Wavelength (nm)	UUC (nm)	Error (nm)	Uncertainty (±nm)
241.70	241.55	-0.15	0.18
334.02	333.85	-0.17	0.18
418.53	418.57	0.04	0.18
572.99	572.97	-0.02	0.18
879.41	879.17	-0.24	0.18

2.Photometric Accuracy (UV)

Wavelength (nm)	Certified Absorbance (A)	UUC (A)	Error (A)	Uncertainty (±A)
235	0.0000	0.0000	0.0000	0.0075
	0.7171	0.7169	-0.0002	0.0075
257	0.0000	0.0000	0.0000	0.0075
	0.8354	0.8345	-0.0009	0.0075
313	0.0000	0.0000	0.0000	0.0075
	0.2786	0.2781	-0.0005	0.0075
350	0.0000	0.0000	0.0000	0.0075
	0.6199	0.6194	-0.0005	0.0075

*CNR = Customer not request

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Bara Scientific Co., Ltd.
968 U Chu Liang Building Floor7 Rama4 Road
Silom Bangrak Bangkok Thailand 10500
Tel : 02-6324300 Fax : 02-6375496-7
www.barascientific.com

Certificate of Calibration

Certificate No. BSCC-UV-374/24 Number of Page(s) 3 of 3

Calibration Results:

3.Photometric Accuracy (Visible)

Wavelength (nm)	Certified Absorbance (A)	UUC (A)	Error (A)	Uncertainty (±A)
426.0	0.0000	0.0000	0.0000	0.0042
	0.5761	0.5765	0.0004	0.0042
	0.7119	0.7105	-0.0014	0.0042
	1.0189	1.0174	-0.0015	0.0042
440.0	0.0000	0.0000	0.0000	0.0042
	0.5610	0.5613	0.0003	0.0042
	0.7001	0.6984	-0.0017	0.0042
	1.0026	1.0011	-0.0015	0.0042
465.0	0.0000	0.0000	0.0000	0.0042
	0.5235	0.5232	-0.0003	0.0042
	0.6614	0.6598	-0.0016	0.0042
	0.9456	0.9444	-0.0012	0.0042
546.1	0.0000	0.0000	0.0000	0.0042
	0.6249	0.6245	-0.0004	0.0042
	0.6975	0.6956	-0.0019	0.0042
	1.0009	0.9994	-0.0015	0.0042
590.0	0.0000	0.0000	0.0000	0.0042
	0.5590	0.5586	-0.0004	0.0042
	0.7725	0.7708	-0.0017	0.0042
	1.1125	1.1114	-0.0011	0.0042
635.0	0.0000	0.0000	0.0000	0.0042
	0.5668	0.5668	0.0000	0.0042
	0.7620	0.7604	-0.0016	0.0042
	1.0982	1.0971	-0.0011	0.0042

*CNR = Customer not request

4.Stray Light*

Standard cut-off wavelenght (nm)	Unit Under Calibration(UUC)		
	Wavelength (nm)	Transmission (%T)	Absorbance (A)
200.85±0.11nm	199.58	0.9520	2.0217

The Stray light transmission reference is less than 1.0%T and Stray light absorbance reference is greater than 2.00A
*Stray Light not NSC-ONSC Accredited.

The measurement uncertainty is base on a standard uncertainty multiplied by a coverage factor k=2 providing a level of confidence of approximately 95%.

End of Certificate

The above results are valid exclusively for the calibrated item(s) as mention in this report / certificate.
Advertising the report / Certificate and publicity of the results are prohibited and also shall not be reproduced except in full, without written approval of the Bara Scientific Co., Ltd.

Sartorius (Thailand) Co., Ltd.
129 Rama 9 Road, Huaykwang, Huaykwang, Bangkok 10310
Tel: +66 2643 8367-8, Fax: +66 2643 8367, e-mail: sartorius.th@sartorius.com

NSC-TSM-TIS 17025
CALIBRATION 0435

REVIEW BY Jinda K.
APPROVED BY Chinuk P
NEXT CAL DATE 02/08/25

Certificate of Calibration

Model Number :	MSE2245-100-DU	Certificate No. :	24BC0270
Description :	Analytical Balance	Issued Date :	Monday, August 05, 2024
Serial Number :	0027405555	Reference No. :	240947
ID No. :	BKK_EN0003		
Manufacturer :	Sartorius	Page No. :	1 of 2

Customer Name : ALS Laboratory Group (Thailand)Co., Ltd.
104 Phatthanakan 40,Phatthanakan Rd., Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250.

Calibrated Place : Lab Room

Calibrated By : Mr.Chonchai Inthana
Calibration Date : Friday, August 02, 2024

Calibration Procedure No. : This calibration was conducted by
Using in-house calibration procedure number (WI-003)
Based on UKAS LAB 14 : 2019

Metrological data :
Capacity : 220 g Readability : 0.0001 g

Ambients Conditions:
Temperature : 22.0 °C ± 5.0 °C
Humidity : 55.0 % RH ± 10.0 % RH
Pressure ± ____

Reasons for calibration:
☐ New installation ☐ Service / Repaired ☒ Re-calibration/ Maintenance

Equipment Condition: ☒ Good Operate ☐ Fair

Measurement Method UKAS Publication Ref :Lab 14

The measurement uncertainty stated is the expanded uncertainty which is obtained from the standard uncertainty multiplied by the coverage factor (k=2) to provide a level of confidence of approximately 95%. It is determined in accordance with the Guide to Expression of Uncertainty in Measurement (GUM). The calibration certificate documents the traceability to National Standards, which realise the unit of measurement according to the International Standard System of Units (SI). Report of Tolerance error form List of Sartorius Metrological Specifications.

Traceability:

Model Number	Description	Traceability	Certificate No.	Due Date
YCS011-522-00	Sartorius weight set 1mg - 500mg E2,(YCS011-522-00	TCS.	M23081975	23-Aug-2025
Testo 174 H	Thermo-Hygrometer , Testo 174H	ENTECH	H/T 661303,H661140	12-Nov-2024

This certificate relate and apply this equipment only.
This certificate may not be reproduced other than in full except with the prior written approval of the Verification Operation Division Sartorius (Thailand) Co., Ltd.

Mr.Chonchai Inthana(Technical Manager)

STAMP

SOP FM 33 03 February 2022

Sartorius (Thailand) Co., Ltd.
129 Rama 9 Road, Huaykwang, Huaykwang, Bangkok 10310
Tel: +66 2643 8367-8, Fax: +66 2643 8367, e-mail: sartorius.th@sartorius.com

Certificate of Calibration

Model Number :	MSE2245-100-DU	Certificate No.	24BC0270
Description :	Analytical Balance	Issued Date :	Monday, August 05, 2024
Serial Number :	0027405555	Reference No.	240912
ID No. :	BKK_EN0003		
Manufacturer :	Sartorius	Page No. :	2 of 2

Calibration Results : Without Adjustment

Repeatability

The repeatability is the ability of a weighing instrument to display nearly identical results under constant test conditions when the same load within a measurement range is placed repeatedly on the weighing pan in the same manner. The standard deviation is used to express repeatability uncertainty.

Nominal Value (Low Load)	20.0000	200.0000
20 g	20.0000	199.9999
Tolerance	20.0001	200.0000
0.0001 g	20.0000	200.0000
	20.0000	200.0000
Nominal Value (High Load)	20.0000	200.0000
200 g	20.0001	200.0001
Tolerance	20.0000	200.0000
0.0001 g	20.0000	199.9999
	20.0000	200.0000
Standard Deviation	0.00004	0.00006

Eccentricity (Off-center loading error)

The off-center loading error is defined by the difference between the readings of the load in 1/3 or 1/4 of maximum capacity, placed in the middle of the weighing pan and below each of four additional measurement points (positions defined according to OIML R76)

Nominal value: 100 g
Tolerance 0.0004 g

	Difference
1	-
2	0.0000
3	0.0000
4	0.0000
5	0.0001
6	-

Linearity

The linearity, also called linearity error, describes the deviation of the characteristic curve of a weighing instrument from the ideal line.

Tolerance 0.0002 g

Nominal Value (g)	Conventional Mass Value (g)	Displayed Value (g)	Deviation (g)	Uncertainty (g)
0.01	0.0100	0.0100	0.0000	0.00015
0.1	0.1000	0.1000	0.0000	0.00015
1	1.0000	1.0000	0.0000	0.00015
2	2.0000	2.0000	0.0000	0.00015
5	5.0000	5.0000	0.0000	0.00015
10	10.0000	10.0000	0.0000	0.00015
20	20.0000	20.0000	0.0000	0.00015
50	50.0000	50.0001	0.0001	0.00016
100	100.0000	100.0001	0.0001	0.00019
200	200.0000	200.0002	0.0000	0.00029

End of Report

SOP FM 33 03 February 2022

SCG
Metrology
SCI ECO Services Company Limited
33/2 Moo 3, T.Banpa, A.Kaengkhoi, Saraburi 18110, Thailand.
Saraburi Tel : +66 3627 3096 Fax : +66 3627 3100
Bangkok Tel : +668 9205 6851 , +669 8247 2360
Website : www.scieco.co.th E-Mail : calibrate@scg.com

NSC-TISI-TIS 17025 CALIBRATION 0244

Certificate of Calibration

Equipment	: Chamber (Oven)
Manufacturer	: Memmert
Model	: UF 450
Serial No.	: B717.0531
Customer Code	: BKK_EN0273
ID No.	: T8042A4
Customer	: ALS Laboratory Group (Thailand) Co.,Ltd.
	104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan,
	Khet Suan Luang, Bangkok 10250
Customer Location	: Laboratory (Oven Room)
Date of Receipt	: 08 May 2024
Calibrated By	: Preecha Phisassutthikul (Temperature Calibration Manager)
Approved By	: _____ / Nuafun Sungchum (Metrology Manager)
Date of Issue	: 23 MAY 2024

REVIEW BY Suda K.
APPROVED BY Sriluk P.
NEXT CAL. DATE 14/11/25

The uncertainties are for a confidence probability of approximately 95%.

This Certificate is issued in accordance with the conditions of accreditation granted by the Thai Laboratory Accreditation Scheme which has assessed the measurement capability of the laboratory and its traceability to recognized national standards and to the units of measurement realized at the corresponding national standard laboratory. This certificate may not be reproduced other than in full except with the prior written approval of the Metrology.

SCG
Metrology
SCI ECO Services Company Limited
33/2 Moo 3, T.Banpa, A.Kaengkhoi, Saraburi 18110, Thailand.
NSC-TISI-TIS 17025 CALIBRATION 0244

Calibration Report

Equipment	: Chamber (Oven)
Date of Calibration	: 14 May 2024
Environment	: Temperature : 26.5-28.1 °C
	Line Voltage : 226.7-229.8 V
	Relative Humidity : 51 - 57 %RH

Condition of this results of calibration :

1. This equipment was calibrated by insert nine resistance thermometer detectors into its chamber , the other one resistance thermometer detector use for ambient temperature measurement . The calibration was done in according to WI-T20 (based on ASTM E145-94 (Reapproved 2001) and AS2853-1986).
   All data show below were final values and the initial data from customer request . The temperature scale used was based on ITS - 90 .
2. Reference Standard Instrument :

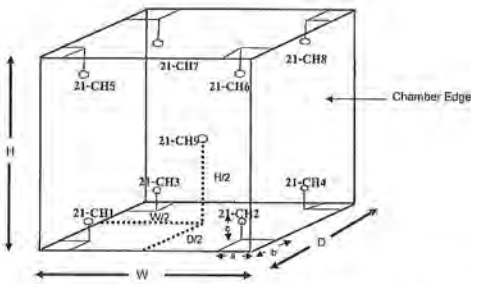
Instrument	Model	Instrument No.	Certificate No.	Due Date
RTD	100 ohm	21-(CH1-10)	T231955	17 November 2024
DATA LOGGER	34970A	T121	T231955	17 November 2024

3. This certificate is traceable to :
   National Institute of Metrology (Thailand) through Metrological Center (NSC-TISI-TIS 17025 CALIBRATION 0244.)
4. Condition of calibrated item : good
   Equipment Description :
   Time Constant 1 Hour 30 Minute At 104 °C
   Fresh Air Damper ☐ Open ☐ Min ☐ Medium ☐ Max
   ☐ Close
   ☒ Not Available
5. Adjustment :
   (X) without adjustment ( ) after adjustment

Approved By_____

SCG
Metrology
SCI ECO Services Company Limited
33/2 Moo 3, T.Banpa, A.Kaengkhoi, Saraburi 18110, Thailand.
NSC-TISI-TIS 17025 CALIBRATION 0244

Calibration Report



Remark :
Internal Dimensions of Chamber : W (Width) = 104 cm. , H(Height)=72 cm. and D(Depth)=60 cm.
Size of Installed Standard sensor number21-CH1 to number21-CH8 : a = 5 cm. ,b = 5 cm. and c = 5 cm.
Size of Installed Standard sensor number21-CH9 : W/2=104 cm./2 , H/2=72 cm./2 and D/2=60 cm./2.

Measurement Results

Calibration Point	Average Standard Reading at each position (°C)								
	21-CH1	21-CH2	21-CH3	21-CH4	21-CH5	21-CH6	21-CH7	21-CH8	21-CH9
104	103.4	105.0	103.7	103.6	103.3	104.6	103.3	104.0	103.9
180	179.5	181.1	179.2	179.5	179.0	181.3	179.8	179.9	180.2

Chamber (Oven)			Temperature Distribution				
Setting (°C)	Reading (°C) Min , Max	Reading (°C) Average	Average (°C)	Stability (±°C)	Uniformity (°C)	Uncertainty (±°C)	Coverage Factor k
104.0	103.9 , 104	104.0	103.85	0.14	1.27	0.44	2.00
180.0	179.9 , 180.1	180.0	179.94	0.39	2.29	0.76	2.00

* The quoted uncertainty exclude "uniformity"
The calibration result apply only the above calibrated item.
The result of test was found accurate as shown on date and place of test only.
The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k which for a t-distribution, providing a level of confidence of approximately 95 %.

End of Certificate

Approved By_____

TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
CORPORATE SERVICES 3: EQUIPMENT CALIBRATION AND TESTING SERVICES
534/4 PATTANAKARN ROAD SOI 18, SUANLUANG, SUANLUANG BANGKOK 10250
TEL.0-2717-3000-29 FAX.0-2719-9484

ilac-MRA

NSC-TISI-TIS 17025 CALIBRATION 0504

Certificate of Calibration

Cert. No.: 24TM1618
Page : 1 of 3

Equipment :	Water Bath
Manufacturer :	Memmert
Model :	WNE29
Serial No. :	L622.0282
ID No. :	BKK_EN0439
Submitted by :	ALS Laboratory Group (Thailand) Co.,Ltd. 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand
Location :	Organic Preparation Lab
Received Order :	29 October 2024
Calibration Date :	29 October 2024
Ambient Temperature :	(26 ± 10) °C
Relative Humidity :	(50 ± 30) %
Calibrated by :	Man Pattanapongpaiboon
Approved by :	Kunchit Approved Signatory

REVIEW BY Suda K.
APPROVED BY Sriluk P.
NEXT CAL DATE 29/10/25

( ) Ponpan Paipim
( ) Suwit Imjai
(✓) Kunchit Promprat

Issue Date : 30 October 2024

The Uncertainties are for a confidence probability of approximately 95%

This certificate may not be reproduced other than in full except with the prior written Approval of the Head of Corporate Services 3 - Equipment Calibration and Testing Services

Equipment : Water Bath
Condition As-Received : Used Item
Reference : 2410-0782OC-4

Cert. No.: 24TM1618

Procedure Used :-

Calibration were conducted using in-house calibration procedure CP-OT04 Based on ASTM E715 according to direct measurement method with Data Acquisition which connected with Industrial Platinum Resistance Thermometer (IPRT).

The temperature scale used was based on ITS-90.

Condition of this result of calibration

1. Reference standard instrument:-

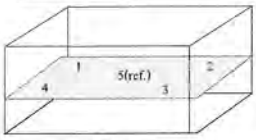
Instrument	Serial No.	Cert. No.	Traceable	Due Date
1) Data Acquisition	MY57013711	24LM115	TPA	13 Jul 2025

2. This certificate is valid only to the item calibrated on date and place of calibration.
3. This certification is traceable to the International System of Unit.

Remark : TPA : Technology Promotion Association (Thailand - Japan)

Result of Calibration :- (*) Without Adjustment
Function of UUC* : Temperature Source
Heat transfer medium used : Water

	Environmental		AC Voltage Supply
	(°C)	(%R.H.)	(Volt)
Beginning of Calibration	25	54	222
Finished of Calibration	25	57	226



Front

Position :	Ref. Std. ID No.:
1	4803988-001
2	4803988-002
3	4803988-003
4	4803988-004
5(ref.)	4803988-005

Equipment : Water Bath
Condition As-Received : Used Item
Reference : 2410-0782OC-4

Cert. No.: 24TM1618

Result of Calibration :- (*) Without Adjustment
Function of UUC* : Temperature Source

Calibration point (°C)	UUC* Setting (°C)	UUC* Reading (°C)	Average* Standard Reading (°C) Position					Uncertainty (± °C)
			1	2	3	4	5 (ref.)	
85.0	85.0	85.0	85.133	85.212	85.150	84.983	85.096	0.22

Calibration point (°C)	Uniformity (°C)	Stability (± °C)	Coverage Factor *k*
85.0	0.21	0.13	2

Average* : The average of 30 values in each position.
Uniformity : The maximum difference of measured temperatures at any sensors and the measured temperature at the reference location which are observed at the same time or at as close an observation time as possible to determine the temperature pattern or homogeneity within the chamber under steady-state conditions.
Stability : One-half of the greatest maximum difference of measured temperature at any one probe.
UUC* : Unit Under Calibration
Note : The reported uncertainty of measurement was included stability and excluded uniformity.

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor *k*, providing a level of confidence of approximately 95 %.

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ภาคผนวก จ

สำเนาหนังสืออนุญาตขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน

ที่ อก ๐๑๑๐(๑)/ ๑๖๑๖๘

กรมโรงงานอุตสาหกรรม
ถนนพระรามที่ ๖ แขวงทุ่งพญาไท
เขตราชเทวี กรุงเทพฯ ๑๐๔๐๐

๒๐ พฤศจิกายน ๒๕๖๖

เรื่อง ต่ออายุหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน

เรียน กรรมการผู้จัดการ บริษัท เอเอลเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด

อ้างถึง คำขอขึ้นทะเบียน/ต่ออายุ/เปลี่ยนแปลงบุคลากร และขนิดสารมลพิษของห้องปฏิบัติการวิเคราะห์เอกชน ลงวันที่ ๔ สิงหาคม ๒๕๖๖

สิ่งที่ส่งมาด้วย ๑. รายชื่อผู้ควบคุมดูแลห้องปฏิบัติการวิเคราะห์ จำนวน ๑ แผ่น
๒. รายชื่อเจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์ จำนวน ๕ แผ่น
๓. ขอบข่ายสารมลพิษที่ได้รับขึ้นทะเบียนจากกรมโรงงานอุตสาหกรรม จำนวน ๑๑ แผ่น

ตามหนังสืออ้างถึง บริษัท เอเอลเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด ขอต่ออายุหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ว-๒๐๔ สถานที่ตั้งเลขที่ ๑๑๔ ซอยพัฒนาการ ๔๑ ถนนพัฒนาการ แขวงพัฒนาการ เขตสวนหลวง กรุงเทพมหานคร ต่อกรมโรงงานอุตสาหกรรม นั้น

กรมโรงงานอุตสาหกรรมพิจารณาแล้ว ให้บริษัท เอเอลเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด ต่ออายุหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน โดยมีองค์ประกอบดังนี้

ก. ผู้ควบคุมดูแลห้องปฏิบัติการวิเคราะห์ จำนวน ๖ ราย ตามสิ่งที่ส่งมาด้วย ๑
ข. เจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์ ๑๔๑ ราย ตามสิ่งที่ส่งมาด้วย ๒
ค. ขอบข่ายสารมลพิษที่ได้รับขึ้นทะเบียนให้วิเคราะห์ไอน้ำเสีย น้ำใต้ดิน อากาศเสีย สิ่งปฏิกูล หรือวัสดุที่ใช้แล้ว และดิน ตามสิ่งที่ส่งมาด้วย ๑

หนังสือฉบับนี้จะหมดอายุในวันที่ ๒ กันยายน ๒๕๖๙ หากประสงค์จะต่ออายุหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน ให้ยื่นคำขอต่ออายุพร้อมเอกสารประกอบคำขอต่อกรมโรงงานอุตสาหกรรม ล่วงหน้า ๑๐ วัน ก่อนวันสิ้นอายุของหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน ทั้งนี้ สามารถยื่นคำขอผ่านระบบอิเล็กทรอนิกส์ได้ที่หน้าเว็บไซต์กรมโรงงานอุตสาหกรรม

จึงเรียนมาเพื่อทราบ

ขอแสดงความนับถือ

(นายศิระ ยันตรัมโอ)
นักวิทยาศาสตร์ชำนาญการพิเศษ ชำนาญการพิเศษ
ผู้อำนวยการกองวิจัยและเทคโนโลยีสิ่งแวดล้อมอุตสาหกรรม
ปฏิบัติราชการแทนอธิบดีกรมโรงงานอุตสาหกรรม

ทราบวิจัยและเทคโนโลยีมลพิษโรงงาน
กลุ่มมาตรฐานวิธีการวิเคราะห์ทดสอบมลพิษและทะเบียนห้องปฏิบัติการ
โทร. ๐ ๒๔๓๐ ๖๓๑๒ ต่อ ๒๑๑๑๕
โทรสาร ๐ ๒๔๓๐ ๖๓๑๒ ต่อ ๒๑๑๑๑
ไปรษณีย์อิเล็กทรอนิกส์ sanaban@diw.mail.go.th

"อุตสาหกรรมก้าวไกล ประเทศไทยก้าวหน้า ร่วมกันพัฒนา อุตสาหกรรมสีเขียว"

สิ่งที่ส่งมาด้วย ๑

เอกสารแนบท้ายหนังสือรับต่ออายุขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน
บริษัท เอเอลเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด เลขทะเบียน ว-๒๐๔
ที่ อก ๐๑๑๐(๑)/ ๑๖๑๖๘ ลงวันที่ ๒๐ พฤศจิกายน ๒๕๖๖

ก. ผู้ควบคุมดูแลห้องปฏิบัติการวิเคราะห์ จำนวน ๖ ราย

๑) นางสาวมุฬาพร จันทร์ขนุง	ทะเบียนเลขที่ ว-๒๐๔-ค-๐๐๐๑
๒) นางสาวขันน้ำ ไกรารกุล ณ นคร	ทะเบียนเลขที่ ว-๒๐๔-ค-๐๐๐๒
๓) นายศรายุทธ ลีลรานนท์	ทะเบียนเลขที่ ว-๒๐๔-ค-๐๐๐๓
๔) นางสาวกนกพร เคนท	ทะเบียนเลขที่ ว-๒๐๔-ค-๐๐๐๔
๕) นายสุธีรา สอนแก้ว	ทะเบียนเลขที่ ว-๒๐๔-ค-๐๐๐๕
๖) นายวิชาญ ชุณหรัศ	ทะเบียนเลขที่ ว-๒๐๔-ค-๐๐๐๖

ข. เจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์ จำนวน ๑๔๑ ราย

๑) นายกาจน์ปัณฑิต ลีลลิศุภวณิชย์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๐๑
๒) นายกิตพล ลว้านโชธรรม์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๐๒
๓) นายนราธิป เพ็ชรขัยดำ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๐๓
๔) นายศิริโชค พรษ์ประสม	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๐๔
๕) นายณัฐวุฒิ ตั้งแพร	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๐๕
๖) นางสาวจินดา ไชยุลธรรม	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๐๖
๗) นางสาวสาวิตรี น้อยเสวียม	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๐๗
๘) นางสาวพญิฐกาญจน์ อิ่มขม	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๐๘
๙) นางสาวนรินทร์ ลายเงิน	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๐๙
๑๐) นางสาวนันทวิ สมบูรณ์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๑๐
๑๑) นางสาวศรันยา เฉลิมฝ่างศี	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๑๑
๑๒) นางสาวรัญญรส มงคลจิรวุฒิ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๑๒
๑๓) นางสาวศิริลักษณ์ ขุนนาค	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๑๓
๑๔) นายภพพงศ์ จันทรุทันรุ่	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๑๔
๑๕) นายนรเศรษฐ์ ไกรกาลย์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๑๕
๑๖) นายชัยวา จริยา	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๑๖
๑๗) นางสาวเกศรินทร์ แก้วบัง	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๑๗
๑๘) นางสาวสุริมล ขัณเรืองวุฒิ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๑๘
๑๙) นางสาวสุขาดา ธรรมถาวร	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๑๙
๒๐) นางสาวเยมิกา ชัยเดชนกุล	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๒๐
๒๑) นางสาวศศิวร หนูสวัสดิ์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๒๑
๒๒) นางสาวเสาวลักษณ์ ภูมภาอำพร	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๒๒
๒๓) นายอภิสิทธิ์ ลิงหา	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๒๓
๒๔) นายศักดิ์สิทธิ์ ไพศาลพิสุทธิ์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๒๔
๒๕) ว่าที่ร้อยตรีหญิง พรรณิภา อำเจริญ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๒๕
๒๖) นางจิตตา คำคุณแก้ว	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๒๖
๒๗) นางสาวธวรรณ รักพร	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๒๗
๒๘) นายจุฬเจต วารินทร์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๒๘
๒๙) นางสาวอาภาภัทน์ ร่องคำ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๒๙
๓๐) นายพ่วงมี ศรีปัตเนตร	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๓๐
๓๑) นายคุทิต ยุ่นสิน	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๓๑
๓๒) ว่าที่ร้อยตรี เผลิมเกียรติ ตองพริงเพิ่ม	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๓๒
๓๓) นางสาวรวีดา ศรีงาม	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๓๓
๓๔) นายอนุพงศ์ วัฒนศรีประเสริฐ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๓๔

๓๕) นางสาวจุฑารัตน์...

๓๕) นางสาวจุฑารัตน์ โอนสันเทียะ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๓๕
๓๖) นางสาวชาวุรรรณ พิมพ์อภิกฤติยา	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๓๖
๓๗) นางสาวปรางค์ทิพย์ กิจไพศาลศักดิ์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๓๗
๓๘) นางสาวเดือนโจ ทางกลาง	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๓๘
๓๙) นางสาวจิรพพร ศิริเวช	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๓๙
๔๐) นายวรากร ผูกรักษ์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๔๐
๔๑) นายทนง วีรัยยสหลิง	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๔๑
๔๒) นายธนิต เจนจบ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๔๒
๔๓) นายคณิศร ชำเพชร	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๔๓
๔๔) นายภูริช พรหมสะอาด	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๔๔
๔๕) นายธนเดช โภคาพิพัฒน์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๔๕
๔๖) นายชวฤทธิ์ วงษ์จันทร์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๔๖
๔๗) นายอาทิตย์ ศรีเสน	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๔๗
๔๘) นายเจษฎินทร์ ศรสักดิไทย	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๔๘
๔๙) นายจรัส บุญยิ่ง	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๔๙
๕๐) นายธนาณัติ เอนก	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๕๐
๕๑) นายกิรัณน์ หุมหนู	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๕๑
๕๒) นางสาวสุภาพรัญ มาก	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๕๒
๕๓) นางสาวทัดพร ชวาลสมบูรณ์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๕๓
๕๔) นางสาวธิติมา บุญเพ็ง	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๕๔
๕๕) นางสาวภาณุมาศ นามวัลณ์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๕๕
๕๖) นางสาวอุไรรัตน์ ทึงสร้างแป้น	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๕๖
๕๗) นายธีรวัฒน์ ปวงสุข	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๕๗
๕๘) นายศิพธิพล ยะโส	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๕๘
๕๙) นายศิพธิพล ยะโส	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๕๙
๖๐) นายประยงค์ วรรณชูชัย	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๖๐
๖๑) นายยอธ หวงทิพย์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๖๑
๖๒) นางสาวกนกวรรณ จันทบาล	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๖๒
๖๓) นายสิทธิโชค รงเงิน	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๖๓
๖๔) นางศิลาวรรณ โชญญ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๖๔
๖๕) นางสาวพรรณธิดา หุ่มลง	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๖๕
๖๖) นายนวลัทธ ศรีวิริยะ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๖๖
๖๗) นายสุวิชา ทองอ่อน	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๖๗
๖๘) นายวิญญู บุญละนัย	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๖๘
๖๙) นายสมบูรณ์ บุตรจันทร์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๖๙
๗๐) นายวิรัตน์ ไชยนะรา	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๗๐
๗๑) นายกุเบศน์ เพิ่มขุน	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๗๑
๗๒) นายจิรณัฐ ขวาสออ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๗๒
๗๓) นายอัสรี นามบุรี	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๗๓
๗๔) นายอัศวเรส ขัลสาร	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๗๔

๗๕) นายประเสริฐ...

๗๕) นายประเสริฐ สุวะชันธ์	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๗๕
๗๖) นายภูวุฒ จันทร์เนียม	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๗๖
๗๗) นายพีรพงษ์ ทองคูณปรีดา	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๗๗
๗๘) นายนฤพล ทองบุช	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๗๘
๗๙) นายอนุวัฒน์ ม่วงแพร	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๗๙
๘๐) นายเจตศรารวุฒิ ปัสตะมะ	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๘๐
๘๑) นายกฤษณะ สายวรรณ์	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๘๑
๘๒) นายพิชัย บุญยงค์	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๘๒
๘๓) นายกานุพงศ์ โยธวงศ์	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๘๓
๘๔) นายสามารถ ตุ้มปลี	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๘๔
๘๕) นายสัญชัย โกศรีนาม	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๘๕
๘๖) นายณัฐวุฒิ ศรีประเสริฐ	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๘๖
๘๗) นายชวัลลัย นาคพนม	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๘๗
๘๘) นายพงศธร ชัยทิพย์	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๘๘
๘๙) นายสิทธิโชค ทาสีดา	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๘๙
๙๐) นายธนากร ยืนสุดา	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๙๐
๙๑) นางสาววรณิชชา ชาติวันชัย	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๙๑
๙๒) นางสาวหิมพ์ตะวัน มีนาถุล	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๙๒
๙๓) นางสาวเพชรัตน์ สิงห์สมบุญ	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๙๓
๙๔) นางสาวธญานิน พรหมจันทร์	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๙๔
๙๕) นายกิรติ หวีวาย	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๙๕
๙๖) นายจักรริน หนับวิชา	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๙๖
๙๗) นายชัชรชัย สุขเปีย	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๙๗
๙๘) นายณรนนท์ ตัะทองคำ	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๙๘
๙๙) นายอุดมพล สนนอก	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๐๙๙
๑๐๐) นายทักษ์ดนัย อุบลศรี	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๐๐
๑๐๑) นายธนศวร นามะคุณณา	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๐๑
๑๐๒) นายธิติทรงศ์ บัวแดง	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๐๒
๑๐๓) นายนนทชัย ลุปอัมภ์	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๐๓
๑๐๔) นายณัฐพล กุณฑุทธิ์	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๐๔
๑๐๕) นายนันทวัฒน์ สารีน	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๐๕
๑๐๖) นายปิยะณัฐ หลมะศรี	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๐๖
๑๐๗) นายพงศ์สิริ โสมเขียว	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๐๗
๑๐๘) นายทีรพัฒน์ ก่าทำ	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๐๘
๑๐๙) นายภาณุทงศ์ มานิตย์	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๐๙
๑๑๐) นายมะลต ผลาทิพย์	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๑๐
๑๑๑) นายสิรินนท์ ทองอิ่น	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๑๑
๑๑๒) นายอนุชา ทันสมัย	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๑๒
๑๑๓) นายอดิศักดิ์ ธวไชย	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๑๓

๑๑๔) นายนันทชัย...

๑๑๔) นายนันทชัย วีสม	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๑๔
๑๑๕) นายวรวุฒ ดีนัก	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๑๕
๑๑๖) นายแสงตะวัน มะลมลัด	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๑๖
๑๑๗) นายยุทธพงศ์ รัตนะ	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๑๗
๑๑๘) นายชยัญญ์ ไชยอะนิจ	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๑๘
๑๑๙) นายวิศรุต ศรีธรรมมา	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๑๙
๑๒๐) นายนนทกร เดือกผ่อง	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๒๐
๑๒๑) นายกำชัย สุทธะ	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๒๑
๑๒๒) นางสาวณัฐกรณ์ บุญคะนัย	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๒๒
๑๒๓) นางสาวพัชรินทร์ แสนสร้อย	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๒๓
๑๒๔) นายไพรวัลย์ เปรื่องพิมาย	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๒๔
๑๒๕) นางสาวคุณมาศ ทองมาศ	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๒๕
๑๒๖) นางสาวลลิตา จิตรสวาง	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๒๖
๑๒๗) นางสาวขไมพร เลิกกู่เขียว	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๒๗
๑๒๘) นางสาวกฤติมาพร ทำมีแก้น	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๒๘
๑๒๙) นางสาวสกุลรัตน์ ภาคภูมิ	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๒๙
๑๓๐) นางสาวไหรินทร์ ศรีรูปี	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๓๐
๑๓๑) นางสาวทิพเนตร ผุยปัญญา	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๓๑
๑๓๒) นางสาวสาธิตา ปานทอง	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๓๒
๑๓๓) นางสาวอริสา ทองนวล	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๓๓
๑๓๔) นางสาวอรยา ถ้ำคล้อง	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๓๔
๑๓๕) นางสาวชุตาภรณ์ สุนทรสนาน	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๓๕
๑๓๖) นางสาวอัญชลี ค้ำจันทร์	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๓๖
๑๓๗) นายบุญฤทธิ์ เอี่ยมเทศ	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๓๗
๑๓๘) นางสาวศุภรดา ปิ่นมสุวา	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๓๘
๑๓๙) นางสาวพาณี คุณนาน	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๓๙
๑๔๐) นางสาวจิราพุช พ่อยตา	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๔๐
๑๔๑) นางสาวอารยา มีชัย	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๔๑
๑๔๒) นางสาววิชุดา นาคขจญ	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๔๒
๑๔๓) นางสาวบันทิยา ชันทะสุน	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๔๓
๑๔๔) นายทิตติทงศ์ แซ่ลี้	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๔๔
๑๔๕) นายอนุวัติ ภูดวิด	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๔๕
๑๔๖) นายธีรพล แสงทอง	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๔๖
๑๔๗) นายศักดิ์พิพัฒน์ บุญนั่น	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๔๗
๑๔๘) นายฐิติวัลค์ เอมอุไร	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๔๘
๑๔๙) นายชัยณรงค์ ศรีกุรินทร์	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๔๙
๑๕๐) นางสาวอัจฉราวรรณ สวนสนอง	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๕๐
๑๕๑) นางสาวณัฐฐาพร สิงหา	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๕๑
๑๕๒) นายถิ่นเรศ เหมยโต	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๕๒

๑๕๓) นางสาวจุบล...

๑๕๓) นางสาวจุบล เลิศสิริ	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๕๓
๑๕๔) นางสาวมันวัตน์ ทองบุตร	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๕๔
๑๕๕) นายภาคภูมิ แทนไทย	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๕๕
๑๕๖) นางสาวสุภาณัฐ เมล์พ้วง	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๕๖
๑๕๗) นางสาวพรหิตา สาตาขนม์	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๕๗
๑๕๘) นายเอกวิทย์ วับทะบา	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๕๘
๑๕๙) นายโตรมณฑล พิทย์วรรณ	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๕๙
๑๖๐) นายจิรเมธ ประเสริฐสิรพงศ์	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๖๐
๑๖๑) นายจิรายุส เกษมสุข	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๖๑
๑๖๒) นายจีรศักดิ์ ศรีวิจัย	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๖๒
๑๖๓) นายณัฐกฤษณ์ สมพานแก้ว	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๖๓
๑๖๔) นายบูรพศักดิ์ ปะทิ	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๖๔
๑๖๕) นายปัณณวิทญ์ เผยอทรัพย์	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๖๕
๑๖๖) นายพิชญุพงษ์ ไชยา	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๖๖
๑๖๗) นายภัทรพงษ์ มณฑาทอง	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๖๗
๑๖๘) นายวสันต์ ตรีนกุล	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๖๘
๑๖๙) นายภาณุเดช เพชรอุด	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๖๙
๑๗๐) นายอนุกูล วิระแสง	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๗๐
๑๗๑) นายภัทรพงษ์ มิสุข	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๗๑
๑๗๒) นางสาวนุชรี สีละทีป	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๗๒
๑๗๓) นางสาวสุภาวดี โกศรีนาม	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๗๓
๑๗๔) นางสาวอรณิช เทียนดำ	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๗๔
๑๗๕) นางสาวพรเพ็ญ ชอบสอน	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๗๕
๑๗๖) นางสาวรันวัลา ชอบศิกุล	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๗๖
๑๗๗) นางสาวอรวรรณ เถาว์ทอง	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๗๗
๑๗๘) นางสาวอัยย์ลิณ เมอร์วิณณ์	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๗๘
๑๗๙) นางสาววิลรา คู่ครอง	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๗๙
๑๘๐) นายวุฒิกร ศิริวรรณ	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๘๐
๑๘๑) นางสาวจารุวรรณ กระจ่างหินอุ่	ทะเบียนเลขที่ ว-๒๐๔-๑-๐๑๘๑

ลำดับที่ ๑๕๔ ...

ลำดับที่ ๑๕๕ ...

เอกสารแนบท้ายหนังสือรับต่ออายุขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์มลทิน
บริษัท เอเอสเอ แอบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด เลขทะเบียน ว-๒๐๔
ที่ สถ ๐๑๑๐(๑)/ ๑๖๑๖๘ ลงวันที่ ๒๐ พฤศจิกายน ๒๕๖๖

ห. ขอนำยาสารเคมีที่ได้รับขึ้นทะเบียนจากกรมโรงงานอุตสาหกรรม จำนวน ๓๗๕ รายการ

น้ำเสีย จำนวน 60 รายการ

ลำดับที่	สารเคมีพิษ	วิธีวิเคราะห์
1	Aldicarb	High-Performance Liquid Chromatographic Method[1]
2	Aldicarb Sulfone	High-Performance Liquid Chromatographic Method[1]
3	Aldicarb Sulfoxide	High-Performance Liquid Chromatographic Method[1]
4	Aldrin	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[2]
5	Arsenic	1) Digestion, Inductively Coupled Plasma Method[3] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[3]
6	Barium	1) Digestion, Inductively Coupled Plasma Method[3] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[3]
7	α-BHC	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[2]
8	β-BHC	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[2]
9	δ BHC	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[2]
10	γ-BHC	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[2]
11	Biochemical Oxygen Demand	1) 5-Day BOD Test, Azide Modification Method[4] 2) 5-Day BOD Test, Membrane Electrode Method[4]
12	Carbaryl	High-Performance Liquid Chromatographic Method[1]
13	Carbofuran	High-Performance Liquid Chromatographic Method[1]
14	Cadmium	1) Digestion, Inductively Coupled Plasma Method[3] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[3]
15	Chemical Oxygen Demand	1) Closed Reflux, Colorimetric Method[5] 2) Closed Reflux, Titrimetric Method[5]
16	Chlordane	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[2]
17	Chromium	1) Digestion, Inductively Coupled Plasma Method[3] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[3]
18	Color	ADMI Weighted-Ordinate Spectrophotometric Method[6]

19 Copper...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
19	Copper	1) Digestion, Inductively Coupled Plasma Method[1] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[1]
20	Cyanide	Distillation, Colorimetric Method[3]
21	2,4'-DDD	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
22	4,4'-DDD	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
23	2,4'-DDE	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
24	4,4'-DDE	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
25	2,4'-DDT	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
26	4,4'-DDT	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
27	Dieldrin	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
28	Endosulfan Sulfate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
29	Endosulfan I	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
30	Endosulfan II	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
31	Endrin	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
32	Endrin Aldehyde	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
33	Formaldehyde	Distillation, Colorimetric Method[3]
34	Free Chlorine	1) DPD Ferrous Titrimetric Method[3] 2) DPD Colorimetric Method[4]
35	Heptachlor	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
36	Heptachlor Epoxide	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
37	Hexavalent Chromium	Colorimetric Method[3]
38	3-Hydroxycarbofuran	High-Performance Liquid Chromatographic Method[4]
39	Lead	1) Digestion, Inductively Coupled Plasma Method[1] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[1]

40 Manganese...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
40	Manganese	1) Digestion, Inductively Coupled Plasma Method[1] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[1]
41	Mercury	1) Digestion, Cold-Vapor Atomic Absorption Spectrometric Method[1] 2) Digestion, Inductively Coupled Plasma/ Mass spectrometric Method[1]
42	Methiocarb	High-Performance Liquid Chromatographic Method[4]
43	Methoxychlor	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
44	Methomyl	High-Performance Liquid Chromatographic Method[4]
45	Nickel	1) Digestion, Inductively Coupled Plasma Method[1] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[1]
46	Oil & Grease	1) Liquid-Liquid, Partition-Gravimetric Method[3] 2) Soxhlet Extraction Method[6]
47	Oxamyl	High-Performance Liquid Chromatographic Method[4]
48	Propoxur	High-Performance Liquid Chromatographic Method[4]
49	pH	Electrometric Method[3]
50	Phenols	1) Distillation, Chloroform Extraction Method[3] 2) Distillation, Direct Photometric Method[3]
51	Selenium	1) Digestion, Inductively Coupled Plasma Method[1] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[1]
52	Sulfide	Iodometric Method[3]
53	Temperature	Laboratory and Field Methods[3]
54	Total Dissolved Solids	Dried at 180 °C[3]
55	Total Kjeldahl Nitrogen	Semi-Micro Kjeldahl Method[4]
56	Total Phosphorous	Digestion, Colorimetric Method[4]
57	Total Suspended Solids	Dried from 103-105 °C[3]
58	Toxaphene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
59	Trivalent Chromium	1) Digestion, Inductively Coupled Plasma Method; Colorimetric Method; Calculation[1] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method; Colorimetric Method; Calculation[1]
60	Zinc	1) Digestion, Inductively Coupled Plasma Method[1] 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1]

น้ำใต้ดิน...

น้ำใต้ดิน จำนวน 126 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Acenaphthene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
2	Acetone	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
3	Aldrin	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
4	Anthracene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
5	Antimony	1) Digestion, Inductively Coupled Plasma Method[1] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[1]
6	Arsenic	1) Digestion, Inductively Coupled Plasma Method[1] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[1]
7	Atrazine	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
8	Barium	1) Digestion, Inductively Coupled Plasma Method[1] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[1]
9	Benz(a)anthracene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
10	Benzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
11	Benzo(b)fluoranthene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
12	Benzo(k)fluoranthene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
13	Benzoic Acid	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
14	Benzo(a)pyrene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
15	Benzo(g,h,i)perylene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
16	Beryllium	1) Digestion, Inductively Coupled Plasma Method[1] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[1]
17	Bis(2-chloroethyl)ether	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]

18 Bis(2-ethylhexyl)phthalate...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
18	Bis(2-ethylhexyl)phthalate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
19	Bromodichloromethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
20	Bromoform	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
21	Butanol	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
22	Butyl benzyl phthalate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
23	Cadmium	1) Digestion, Inductively Coupled Plasma Method[1] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[1]
24	Carbazole	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
25	Carbon disulfide	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
26	Carbon tetrachloride	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
27	Chlordane	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
28	p-Chloroaniline	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
29	Chlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
30	Chlorodibromomethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
31	Chloroform	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
32	2-Chlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
33	Chromium	1) Digestion, Inductively Coupled Plasma Method[1] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[1]
34	Chromium (III)	1) Digestion, Inductively Coupled Plasma Method; Colorimetric Method; Calculation[1] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method; Colorimetric Method; Calculation[1]
35	Chromium (VI)	Colorimetric Method[1]

36 Chrysene...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
36	Chrysene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
37	Cyanide	Distillation, Colorimetric Method[4]
38	2,4-D	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
39	DDD	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
40	DDE	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
41	DDT	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
42	Dibenz(a,h)anthracene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
43	Di-n-Butyl Phthalate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
44	1,2-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
45	1,3-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
46	1,4-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
47	3,3-Dichlorobenzidine	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
48	1,1-Dichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
49	1,2-Dichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
50	1,1-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
51	cis-1,2-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
52	trans-1,2-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
53	2,4-Dichlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
54	1,2-Dichloropropane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
55	1,3-Dichloropropane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]

56 1,3-Dichloropropene...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
56	1,3-Dichloropropene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
57	Dieldrin	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
58	Diethyl Phthalate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
59	2,4-Dimethylphenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
60	2,4-Dinitrophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
61	2,4-Dinitrotoluene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
62	2,6-Dinitrotoluene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
63	Di-n-octyl phthalate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
64	Endosulfan	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
65	Endrin	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
66	Ethylbenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
67	Fluoranthene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
68	Fluorene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
69	Heptachlor	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
70	Heptachlor epoxide	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
71	Hexachlorobenzene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
72	Hexachloro-1,3-butadiene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
73	n-Hexane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
74	α-HCH	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
75	β-HCH	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]

76 γ-HCH...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
76	γ-HCH	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
77	Hexachlorocyclopentadiene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
78	Hexachloroethane	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
79	Indeno(1,2,3-cd)pyrene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
80	Isophorone	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
81	Lead	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
82	Manganese	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
83	Mercury	1) Digestion, Cold Vapor Atomic Absorption Spectrometric Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
84	Methanol	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
85	Methoxychlor	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
86	Methyl bromide	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
87	Methylene chloride	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
88	2-Methylphenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
89	2-Methylnapthalene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
90	Methyl tert-butyl Ether	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
91	Naphthalene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
92	Nickel	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
93	Nitrobenzene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]

94 N-Nitrosodiphenylamine...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
94	N-Nitrosodiphenylamine	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
95	N-Nitrosodi-n-Propylamine	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
96	Polychlorinated Biphenyls - PCB 1016 - PCB 1221 - PCB 1232 - PCB 1242 - PCB 1248 - PCB 1254 - PCB 1260	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
97	Pentachlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
98	pH	Electrometric Method[5]
99	Phenanthrene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
100	Phenol	1) Distillation, Chloroform Extraction Method[4] 2) Distillation, Direct Photometric Method[4] 3) Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
101	Pyrene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
102	Selenium	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
103	Silver	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
104	Styrene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
105	1,1,2,2-Tetrachloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
106	Tetrachloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
107	Toluene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
108	Toxaphene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
109	TPH (C_4-C_9)	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4,23]

110 TPH (C_{10}-C_{36})...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
110	TPH (C_{9}-C_{18})	Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method[9,22]
111	TPH (C_{19}-C_{35})	Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method[9,22]
112	1,2,4-Trichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
113	1,1,1-Trichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
114	1,1,2-Trichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
115	Trichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
116	2,4,5-Trichlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
117	2,4,6-Trichlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
118	1,3,5-Trimethylbenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
119	Vanadium	1) Digestion, Inductively Coupled Plasma Method[5] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[5]
120	Vinyl acetate	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
121	Vinyl chloride	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
122	m-Xylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
123	o-Xylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
124	p-Xylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
125	Xylene (Total)	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
126	Zinc	1) Digestion, Inductively Coupled Plasma Method[5] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[5]

อากาศเสีย...

อากาศเสีย (ปล่องระบาย) จำนวน 28 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Antimony	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
2	Arsenic	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
3	Beryllium	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
4	Cadmium	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
5	Carbon Monoxide	1) Instrumental Analyzer Method[5] 2) Sampling Bag Non-Dispersive Infrared Method[5]
6	Chlorine	1) Absorption Sampling, Ion Chromatographic Method[5] 2) Isokinetic Sampling, Ion Chromatographic Method [5]
7	Chromium	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
8	Cobalt	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
9	Copper	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
10	Cresol	Adsorption Sampling, Gas Chromatographic Method[5]
11	Dioxins	Isokinetic Sampling[5]
12	Hydrogen Chloride	1) Absorption Sampling, Ion Chromatographic Method[5] 2) Isokinetic Sampling, Ion Chromatographic Method[5]
13	Hydrogen Fluoride	1) Absorption Sampling, Ion Chromatographic Method[5] 2) Isokinetic Sampling, Ion Chromatographic Method[5]
14	Hydrogen Sulfide	Absorption Sampling, Iodometric Method[5]

15 Lead...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
15	Lead	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
16	Manganese	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
17	Mercury	1) Isokinetic Sampling, Digestion, Cold-Vapor Atomic Absorption Spectrometric Method[5] 2) Isokinetic Sampling, Digestion, Cold-Vapor Atomic Fluorescence Spectrometric Method[5]
18	Nickel	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
19	Opacity	Ringelmann's Method[2]
20	Oxides of Nitrogen	1) Absorption Sampling, Phenoldisulfonic Acid Method[5] 2) Absorption Sampling, Alkaline Permanganate/ Colorimetric Method[5] 3) Instrumental Analyzer Method[5]
21	Selenium	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
22	Sulfur Dioxide	1) Absorption Sampling, Barium-Thorin Titrimetric Method[5] 2) Instrumental Analyzer Method[5]
23	Sulfuric Acid	Isokinetic Sampling, Barium-Thorin Titrimetric Method[5]
24	Tellurium	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
25	Tin	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
26	Total Suspended Particulate	1) Isokinetic Sampling, Gravimetric Method[5] 2) Paired Train, Isokinetic Sampling, Gravimetric Method[5]

27 Vanadium...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
27	Vanadium	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
28	Xylene	Adsorption Sampling, Gas Chromatographic Method[5]

สิ่งปฏิกูลหรือวัสดุที่เน่าเปื่อยแล้ว จำนวน 35 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Aldrin	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[1,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[1,26]
2	Antimony	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,16] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
3	Arsenic	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
4	Barium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]

5 Beryllium...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
5	Beryllium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
6	Cadmium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
7	Chlordane	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
8	Chromium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
9	Chromium (III)	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method; Waste Extraction, Colorimetric Method; Calculation Method[1,6,16,19] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method; Waste Extraction, Colorimetric Method; Calculation Method[1,6,17,19] 3) Digestion, Inductively Coupled Plasma Method; Alkaline Digestion, Colorimetric Method; Calculation Method[7,8,16,19] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method; Alkaline Digestion, Colorimetric Method; Calculation Method[7,8, 17,19]

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
10	Chromium (VI)	1) Waste Extraction, Colorimetric Method[1,8,19] 2) Alkaline Digestion, Colorimetric Method[8,19]
11	Cobalt	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
12	Copper	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
13	2,4-D	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
14	DDD	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
15	DDE	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
16	DDT	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26]

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
		2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
17	Dieldrin	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
18	Endrin	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
19	Heptachlor	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
20	Lead	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
21	Lindane	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
22	Mercury	1) Waste Extraction, Digestion, Cold-Vapor Atomic Absorption Spectrometric Method[1,6,20] 2) Waste Extraction, Digestion, Cold-Vapor Atomic Fluorescence Spectrometric Method[1,6,20] 3) Digestion, Cold-Vapor Atomic Absorption Spectrometric Method[20] 4) Digestion, Cold-Vapor Atomic Fluorescence Spectrometric Method[20] 5) Thermal Decomposition Amalgamation and Atomic Absorption Spectrometric Method[21]
23	Methoxychlor	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic / Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic /Mass Spectrometric Method[11,26]
24	Mirex	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic / Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic /Mass Spectrometric Method[11,26]
25	Molybdenum	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
26	Nickel	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
27	Polychlorinated biphenyls (PCBs) - Aroclor 1016 - Aroclor 1221 - Aroclor 1232 - Aroclor 1242 - Aroclor 1248 - Aroclor 1254 - Aroclor 1260	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic Method[11,26]

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
	- 2-Chlorobiphenyl - 2,3-Dichlorobiphenyl - 2,2',5-Trichlorobiphenyl - 2,4',5-Trichlorobiphenyl - 2,2',3,5'-Tetrachlorobiphenyl - 2,2',5,5'-Tetrachlorobiphenyl - 2,3',4,4'-Tetrachlorobiphenyl - 2,2',3,4,5-Pentachlorobiphenyl - 2,2',4,5,5'-Pentachlorobiphenyl - 2,3,3',4',6-Pentachlorobiphenyl - 2,2',3,4',5'-Hexachlorobiphenyl - 2,2',3,4,5,5'-Hexachlorobiphenyl - 2,2',3,5,5',6-Hexachlorobiphenyl - 2,2',4,4',5,5'-Hexachlorobiphenyl - 2,2',3,3',4,4',5-Heptachlorobiphenyl - 2,2',3,4,4',5,5'-Heptachlorobiphenyl - 2,2',3,4,4',5',6-Heptachlorobiphenyl - 2,2',3,4',5,5',6-Heptachlorobiphenyl - 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	
28	Pentachlorophenol	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
29	pH	Electrometric Method[23,24]
30	Selenium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
31	Silver	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
32	Thallium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
33	Toxaphene	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
34	Vanadium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
35	Zinc	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]

<u>ต่อ จำนวน 125 รายการ</u>

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Acenaphthene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
2	Acetone	1)Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25] 2) Equilibrium Headspace, Gas Chromatographic/ Mass Spectrometric Method[13]
3	Aldrin	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
4	Anthracene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
5	Antimony	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
6	Arsenic	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
7	Atrazine	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
8	Barium	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
9	Benz(a)anthracene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
10	Benzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
11	Benzo(b)fluoranthene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
12	Benzo(k)fluoranthene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
13	Benzoic acid	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
14	Benzo(a)pyrene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
15	Benzo(g,h,i)perylene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
16	Beryllium	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
17	Bis(2-chloroethyl)ether	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
18	Bis(2-ethylhexyl)phthalate	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
19	Bromodichloromethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
20	Bromoform	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
21	Butanol	Equilibrium Headspace, Gas Chromatographic/ Mass Spectrometric Method[13,25]
22	Butyl Benzyl Phthalate	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
23	Cadmium	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
24	Carbazole	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
25	Carbon Disulfide	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
26	Carbon tetrachloride	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
27	Chlordane	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
28	p-Chloroaniline	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
29	Chlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
30	Chlorodibromomethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
31	Chloroform	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
32	2-Chlorophenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
33	Chromium	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
34	Chromium (III)	1) Digestion, Inductively Coupled Plasma Method; Alkaline Digestion, Colorimetric Method, Calculation Method[7,8,14,19] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method; Alkaline Digestion, Colorimetric Method; Calculation Method[7,8,17,19]
35	Chromium (VI)	Alkaline Digestion, Colorimetric Method[8,19]

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
36	Chrysene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
37	Cyanide	Extraction, Distillation, Colorimetric Method[27,28,29]
38	2,4-D	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
39	DDD	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
40	DDE	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
41	DDT	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
42	Dibenzo,h,anthracene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
43	Di-n-Butyl Phthalate	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
44	1,2-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
45	1,3-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
46	1,4-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
47	3,3-Dichlorobenzidine	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
48	1,1-Dichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
49	1,2-Dichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
50	1,1-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
51	cis-1,2 Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
52	trans-1,2-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
53	2,4-Dichlorophenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
54	1,2-Dichloropropane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
55	1,3-Dichloropropane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
56	1,3-Dichloropropene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
57	Dieldrin	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
58	Diethyl Phthalate	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
59	2,4-Dimethylphenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
60	2,4-Dinitrophenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
61	2,4-Dinitrotoluene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
62	2,6-Dinitrotoluene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
63	Di-n-Octyl Phthalate	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
64	Endosulfan	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
65	Endrin	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
66	Ethylbenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
67	Fluoranthene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
68	Fluorene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
69	Heptachlor	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
70	Heptachlor epoxide	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
71	Hexachlorobenzene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
72	Hexachloro-1,3-butadiene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
73	n-Hexane	1) Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25] 2) Equilibrium Headspace, Gas Chromatographic/ Mass Spectrometric Method[15]

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
74	α-HCH	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
75	β-HCH	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
76	γ-HCH	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
77	Hexachlorocyclopentadiene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
78	Hexachloroethane	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
79	Indeno(1,2,3-cd)pyrene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
80	Isophorone	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
81	Lead	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
82	Manganese	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
83	Mercury	1) Digestion, Cold-Vapor Atomic Absorption Spectrometric Method[20] 2) Thermal Decomposition, Amalgamation, and Atomic Absorption Spectrophotometry[21] 3) Digestion, Cold-Vapor Atomic Fluorescence Spectrometric Method[10]

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
84	Methanol	1) Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25] 2) Equilibrium (Headspace, Gas Chromatographic/ Mass Spectrometric Method[15,25]
85	Methoxychlor	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
86	Methyl Bromide	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
87	Methylene Chloride	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
88	2-methylphenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
89	2-Methylnaphthalene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
90	Methyl tert-Butyl Ether	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
91	Naphthalene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
92	Nickel	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
93	Nitrobenzene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
94	N-Nitrosodiphenylamine	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
95	N-Nitrosodi-n-propylamine	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
96	Polychlorinated biphenyls (PCBs) - Aroclor 1016 - Aroclor 1221 - Aroclor 1232 - Aroclor 1242 - Aroclor 1248 - Aroclor 1254 - Aroclor 1260 - 2-Chlorobiphenyl - 2,2',3,5'-Tetrachlorobiphenyl - 2,2',5,5'-Tetrachlorobiphenyl - 2,3',4,4'-Tetrachlorobiphenyl - 2,2',3,4,5'-Pentachlorobiphenyl - 2,2',4,5,5'-Pentachlorobiphenyl - 2,3,3',4,6-Pentachlorobiphenyl - 2,2',3,4,4',5'-Hexachlorobiphenyl - 2,2',3,4,5,5'-Hexachlorobiphenyl - 2,2',3,5,5',6-Hexachlorobiphenyl - 2,2',4,4',5,5'-Hexachlorobiphenyl - 2,2',3,3',4,4',5-Heptachlorobiphenyl - 2,2',3,4,4',5,5'-Heptachlorobiphenyl - 2,2',3,4,4',5',6-Heptachlorobiphenyl - 2,2',3,4',5,5',6-Heptachlorobiphenyl - 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
97	Pentachlorophenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
98	Phenanthrene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
99	Phenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
100	Pyrene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
101	Selenium	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
102	Silver	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
103	Styrene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
104	1,1,2,2-Tetrachloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
105	Tetrachloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
106	Toluene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
107	Toxaphene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
108	TPH (C_6-C_9)	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
109	TPH (C_{10}- C_{14})	1) Automate Extraction, Gas Chromatographic Method[16,22] 2) Solvent Extraction, Gas Chromatographic Method[17,22] 3) Ultrasonic Extraction, Gas Chromatographic Method[22,23]
110	TPH ($C_{>14}$ – C_{35})	1) Automate Extraction, Gas Chromatographic Method[16,22] 2) Solvent Extraction, Gas Chromatographic Method[17,22] 3) Ultrasonic Extraction, Gas Chromatographic Method[22,23]
111	1,2,4-Trichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
112	1,1,1-Trichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
113	1,1,2-Trichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
114	Trichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
115	2,4,5-Trichlorophenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,25] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,25]
116	2,4,6-Trichlorophenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,25] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,25]
117	1,3,5-Trimethylbenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
118	Vanadium	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
119	Vinyl Acetate	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
120	Vinyl Chloride	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
121	m-Xylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
122	o-Xylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
123	p-Xylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
124	Xylene (Total)	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
125	Zinc	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]

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ที่ อ. [illegible] ๔๑๒๓

กรมโรงงานอุตสาหกรรม
ถนนพระรามที่ 6 แขวงทุ่งพญาไท
เขตราชเทวี กรุงเทพฯ [illegible]

๒๕ เมษายน ๒๕๖๗

เรื่อง ขอเชิญเข้าร่วมประชุมชี้แจงข้อกำหนดปฏิบัติการวิเคราะห์

เรียน ผู้จัดการ บริษัท [illegible] จำกัด

อ้างถึง หนังสือกรมโรงงานอุตสาหกรรม ด่วนที่สุด ที่ อ. [illegible] ลงวันที่ [illegible] เรื่อง ขอเชิญเข้าร่วมประชุมชี้แจงข้อกำหนดปฏิบัติการวิเคราะห์ห้องปฏิบัติการ จำนวน [illegible] ราย

ตามที่ กองวิจัยและเทคโนโลยีมลพิษ [illegible] ได้แจ้งรายชื่อห้องปฏิบัติการวิเคราะห์ [illegible] ตามหนังสือที่อ้างถึง [illegible] ซึ่งมีผลการประเมินอยู่ในเกณฑ์ [illegible] ตามหลักเกณฑ์ [illegible] ความละเอียดแล้วนั้น

กรมโรงงานอุตสาหกรรม จึงขอแจ้งว่า มีรายชื่อดังนี้

๑. ห้องปฏิบัติการวิเคราะห์ [illegible] จำนวน [illegible] ราย

๑) [illegible]	ทะเบียนเลขที่ [illegible]
๒) [illegible]	ทะเบียนเลขที่ [illegible]
๓) [illegible]	ทะเบียนเลขที่ [illegible]

๒. วิเคราะห์ [illegible] ห้องปฏิบัติการวิเคราะห์ [illegible] จำนวน [illegible] ราย

๑) [illegible]	ทะเบียนเลขที่ [illegible]
๒) [illegible]	ทะเบียนเลขที่ [illegible]
๓) [illegible]	ทะเบียนเลขที่ [illegible]
๔) [illegible]	ทะเบียนเลขที่ [illegible]
๕) [illegible]	ทะเบียนเลขที่ [illegible]
๖) [illegible]	ทะเบียนเลขที่ [illegible]
๗) [illegible]	ทะเบียนเลขที่ [illegible]
๘) [illegible]	ทะเบียนเลขที่ [illegible]
๙) [illegible]	ทะเบียนเลขที่ [illegible]
๑๐) [illegible]	ทะเบียนเลขที่ [illegible]

- [illegible] -

หนังสือฉบับนี้จะสิ้นอายุพร้อมหนังสือต่ออายุรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์ภายใน
ในวันที่ ๑ กันยายน ๒๕๖๙

จึงเรียนมาเพื่อทราบ

ขอแสดงความนับถือ

(นายพระศ กล้นกรอง)
นักวิชาการอุตสาหกรรม
ผู้อำนวยการกลุ่มอุตสาหกรรม

กองวิจัยและเตือนภัยมลพิษโรงงาน
กลุ่มมาตรฐานวิธีการวิเคราะห์ทดสอบมลพิษและทะเบียนห้องปฏิบัติการ
โทร. ๐ ๒๔๑๐ ๖๗๑๒ ต่อ ๒๑๐๗-๕
โทรสาร ๐ ๒๔๑๐ ๖๗๑๒ ต่อ ๒๑๐๗
ไปรษณีย์อิเล็กทรอนิกส์ saraban@diw.mail.go.th

"อุตสาหกรรมก้าวไกล ประเทศไทยก้าวหน้า ร่วมกันพัฒนา อุตสาหกรรมสีเขียว"

ที่ อก ๐๗๑๐.๑๑/ ๔๖๗๓

กรมโรงงานอุตสาหกรรม
ถนนพระรามที่ ๖ แขวงทุ่งพญาไท
เขตราชเทวี กรุงเทพฯ ๑๐๔๐๐

๐๕ มิถุนายน ๒๕๖๘

เรื่อง เปลี่ยนแปลงบุคลากรของห้องปฏิบัติการวิเคราะห์

เรียน กรรมการผู้จัดการ บริษัท เอแอลเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด

อ้างถึง คำขอขึ้นทะเบียน/ต่ออายุ/เปลี่ยนแปลงบุคลากร และขนิดสารมลพิษของห้องปฏิบัติการวิเคราะห์เอกชน ลงวันที่ ๗ พฤษภาคม ๒๕๖๘

ตามคำขอที่อ้างถึง บริษัท เอแอลเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด ห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ว-๒๐๔ สถานที่ตั้งเลขที่ ๑๐๔ ซอยพัฒนาการ ๔๐ ถนนพัฒนาการ แขวงพัฒนาการ เขตสวนหลวง กรุงเทพมหานคร ขอเปลี่ยนแปลงบุคลากร ความละเอียดแจ้งแล้ว นั้น

กรมโรงงานอุตสาหกรรมพิจารณาแล้ว ให้เพิ่มเจ้าหน้าที่ห้องปฏิบัติการวิเคราะห์เอกชน จำนวน ๑๐ ราย ได้แก่

๑) นายคุณากร มั่นชื่น	ทะเบียนเลขที่ ว-๒๐๔-๙-๐๑๙๙
๒) นายชัยพงศ์ แสนวาศร	ทะเบียนเลขที่ ว-๒๐๔-๙-๐๑๙๕
๓) นายเอกรินทร์ บุตสัทที	ทะเบียนเลขที่ ว-๒๐๔-๙-๐๑๙๖
๔) นายพัชรพนท์ ชินปริก	ทะเบียนเลขที่ ว-๒๐๔-๙-๐๑๙๗
๕) นายศรวรรษ แก้วกันหา	ทะเบียนเลขที่ ว-๒๐๔-๙-๐๑๙๘
๖) นายวิทวัส มีศิริ	ทะเบียนเลขที่ ว-๒๐๔-๙-๐๑๙๙
๗) นายภคนันท์ คำจันทราช	ทะเบียนเลขที่ ว-๒๐๔-๙-๐๒๐๐
๘) นายศิรวิทย์ มีเพญรอ์	ทะเบียนเลขที่ ว-๒๐๔-๙-๐๒๐๑
๙) นายธีรพงษ์ ศรีจำแนะ	ทะเบียนเลขที่ ว-๒๐๔-๙-๐๒๐๒
๑๐) นายยศวิสิทธิ์ ศรีคงแก้ว	ทะเบียนเลขที่ ว-๒๐๔-๙-๐๒๐๓
๑๑) ว่าที่ร้อยตรี ภาณุพงศ์ แสนศรี	ทะเบียนเลขที่ ว-๒๐๔-๙-๐๒๐๔

อนึ่ง หนังสือฉบับนี้จะสิ้นอายุพร้อมหนังสือต่ออายุรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน ในวันที่ ๑ กันยายน ๒๕๖๙

จึงเรียนมาเพื่อทราบ

ขอแสดงความนับถือ

(นายพิชะ จันทร์เลิง)
นักวิชาการอุตสาหกรรมชำนาญการพิเศษ
ผู้อำนวยการกลุ่มวิจัยและเตือนภัยมลพิษโรงงาน
ปฏิบัติราชการแทนอธิบดีกรมโรงงานอุตสาหกรรม

กองวิจัยและเตือนภัยมลพิษโรงงาน
กลุ่มมาตรฐานวิธีการวิเคราะห์ทดสอบมลพิษและทะเบียนห้องปฏิบัติการ
โทร. ๐ ๒๔๑๐ ๖๗๑๒ ต่อ ๒๑๐๗-๕
โทรสาร ๐ ๒๔๑๐ ๖๗๑๒ ต่อ ๒๑๐๗
ไปรษณีย์อิเล็กทรอนิกส์ saraban@diw.mail.go.th

"อุตสาหกรรมก้าวไกล ประเทศไทยก้าวหน้า ร่วมกันพัฒนา อุตสาหกรรมสีเขียว"

ที่ อก ๐๗๑๐.๑๑/ ๑๑๕๐

กรมโรงงานอุตสาหกรรม
ถนนพระรามที่ ๖ แขวงทุ่งพญาไท
เขตราชเทวี กรุงเทพฯ ๑๐๔๐๐

๑๐ เมษายน ๒๕๖๘

เรื่อง ยกเลิกบุคลากรของห้องปฏิบัติการวิเคราะห์

เรียน กรรมการผู้จัดการ บริษัท เอแอลเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด

อ้างถึง คำขอขึ้นทะเบียน/ต่ออายุ/เปลี่ยนแปลงบุคลากร และขนิดสารมลพิษของห้องปฏิบัติการวิเคราะห์เอกชน ลงวันที่ ๒ เมษายน ๒๕๖๘

ตามคำขอที่อ้างถึง บริษัท เอแอลเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด ห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ว-๒๐๔ สถานที่ตั้งเลขที่ ๑๐๔ ซอยพัฒนาการ ๔๐ ถนนพัฒนาการ แขวงพัฒนาการ เขตสวนหลวง กรุงเทพมหานคร ขอยกเลิกบุคลากร ความละเอียดแจ้งแล้ว นั้น

กรมโรงงานอุตสาหกรรมพิจารณาแล้ว ให้ยกเลิกเจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์ จำนวน ๒ ราย ได้แก่

๑) นายวิติพงศ์ บัวแดง	ทะเบียนเลขที่ ว-๒๐๔-๙-๐๑๑๒
๒) นายบงกช ผยาทัพย์	ทะเบียนเลขที่ ว-๒๐๔-๙-๐๑๑๓

จึงเรียนมาเพื่อทราบ

ขอแสดงความนับถือ

(นายชิรวัฒน์ อัครานุกูร ณ อยุธยา)
รองอธิบดี ปฏิบัติราชการแทน
อธิบดีกรมโรงงานอุตสาหกรรม

กองวิจัยและเตือนภัยมลพิษโรงงาน
กลุ่มมาตรฐานวิธีการวิเคราะห์ทดสอบมลพิษและทะเบียนห้องปฏิบัติการ
โทร. ๐ ๒๔๑๐ ๖๗๑๒ ต่อ ๒๑๐๗-๕
โทรสาร ๐ ๒๔๑๐ ๖๗๑๒ ต่อ ๒๑๐๗
ไปรษณีย์อิเล็กทรอนิกส์ saraban@diw.mail.go.th

"อุตสาหกรรมก้าวไกล ประเทศไทยก้าวหน้า ร่วมกันพัฒนา อุตสาหกรรมสีเขียว"

ที่ อก ๐๑๒๐/ ๗๙๓๘

กรมโรงงานอุตสาหกรรม
ถนนพระรามที่ ๖ แขวงทุ่งพญาไท
เขตราชเทวี กรุงเทพฯ ๑๐๔๐๐

๐๘ สิงหาคม ๒๕๖๗

เรื่อง ต่ออายุหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน

เรียน กรรมการผู้จัดการ บริษัท เอเอออเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด

อ้างถึง ขอขึ้นทะเบียน/ต่ออายุ/แก้ไขเปลี่ยนแปลงสารมลพิษของห้องปฏิบัติการวิเคราะห์เอกชน ลงวันที่ ๒๗ พฤษภาคม ๒๕๖๗

สิ่งที่ส่งมาด้วย เอกสารแบบท้ายหนังสือต่ออายุรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน บริษัท เอเอออเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด จำนวน ๑ แฟ้ม

ตามคำขอที่อ้างถึง บริษัท เอเอออเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด ขอต่ออายุหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ว-๐๑๒๐ สถานที่ตั้งเลขที่ ๓๑๑/๑๑๑ หมู่ที่ ๙ ตำบลคลองน้ำใส อำเภอบางคล้า จังหวัดระยอง ตลาดโรงงานอุตสาหกรรม นั้น

กรมโรงงานอุตสาหกรรมพิจารณาแล้ว ให้บริษัท เอเอออเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด ต่ออายุหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน โดยมีองค์ประกอบดังนี้

ก. ผู้ควบคุมห้องปฏิบัติการวิเคราะห์เอกชน

๑) นายเดช จังหาน	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๐๑
๒) นางสาววิมล บริรักษ์	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๐๒
๓) นายสุพจน์ สมานเสียง	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๐๓

ข. เจ้าหน้าที่ห้องปฏิบัติการวิเคราะห์เอกชน

๑) นายณัฐพงษ์ เพ็ชรานา	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๐๑
๒) นางสาวกัลยพรรณ์ รักดี	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๐๒
๓) นางสาวสุพัตรา์ สิงหเทอง	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๐๓
๔) นางสาวจิตสุภา ประเมืองสุข	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๐๔
๕) นายสราเสริญ คุ้ยยกสุ	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๐๕
๖) นายณัฐวุฒิ กฤษพรมราช	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๐๖
๗) นายจักร สังเลา	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๐๗
๘) นายสิทธิโชคุ์ ศุภวรณวัลย์	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๐๘
๙) นายสิทธิพันธ์ เสนาชัย	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๐๙
๑๐) นายอนุวัศน์ เดมา	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๑๐
๑๑) นายสุรวิทย์ นราพงษ์	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๑๑
๑๒) นายณัฐพล เรืองวิวัฒน์	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๑๒
๑๓) นายชานนท์ บุญชื่น	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๑๓
๑๔) นายณัฐกานต์ วงศ์อินทรวัฒน์	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๑๔
๑๕) นายชานนท์ ไพฑิตรทอง	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๑๕

๑๖) นายณัฐพล...

๑๖) นายณัฐพล ถ้ำกลาง	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๑๗
๑๗) นายศุภณัฐ ทิสัยพันธ์	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๑๘
๑๘) นายวสันต์ คำนันติ	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๑๙
๑๙) นายวรัญญู ฉิมพาลี	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๒๐
๒๐) นายศุภณัฐ ลกุลกิตติ์ศักดิ์	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๒๑
๒๑) นายเอกชัย ยันทอง	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๒๒
๒๒) นายพงษ์เทพ สิทธิเอาะ	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๒๓
๒๓) นายทินกร กุมภาษี	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๒๔
๒๔) นางสาวนันทิยา เบญจจันธ์	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๒๕
๒๕) นายสิทธิชัย ยันพิมาย	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๒๖
๒๖) นางสาวปภาณิน หลอดทอง	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๒๗
๒๗) นางสาวพจนา สีดา	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๒๘
๒๘) นางสาวรนิดา กุลศิริวงศ์	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๒๙
๒๙) นายพิทยา ทองแดง	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๓๐
๓๐) นางสาวชลธิชา สุนงกช	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๓๑
๓๑) ว่าที่ร้อยตรี รณชัย ม่วงมา	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๓๒
๓๒) นายวรากฤติ พับพา	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๓๓
๓๓) นายศักดิ์นรินทร์ จรัสกาย	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๓๔
๓๔) นายสุรศักดิ์ สาจิน	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๓๕
๓๕) นายสถาพร ถาแก้ว	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๓๖
๓๖) นายสุทธิ์ด้วง โยกปิตันนท์	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๓๗
๓๗) นายวัลลภ หันไชยเนาว์	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๓๘
๓๘) นางสาวนาลี เหรียญตระกูล	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๓๙
๓๙) นายธนะสิทธิ์ วงศ์ษาไชย	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๔๐
๔๐) นายชัยบุสรณ์ เสัตนันทกุลชัย	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๔๑
๔๑) นายสังจา เพ็ชรแสวง	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๔๒
๔๒) นายกัณฑภณ มณีสันทัน์	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๔๓
๔๓) นายธารินทร์ อ๊อกซิเดา	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๔๔
๔๔) นายศุภชัย วงศ์สุรย์ฉาย	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๔๕
๔๕) นายโสว ตันไพฐิ์	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๔๖
๔๖) นางสาวกิตติยา คัญญาอริยาภรณ์	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๔๗
๔๖) นางสาวกิตารัตน์ สิริมังคละโร	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๔๘
๔๗) นายพิพัฒน์ นิภัทร์เศรษฐ์	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๔๙
๔๘) นายศิริวิทย์ เรืองสม	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๕๐
๔๙) นายปาราเมศ สัตยาคุณ	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๕๑
๕๐) นายนนุนาท ธรรมสะโร	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๕๒
๕๑) นางสาวศุภรัตน์ โลจันทร์	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๕๓

๕๒) นายพรกร...

๕๒) นายพรกร เจิมเจริญ	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๕๔
๕๓) นายทิวากร เนื่องมาก	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๕๕
๕๔) นายอนุรักษ์ ทองประจักษ์	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๕๖
๕๕) นายอภิชาติ วิลาศ	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๕๗
๕๖) นายจรัสระวี ศรีรักษา	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๕๘
๕๗) นายประสานมิตร เรือนพร	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๕๙
๕๘) นายภานุวัฒน์ วังบง	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๖๐
๕๙) นายเสันติ์ ชัยชนะ	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๖๑
๖๐) นายทินกร กุมภาษี	ทะเบียนเลขที่ ว-๐๒๐-๑-๐๐๖๒

ขอแสดงความนับถือ

(นายพรกร กลันกรอง)
ผู้อำนวยการกองโรงงานอุตสาหกรรม

ศูนย์วิจัยและฝึกอบรมอุตสาหกรรมภาคตะวันออก
โทร. ๐ ๓๘๗๑ ๖๑๑๔ ต่อ ๕๐๐๑-๑
ไปรษณีย์อิเล็กทรอนิกส์ cirw@diw.mail.go.th

"อุตสาหกรรมก้าวไกล ประเทศไทยก้าวหน้า ร่วมกันพัฒนา อุตสาหกรรมสีเขียว"

เอกสารแบบท้ายหนังสือเปลี่ยนแปลงสารมลพิษของห้องปฏิบัติการวิเคราะห์เอกชน
บริษัท เอเอออเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด เลขทะเบียน ว-๐๒๐
ที่ อก ๐๑๒๐/ ๗๙๓๘ ลงวันที่ ๐๘ สิงหาคม ๒๕๖๗

ขอบข่ายสารมลพิษที่ได้รับขึ้นทะเบียนจากกรมโรงงานอุตสาหกรรม จำนวน ๒๕ รายการ

น้ำเสีย จำนวน 14 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Biochemical Oxygen Demand	1) 5-Day BOD Test, Membrane Electrode Method[1]
		2) 5-Day BOD Test, Azide Modification Method[1]
2	Chemical Oxygen Demand	1) Open Reflux, Titrimetric Method[1]
		2) Closed Reflux, Colorimetric Method[1]
		3) Closed Reflux, Titrimetric Method[1]
3	Color	ADMI Weighted-Ordinate Spectrophotometric Method[1]
4	Cyanide	Distillation, Colorimetric Method[1]
5	Formaldehyde	Distillation, Colorimetric Method
6	Free Chlorine	DPD Ferrous Titrimetric Method[1]
7	Oil and Grease	Liquid-Liquid, Partition-Gravimetric Method[1]
8	pH	Electrometric Method[1]
9	Phenols	1) Distillation, Chloroform Extraction Method
		2) Distillation, Direct Photometric Method[1]
10	Sulfide	Acid Precipitation, Iodometric Method[1]
11	Temperature	Field Method[1]
12	Total Dissolved Solids	Dried at 180 °C[1]
13	Total Kjeldahl Nitrogen	Semi-Macro Kjeldahl Method[1]
14	Total Suspended Solids	Dried at 103-105 °C[1]

น้ำใต้ดิน จำนวน 3 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Cyanide	Distillation, Colorimetric Method
2	pH	Electrometric Method[1]
3	Phenols	Distillation, Direct Photometric Method[1]

อากาศเสีย...

อากาศเสีย (ปล่องระบาย) จำนวน 7 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Carbon Monoxide	1) Sampling Bag, Non-Dispersive Infrared Method[1] 2) Instrumental Analyzer Method[2]
2	Hydrogen Sulfide	Absorption Sampling, Iodometric Method[3]
3	Opacity	Ringelmanns Method[1,4]
4	Oxide of Nitrogen	1) Absorption Sampling, Phenoldisulfonic Acid Method[8] 2) Instrumental Analyzer Method[10]
5	Sulfur Dioxide	1) Absorption Sampling, Barium-Thorin Titrimetric Acid Method[5] 2) Instrumental Analyzer Method[11]
6	Sulfuric Acid	Isokinetic Sampling, Barium – Titrimetric Method[6]
7	Total Suspended Particulate	Isokinetic Sampling, Gravimetric Method[7]

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7. United States Environmental Protection Agency. **Standards of Performance for New Stationary Sources**. 40 CFR 60. Appendix A, 2020.

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11. United States Environmental Protection Agency. **Determination of Sulfur dioxide Emission from Stationary Sources; Instrumental Analyzer Procedure**. 40 CFR 60. Appendix A Method 6C, 2017.

ที่ อก.๑๑๑๐๐/ ๑๐๐๔๙

กรมโรงงานอุตสาหกรรม
ถนนพระรามที่ ๖ แขวงทุ่งพญาไท
เขตราชเทวี กรุงเทพฯ ๑๐๔๐๐

๑๔ ตุลาคม ๒๕๖๗

เรื่อง แต่งตั้งเจ้าหน้าที่ห้องปฏิบัติการวิเคราะห์เอกชน

เรียน กรรมการผู้จัดการ บริษัท เอเอดเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด

อ้างถึง หนังสือ บริษัท เอเอดเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด เลขที่ Env.2024/005 ลงวันที่ ๑๐ ตุลาคม ๒๕๖๗

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กรมโรงงานอุตสาหกรรม ได้รับทราบและดำเนินการแก้ไขทะเบียนเจ้าหน้าที่ห้องปฏิบัติการวิเคราะห์เอกชน จำนวน ๔ ราย ดังปรากฏในรายชื่อแล้ว เป็นดังนี้

ลำดับที่ ๑๓ นางสาวพนา สิงห์
ลำดับที่ ๑๔ นางสาวรวิกิตะ รวยสูงเด่น
ลำดับที่ ๑๐ นางขนลิขา สุขเกษ
ลำดับที่ ๑๑ นายกฤษณ์สำรวง โชคปิติเนนท์
ลำดับที่ ๑๕ นายกันตเดช มณีสันทัด

จึงเรียนมาเพื่อทราบ

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เขตราชเทวี กรุงเทพฯ ๑๐๔๐๐

๒๐ พฤษภาคม ๒๕๖๘

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กรมโรงงานอุตสาหกรรมพิจารณาแล้ว ให้ยกเลิกเจ้าหน้าที่ห้องปฏิบัติการวิเคราะห์เอกชน จำนวน ๑ ราย ได้แก่ นายปรายเมต สัตยาคุณ ทะเบียนเลขที่ ว-๑๒๓-ช-๐๐๕๑

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ที่ อก ๐๑๑๐๕/๗ ๕๔๐๙

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