

ภาคผนวก ง-4

คุณภาพน้ำทิ้ง



Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :



TESTING

Lot ID: 2380989
Date Received : Jul 13, 2023
Date Reported : Jul 20, 2023
Report Number : 2724410-1

Page 1 of 1

Sample Number	2380989-1						
Sampled Date	Jul 13, 2023 1:18 PM						
Sample Description	Wastewater						
Location	Inspection Pit						
Date Analysis Commenced	Jul 13, 2023						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	18.2	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
COD	mg/L	1.5	25	53	≤750	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	6	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	32.6	≤45	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	632	≤3000	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Sansoen Khuyoksuji ๓๓๑๑๑๑๑๑ ๓-323-๙-๐๐๐5

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banongkit

Narumon Banchoangkit
Supervisor
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Approved by

D. Chanchon

Dej Chanchon
Senior Manager
๓๓๑๑๑๑๑๑ ๓-323-๙-๙๙๔2

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Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :



TESTING

Lot ID: 2380989
Date Received : Jul 13, 2023
Date Reported : Jul 20, 2023
Report Number : 2724411-1

Page 1 of 1

Sample Number	2380989-2					
Sampled Date	Jul 13, 2023 1:45 PM					
Sample Description	Wastewater					
Location	Waste pit 5 and 6 (ในบ่อกำจัด)					
Date Analysis Commenced	Jul 13, 2023					
Condition of Sample	Contained in one amber glass bottle and two 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	417	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease *	mg/L	-	3	26	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	7.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	143	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Sampling By : Sansoen Khuyoksu (นายแสน ขุยกสุ) ๖-323-๐005						
Remark :						
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- "c" : 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.						

Sampling By : Sansoen Khuyoksuji ๓๓๑๑๑๑๑๑ ๓-323-๙-๐๐๐5

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Technical Management

N. Banongkit

Narumon Banchoangkit
Supervisor
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Approved by

D. Chanchon

Dej Chanchon
Senior Manager
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Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :



TESTING

Lot ID: 2380989
Date Received : Jul 13, 2023
Date Reported : Jul 20, 2023
Report Number : 2724412-1

Page 1 of 1

Sample Number	2380989-3					
Sampled Date	Jul 13, 2023 1:38 PM					
Sample Description	Wastewater					
Location	Waste pit 7 and 8 (Waste MFG Office)					
Date Analysis Commenced	Jul 13, 2023					
Condition of Sample	Contained in one amber glass bottle and two 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	101	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	9	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C	-	-	-	7.9	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	54	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Sansoen Khuyoksuji ๓๓๑๑๑๑๑๑ ๓-323-๙-๐๐๐5

Remark :
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Technical Management

N. Banongkit

Narumon Banchoangkit
Supervisor
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Approved by

D. Chanchon

Dej Chanchon
Senior Manager
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Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :



TESTING

Lot ID: 2380989
Date Received : Jul 13, 2023
Date Reported : Jul 20, 2023
Report Number : 2724413-1

Page 1 of 1

Page 1 of 1						
Sample Number	2380989-4					
Sampled Date	Jul 13, 2023 1:27 PM					
Sample Description	Wastewater					
Location	Waste pit 15 (หน้าร้าน Front Office)					
Date Analysis Commenced	Jul 13, 2023					
Condition of Sample	Contained in one amber glass bottle and two 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	205	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O	Rayong
Oil & Grease *	mg/L	-	3	13	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	7.8	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	115	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Sansoen Khuyoksuji ๓๓๑๑๑๑๑๑ ๓-323-๙-๐๐๐5

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Technical Management

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Approved by

D. Chanchon

Dej Chanchon
Senior Manager
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Analysis / Test Report

TESTING
No.0042

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140

Lot ID: 2384380
Date Received : Aug 11, 2023
Date Reported : Aug 19, 2023
Report Number : 2750805-1

P/O :
Project Name : EIA Monitoring
Project Location :

Page 1 of 1

Sample Number	2384380-1						
Sampled Date	Aug 10, 2023 10:38 AM						
Sample Description	Wastewater						
Location	Inspection Pit						
Date Analysis Commenced	Aug 11, 2023						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	16.3	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
COD	mg/L	1.5	25	58	≤750	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	35.6	≤45	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	524	≤3000	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Narunat thamasaro นารุนัต ธรรมสารอ น-323-9-9477

Remark :
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Technical Management

N. Banongkit

Narunat Banhongkit
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โทร: 09-00000000-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทร: 09-00000000-323-9-9442

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Analysis / Test Report

TESTING
No.0042

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140

Lot ID: 2384380
Date Received : Aug 11, 2023
Date Reported : Aug 19, 2023
Report Number : 2750806-1

P/O :
Project Name : EIA Monitoring
Project Location :

Page 1 of 1

Page 1 of 1

Sample Number	2384380-2					
Sampled Date	Aug 10, 2023 11:00 AM					
Sample Description	Wastewater					
Location	Waste pit 5 และ 6 (โรงบำบัดน้ำ)					
Date Analysis Commenced	Aug 11, 2023					
Condition of Sample	Contained in one amber glass bottle and two 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	316	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease *	mg/L	-	3	35	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	6.8	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	97	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Narunat thamasaro นารุนัต ธรรมสารอ น-323-9-9477

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Technical Management

N. Banongkit

Narunat Banhongkit
Supervisor
โทร: 09-00000000-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทร: 09-00000000-323-9-9442

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Analysis / Test Report

TESTING
No.0042

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140

Lot ID: 2384380
Date Received : Aug 11, 2023
Date Reported : Aug 19, 2023
Report Number : 2750807-1

P/O :
Project Name : EIA Monitoring
Project Location :

Page 1 of 1

Sample Number	2384380-3					
Sampled Date	Aug 10, 2023 10:53 AM					
Sample Description	Wastewater					
Location	Waste pit 7 (น้ำทิ้ง MFG Office)					
Date Analysis Commenced	Aug 11, 2023					
Condition of Sample	Contained in one amber glass bottle and two 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	81.9	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease *	mg/L	-	3	7	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	7.6	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	49	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Narunat thamasaro นารุนัต ธรรมสารอ น-323-9-9477

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Technical Management

N. Banongkit

Narunat Banhongkit
Supervisor
โทร: 09-00000000-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทร: 09-00000000-323-9-9442

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Analysis / Test Report

TESTING
No.0042

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140

Lot ID: 2384380
Date Received : Aug 11, 2023
Date Reported : Aug 19, 2023
Report Number : 2750808-1

P/O :
Project Name : EIA Monitoring
Project Location :

Page 1 of 1

Sample Number	2384380-4					
Sampled Date	Aug 11, 2023 10:46 AM					
Sample Description	Wastewater					
Location	Waste pit 15 (Waste Front Office)					
Date Analysis Commenced	Aug 11, 2023					
Condition of Sample	Contained in one amber glass bottle and two 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	157	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease *	mg/L	-	3	9	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	7.5	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	99	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Narunat thamasaro นารุนัต ธรรมสารอ น-323-9-9477

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Technical Management

N. Banongkit

Narunat Banhongkit
Supervisor
โทร: 09-00000000-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทร: 09-00000000-323-9-9442

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29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :



TESTING

No.0042
Lot ID: 2395474
Date Received : Sep 12, 2023
Date Reported : Sep 19, 2023
Report Number : 2781217-1

Page 1 of 1

Sample Number	2395474-1						
Sampled Date	Sep 12, 2023 11:50 AM						
Sample Description	Wastewater						
Location	Inspection Pit						
Date Analysis Commenced	Sep 12, 2023						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	27.7	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
COD	mg/L	1.5	25	114	≤750	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	9	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.2	≤45	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	488	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Narurat thammassaro วิจัยและทดสอบ 3-323-9-9477

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.
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Technical Management

N. Banongkit

Narumon Banchoangkit
Supervisor
วิทย์และทดสอบ 3-323-9-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
วิทย์และทดสอบ 3-323-9-9442

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Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :



TESTING

No.0042
Lot ID: 2395474
Date Received : Sep 12, 2023
Date Reported : Sep 19, 2023
Report Number : 2781218-1

Page 1 of 1

Page 1 of 1

Sample Number	2395474-2					
Sample Date	Sep 12, 2023 11:35 AM					
Sample Description	Wastewater					
Location	Waste pit 5 and 6 (หน้าโรงรถ)					
Date Analysis Commenced	Sep 12, 2023					
Condition of Sample	Contained in one amber glass bottle and two 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	214	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease *	mg/L	-	3	31	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	6.7	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	57	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Sampling By : Narunat.thammasaro (นายณฐกร งาม - 323-9477)						
Remark :						
- LOD : Limit of Detection						
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Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Narurat thammassaro วิจัยและทดสอบ 3-323-9-9477

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Technical Management

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Narumon Banchoangkit
Supervisor
วิทย์และทดสอบ 3-323-9-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
วิทย์และทดสอบ 3-323-9-9442

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Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :



TESTING

No.0042
Lot ID: 2395474
Date Received : Sep 12, 2023
Date Reported : Sep 19, 2023
Report Number : 2781219-1

Page 1 of 1

Sample Number	2395474-3					
Sample Date	Sep 12, 2023 11:40 AM					
Sample Description	Wastewater					
Location	Waste pit 7 and 8 (หน้าห้อง MFG Office)					
Date Analysis Commenced	Sep 12, 2023					
Condition of Sample	Contained in one amber glass bottle and two 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	62.1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease *	mg/L	-	3	12	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	7.6	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Narurat thammassaro วิจัยและทดสอบ 3-323-9-9477

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Narumon Banchoangkit
Supervisor
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Approved by

D. Chongchon

Dej Chongchon
Senior Manager
วิทย์และทดสอบ 3-323-9-9442

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Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :



TESTING

No.0042
Lot ID: 2395474
Date Received : Sep 12, 2023
Date Reported : Sep 19, 2023
Report Number : 2781220-1

Page 1 of 1

Sample Number	2395474-4						Page 1 of 1
Sample Date	Sep 12, 2023 11:45 AM						
Sample Description	Wastewater						
Location	Waste pit 15 (หน้าห้อง Front Office)						
Date Analysis Commenced	Sep 12, 2023						
Condition of Sample	Contained in one amber glass bottle and two 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	77.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong	
Oil & Grease *	mg/L	-	3	15	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong	
pH at 25 degree C *	-	-	-	8.1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong	
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	82	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong	

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Narurat thammassaro วิจัยและทดสอบ 3-323-9-9477

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Approved by

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Dej Chongchon
Senior Manager
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Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : EIA Monitoring
Project Location :



TESTING
No.0042
Lot ID: 23110722
Date Received : Oct 12, 2023
Date Reported : Oct 20, 2023
Report Number : 2812454-1

Page 1 of 1

Sample Number	23110722-1						
Sampled Date	Oct 12, 2023 2:20 PM						
Sample Description	Wastewater						
Location	Inspection Pit						
Date Analysis Commenced	Oct 12, 2023						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	34.4	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	122	≤750	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.5	≤45	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	360	≤3000	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Samsen Khuyokul วิเศษกุล 3-323-4-0005

Remark :
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Narumon Banchoangkit
Supervisor
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Approved by

D. Chanchon

Dej Chanchon
Senior Manager
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Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : EIA Monitoring
Project Location :



TESTING
No.0042
Lot ID: 23110722
Date Received : Oct 12, 2023
Date Reported : Oct 20, 2023
Report Number : 2812455-1

Page 1 of 1

Sample Number	23110722-2					
Sampled Date	Oct 12, 2023 2:10 PM					
Sample Description	Wastewater					
Location	Waste pit 5 and 6 (โรงงาน)					
Date Analysis Commenced	Oct 12, 2023					
Condition of Sample	Contained in one amber glass bottle and two 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	413	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease *	mg/L	-	3	49	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	6.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	67	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Sampling By : Sarsoon Khuyokulsi สรสอนกุลสิริ ๓-323-๐005						
Remark :						
- LOD : Limit of Detection						
- "x" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)						
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Sampling By : Samsen Khuyokul วิเศษกุล 3-323-4-0005

Remark :
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Technical Management

N. Banongkit

Narumon Banchoangkit
Supervisor
วิเศษกุล 3-323-4-9445

Approved by

D. Chanchon

Dej Chanchon
Senior Manager
วิเศษกุล 3-323-4-9442

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Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : EIA Monitoring
Project Location :



TESTING
No.0042
Lot ID: 23110722
Date Received : Oct 12, 2023
Date Reported : Oct 20, 2023
Report Number : 2812456-1

Page 1 of 1

Page 1 of 1						
Sample Number	23110722-3					
Sampled Date	Oct 12, 2023 2:30 PM					
Sample Description	Wastewater					
Location	Waste pit 7 and 8 (Klaib's MFG Office)					
Date Analysis Commenced	Oct 12, 2023					
Condition of Sample	Contained in one amber glass bottle and two 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	78.2	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease *	mg/L	-	3	4	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	7.8	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	36	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Samsen Khuyokul วิเศษกุล 3-323-4-0005

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วิเศษกุล 3-323-4-9445

Approved by

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Dej Chanchon
Senior Manager
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Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : EIA Monitoring
Project Location :



TESTING
No.0042
Lot ID: 23110722
Date Received : Oct 12, 2023
Date Reported : Oct 20, 2023
Report Number : 2812457-1

Page 1 of 1

Sample Number	23110722-4					
Sampled Date	Oct 12, 2023 2:25 PM					
Sample Description	Wastewater					
Location	Waste pit 15 (House Front Office)					
Date Analysis Commenced	Oct 12, 2023					
Condition of Sample	Contained in one amber glass bottle and two 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	125	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease *	mg/L	-	3	6	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	7.9	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	70	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Samsen Khuyokul วิเศษกุล 3-323-4-0005

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Analysis / Test Report



TESTING

Lot ID: 23123392

Date Received : Nov 13, 2023

Date Reported : Nov 20, 2023

Report Number : 2841012-1

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :

Page 1 of 1

Sample Number	23123392-1						
Sampled Date	Nov 13, 2023 9:40 AM						
Sample Description	Wastewater						
Location	Inspection Pit						
Date Analysis Commenced	Nov 13, 2023						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	10.0	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	56	≤750	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	6.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.6	≤45	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	332	≤3000	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Nanunat thamasaro ๖๓๒๒๒๒๒ ๖-323-๙-9477

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banngit

Nanunat Banngit
Supervisor
๖๓๒๒๒๒๒ ๖-323-๙-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
๖๓๒๒๒๒๒ ๖-323-๙-9442

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320-331 ENGL

S (Report), AE, NACL (pt 1-4) (RM)



Analysis / Test Report



TESTING

Lot ID: 23123392

Date Received : Nov 13, 2023

Date Reported : Nov 20, 2023

Report Number : 2841013-1

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :

Page 1 of 1

Page 1 of 2

Sample Number	23123392-2					
Sampled Date	Nov 13, 2023 9:20 AM					
Sample Description	Wastewater					
Location	Waste pit 5 unit 6 (โหล่งน้ำรวม)					
Date Analysis Commenced	Nov 13, 2023					
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	598	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease *	mg/L	-	3	26	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	7.5	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	373	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Narurat thammassara วนิรัตน์ธรรมสาร ๖-323-๖-9477

Remark

- LOD : Limit of Detection
- * < : Lower than LOQ (Limit of Quantification) / LOR (Limit of Reporting)
- Analysis/eq marked * : value not included in scope of Accreditation ISO/IEC 17025
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Sampling By : Nanunat thamasaro ๖๓๒๒๒๒๒ ๖-323-๙-9477

Remark :
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Technical Management

N. Banngit

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
๖๓๒๒๒๒๒ ๖-323-๙-9442

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S (Report), AE, NACL (pt 1-4) (RM)



Analysis / Test Report



TESTING

Lot ID: 23123392

Date Received : Nov 13, 2023

Date Reported : Nov 20, 2023

Report Number : 2841014-1

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :

Page 1 of 1

Sample Number						23123392-3		Page 1 of 1	
Sampled Date						Nov 13, 2023		9:35 AM	
Sample Description						Wastewater			
Location						Waste pit 7 unit 8 (โหล่งน้ำ MFG Office)			
Date Analysis Commenced						Nov 13, 2023			
Condition of Sample						Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)			
Analyte		Unit	LOD	LOQ (LOR)	Result	Method		Testing Location	
Water Testing									
BOD (5 days at 20 Degree C)		mg/L	-	2.0	68.6	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G		Rayong	
Oil & Grease *		mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B		Rayong	
pH at 25 degree C *		-	-	-	7.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)		Rayong	
Total Suspended Solids Dried at 103-105 degree C		mg/L	-	5	42	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D		Rayong	

Sampling By : Nanunat thamasaro ๖๓๒๒๒๒๒ ๖-323-๙-9477

Remark :
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Technical Management

N. Banngit

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
๖๓๒๒๒๒๒ ๖-323-๙-9442

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Analysis / Test Report



TESTING

Lot ID: 23123392

Date Received : Nov 13, 2023

Date Reported : Nov 20, 2023

Report Number : 2841015-1

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :

Page 1 of 1

Page 1 of 1

Sample Number	23123392-4					
Sampled Date	Nov 13, 2023 9:30 AM					
Sample Description	Wastewater					
Location	Waste pit 15 (โหล่งน้ำ Front Office)					
Date Analysis Commenced	Nov 13, 2023					
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	41.6	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	7.6	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	28	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Nanunat thamasaro ๖๓๒๒๒๒๒ ๖-323-๙-9477

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Technical Management

N. Banngit

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
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Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :



TESTING

No.0042
Lot ID: 23132287
Date Received : Dec 12, 2023
Date Reported : Dec 19, 2023
Report Number : 2867584-1

Page 1 of 1

Sample Number	23132287-1						
Sampled Date	Dec 12, 2023 10:20 AM						
Sample Description	Wastewater						
Location	Inspection Pit						
Date Analysis Commenced	Dec 12, 2023						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	7.4	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	47	≤750	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.7	≤45	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	336	≤3000	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2500 C	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Narumon thamasaro นารumon ๓-323-๙-9477

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Technical Management

N. Banongkit

Narumon Banchoangkit
Supervisor
นารumon ๓-323-๙-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
นารumon ๓-323-๙-9442

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Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :



TESTING

No.0042
Lot ID: 23132287
Date Received : Dec 12, 2023
Date Reported : Dec 19, 2023
Report Number : 2867585-1

Page 1 of 1

Page 1 of 2

Sample Number	23132287-2					
Sampled Date	Dec 12, 2023 9:50 AM					
Sample Description	Wastewater					
Location	Waste pit 5 นารูมณ ๓-323-๙-๙445					
Date Analysis Commenced	Dec 12, 2023					
Condition of Sample	Contained in one amber glass bottle and two 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	458	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease *	mg/L	-	3	23	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	6.6	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	107	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Sampling By : Narunat thammassaro :๐๖๒๒๓๓-๓-๓23-๙-๙447						
Remark :						
- LOD : Limit of Detection						
- "L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)						
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Sampling By : Narumon thamasaro นารumon ๓-323-๙-9477

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Technical Management

N. Banongkit

Narumon Banchoangkit
Supervisor
นารumon ๓-323-๙-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
นารumon ๓-323-๙-9442

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Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :



TESTING

No.0042
Lot ID: 23132287
Date Received : Dec 12, 2023
Date Reported : Dec 19, 2023
Report Number : 2867586-1

Page 1 of 1

Sample Number	23132287-3					
Sampled Date	Dec 12, 2023 10:10 AM					
Sample Description	Wastewater					
Location	Waste pit 7 นารูม ๓-323-๙-9445					
Date Analysis Commenced	Dec 12, 2023					
Condition of Sample	Contained in one amber glass bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOB)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	83.5	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease *	mg/L	-	3	6	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	7.9	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	58	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Narumon thamasaro นารumon ๓-323-๙-9477

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Technical Management

N. Banongkit

Narumon Banchoangkit
Supervisor
นารumon ๓-323-๙-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
นารumon ๓-323-๙-9442

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Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng,
Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :



TESTING

No.0042
Lot ID: 23132287
Date Received : Dec 12, 2023
Date Reported : Dec 19, 2023
Report Number : 2867587-1

Page 1 of 1

Sample Number	23132287-4					
Sampled Date	Dec 12, 2023 10:00 AM					
Sample Description	Wastewater					
Location	Waste pit 15 (หน้าร้าน Front Office)					
Date Analysis Commenced	Dec 12, 2023					
Condition of Sample	Contained in one amber glass bottle and two 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	37.7	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease *	mg/L	-	3	4	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	7.6	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	33	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Narumon thamasaro นารumon ๓-323-๙-9477

Remark :
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Technical Management

N. Banongkit

Narumon Banchoangkit
Supervisor
นารumon ๓-323-๙-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
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ภาคผนวก ง-5

ระดับเสียงในบริเวณการทำงาน



Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng, Amphur
Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 2389312
Date Received : Aug 09, 2023
Date Reported : Aug 16, 2023
Report Number: 2747640-1

Page 1 of 1

Sample Number	2389312-1		
Parameter	Noise (Leq 8 hrs.)		
Location	บริเวณ DOA Pay off		
Measurement Date	Aug 08, 2023		
Measurement by	Nattakarn Vongyoo		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:13 AM - 10:13 AM	85.6	91.1	84.4
10:13 AM - 11:13 AM	85.9	92.4	84.9
11:13 AM - 12:13 PM	84.0	87.7	82.6
12:13 PM - 01:13 PM	83.0	90.4	81.7
01:13 PM - 02:13 PM	83.0	87.9	81.7
02:13 PM - 03:13 PM	82.6	86.3	76.2
03:13 PM - 04:13 PM	76.3	96.4	75.4
04:13 PM - 05:13 PM	83.2	86.9	81.8
Leq Average 8 hrs. (dB(A))	83.6		
Lmax (dB(A))		96.4	
Standard (dB(A))	90	140	
Reference Method : Based on ISO1996-1 and 1996-2			
Standard	ประเทศไทย:พระราชบัญญัติว่าด้วยการควบคุมและลดผลกระทบจากสิ่งแวดล้อม พ.ศ.๒๕๖๑ ในการประเมินผลกระทบจากโรงงานอุตสาหกรรมและลดผลกระทบจากโรงงาน พ.ศ.๒๕๖๑		

Technical Management

Orawan R.
Orawan Rakying
Scientist (3)

Approved by

Supot S.
Supot Salamteh
Section Head

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320-31/ ENAL

S:Vapors_Air Noise (p) (8.12PM)



Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng, Amphur
Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 2389312
Date Received : Aug 09, 2023
Date Reported : Aug 16, 2023
Report Number: 2747641-1

Page 1 of 1

Sample Number	2389312-2		
Parameter	Noise (Leq 8 hrs.)		
Location	บริเวณ R-Plant PL Take up Line 3-4		
Measurement Date	Aug 07, 2023		
Measurement by	Nattakarn Vongyoo		
	Time	Leq (dB(A))	Lmax (dB(A))
			L90 (dB(A))
	08:35 AM - 09:35 AM	73.6	87.0
			72.0
	09:35 AM - 10:35 AM	72.7	86.1
			72.0
	10:35 AM - 11:35 AM	72.2	80.1
			71.5
	11:35 AM - 12:35 PM	72.1	79.5
			71.7
	12:35 PM - 01:35 PM	72.2	80.9
			71.5
	01:35 PM - 02:35 PM	76.7	88.5
			69.9
	02:35 PM - 03:35 PM	76.5	90.9
			73.5
	03:35 PM - 04:35 PM	74.4	87.8
			72.8
	Leq Average 8 hrs. (dB(A))	74.2	
	Lmax (dB(A))		90.9
	Standard (dB(A))	90	140
Reference Method	Based on ISO1996-1 and 1996-2		
Standard	ประเทศไทย:พระราชบัญญัติว่าด้วยการควบคุมและลดผลกระทบจากสิ่งแวดล้อม พ.ศ.๒๕๖๑ ในการประเมินผลกระทบสิ่งแวดล้อมและลดผลกระทบจากโรงงาน พ.ศ.๒๕๖๑		

Technical Management

Orawan R.
Orawan Rakying
Scientist (3)

Approved by

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Supot Salamteh
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S:Vapors_Air Noise (p) (8.12PM)



Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
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Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 2389312
Date Received : Aug 09, 2023
Date Reported : Aug 16, 2023
Report Number: 2747642-1

Page 1 of 1

Sample Number	2389312-3			
Parameter	Noise (Leq 8 hrs.)			
Location	บริเวณ R-Plant SC Take up			
Measurement Date	Aug 07, 2023			
Measurement by	Nattakarn Vongyoo			
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
08:48 AM - 09:48 AM	85.8	88.9	85.5	
09:48 AM - 10:48 AM	85.4	90.3	82.5	
10:48 AM - 11:48 AM	81.4	85.4	80.8	
11:48 AM - 12:48 PM	81.9	83.3	81.5	
12:48 PM - 01:48 PM	82.1	85.6	81.6	
01:48 PM - 02:48 PM	81.9	87.8	81.3	
02:48 PM - 03:48 PM	81.9	85.6	81.5	
03:48 PM - 04:48 PM	81.9	85.9	81.3	
Leq Average 8 hrs. (dB(A))	83.1			
Lmax (dB(A))		90.3		
Standard (dB(A))	90	140		
Reference Method :	Based on ISO1996-1 and 1996-2			
Standard	ประเทศไทย:พระราชบัญญัติว่าด้วยการควบคุมและลดผลกระทบจากสิ่งแวดล้อม พ.ศ.๒๕๖๑ ในการประเมินผลกระทบสิ่งแวดล้อมและลดผลกระทบจากโรงงาน พ.ศ.๒๕๖๑			

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Analysis / Test Report

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P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 2389312
Date Received : Aug 09, 2023
Date Reported : Aug 16, 2023
Report Number: 2747643-1

Page 1 of 1

Page 1 of 1

Sample Number	2389312-4		
Parameter	Noise (Leq 8 hrs.)		
Location	บริเวณ R-Plant SR Take up		
Measurement Date	Aug 07, 2023		
Measurement by	Nattakarn Vongyoo		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:39 AM - 09:39 AM	83.7	91.2	80.0
09:39 AM - 10:39 AM	83.1	89.8	78.7
10:39 AM - 11:39 AM	80.9	90.0	76.0
11:39 AM - 12:39 PM	76.1	83.7	75.5
12:39 PM - 01:39 PM	77.5	87.8	75.7
01:39 PM - 02:39 PM	77.3	91.6	75.4
02:39 PM - 03:39 PM	76.4	93.2	74.8
03:39 PM - 04:39 PM	75.2	86.3	74.0
Leq Average 8 hrs. (dB(A))	79.9		
Lmax (dB(A))		93.2	
Standard (dB(A))	90	140	
Reference Method : Based on ISO1996-1 and 1996-2			
Standard	ประเทศไทย:พระราชบัญญัติว่าด้วยการควบคุมและลดผลกระทบจากสิ่งแวดล้อม พ.ศ.๒๕๖๑ ในการประเมินผลกระทบสิ่งแวดล้อมและลดผลกระทบจากโรงงาน พ.ศ.๒๕๖๑		

Technical Management

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S:Vapors_Air Noise (p) (8.12PM)



Analysis / Test Report

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Lot ID: 2389312
Date Received : Aug 09, 2023
Date Reported : Aug 16, 2023
Report Number: 2747644-1

P/O :
Project Name : EIA Monitoring
Project Location :

Page 1 of 1

Sample Number : 2389312-5
Parameter : Noise (Leq 8 hrs.)
Location : บริเวณ R-Plant LP5B 8-1
Measurement Date : Aug 07, 2023
Measurement by : Nattakarn Vongyoo

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:39 AM - 09:39 AM	77.4	82.6	76.1
09:39 AM - 10:39 AM	77.1	83.7	75.7
10:39 AM - 11:39 AM	76.6	86.3	74.6
11:39 AM - 12:39 PM	74.4	79.7	73.8
12:39 PM - 01:39 PM	75.2	88.7	73.3
01:39 PM - 02:39 PM	74.9	83.3	73.1
02:39 PM - 03:39 PM	74.2	89.4	72.7
03:39 PM - 04:39 PM	73.9	89.9	72.1

Leq Average 8 hrs. (dB(A))

Lmax (dB(A))

Standard (dB(A))

Reference Method : Based on ISO1996-1 and 1996-2

Standard : มาตรฐานการวัดและประเมินผลเสียงตามข้อกำหนดของกรมควบคุมมลพิษ

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Technical Management

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Date Received : Aug 09, 2023
Date Reported : Aug 16, 2023
Report Number: 2747645-1

P/O :
Project Name : EIA Monitoring
Project Location :

Page 1 of 1

Sample Number : 2389312-6
Parameter : Noise (Leq 8 hrs.)
Location : บริเวณ S-Plant WD Take up
Measurement Date : Aug 07, 2023
Measurement by : Nattakarn Vongyoo

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:54 AM - 09:54 AM	93.3	95.1	92.5
09:54 AM - 10:54 AM	93.4	97.7	92.9
10:54 AM - 11:54 AM	93.5	98.2	93.2
11:54 AM - 12:54 PM	91.6	93.7	90.6
12:54 PM - 01:54 PM	90.8	95.5	89.9
01:54 PM - 02:54 PM	91.6	97.6	90.2
02:54 PM - 03:54 PM	88.4	93.0	84.1
03:54 PM - 04:54 PM	88.3	95.4	84.8

Leq Average 8 hrs. (dB(A))

Lmax (dB(A))

Standard (dB(A))

Reference Method : Based on ISO1996-1 and 1996-2

Standard : มาตรฐานการวัดและประเมินผลเสียงตามข้อกำหนดของกรมควบคุมมลพิษ

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Technical Management

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Lot ID: 2389312
Date Received : Aug 09, 2023
Date Reported : Aug 16, 2023
Report Number: 2747646-1

P/O :
Project Name : EIA Monitoring
Project Location :

Page 1 of 1

Sample Number : 2389312-7
Parameter : Noise (Leq 8 hrs.)
Location : บริเวณ S-Plant SC Take up
Measurement Date : Aug 08, 2023
Measurement by : Nattakarn Vongyoo

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:55 AM - 09:55 AM	97.6	99.2	97.2
09:55 AM - 10:55 AM	97.7	99.7	97.3
10:55 AM - 11:55 AM	96.5	98.8	96.1
11:55 AM - 12:55 PM	95.8	96.8	95.5
12:55 PM - 01:55 PM	95.2	96.4	94.8
01:55 PM - 02:55 PM	95.2	100.6	94.6
02:55 PM - 03:55 PM	95.9	97.2	95.6
03:55 PM - 04:55 PM	95.7	98.0	95.3

Leq Average 8 hrs. (dB(A))

Lmax (dB(A))

Standard (dB(A))

Reference Method : Based on ISO1996-1 and 1996-2

Standard : มาตรฐานการวัดและประเมินผลเสียงตามข้อกำหนดของกรมควบคุมมลพิษ

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Technical Management

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Lot ID: 2389312
Date Received : Aug 09, 2023
Date Reported : Aug 16, 2023
Report Number: 2747647-1

P/O :
Project Name : EIA Monitoring
Project Location :

Page 1 of 1

Sample Number : 2389312-8
Parameter : Noise (Leq 8 hrs.)
Location : บริเวณ S-Plant SR Take up
Measurement Date : Aug 08, 2023
Measurement by : Nattakarn Vongyoo

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:06 AM - 10:06 AM	92.6	105.0	91.3
10:06 AM - 11:06 AM	93.6	102.5	92.0
11:06 AM - 12:06 PM	92.2	96.0	91.3
12:06 PM - 01:06 PM	92.5	97.6	92.1
01:06 PM - 02:06 PM	93.5	100.1	92.5
02:06 PM - 03:06 PM	93.6	99.1	92.7
03:06 PM - 04:06 PM	92.8	99.2	92.3
04:06 PM - 05:06 PM	92.8	99.4	91.8

Leq Average 8 hrs. (dB(A))

Lmax (dB(A))

Standard (dB(A))

Reference Method : Based on ISO1996-1 and 1996-2

Standard : มาตรฐานการวัดและประเมินผลเสียงตามข้อกำหนดของกรมควบคุมมลพิษ

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Technical Management

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P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 2389312
Date Received : Aug 09, 2023
Date Reported : Aug 16, 2023
Report Number: 2747648-1

Page 1 of 1

Sample Number : 2389312-9
Parameter : Noise (Leq 8 hrs.)
Location : บริเวณ S-Plant Shipping (Middle)
Measurement Date : Aug 08, 2023
Measurement by : Nattakarn Vonginyoo

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:05 AM - 10:05 AM	76.9	95.0	72.9
10:05 AM - 11:05 AM	75.3	86.8	73.6
11:05 AM - 12:05 PM	75.4	93.7	72.5
12:05 PM - 01:05 PM	73.2	80.9	72.5
01:05 PM - 02:05 PM	76.1	91.6	74.6
02:05 PM - 03:05 PM	76.4	93.3	74.9
03:05 PM - 04:05 PM	75.3	86.0	65.6
04:05 PM - 05:05 PM	71.6	79.3	70.9

Leq Average 8 hrs. (dB(A))

Lmax (dB(A))

Standard (dB(A))

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ภาวการณ์การจราจรทางบกและทางอากาศในกรุงเทพมหานคร

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Technical Management

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P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 2389312
Date Received : Aug 09, 2023
Date Reported : Aug 16, 2023
Report Number: 2747649-1

Page 1 of 1

Sample Number : 2389312-10
Parameter : Noise (Leq 8 hrs.)
Location : บริเวณ T-Plant SR Take up
Measurement Date : Aug 08, 2023
Measurement by : Nattakarn Vonginyoo

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:32 AM - 09:32 AM	86.2	104.6	82.8
09:32 AM - 10:32 AM	86.1	98.3	83.5
10:32 AM - 11:32 AM	88.5	102.5	81.9
11:32 AM - 12:32 PM	85.4	101.0	81.9
12:32 PM - 01:32 PM	85.7	104.5	83.1
01:32 PM - 02:32 PM	84.9	108.4	83.2
02:32 PM - 03:32 PM	83.8	92.0	82.8
03:32 PM - 04:32 PM	84.9	103.7	82.3

Leq Average 8 hrs. (dB(A))

Lmax (dB(A))

Standard (dB(A))

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ภาวการณ์การจราจรทางบกและทางอากาศในกรุงเทพมหานคร

Standard : ในการประเมินผลกระทบทางสิ่งแวดล้อมจากการจราจรทางบกและทางอากาศในกรุงเทพมหานคร พ.ศ.๒๕๖๕

Technical Management

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P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 2389312
Date Received : Aug 09, 2023
Date Reported : Aug 16, 2023
Report Number: 2747650-1

Page 1 of 1

Sample Number : 2389312-11
Parameter : Noise (Leq 8 hrs.)
Location : บริเวณ New Office
Measurement Date : Aug 07, 2023
Measurement by : Nattakarn Vonginyoo

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:33 AM - 09:33 AM	55.2	68.2	53.4
09:33 AM - 10:33 AM	55.3	75.3	53.4
10:33 AM - 11:33 AM	55.1	69.9	53.6
11:33 AM - 12:33 PM	51.6	64.5	41.6
12:33 PM - 01:33 PM	54.9	78.5	41.2
01:33 PM - 02:33 PM	54.3	62.6	53.5
02:33 PM - 03:33 PM	54.8	63.1	53.5
03:33 PM - 04:33 PM	55.7	69.5	53.4

Leq Average 8 hrs. (dB(A))

Lmax (dB(A))

Standard (dB(A))

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ภาวการณ์การจราจรทางบกและทางอากาศในกรุงเทพมหานคร

Standard : ในการประเมินผลกระทบทางสิ่งแวดล้อมจากการจราจรทางบกและทางอากาศในกรุงเทพมหานคร พ.ศ.๒๕๖๕

Technical Management

Orawan R.
Orawan Rakying
Scientist (3)

Approved by

Supot S.
Supot Salameh
Section Head

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Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng, Amphur
Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 2389312
Date Received : Aug 09, 2023
Date Reported : Aug 16, 2023
Report Number: 2747651-1

Page 1 of 1

Sample Number : 2389312-12
Parameter : Noise (Leq 8 hrs.)
Location : บริเวณ T-Plant Shipping (Middle)
Measurement Date : Aug 08, 2023
Measurement by : Nattakarn Vonginyoo

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:40 AM - 09:40 AM	71.0	91.5	62.6
09:40 AM - 10:40 AM	64.3	74.3	62.9
10:40 AM - 11:40 AM	63.4	77.8	62.6
11:40 AM - 12:40 PM	63.2	76.9	62.4
12:40 PM - 01:40 PM	68.8	91.7	62.4
01:40 PM - 02:40 PM	72.5	95.7	63.4
02:40 PM - 03:40 PM	65.3	79.5	62.7
03:40 PM - 04:40 PM	67.9	90.8	61.5

Leq Average 8 hrs. (dB(A))

Lmax (dB(A))

Standard (dB(A))

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ภาวการณ์การจราจรทางบกและทางอากาศในกรุงเทพมหานคร

Standard : ในการประเมินผลกระทบทางสิ่งแวดล้อมจากการจราจรทางบกและทางอากาศในกรุงเทพมหานคร พ.ศ.๒๕๖๕

Technical Management

Orawan R.
Orawan Rakying
Scientist (3)

Approved by

Supot S.
Supot Salameh
Section Head

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Analysis / Test Report

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29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng, Amphur
Pluakdaeng, Rayong Thailand 21140

Lot ID: 2389312
Date Received : Aug 09, 2023
Date Reported : Aug 16, 2023
Report Number: 2747652-1

P/O :
Project Name : EIA Monitoring
Project Location :

Page 1 of 1

Sample Number : 2389312-13
Parameter : Noise (Leq 8 hrs.)
Location : บริษัท MFG- Office
Measurement Date : Aug 07, 2023
Measurement by : Nattakarn Vonginyoo

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:30 AM - 09:30 AM	56.3	72.0	52.5
09:30 AM - 10:30 AM	55.1	66.5	50.5
10:30 AM - 11:30 AM	52.1	64.3	50.1
11:30 AM - 12:30 PM	49.6	64.3	43.7
12:30 PM - 01:30 PM	52.8	68.3	43.8
01:30 PM - 02:30 PM	58.6	77.4	51.1
02:30 PM - 03:30 PM	57.9	78.9	50.9
03:30 PM - 04:30 PM	57.2	68.3	53.5
Leq Average 8 hrs. (dB(A))	55.8		
Lmax (dB(A))		78.9	
Standard (dB(A))	90	140	
Reference Method : Based on ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง อาศัยการคุ้มครองการรบกวนเสียง พ.ศ.๒๕๕๖ ในกรณีการวัดการรบกวนเสียงตามข้อกำหนดการวัดการรบกวนเสียง พ.ศ.๒๕๕๖			

Technical Management

Orawan R.
Orawan Rakying
Scientist (3)

Approved by

Supt S.
Supot Salamteh
Section Head

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3 Reports_Air Noise.pdf (8.15MB)

ภาคผนวก ง-6

ระดับเสียงเฉลี่ยตลอดเวลาการทำงาน (Noise Dose, TWA)



Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol
Pluakdaeng, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 2389289
Date Received : Aug 07, 2023
Date Reported : Aug 10, 2023
Report Number : 2733257-1

Page 1 of 13

Sample Number	2389289-1
Sampled Date	Aug 07, 2023
Sample Description	Noise Dose
Location	DDA Pay-off
Personal Sampling	การสุ่มตัวอย่าง
Date Analysis Commenced	Aug 10, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:00 AM - 04:00 PM	%	-	1	46.8	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:00 AM - 04:00 PM	dB(A)	-	-	81.7	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :
MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
Sampled By : Nattakam Vonginyoo

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

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Wichan Choonharat
Assistant Manager

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29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol
Pluakdaeng, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 2389289
Date Received : Aug 07, 2023
Date Reported : Aug 10, 2023
Report Number : 2733257-1

Page 2 of 13

Sample Number	2389289-2
Sampled Date	Aug 07, 2023
Sample Description	Noise Dose
Location	R-Plant PL Take up
Personal Sampling	การสุ่มตัวอย่าง
Date Analysis Commenced	Aug 10, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:00 AM - 04:00 PM	%	-	1	57.5	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:00 AM - 04:00 PM	dB(A)	-	-	82.6	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :
MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
Sampled By : Nattakam Vonginyoo

Remark :
- LOD : Limit of Detection
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29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol
Pluakdaeng, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 2389289
Date Received : Aug 07, 2023
Date Reported : Aug 10, 2023
Report Number : 2733257-1

Page 3 of 13

Sample Number	2389289-3
Sampled Date	Aug 07, 2023
Sample Description	Noise Dose
Location	R-Plant SC Take up
Personal Sampling	การสุ่มตัวอย่าง
Date Analysis Commenced	Aug 10, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:00 AM - 04:00 PM	%	-	1	58.9	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:00 AM - 04:00 PM	dB(A)	-	-	92.7	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :
MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
Sampled By : Nattakam Vonginyoo

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

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Pluakdaeng, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 2389289
Date Received : Aug 07, 2023
Date Reported : Aug 10, 2023
Report Number : 2733257-1

Page 5 of 13

Sample Number	2389289-5
Sampled Date	Aug 07, 2023
Sample Description	Noise Dose
Location	R-Plant SR Take up
Personal Sampling	การสุ่มตัวอย่าง
Date Analysis Commenced	Aug 10, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:00 AM - 04:00 PM	%	-	1	134.9	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:00 AM - 04:00 PM	dB(A)	-	-	96.3	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :
MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
Sampled By : Nattakam Vonginyoo

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

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29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol
Pluakdaeng, Amphur Pluakdaeng, Rayong Thailand 21140

Lot ID: 2389289
Date Received : Aug 07, 2023
Date Reported : Aug 10, 2023
Report Number : 2733257-1

P/O :
Project Name : EIA Monitoring
Project Location :

Page 6 of 13

Sample Number	2389289-6									
Sampled Date	Aug 07, 2023									
Sample Description	Noise Dose									
Location	S-Plant WD Take up									
Personal Sampling	ณพื้นที่ปฏิบัติงาน									
Date Analysis Commenced	Aug 10, 2023									
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location	
Air Testing										
Noise Dose (8 hrs.)	08:00 AM - 04:00 PM	%	-	1	724	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (8 hrs.)	08:00 AM - 04:00 PM	dB(A)	-	-	93.6	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	

Guideline :
MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
Sampled By : Nattakarn Vonginyoo

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

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Pluakdaeng, Amphur Pluakdaeng, Rayong Thailand 21140

Lot ID: 2389289
Date Received : Aug 07, 2023
Date Reported : Aug 10, 2023
Report Number : 2733257-1

P/O :
Project Name : EIA Monitoring
Project Location :

Page 7 of 13

Sample Number	2389289-7									
Sampled Date	Aug 07, 2023									
Sample Description	Noise Dose									
Location	S-Plant SC Take up									
Personal Sampling	ณพื้นที่ปฏิบัติงาน									
Date Analysis Commenced	Aug 10, 2023									
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location	
Air Testing										
Noise Dose (8 hrs.)	08:00 AM - 04:00 PM	%	-	1	871	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (8 hrs.)	08:00 AM - 04:00 PM	dB(A)	-	-	94.4	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	

Guideline :
MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
Sampled By : Nattakarn Vonginyoo

Remark :
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29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol
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Lot ID: 2389289
Date Received : Aug 07, 2023
Date Reported : Aug 10, 2023
Report Number : 2733257-1

P/O :
Project Name : EIA Monitoring
Project Location :

Page 8 of 13

Sample Number	2389289-8									
Sampled Date	Aug 07, 2023									
Sample Description	Noise Dose									
Location	S-Plant SR take up									
Personal Sampling	ณพื้นที่ปฏิบัติงาน									
Date Analysis Commenced	Aug 10, 2023									
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location	
Air Testing										
Noise Dose (8 hrs.)	08:00 AM - 04:00 PM	%	-	1	457	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (8 hrs.)	08:00 AM - 04:00 PM	dB(A)	-	-	91.6	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	

Guideline :
MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
Sampled By : Nattakarn Vonginyoo

Remark :
- LOD : Limit of Detection
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29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol
Pluakdaeng, Amphur Pluakdaeng, Rayong Thailand 21140

Lot ID: 2389289
Date Received : Aug 07, 2023
Date Reported : Aug 10, 2023
Report Number : 2733257-1

P/O :
Project Name : EIA Monitoring
Project Location :

Page 10 of 13

Sample Number	2389289-10									
Sampled Date	Aug 08, 2023									
Sample Description	Noise Dose									
Location	T-Plant SR Take up									
Personal Sampling	ณพื้นที่ปฏิบัติงาน									
Date Analysis Commenced	Aug 10, 2023									
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location	
Air Testing										
Noise Dose (8 hrs.)	08:00 AM - 04:00 PM	%	-	1	214	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (8 hrs.)	08:00 AM - 04:00 PM	dB(A)	-	-	88.3	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	

Guideline :
MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
Sampled By : Nattakarn Vonginyoo

Remark :
- LOD : Limit of Detection
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29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol
Pluakdaeng, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 2389289
Date Received : Aug 07, 2023
Date Reported : Aug 10, 2023
Report Number : 2733257-1

Page 11 of 13

Sample Number	2389289-11									
Sampled Date	Aug 08, 2023									
Sample Description	Noise Dose									
Location	New office									
Personal Sampling	ณศูนย์ข้อมูลข่าวสาร									
Date Analysis Commenced	Aug 10, 2023									
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location	
Air Testing										
Noise Dose (8 hrs.)	08:00 AM - 04:00 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (8 hrs.)	08:00 AM - 04:00 PM	dB(A)	-	-	54.8	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	

Guideline :
MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
Sampled By : Nattakam Vonginyoo

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

Approved by 
Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : Bridgestone Metalphi (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol
Pluakdaeng, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 2389289
Date Received : Aug 07, 2023
Date Reported : Aug 10, 2023
Report Number : 2733257-1

Page 13 of 13

Sample Number	2389289-13									
Sampled Date	Aug 08, 2023									
Sample Description	Noise Dose									
Location	MFG office									
Personal Sampling	ณฝ่ายผลิต อาคาร 1									
Date Analysis Commenced	Aug 10, 2023									
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location	
Air Testing										
Noise Dose (8 hrs.)	08:00 AM - 04:00 PM	%	-	1	20.9	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (8 hrs.)	08:00 AM - 04:00 PM	dB(A)	-	-	78.2	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	

Guideline :
MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
Sampled By : Nattakam Vonginyoo

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

Approved by 
Wichan Choonharat
Assistant Manager

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ภาคผนวก ง-7

ระดับความร้อนในบริเวณการทำงาน



Analysis / Test Report

Client : Bridgestone Metalpha (Thailand) Co., Ltd.

29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol
Pluakdaeng, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :

Project Name : EIA Monitoring

Project Location :

Lot ID: 2389290

Date Received : Aug 07, 2023

Date Reported : Aug 10, 2023

Report Number: 2733262-1

Page 1 of 1

Sample Number 2389290-1
Parameter Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date Aug 04, 2023
Measurement by Natthapon Jiengwareewong
Location ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
DDA Line 3 (บริเวณกระบวนการให้ความร้อนและชุบ ลวดด้วยทองเหลือง)	120	31.5	27.5	40.7	40.3
Average (WBGT)		31.5			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Technical Management

Supot Salamteh
Section Head

Approved by

Wichan Choonharat
Assistant Manager

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ภาคผนวก ง-8

ความเข้มแสงสว่างในบริเวณการทำงาน



Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng, Amphur
Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : EIA Monitoring
Project Location:

Lot ID: 23102475 (1)
Date Received : Sep 27, 2023
Date Reported : Oct 13, 2023
Report Number: 23102475 (1)-1

Page 1 of 5

Lay out No.	Location	Bridgestone Metapha (Thailand) Co., Ltd.									
		Reference Number	Date	Time	No.	Illuminance (Lux) Spot	Average	Guideline Limit Spot/Min	Average	Comment	
1	Area : S-Plant Finish good Area	23102475 (1)-1	25-Sep-23	Day time	1	581	492	100	200	Pass	
		23102475 (1)-2	25-Sep-23	Day time	2	587					
		23102475 (1)-3	25-Sep-23	Day time	3	525					
		23102475 (1)-4	25-Sep-23	Day time	4	575					
		23102475 (1)-5	25-Sep-23	Day time	5	509					
		23102475 (1)-6	25-Sep-23	Day time	6	493					
		23102475 (1)-7	25-Sep-23	Day time	7	584					
		23102475 (1)-8	25-Sep-23	Day time	8	511					
		23102475 (1)-9	25-Sep-23	Day time	9	301					
		23102475 (1)-10	25-Sep-23	Day time	10	332					
		23102475 (1)-11	25-Sep-23	Day time	11	357					
		23102475 (1)-12	25-Sep-23	Day time	12	332					
2	Area : Lab Office Area	23102475 (1)-13	25-Sep-23	Day time	1	621	712	150	300	Pass	
		23102475 (1)-14	25-Sep-23	Day time	2	627					
		23102475 (1)-15	25-Sep-23	Day time	3	754					
		23102475 (1)-16	25-Sep-23	Day time	4	792					
		23102475 (1)-17	25-Sep-23	Day time	5	708					
		23102475 (1)-18	25-Sep-23	Day time	6	625					
		23102475 (1)-19	25-Sep-23	Day time	7	550					
		23102475 (1)-20	25-Sep-23	Day time	8	660					
		23102475 (1)-21	25-Sep-23	Day time	9	668					
		23102475 (1)-22	25-Sep-23	Day time	10	568					
		23102475 (1)-23	25-Sep-23	Day time	11	807					
		23102475 (1)-24	25-Sep-23	Day time	12	730					
3	Area : Chemical Lab Area #1	23102475 (1)-25	25-Sep-23	Day time	1	676	660	150	300	Pass	
		23102475 (1)-26	25-Sep-23	Day time	2	674					
		23102475 (1)-27	25-Sep-23	Day time	3	697					
		23102475 (1)-28	25-Sep-23	Day time	4	635					
		23102475 (1)-29	25-Sep-23	Day time	5	772					
		23102475 (1)-30	25-Sep-23	Day time	6	656					
		23102475 (1)-31	25-Sep-23	Day time	7	572					
		23102475 (1)-32	25-Sep-23	Day time	8	652					
		23102475 (1)-33	25-Sep-23	Day time	9	730					
		23102475 (1)-34	25-Sep-23	Day time	10	439					
		23102475 (1)-35	25-Sep-23	Day time	11	713					
		23102475 (1)-36	25-Sep-23	Day time	12	593					

Technical Management

Supot S
Supot Salameh
Section Head

Approved by

Wichan Choonharat
Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng, Amphur
Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : EIA Monitoring
Project Location:

Lot ID: 23102475 (1)
Date Received : Sep 27, 2023
Date Reported : Oct 13, 2023
Report Number: 23102475 (1)-1

Page 2 of 5

Lay out No.	Location	Bridgestone Metapha (Thailand) Co., Ltd.									
		Reference Number	Date	Time	No.	Illuminance (Lux) Spot	Average	Guideline Limit Spot/Min	Average	Comment	
4	Area : Chemical Lab Area #2	23102475 (1)-37	25-Sep-23	Day time	1	819	1001	150	300	Pass	
		23102475 (1)-38	25-Sep-23	Day time	2	1,101					
		23102475 (1)-39	25-Sep-23	Day time	3	1,106					
		23102475 (1)-40	25-Sep-23	Day time	4	1,076					
		23102475 (1)-41	25-Sep-23	Day time	5	576					
		23102475 (1)-42	25-Sep-23	Day time	6	790					
		23102475 (1)-43	25-Sep-23	Day time	7	1,055					
		23102475 (1)-44	25-Sep-23	Day time	8	1,116					
		23102475 (1)-45	25-Sep-23	Day time	9	830					
		23102475 (1)-46	25-Sep-23	Day time	10	998					
		23102475 (1)-47	25-Sep-23	Day time	11	1,052					
		23102475 (1)-48	25-Sep-23	Day time	12	1,014					
5	Area : Physical Lab Area	23102475 (1)-49	25-Sep-23	Day time	1	903	792	150	300	Pass	
		23102475 (1)-50	25-Sep-23	Day time	2	1,144					
		23102475 (1)-51	25-Sep-23	Day time	3	741					
		23102475 (1)-52	25-Sep-23	Day time	4	787					
		23102475 (1)-53	25-Sep-23	Day time	5	463					
		23102475 (1)-54	25-Sep-23	Day time	6	680					
		23102475 (1)-55	25-Sep-23	Day time	7	797					
		23102475 (1)-56	25-Sep-23	Day time	8	962					
		23102475 (1)-57	25-Sep-23	Day time	9	623					
		23102475 (1)-58	25-Sep-23	Day time	10	523					
		23102475 (1)-59	25-Sep-23	Day time	11	813					
		23102475 (1)-60	25-Sep-23	Day time	12	573					
6	Area : MFG office	23102475 (1)-61	25-Sep-23	Day time	1	940	726	150	300	Pass	
		23102475 (1)-62	25-Sep-23	Day time	2	571					
		23102475 (1)-63	25-Sep-23	Day time	3	685					
		23102475 (1)-64	25-Sep-23	Day time	4	860					
		23102475 (1)-65	25-Sep-23	Day time	5	644					
		23102475 (1)-66	25-Sep-23	Day time	6	479					
		23102475 (1)-67	25-Sep-23	Day time	7	580					
		23102475 (1)-68	25-Sep-23	Day time	8	545					
		23102475 (1)-69	25-Sep-23	Day time	9	667					
		23102475 (1)-70	25-Sep-23	Day time	10	302					
		23102475 (1)-71	25-Sep-23	Day time	11	678					
		23102475 (1)-72	25-Sep-23	Day time	12	465					

Technical Management

Supot S
Supot Salameh
Section Head

Approved by

Wichan Choonharat
Wichan Choonharat
Assistant Manager

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Analysis / Test Report

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29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng, Amphur
Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : EIA Monitoring
Project Location:

Lot ID: 23102475 (1)
Date Received : Sep 27, 2023
Date Reported : Oct 13, 2023
Report Number: 23102475 (1)-1

Page 3 of 5

Bridgestone Metapha (Thailand) Co., Ltd.										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
7	Area : New Office Area	23102475 (1)-73	25-Sep-23	Day time	1	637	527	150	300	Pass
		23102475 (1)-74	25-Sep-23	Day time	2	490				
		23102475 (1)-75	25-Sep-23	Day time	3	673				
		23102475 (1)-76	25-Sep-23	Day time	4	431				
		23102475 (1)-77	25-Sep-23	Day time	5	592				
		23102475 (1)-78	25-Sep-23	Day time	6	686				
		23102475 (1)-79	25-Sep-23	Day time	7	362				
		23102475 (1)-80	25-Sep-23	Day time	8	352				
		23102475 (1)-81	25-Sep-23	Day time	9	409				
		23102475 (1)-82	25-Sep-23	Day time	10	349				
		23102475 (1)-83	25-Sep-23	Day time	11	545				
		23102475 (1)-84	25-Sep-23	Day time	12	320				
8	Area : R-Plant Packing Area	23102475 (1)-85	25-Sep-23	Day time	1	706	608	150	300	Pass
		23102475 (1)-86	25-Sep-23	Day time	2	676				
		23102475 (1)-87	25-Sep-23	Day time	3	598				
		23102475 (1)-88	25-Sep-23	Day time	4	707				
		23102475 (1)-89	25-Sep-23	Day time	5	448				
		23102475 (1)-90	25-Sep-23	Day time	6	310				
		23102475 (1)-91	25-Sep-23	Day time	7	384				
		23102475 (1)-92	25-Sep-23	Day time	8	779				
		23102475 (1)-93	25-Sep-23	Day time	9	758				
		23102475 (1)-94	25-Sep-23	Day time	10	493				
		23102475 (1)-95	25-Sep-23	Day time	1	456	426	50	100	Pass
		23102475 (1)-96	25-Sep-23	Day time	2	643				
23102475 (1)-97	25-Sep-23	Day time	3	427						
23102475 (1)-98	25-Sep-23	Day time	4	449						
23102475 (1)-99	25-Sep-23	Day time	5	287						
23102475 (1)-100	25-Sep-23	Day time	6	286						
23102475 (1)-101	25-Sep-23	Day time	7	256						
23102475 (1)-102	25-Sep-23	Day time	8	281						
23102475 (1)-103	25-Sep-23	Day time	9	540						
23102475 (1)-104	25-Sep-23	Day time	10	352						



Analysis / Test Report

Client : Bridgestone Metalpha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring

Project Location :

Lot ID: 23102475 (1)

Date Received : Sep 27, 2023

Date Reported : Oct 13, 2023

Report Number: 23102475 (1)-1

Page 5 of 5

Bridgestone Metalpha (Thailand) Co., Ltd.

Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)	Spot	Average	Spot/Min	Guideline Limit	Average	Comment
13	Area : T-Plant Shipping Area	23102475 (1)-141	25-Sep-23	Day time	1	594	470	100	200	Pass		
		23102475 (1)-142	25-Sep-23	Day time	2	400						
		23102475 (1)-143	25-Sep-23	Day time	3	520						
		23102475 (1)-144	25-Sep-23	Day time	4	472						
		23102475 (1)-145	25-Sep-23	Day time	5	402						
		23102475 (1)-146	25-Sep-23	Day time	6	436						
		23102475 (1)-147	25-Sep-23	Day time	7	302						
		23102475 (1)-148	25-Sep-23	Day time	8	209						
		23102475 (1)-149	25-Sep-23	Day time	9	160						
		23102475 (1)-150	25-Sep-23	Day time	10	323						
		23102475 (1)-151	25-Sep-23	Day time	11	401						
		23102475 (1)-152	25-Sep-23	Day time	12	466						
14	Area : Rod Storage Area	23102475 (1)-153	25-Sep-23	Day time	1	428	396	50	100	Pass		
		23102475 (1)-154	25-Sep-23	Day time	2	345						
		23102475 (1)-155	25-Sep-23	Day time	3	486						
		23102475 (1)-156	25-Sep-23	Day time	4	389						
		23102475 (1)-157	25-Sep-23	Day time	5	232						
		23102475 (1)-158	25-Sep-23	Day time	6	220						
		23102475 (1)-159	25-Sep-23	Day time	7	209						
		23102475 (1)-160	25-Sep-23	Day time	8	139						
		23102475 (1)-161	25-Sep-23	Day time	9	201						
		23102475 (1)-162	25-Sep-23	Day time	10	310						
		23102475 (1)-163	25-Sep-23	Day time	11	343						
		23102475 (1)-164	25-Sep-23	Day time	12	646						

Measurement by : Norranon Tathongkham

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot S
Supot Salameth
Section Head

Approved by

Wichan C
Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : Bridgestone Metalpha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring

Project Location :

Lot ID: 23102475 (2)

Date Received : Sep 27, 2023

Date Reported : Oct 13, 2023

Report Number: 23102475 (2)-1

Page 1 of 8

Bridgestone Metalpha (Thailand) Co., Ltd.

Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)	Spot	Average	Spot/Min	Guideline Limit	Average	Comment
15	Area : T-Plant SC New Area	23102475 (2)-1	25-Sep-23	Night time	1	499	417	150	300	Pass		
		23102475 (2)-2	25-Sep-23	Night time	2	349						
		23102475 (2)-3	25-Sep-23	Night time	3	484						
		23102475 (2)-4	25-Sep-23	Night time	4	422						
		23102475 (2)-5	25-Sep-23	Night time	5	369						
		23102475 (2)-6	25-Sep-23	Night time	6	373						
		23102475 (2)-7	25-Sep-23	Night time	7	403						
		23102475 (2)-8	25-Sep-23	Night time	8	367						
		23102475 (2)-9	25-Sep-23	Night time	9	380						
		23102475 (2)-10	25-Sep-23	Night time	10	255						
		23102475 (2)-11	25-Sep-23	Night time	11	305						
		23102475 (2)-12	25-Sep-23	Night time	12	307						
16	Area : T-Plant SR-1	23102475 (2)-13	25-Sep-23	Night time	1	331	361	150	300	Pass		
		23102475 (2)-14	25-Sep-23	Night time	2	340						
		23102475 (2)-15	25-Sep-23	Night time	3	456						
		23102475 (2)-16	25-Sep-23	Night time	4	465						
		23102475 (2)-17	25-Sep-23	Night time	5	297						
		23102475 (2)-18	25-Sep-23	Night time	6	302						
		23102475 (2)-19	25-Sep-23	Night time	7	335						
		23102475 (2)-20	25-Sep-23	Night time	8	321						
		23102475 (2)-21	25-Sep-23	Night time	9	285						
		23102475 (2)-22	25-Sep-23	Night time	10	328						
		23102475 (2)-23	25-Sep-23	Night time	11	309						
		23102475 (2)-24	25-Sep-23	Night time	12	353						
17	Area : R-Plant	23102475 (2)-25	26-Sep-23	Night time	1	535	470	150	300	Pass		
		23102475 (2)-26	26-Sep-23	Night time	2	574						
		23102475 (2)-27	26-Sep-23	Night time	3	361						
		23102475 (2)-28	26-Sep-23	Night time	4	471						
		23102475 (2)-29	26-Sep-23	Night time	5	360						
		23102475 (2)-30	26-Sep-23	Night time	6	382						
		23102475 (2)-31	26-Sep-23	Night time	7	280						
		23102475 (2)-32	26-Sep-23	Night time	8	298						
		23102475 (2)-33	26-Sep-23	Night time	9	225						
		23102475 (2)-34	26-Sep-23	Night time	10	350						
		23102475 (2)-35	26-Sep-23	Night time	11	463						
		23102475 (2)-36	26-Sep-23	Night time	12	483						

Technical Management

Supot S
Supot Salameth
Section Head

Approved by

Wichan C
Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : Bridgestone Metalpha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring

Project Location :

Lot ID: 23102475 (2)

Date Received : Sep 27, 2023

Date Reported : Oct 13, 2023

Report Number: 23102475 (2)-1

Page 2 of 8

Bridgestone Metalpha (Thailand) Co., Ltd.

Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)	Spot	Average	Spot/Min	Guideline Limit	Average	Comment
18	Area : T-Plant WDS1	23102475 (2)-37	25-Sep-23	Night time	1	307	338	150	300	Pass		
		23102475 (2)-38	25-Sep-23	Night time	2	302						
		23102475 (2)-39	25-Sep-23	Night time	3	201						
		23102475 (2)-40	25-Sep-23	Night time	4	297						
		23102475 (2)-41	25-Sep-23	Night time	5	302						
		23102475 (2)-42	25-Sep-23	Night time	6	305						
		23102475 (2)-43	25-Sep-23	Night time	7	308						
		23102475 (2)-44	25-Sep-23	Night time	8	310						
		23102475 (2)-45	25-Sep-23	Night time	9	478						
		23102475 (2)-46	25-Sep-23	Night time	10	300						
		23102475 (2)-47	25-Sep-23	Night time	11	647						
		23102475 (2)-48	25-Sep-23	Night time	12	329						
19	Area : T-Plant WDS4,WDS3B	23102475 (2)-49	25-Sep-23	Night time	1	489	475	150	300	Pass		
		23102475 (2)-50	25-Sep-23	Night time	2	445						
		23102475 (2)-51	25-Sep-23	Night time	3	538						
		23102475 (2)-52	25-Sep-23	Night time	4	458						
		23102475 (2)-53	25-Sep-23	Night time	5	176						
		23102475 (2)-54	25-Sep-23	Night time	6	151						
		23102475 (2)-55	25-Sep-23	Night time	7	170						
		23102475 (2)-56	25-Sep-23	Night time	8	159						
		23102475 (2)-57	25-Sep-23	Night time	9	570						
		23102475 (2)-58	25-Sep-23	Night time	10	260						
		23102475 (2)-59	25-Sep-23	Night time	11	590						
		23102475 (2)-60	25-Sep-23	Night time	12	429						
20	Area : T-Plant SR New Area	23102475 (2)-61	25-Sep-23	Night time	1	301	379	150	300	Pass		
		23102475 (2)-62	25-Sep-23	Night time	2	439						
		23102475 (2)-63	25-Sep-23	Night time	3	344						
		23102475 (2)-64	25-Sep-23	Night time	4	396						
		23102475 (2)-65	25-Sep-23	Night time	5	417						
		23102475 (2)-66	25-Sep-23	Night time	6	422						
		23102475 (2)-67	25-Sep-23	Night time	7	321						
		23102475 (2)-68	25-Sep-23	Night time	8	341						
		23102475 (2)-69	25-Sep-23	Night time	9	390						
		23102475 (2)-70	25-Sep-23	Night time	10	351						
		23102475 (2)-71	25-Sep-23	Night time	11	511						
		23102475 (2)-72	25-Sep-23	Night time	12	301						

Technical Management

Supot S
Supot Salameth
Section Head

Approved by

Wichan C
Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : Bridgestone Metalpha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng, Amphur Pluakdaeng, Rayong Thailand 21140



Analysis / Test Report

Client : Bridgestone Metalphal (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng, Amphur
Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 23102475 (2)
Date Received : Sep 27, 2023
Date Reported : Oct 13, 2023
Report Number: 23102475 (2)-1

Page 4 of 8

Bridgestone Metalphal (Thailand) Co., Ltd.									
Lot No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux) Spot	Average	Guideline Limit Spot/Min	Comment
29	Area : DOA Pay Off Area	23102475 (2)-98	26-Sep-23	Night time	1	220	319	150 300	Pass
		23102475 (2)-99	26-Sep-23	Night time	2	336			
		23102475 (2)-100	26-Sep-23	Night time	3	290			
		23102475 (2)-101	26-Sep-23	Night time	4	278			
		23102475 (2)-102	26-Sep-23	Night time	5	220			
		23102475 (2)-103	26-Sep-23	Night time	6	256			
		23102475 (2)-104	26-Sep-23	Night time	7	229			
		23102475 (2)-105	26-Sep-23	Night time	8	239			
		23102475 (2)-106	26-Sep-23	Night time	9	210			
		23102475 (2)-107	26-Sep-23	Night time	10	249			
		23102475 (2)-108	26-Sep-23	Night time	11	479			
		23102475 (2)-109	26-Sep-23	Night time	12	373			
30	Area : DOA Take Up Area	23102475 (2)-110	26-Sep-23	Night time	1	488	447	150 300	Pass
		23102475 (2)-111	26-Sep-23	Night time	2	560			
		23102475 (2)-112	26-Sep-23	Night time	3	339			
		23102475 (2)-113	26-Sep-23	Night time	4	419			
		23102475 (2)-114	26-Sep-23	Night time	5	690			
		23102475 (2)-115	26-Sep-23	Night time	6	753			
		23102475 (2)-116	26-Sep-23	Night time	7	413			
		23102475 (2)-117	26-Sep-23	Night time	8	540			
		23102475 (2)-118	26-Sep-23	Night time	9	340			
		23102475 (2)-119	26-Sep-23	Night time	10	520			
		23102475 (2)-120	26-Sep-23	Night time	11	407			
		23102475 (2)-121	26-Sep-23	Night time	12	376			
31	Area : PL Pay Off Area	23102475 (2)-122	26-Sep-23	Night time	1	391	512	150 300	Pass
		23102475 (2)-123	26-Sep-23	Night time	2	588			
		23102475 (2)-124	26-Sep-23	Night time	3	498			
		23102475 (2)-125	26-Sep-23	Night time	4	599			
		23102475 (2)-126	26-Sep-23	Night time	5	593			
		23102475 (2)-127	26-Sep-23	Night time	6	599			
		23102475 (2)-128	26-Sep-23	Night time	7	433			
		23102475 (2)-129	26-Sep-23	Night time	8	409			
		23102475 (2)-130	26-Sep-23	Night time	9	390			
		23102475 (2)-131	26-Sep-23	Night time	10	411			
		23102475 (2)-132	26-Sep-23	Night time	11	339			
		23102475 (2)-133	26-Sep-23	Night time	12	578			

Technical Management

Supot S
Supot Salameth
Section Head

Approved by

Wichan Choonharat
Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : Bridgestone Metalphal (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng, Amphur
Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 23102475 (2)
Date Received : Sep 27, 2023
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Report Number: 23102475 (2)-1

Page 5 of 8

Bridgestone Metalphal (Thailand) Co., Ltd.									
Lot No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux) Spot	Average	Guideline Limit Spot/Min	Comment
32	Area : PL Take Up Area	23102475 (2)-134	26-Sep-23	Night time	1	402	406	150 300	Pass
		23102475 (2)-135	26-Sep-23	Night time	2	410			
		23102475 (2)-136	26-Sep-23	Night time	3	403			
		23102475 (2)-137	26-Sep-23	Night time	4	380			
		23102475 (2)-138	26-Sep-23	Night time	5	269			
		23102475 (2)-139	26-Sep-23	Night time	6	302			
		23102475 (2)-140	26-Sep-23	Night time	7	486			
		23102475 (2)-141	26-Sep-23	Night time	8	430			
		23102475 (2)-142	26-Sep-23	Night time	9	360			
		23102475 (2)-143	26-Sep-23	Night time	10	342			
		23102475 (2)-144	26-Sep-23	Night time	11	350			
		23102475 (2)-145	26-Sep-23	Night time	12	602			
33	Area : HCI Bath; HCI Rinsing; P-Cu Bath-S-Zn Bath; S-Zn	23102475 (2)-146	26-Sep-23	Night time	1	389	325	150 300	Pass
		23102475 (2)-147	26-Sep-23	Night time	2	303			
		23102475 (2)-148	26-Sep-23	Night time	3	324			
		23102475 (2)-149	26-Sep-23	Night time	4	300			
		23102475 (2)-150	26-Sep-23	Night time	5	521			
		23102475 (2)-151	26-Sep-23	Night time	6	821			
		23102475 (2)-152	26-Sep-23	Night time	7	273			
		23102475 (2)-153	26-Sep-23	Night time	8	277			
		23102475 (2)-154	26-Sep-23	Night time	9	409			
		23102475 (2)-155	26-Sep-23	Night time	10	296			
		23102475 (2)-156	26-Sep-23	Night time	11	169			
		23102475 (2)-157	26-Sep-23	Night time	12	308			
34	Area : TD-Keeping Furnace	23102475 (2)-158	26-Sep-23	Night time	1	380	370	150 300	Pass
		23102475 (2)-159	26-Sep-23	Night time	2	439			
		23102475 (2)-160	26-Sep-23	Night time	3	360			
		23102475 (2)-161	26-Sep-23	Night time	4	366			
		23102475 (2)-162	26-Sep-23	Night time	5	290			
		23102475 (2)-163	26-Sep-23	Night time	6	430			
		23102475 (2)-164	26-Sep-23	Night time	7	317			
		23102475 (2)-165	26-Sep-23	Night time	8	305			
		23102475 (2)-166	26-Sep-23	Night time	9	439			
		23102475 (2)-167	26-Sep-23	Night time	10	242			
		23102475 (2)-168	26-Sep-23	Night time	11	215			
		23102475 (2)-169	26-Sep-23	Night time	12	309			

Technical Management

Supot S
Supot Salameth
Section Head

Approved by

Wichan Choonharat
Wichan Choonharat
Assistant Manager

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29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng, Amphur
Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 23102475 (2)
Date Received : Sep 27, 2023
Date Reported : Oct 13, 2023
Report Number: 23102475 (2)-1

Page 6 of 8

Bridgestone Metalphal (Thailand) Co., Ltd.									
Lot No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux) Spot	Average	Guideline Limit Spot/Min	Comment
35	Area : R-Plant SC Area	23102475 (2)-170	26-Sep-23	Night time	1	402	417	150 300	Pass
		23102475 (2)-171	26-Sep-23	Night time	2	392			
		23102475 (2)-172	26-Sep-23	Night time	3	361			
		23102475 (2)-173	26-Sep-23	Night time	4	549			
		23102475 (2)-174	26-Sep-23	Night time	5	346			
		23102475 (2)-175	26-Sep-23	Night time	6	305			
		23102475 (2)-176	26-Sep-23	Night time	7	686			
		23102475 (2)-177	26-Sep-23	Night time	8	769			
		23102475 (2)-178	26-Sep-23	Night time	9	322			
		23102475 (2)-179	26-Sep-23	Night time	10	596			
		23102475 (2)-180	26-Sep-23	Night time	11	269			
		23102475 (2)-181	26-Sep-23	Night time	12	267			
36	Area : R-Plant SR Area	23102475 (2)-182	26-Sep-23	Night time	1	363	325	150 300	Pass
		23102475 (2)-183	26-Sep-23	Night time	2	340			
		23102475 (2)-184	26-Sep-23	Night time	3	389			
		23102475 (2)-185	26-Sep-23	Night time	4	363			
		23102475 (2)-186	26-Sep-23	Night time	5	335			
		23102475 (2)-187	26-Sep-23	Night time	6	341			
		23102475 (2)-188	26-Sep-23	Night time	7	403			
		23102475 (2)-189	26-Sep-23	Night time	8	413			
		23102475 (2)-190	26-Sep-23	Night time	9	430			
		23102475 (2)-191	26-Sep-23	Night time	10	311			
		23102475 (2)-192	26-Sep-23	Night time	11	301			
		23102475 (2)-193	26-Sep-23	Night time	12	266			
37	Area : R-Plant SC Line 8 Area	23102475 (2)-194	26-Sep-23	Night time	1	540	377	150 300	Pass
		23102475 (2)-195	26-Sep-23	Night time	2	365			
		23102475 (2)-196	26-Sep-23	Night time	3	346			
		23102475 (2)-197	26-Sep-23	Night time	4	326			
		23102475 (2)-198	26-Sep-23	Night time	5	304			
		23102475 (2)-199	26-Sep-23	Night time	6	290			
		23102475 (2)-200	26-Sep-23	Night time	7	301			
		23102475 (2)-201	26-Sep-23	Night time	8	305			
		23102475 (2)-202	26-Sep-23	Night time	9	477			
		23102475 (2)-203	26-Sep-23	Night time	10	302			
		23102475 (2)-204	26-Sep-23	Night time	11	414			
		23102475 (2)-205	26-Sep-23	Night time	12	311			

Technical Management

Supot S
Supot Salameth
Section Head

Approved by

Wichan Choonharat
Wichan Choonharat
Assistant Manager

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29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Pluakdaeng, Amphur
Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 23102475 (2)
Date Received : Sep 27, 2023
Date Reported : Oct 13, 2023
Report Number: 23102475 (2)-1

Page 7 of 8

Bridgestone Metalpha (Thailand) Co., Ltd.									
Lot No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux) Spot	Average	Guideline Limit Spot/Min	Comment
38	Area : S-Plant WDS Area	23102475 (2)-206	27-Sep-23	Night time	1	338	496	150 300	Pass
		23102475 (2)-207	27-Sep-23	Night time	2	639			
		23102475 (2)-208	27-Sep-23	Night time	3	379			
		23102475 (2)-209	27-Sep-23	Night time	4	672			
		23102475 (2)-210	27-Sep-23	Night time	5	582			
		23102475 (2)-211	27-Sep-23	Night time	6	647			
		23102475 (2)-212	27-Sep-23	Night time	7	452			
		23102475 (2)-213	27-Sep-23	Night time	8	575			
		23102475 (2)-214	27-Sep-23	Night time	9	312			
		23102475 (2)-215	27-Sep-23	Night time	10	200			
		23102475 (2)-216	27-Sep-23	Night time	11	295			
		23102475 (2)-217	27-Sep-23	Night time	12	243			
39	Area : S-Plant SC Area	23102475 (2)-218	27-Sep-23	Night time	1	605	538	150 300	Pass
		23102475 (2)-219	27-Sep-23	Night time	2	551			
		23102475 (2)-220	27-Sep-23	Night time	3	556			
		23102475 (2)-221	27-Sep-23	Night time	4	473			
		23102475 (2)-222	27-Sep-23	Night time	5	636			
		23102475 (2)-223	27-Sep-23	Night time	6	628			
		23102475 (2)-224	27-Sep-23	Night time	7	563			
		23102475 (2)-225	27-Sep-23	Night time	8	597			
		23102475 (2)-226	27-Sep-23	Night time	9	580			
		23102475 (2)-227	27-Sep-23	Night time	10	356			
		23102475 (2)-228	27-Sep-23	Night time	11	457			
		23102475 (2)-229	27-Sep-23	Night time	12	375			
40	Area : S-Plant SR Area	23102475 (2)-230	27-Sep-23	Night time	1	358	385	150 300	Pass
		23102475 (2)-231	27-Sep-23	Night time	2	378			
		23102475 (2)-232	27-Sep-23	Night time	3	248			
		23102475 (2)-233	27-Sep-23	Night time	4	269			
		23102475 (2)-234	27-Sep-23	Night time	5	659			
		23102475 (2)-235	27-Sep-23	Night time	6	468			
		23102475 (2)-236	27-Sep-23	Night time	7	660			
		23102475 (2)-237	27-Sep-23	Night time	8	556			
		23102475 (2)-238	27-Sep-23	Night time	9	431			
		23102475 (2)-239	27-Sep-23	Night time	10	463			
		23102475 (2)-240	27-Sep-23	Night time	11	432			
		23102475 (2)-241	27-Sep-23	Night time	12	477			



Analysis / Test Report

Client : Bridgestone Metalpha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol Phukdaeng, Amphur
Phukdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring

Project Location :

Lot ID: 23102475 (2)

Date Received : Sep 27, 2023
Date Reported : Oct 13, 2023
Report Number: 23102475 (2)-1

Page 8 of 8

Bridgestone Metalpha (Thailand) Co., Ltd.

Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
41	Area : Degreaser Bath-Furnace	23102475 (2)-242	26-Sep-23	Night time	1	425	387	150	300	Pass
		23102475 (2)-243	26-Sep-23	Night time	2	446				
		23102475 (2)-244	26-Sep-23	Night time	3	329				
		23102475 (2)-245	26-Sep-23	Night time	4	282				
		23102475 (2)-246	26-Sep-23	Night time	5	209				
		23102475 (2)-247	26-Sep-23	Night time	6	202				
		23102475 (2)-248	26-Sep-23	Night time	7	342				
		23102475 (2)-249	26-Sep-23	Night time	8	330				
		23102475 (2)-250	26-Sep-23	Night time	9	290				
		23102475 (2)-251	26-Sep-23	Night time	10	179				
		23102475 (2)-252	26-Sep-23	Night time	11	797				
		23102475 (2)-253	26-Sep-23	Night time	12	389				

Measurement by : Noranon Tathongkhom

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 390 dated February 21 B.E.2561 (2018)

Technical Management

Supot S.
Supot Salameh
Section Head

Approved by

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Assistant Manager

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ภาคผนวก ง-9

ระดับความเข้มของสารเคมีในพื้นที่การทำงาน



Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol
Pluakdaeng, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 23102474
Date Received : Sep 14, 2023
Date Reported : Sep 22, 2023
Report Number : 2764277-1

Page 1 of 17

Sample Number 23102474-1
Sampled Date Sep 13, 2023
Sample Description Air Quality
Location บริเวณถนนสายพัฒนาอุตสาหกรรม (DDA) บริเวณโหนด (สายตรวจวัด : ฝั่งตะวันออก Pointing ทิศทางจุด H1-H13)
Date Analysis Commenced Sep 15, 2023
Condition of Sample Drawn into two filter papers placed in plastic cassette
Barometric Pressure 751 mmHg
Atmospheric Temperature 30.0 °C

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Respirable Dust	02:00 PM - 04:00 PM	mg/m ³	-	0.15	0.31	5	Based on NIOSH (1998), OSHA 9600	Rayong	
Total Dust	02:00 PM - 04:00 PM	mg/m ³	-	0.15	5.72	15	Based on NIOSH (1994), OSHA 0500	Rayong	

Guideline :
OSHA : Occupational Safety and Health Administration
Sampled By : Nantawat Sarin
Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Analysis / Test Report

Client : Bridgestone Metapha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol
Pluakdaeng, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 23102474
Date Received : Sep 14, 2023
Date Reported : Sep 22, 2023
Report Number : 2764277-1

Page 3 of 17

Sample Number 23102474-3
Sampled Date Sep 13, 2023
Sample Description Air Quality
Location บริเวณถนนสายพัฒนาอุตสาหกรรม (DDA) บริเวณโหนด Line 3
Date Analysis Commenced Sep 15, 2023
Condition of Sample Drawn into two filter papers placed in plastic cassette
Barometric Pressure 751 mmHg
Atmospheric Temperature 30.0 °C

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Metals Testing									
Copper	02:00 PM - 04:00 PM	mg/m ³	-	0.001	<0.001	1	NIOSH (2003), 7301	ACGH Bangkok	
Iron	02:00 PM - 04:00 PM	mg/m ³	-	0.002	0.34	No Standard	NIOSH (2003), 7301	- Bangkok	
Zinc (Inhalable dust)	02:00 PM - 04:00 PM	mg/m ³	-	0.001	<0.001	No Standard	NIOSH (2003), 7301	- Bangkok	

Guideline :
ACGH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2022).
Sampled By : Nantawat Sarin

Remark :
- LOD : Limit of Detection
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Analysis / Test Report

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29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol
Pluakdaeng, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 23102474
Date Received : Sep 14, 2023
Date Reported : Sep 22, 2023
Report Number : 2764277-1

Page 4 of 17

Sample Number 23102474-4
Sampled Date Sep 13, 2023
Sample Description Air Quality
Location บริเวณถนนสายพัฒนาอุตสาหกรรม (DDA) บริเวณโหนด Line 3
Date Analysis Commenced Sep 15, 2023
Condition of Sample Drawn into two filter papers placed in plastic cassette
Barometric Pressure 751 mmHg
Atmospheric Temperature 30.0 °C

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Metals Testing									
Copper	02:00 PM - 04:00 PM	mg/m ³	-	0.001	<0.001	1	NIOSH (2003), 7301	ACGH Bangkok	
Iron		mg/m ³	-	0.002	0.004	No Standard	NIOSH (2003), 7301	- Bangkok	
Zinc (Inhalable dust)	02:00 PM - 04:00 PM	mg/m ³	-	0.001	0.006	No Standard	NIOSH (2003), 7301	- Bangkok	

Guideline :
ACGH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2022).
Sampled By : Nantawat Sarin

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

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Analysis / Test Report

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Pluakdaeng, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 23102474
Date Received : Sep 14, 2023
Date Reported : Sep 22, 2023
Report Number : 2764277-1

Page 5 of 17

Sample Number 23102474-5
Sampled Date Sep 13, 2023
Sample Description Air Quality
Location DDA Line 3
Date Analysis Commenced Sep 15, 2023
Condition of Sample Drawn into two filter papers placed in plastic cassette
Barometric Pressure 751 mmHg
Atmospheric Temperature 30.0 °C

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Hydrogen chloride	02:00 PM - 04:00 PM	ppm	-	0.05	<0.05	5(C)	Based on OSHA, 3D-174-5G	MOL Bangkok	

Guideline :
MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017).
Sampled By : Nantawat Sarin

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

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Analysis / Test Report

Client : Bridgestone Metalpha (Thailand) Co., Ltd.
29/1 Moo 4, Eastern Seaboard Industrial Estate (Rayong) (Rayong), Tambol
Pluakdaeng, Amphur Pluakdaeng, Rayong Thailand 21140

Lot ID: 23102474
Date Received : Sep 14, 2023
Date Reported : Sep 22, 2023
Report Number : 2764277-1

P/O :
Project Name : EIA Monitoring
Project Location :

Page 6 of 17

Sample Number : 23102474-6
Sampled Date : Sep 13, 2023
Sample Description : Air Quality
Location : PL HCl Bath Line 3
Date Analysis Commenced : Sep 15, 2023
Condition of Sample : Drawn into two filter papers placed in plastic cassette
Barometric Pressure : 751 mmHg
Atmospheric Temperature : 30.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Hydrogen chloride	02:00 PM - 04:00 PM	ppm	-	0.05	<0.05	5(C)	Based on OSHA, ID-174-SG	MOL	Bangkok

Guideline :
MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)
Sampled By : Nantawat Sarin

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

Approved by

Savitree N.
Savitree Nolsanglam
Manager

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