

ภาคผนวกที่ 1

สำเนาหนังสือเห็นชอบในรายงานการวิเคราะห์ผลกระทบสิ่งแวดล้อม
โครงการขยายกำลังการผลิตเหล็กถลุง ระยะที่ 2
บริษัท ทาฮา สตีล การผลิต (ประเทศไทย) จำกัด (มหาชน)
(บริษัท เอ็น.ที.เอส. สตีล กรุ๊ป จำกัด (มหาชน) (เดิม))

ภาคผนวกที่ 2

เอกสารการเปลี่ยนแปลงรายละเอียดโครงการ

2.1 สำเนาหนังสือแจ้งเปลี่ยนแปลงข้อมูลชื่อบริษัท

2.2 เอกสารผลการพิจารณาการเปลี่ยนแปลงรายละเอียด
โครงการในรายงานการประเมินผลกระทบสิ่งแวดล้อม
โครงการขยายกำลังการผลิตเหล็กเส้นก่อสร้าง (ครั้งที่ 2)
ของบริษัท ทาทา สตีล การผลิต (ประเทศไทย) จำกัด (มหาชน)
(บริษัท เอ็น.ที.เอส. สตีล กรุ๊ป จำกัด (มหาชน) (เดิม))

ภาคผนวกที่ 3


ใบรายงานผลการวิเคราะห์จากห้องปฏิบัติการ

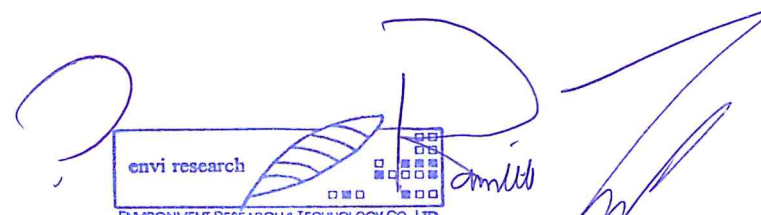
ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวอด ระยะที่ 2
Sampling Source : Ambient Air Quality
Sampling Point : โรงเรียนบ้านเขาหิน (นิคมราษฎร์บำรุง) ตำบลปอวิน อำเภอศรีราชา จังหวัดชลบุรี
(เดิมชื่อโรงเรียนบ้านเขาหินนิคมราษฎร์บำรุง)
GPS. Coordinate : UTM (WGS84) 47P 0727650 E, 1444232 N
Quotation No. : 2023-00188
Sampling Date : September 4-11, 2023
Analysis No. : 2023-AD853
Sampling Time : 12:35
Received Date : September 13, 2023
Sampling Method : U.S. EPA 40 CFR Part 50
Analytical Date : September 13-19, 2023
Sampling By : Mr.Akarawat Kochobog
Report No. : 2023-RAAR882
Analyzed By : Environment Research & Technology Co., Ltd.
Report Date : September 20, 2023

Parameter	Unit	Method of Analysis	Result							Standard ^{1'}
			Sep 4-5, 23	Sep 5-6, 23	Sep 6-7, 23	Sep 7-8, 23	Sep 8-9, 23	Sep 9-10, 23	Sep 10-11, 23	
Total Suspended Particulate (TSP) 24 Hours Average	mg/m ³	High-Volume, Gravimetric	0.049	0.051	0.068	0.061	0.051	0.033	0.038	0.330

Remark : ^{1'} Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995) and Notification No.24, B.E.2547 (2004), published in the Royal Government Gazette No.121 Special Part 104D dated September 22, B.E.2547 (2004), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).


(Ms.Natnicha Sermmatiwong)
Laboratory Reviewer



(Ms.Ramita Taengthai)
Laboratory Supervisor


ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวด ระยะที่ 2
Sampling Source : Ambient Air Quality
Sampling Point : โรงเรียนบ้านปอวิน (ลิขิตราษฎร์บำรุง) ตำบลปอวิน อำเภอสรีราชา จังหวัดชลบุรี
GPS. Coordinate : UTM (WGS84) 47P 0723965 E, 1443535 N
Quotation No. : 2023-00188
Sampling Date : September 4-11, 2023
Analysis No. : 2023-AD853
Sampling Time : 10:25
Received Date : September 13, 2023
Sampling Method : U.S. EPA 40 CFR Part 50
Analytical Date : September 13-19, 2023
Sampling By : Mr.Akarawat Kochobog
Report No. : 2023-RAAR883
Analyzed By : Environment Research & Technology Co., Ltd.
Report Date : September 20, 2023

Parameter	Unit	Method of Analysis	Result							Standard ^{1'}
			Sep 4-5, 23	Sep 5-6, 23	Sep 6-7, 23	Sep 7-8, 23	Sep 8-9, 23	Sep 9-10, 23	Sep 10-11, 23	
Total Suspended Particulate (TSP) 24 Hours Average	mg/m ³	High-Volume, Gravimetric	0.033	0.038	0.042	0.045	0.043	0.018	0.020	0.330

Remark : ^{1'} Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995) and Notification No.24, B.E.2547 (2004), published in the Royal Government Gazette No.121 Special Part 104D dated September 22, B.E.2547 (2004), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).


 (Ms.Natnicha Sermmatiwong)
 Laboratory Reviewer



 (Ms.Ramita Taengthai)
 Laboratory Supervisor

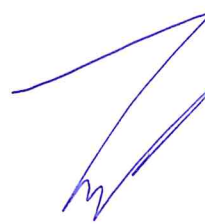
ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวด ระยะที่ 2
Sampling Source : Ambient Air Quality
Sampling Point : วัดพื้นเสด็จนอก ตำบลเขาคันทรง อำเภอศรีราชา จังหวัดชลบุรี
GPS. Coordinate : UTM (WGS84) 47P 0729649 E, 1447518 N
Sampling Date : September 4-11, 2023
Sampling Time : 11:55
Sampling Method : U.S. EPA 40 CFR Part 50
Sampling By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Quotation No. : 2023-00188
Analysis No. : 2023-AD853
Received Date : September 13, 2023
Analytical Date : September 13-19, 2023
Report No. : 2023-RAAR884
Report Date : September 20, 2023

Parameter	Unit	Method of Analysis	Result							Standard ^{1'}
			Sep 4-5, 23	Sep 5-6, 23	Sep 6-7, 23	Sep 7-8, 23	Sep 8-9, 23	Sep 9-10, 23	Sep 10-11, 23	
Total Suspended Particulate (TSP) 24 Hours Average	mg/m ³	High-Volume, Gravimetric	0.050	0.052	0.039	0.041	0.053	0.025	0.021	0.330

Remark : ^{1'} Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995) and Notification No.24, B.E.2547 (2004), published in the Royal Government Gazette No.121 Special Part 104D dated September 22, B.E.2547 (2004), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).


 (Ms.Natnicha Sermmatiwong)
 Laboratory Reviewer


 (Ms.Ramita Taengthai)
 Laboratory Supervisor


ANALYSIS REPORT

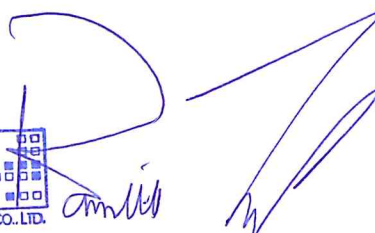
Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลววด ระยะที่ 2
Sampling Source : Ambient Air Quality
Sampling Point : พื้นที่โครงการ (สำนักงานนิคม)
GPS. Coordinate : UTM (WGS84) 47P 0726887 E, 1443658 N
Sampling Date : September 4-11, 2023
Sampling Time : 11:09
Sampling Method : U.S. EPA 40 CFR Part 50
Sampling By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.

Quotation No. : 2023-00188
Analysis No. : 2023-AD853
Received Date : September 13, 2023
Analytical Date : September 13-19, 2023
Report No. : 2023-RAAR885
Report Date : September 20, 2023

Parameter	Unit	Method of Analysis	Result							Standard ^{1'}
			Sep 4-5, 23	Sep 5-6, 23	Sep 6-7, 23	Sep 7-8, 23	Sep 8-9, 23	Sep 9-10, 23	Sep 10-11, 23	
Total Suspended Particulate (TSP) 24 Hours Average	mg/m ³	High-Volume, Gravimetric	0.066	0.075	0.073	0.084	0.076	0.056	0.057	0.330

Remark : ^{1'} Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995) and Notification No.24, B.E.2547 (2004), published in the Royal Government Gazette No.121 Special Part 104D dated September 22, B.E.2547 (2004), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).


 (Ms.Natnicha Sermmatiwong)
 Laboratory Reviewer


 (Ms.Ramita Taengthai)
 Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กถลุง ระยะที่ 2
Measured Source : Ambient Air Quality
Measured Point : โรงเรียนบ้านเขาหิน (นิคมราษฎร์บำรุง) ตำบลบ่อวิน อำเภอศรีราชา จังหวัดชลบุรี
 (เดิมชื่อโรงเรียนบ้านเขาหินนิคมราษฎร์บำรุง)
GPS. Coordinate : UTM (WGS84) 47P 0727650 E, 1444232 N
Quotation No. : 2023-00188
Measured Date : September 4-11, 2023
Analysis No. : 2023-AD853-001
Measured By : Mr.Akarawat Kochobog
Report No. : 2023-RAAS115
Analyzed By : Environment Research & Technology Co., Ltd.
Report Date : September 25, 2023
Measured Instrument : SO₂ UV-Fluorescence Analyzer Thermo Model 43C Serial Number 64389-343/2

Interval Time	Result SO ₂ (ppm)							Standard
	Sep 4-5, 23	Sep 5-6, 23	Sep 6-7, 23	Sep 7-8, 23	Sep 8-9, 23	Sep 9-10, 23	Sep 10-11, 23	
13:00-14:00	0.0018	0.0024	0.0018	0.0015	0.0014	0.0018	0.0014	
14:00-15:00	0.0016	0.0021	0.0020	0.0015	0.0012	0.0019	0.0015	
15:00-16:00	0.0014	0.0028	0.0020	0.0017	0.0014	0.0020	0.0015	
16:00-17:00	0.0014	0.0034	0.0020	0.0017	0.0015	0.0018	0.0015	
17:00-18:00	0.0013	0.0021	0.0017	0.0017	0.0016	0.0018	0.0014	
18:00-19:00	0.0014	0.0020	0.0018	0.0020	0.0017	0.0018	0.0013	
19:00-20:00	0.0015	0.0017	0.0017	0.0020	0.0016	0.0017	0.0012	
20:00-21:00	0.0016	0.0017	0.0017	0.0017	0.0014	0.0015	0.0012	
21:00-22:00	0.0017	0.0017	0.0016	0.0015	0.0014	0.0014	0.0012	
22:00-23:00	0.0016	0.0015	0.0018	0.0014	0.0012	0.0014	0.0010	
23:00-00:00	0.0019	0.0018	0.0015	0.0013	0.0013	0.0014	0.0010	
00:00-01:00	0.0020	0.0019	0.0014	0.0013	0.0012	0.0013	0.0011	
01:00-02:00	0.0020	0.0018	0.0015	0.0013	0.0012	0.0013	0.0011	
02:00-03:00	0.0019	0.0019	0.0014	0.0011	0.0012	0.0014	0.0012	
03:00-04:00	0.0022	0.0018	0.0014	0.0012	0.0013	0.0012	0.0013	
04:00-05:00	0.0021	0.0017	0.0015	0.0012	0.0012	0.0013	0.0011	
05:00-06:00	0.0020	0.0017	0.0014	0.0012	0.0011	0.0014	0.0011	
06:00-07:00	0.0020	0.0017	0.0014	0.0012	0.0013	0.0013	0.0011	
07:00-08:00	0.0020	0.0017	0.0014	0.0013	0.0013	0.0013	0.0011	
08:00-09:00	0.0019	0.0018	0.0013	0.0012	0.0011	0.0013	0.0012	
09:00-10:00	0.0021	0.0017	0.0015	0.0012	0.0012	0.0013	0.0011	
10:00-11:00	0.0022	0.0017	0.0014	0.0013	0.0011	0.0014	0.0010	
11:00-12:00	0.0029	0.0018	0.0015	0.0012	0.0014	0.0014	0.0011	
12:00-13:00	0.0028	0.0019	0.0015	0.0011	0.0016	0.0014	0.0011	
24 Hours Average	0.0019	0.0019	0.0016	0.0014	0.0013	0.0015	0.0012	0.12^{1'}
1 Hour Maximum	0.0029	0.0034	0.0020	0.0020	0.0017	0.0020	0.0015	0.30^{2'}

Remark : ^{1'} Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995) and Notification No.24, B.E.2547 (2004), published in the Royal Government Gazette No.121 Special Part 104D dated September 22, B.E.2547 (2004), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).
^{2'} Notification of National Environmental Board, No.12, B.E.2538 (1995), published in the Royal Government Gazette No.112 Special Part 27D dated July 13, B.E.2538 (1995) and Notification No.21, B.E.2544 (2001), published in the Royal Government Gazette No.118 Special Part 39D dated April 30, B.E.2544 (2001), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).

(Ms.Piyatida Pradangkho)
Laboratory Reviewer



(Ms.Panicha Promchai)
Laboratory Supervisor

ANALYSIS REPORT

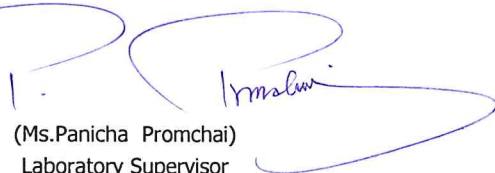
Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวด ระยะที่ 2
Measured Source : Ambient Air Quality
Measured Point : โรงเรียนบ้านปอวิน (ลิขิตราษฎร์บำรุง) ตำบลปอวิน อำเภอศรีราชา จังหวัดชลบุรี
GPS. Coordinate : UTM (WGS84) 47P 0723965 E, 1443535 N **Quotation No.** : 2023-00188
Measured Date : September 4-11, 2023 **Analysis No.** : 2023-AD853-008
Measured By : Mr.Akarawat Kochobog **Report No.** : 2023-RAAS118
Analyzed By : Environment Research & Technology Co., Ltd. **Report Date** : September 25, 2023
Measured Instrument : SO₂ UV-Fluorescence Analyzer Thermo Model 43C Serial Number 64390-343/2

Interval Time	Result SO ₂ (ppm)							Standard
	Sep 4-5, 23	Sep 5-6, 23	Sep 6-7, 23	Sep 7-8, 23	Sep 8-9, 23	Sep 9-10, 23	Sep 10-11, 23	
10:00-11:00	0.0013	0.0017	0.0017	0.0014	0.0013	0.0014	0.0013	
11:00-12:00	0.0014	0.0015	0.0017	0.0015	0.0015	0.0013	0.0012	
12:00-13:00	0.0016	0.0017	0.0014	0.0014	0.0015	0.0013	0.0012	
13:00-14:00	0.0017	0.0017	0.0016	0.0014	0.0015	0.0014	0.0012	
14:00-15:00	0.0016	0.0016	0.0016	0.0014	0.0014	0.0012	0.0013	
15:00-16:00	0.0016	0.0016	0.0017	0.0016	0.0016	0.0014	0.0013	
16:00-17:00	0.0016	0.0016	0.0016	0.0014	0.0015	0.0013	0.0013	
17:00-18:00	0.0017	0.0016	0.0016	0.0014	0.0015	0.0012	0.0013	
18:00-19:00	0.0019	0.0017	0.0016	0.0014	0.0015	0.0014	0.0013	
19:00-20:00	0.0019	0.0018	0.0015	0.0014	0.0014	0.0014	0.0013	
20:00-21:00	0.0018	0.0016	0.0015	0.0015	0.0014	0.0013	0.0013	
21:00-22:00	0.0016	0.0016	0.0015	0.0015	0.0014	0.0014	0.0013	
22:00-23:00	0.0018	0.0018	0.0015	0.0014	0.0014	0.0013	0.0012	
23:00-00:00	0.0017	0.0016	0.0015	0.0013	0.0014	0.0013	0.0013	
00:00-01:00	0.0017	0.0015	0.0014	0.0014	0.0015	0.0013	0.0012	
01:00-02:00	0.0017	0.0016	0.0015	0.0015	0.0015	0.0012	0.0012	
02:00-03:00	0.0017	0.0016	0.0014	0.0014	0.0014	0.0012	0.0011	
03:00-04:00	0.0016	0.0016	0.0015	0.0014	0.0015	0.0011	0.0012	
04:00-05:00	0.0017	0.0015	0.0014	0.0014	0.0015	0.0013	0.0011	
05:00-06:00	0.0017	0.0015	0.0015	0.0014	0.0015	0.0013	0.0012	
06:00-07:00	0.0018	0.0016	0.0015	0.0014	0.0013	0.0015	0.0013	
07:00-08:00	0.0016	0.0017	0.0015	0.0018	0.0014	0.0012	0.0016	
08:00-09:00	0.0017	0.0016	0.0016	0.0016	0.0015	0.0013	0.0014	
09:00-10:00	0.0018	0.0016	0.0015	0.0015	0.0013	0.0012	0.0013	
24 Hours Average	0.0017	0.0016	0.0015	0.0015	0.0014	0.0013	0.0013	0.12¹
1 Hour Maximum	0.0019	0.0018	0.0017	0.0018	0.0016	0.0015	0.0016	0.30²

Remark : ¹ Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995) and Notification No.24, B.E.2547 (2004), published in the Royal Government Gazette No.121 Special Part 104D dated September 22, B.E.2547 (2004), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).
² Notification of National Environmental Board, No.12, B.E.2538 (1995), published in the Royal Government Gazette No.112 Special Part 27D dated July 13, B.E.2538 (1995) and Notification No.21, B.E.2544 (2001), published in the Royal Government Gazette No.118 Special Part 39D dated April 30, B.E.2544 (2001), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).



(Ms.Piyatida Pradangkha)
Laboratory Reviewer

(Ms.Panicha Promchai)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลว ระยะที่ 2
Measured Source : Ambient Air Quality
Measured Point : วัดพื้นเสด็จนอก ตำบลเขาคันทรง อำเภอศรีราชา จังหวัดชลบุรี
GPS. Coordinate : UTM (WGS84) 47P 0729649 E, 1447518 N
Measured Date : September 4-11, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : SO₂ UV-Fluorescence Analyzer Horiba Model APSA-370 Serial Number ETSTKURU

Quotation No. : 2023-00188
Analysis No. : 2023-AD853-015
Report No. : 2023-RAAS121
Report Date : September 25, 2023

Interval Time	Result SO ₂ (ppm)							Standard
	Sep 4-5, 23	Sep 5-6, 23	Sep 6-7, 23	Sep 7-8, 23	Sep 8-9, 23	Sep 9-10, 23	Sep 10-11, 23	
12:00-13:00	0.0021	0.0019	0.0016	0.0014	0.0014	0.0015	0.0015	
13:00-14:00	0.0023	0.0019	0.0017	0.0015	0.0015	0.0015	0.0014	
14:00-15:00	0.0023	0.0019	0.0017	0.0015	0.0016	0.0015	0.0014	
15:00-16:00	0.0024	0.0019	0.0017	0.0016	0.0015	0.0017	0.0014	
16:00-17:00	0.0021	0.0019	0.0014	0.0016	0.0016	0.0018	0.0014	
17:00-18:00	0.0019	0.0018	0.0015	0.0016	0.0016	0.0016	0.0013	
18:00-19:00	0.0018	0.0018	0.0014	0.0017	0.0016	0.0015	0.0013	
19:00-20:00	0.0018	0.0016	0.0014	0.0015	0.0014	0.0014	0.0013	
20:00-21:00	0.0017	0.0016	0.0014	0.0013	0.0014	0.0014	0.0013	
21:00-22:00	0.0017	0.0015	0.0014	0.0013	0.0013	0.0013	0.0013	
22:00-23:00	0.0017	0.0015	0.0013	0.0013	0.0012	0.0013	0.0012	
23:00-00:00	0.0016	0.0014	0.0013	0.0012	0.0013	0.0013	0.0012	
00:00-01:00	0.0016	0.0015	0.0014	0.0013	0.0012	0.0013	0.0012	
01:00-02:00	0.0015	0.0014	0.0013	0.0013	0.0012	0.0012	0.0012	
02:00-03:00	0.0016	0.0014	0.0013	0.0013	0.0012	0.0012	0.0011	
03:00-04:00	0.0016	0.0014	0.0013	0.0013	0.0012	0.0012	0.0012	
04:00-05:00	0.0016	0.0014	0.0013	0.0013	0.0012	0.0012	0.0011	
05:00-06:00	0.0016	0.0014	0.0013	0.0013	0.0012	0.0012	0.0011	
06:00-07:00	0.0016	0.0014	0.0013	0.0012	0.0012	0.0012	0.0011	
07:00-08:00	0.0017	0.0014	0.0013	0.0012	0.0012	0.0012	0.0012	
08:00-09:00	0.0016	0.0014	0.0013	0.0013	0.0013	0.0012	0.0012	
09:00-10:00	0.0017	0.0015	0.0013	0.0013	0.0013	0.0013	0.0012	
10:00-11:00	0.0017	0.0016	0.0013	0.0014	0.0014	0.0013	0.0013	
11:00-12:00	0.0018	0.0016	0.0014	0.0013	0.0015	0.0014	0.0014	
24 Hours Average	0.0018	0.0016	0.0014	0.0014	0.0014	0.0014	0.0013	0.12¹
1 Hour Maximum	0.0024	0.0019	0.0017	0.0017	0.0016	0.0018	0.0015	0.30²

Remark : ¹ Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995) and Notification No.24, B.E.2547 (2004), published in the Royal Government Gazette No.121 Special Part 104D dated September 22, B.E.2547 (2004), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).
² Notification of National Environmental Board, No.12, B.E.2538 (1995), published in the Royal Government Gazette No.112 Special Part 27D dated July 13, B.E.2538 (1995) and Notification No.21, B.E.2544 (2001), published in the Royal Government Gazette No.118 Special Part 39D dated April 30, B.E.2544 (2001), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).

(Ms.Piyatida Pradangkho)
Laboratory Reviewer



(Ms.Panicha Promchai)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลว ระยะเวลาที่ 2
Measured Source : Ambient Air Quality
Measured Point : พื้นที่โครงการ (สำนักงานนิคม)
GPS. Coordinate : UTM (WGS84) 47P 0726887 E, 1443658 N
Measured Date : September 4-11, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : SO₂ UV-Fluorescence Analyzer Horiba Model APSA-370 Serial Number E5KBWB08

Quotation No. : 2023-00188
Analysis No. : 2023-AD853-022
Report No. : 2023-RAAS124
Report Date : September 25, 2023

Interval Time	Result SO ₂ (ppm)							Standard
	Sep 4-5, 23	Sep 5-6, 23	Sep 6-7, 23	Sep 7-8, 23	Sep 8-9, 23	Sep 9-10, 23	Sep 10-11, 23	
11:00-12:00	0.0016	0.0022	0.0020	0.0018	0.0017	0.0014	0.0015	
12:00-13:00	0.0015	0.0021	0.0019	0.0016	0.0015	0.0014	0.0015	
13:00-14:00	0.0015	0.0020	0.0017	0.0014	0.0017	0.0015	0.0014	
14:00-15:00	0.0019	0.0017	0.0017	0.0012	0.0016	0.0015	0.0013	
15:00-16:00	0.0023	0.0016	0.0016	0.0015	0.0016	0.0015	0.0013	
16:00-17:00	0.0022	0.0018	0.0017	0.0014	0.0019	0.0014	0.0013	
17:00-18:00	0.0020	0.0017	0.0019	0.0016	0.0019	0.0013	0.0015	
18:00-19:00	0.0019	0.0016	0.0019	0.0015	0.0019	0.0012	0.0017	
19:00-20:00	0.0021	0.0017	0.0015	0.0014	0.0018	0.0015	0.0018	
20:00-21:00	0.0020	0.0017	0.0014	0.0016	0.0018	0.0013	0.0017	
21:00-22:00	0.0023	0.0016	0.0017	0.0016	0.0015	0.0015	0.0016	
22:00-23:00	0.0024	0.0016	0.0018	0.0016	0.0017	0.0016	0.0015	
23:00-00:00	0.0022	0.0018	0.0019	0.0017	0.0018	0.0014	0.0013	
00:00-01:00	0.0023	0.0017	0.0018	0.0016	0.0019	0.0012	0.0013	
01:00-02:00	0.0022	0.0016	0.0019	0.0015	0.0018	0.0014	0.0013	
02:00-03:00	0.0016	0.0017	0.0018	0.0016	0.0018	0.0014	0.0013	
03:00-04:00	0.0018	0.0015	0.0015	0.0015	0.0017	0.0014	0.0013	
04:00-05:00	0.0019	0.0015	0.0014	0.0015	0.0017	0.0015	0.0014	
05:00-06:00	0.0018	0.0016	0.0015	0.0017	0.0016	0.0016	0.0014	
06:00-07:00	0.0020	0.0016	0.0015	0.0018	0.0015	0.0017	0.0016	
07:00-08:00	0.0018	0.0016	0.0015	0.0020	0.0016	0.0019	0.0020	
08:00-09:00	0.0021	0.0017	0.0013	0.0019	0.0020	0.0020	0.0021	
09:00-10:00	0.0022	0.0019	0.0014	0.0018	0.0016	0.0019	0.0017	
10:00-11:00	0.0021	0.0020	0.0015	0.0017	0.0014	0.0018	0.0016	
24 Hours Average	0.0020	0.0017	0.0017	0.0016	0.0017	0.0015	0.0015	0.12¹
1 Hour Maximum	0.0024	0.0022	0.0020	0.0020	0.0020	0.0020	0.0021	0.30²

Remark : ¹ Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995) and Notification No.24, B.E.2547 (2004), published in the Royal Government Gazette No.121 Special Part 104D dated September 22, B.E.2547 (2004), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).
² Notification of National Environmental Board, No.12, B.E.2538 (1995), published in the Royal Government Gazette No.112 Special Part 27D dated July 13, B.E.2538 (1995) and Notification No.21, B.E.2544 (2001), published in the Royal Government Gazette No.118 Special Part 39D dated April 30, B.E.2544 (2001), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).

(Ms.Piyatida Pradangkho)
Laboratory Reviewer



(Ms.Panicha Promchai)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวด ระยะที่ 2
Measured Source : Ambient Air Quality
Measured Point : โรงเรียนบ้านเขานิน (นิคมอุตสาหกรรม) ตำบลปอวิน อำเภอศรีราชา จังหวัดชลบุรี
(เดิมชื่อโรงเรียนบ้านเขานินนิคมอุตสาหกรรม)
GPS. Coordinate : UTM (WGS84) 47P 0727650 E, 1444232 N
Quotation No. : 2023-00188
Measured Date : September 4-11, 2023
Analysis No. : 2023-AD853-001
Measured By : Mr.Akarawat Kochobog
Report No. : 2023-RAAS114
Analyzed By : Environment Research & Technology Co., Ltd.
Report Date : September 25, 2023
Measured Instrument : NOx Chemiluminescence Analyzer Horiba Model APNA-370 Serial Number YCPL4HTM

Interval Time	Result NO ₂ (ppm)							Standard ¹⁾
	Sep 4-5, 23	Sep 5-6, 23	Sep 6-7, 23	Sep 7-8, 23	Sep 8-9, 23	Sep 9-10, 23	Sep 10-11, 23	
13:00-14:00	0.0129	0.0184	0.0208	0.0110	0.0184	0.0174	0.0158	
14:00-15:00	0.0217	0.0170	0.0201	0.0082	0.0175	0.0179	0.0162	
15:00-16:00	0.0212	0.0188	0.0262	0.0162	0.0207	0.0182	0.0162	
16:00-17:00	0.0241	0.0225	0.0259	0.0167	0.0252	0.0178	0.0157	
17:00-18:00	0.0256	0.0186	0.0260	0.0185	0.0265	0.0228	0.0082	
18:00-19:00	0.0218	0.0236	0.0268	0.0217	0.0327	0.0167	0.0067	
19:00-20:00	0.0181	0.0180	0.0237	0.0223	0.0352	0.0113	0.0067	
20:00-21:00	0.0093	0.0149	0.0135	0.0209	0.0236	0.0090	0.0065	
21:00-22:00	0.0091	0.0166	0.0165	0.0144	0.0164	0.0072	0.0077	
22:00-23:00	0.0100	0.0139	0.0144	0.0138	0.0153	0.0082	0.0103	
23:00-00:00	0.0102	0.0249	0.0095	0.0131	0.0175	0.0093	0.0101	
00:00-01:00	0.0080	0.0371	0.0119	0.0119	0.0157	0.0105	0.0096	
01:00-02:00	0.0140	0.0179	0.0082	0.0097	0.0118	0.0109	0.0082	
02:00-03:00	0.0160	0.0154	0.0095	0.0083	0.0115	0.0118	0.0087	
03:00-04:00	0.0140	0.0119	0.0167	0.0083	0.0106	0.0090	0.0110	
04:00-05:00	0.0168	0.0101	0.0150	0.0115	0.0108	0.0105	0.0099	
05:00-06:00	0.0151	0.0083	0.0152	0.0111	0.0119	0.0093	0.0081	
06:00-07:00	0.0178	0.0088	0.0170	0.0134	0.0124	0.0091	0.0125	
07:00-08:00	0.0188	0.0121	0.0157	0.0129	0.0097	0.0094	0.0092	
08:00-09:00	0.0131	0.0127	0.0160	0.0131	0.0109	0.0093	0.0117	
09:00-10:00	0.0172	0.0091	0.0177	0.0138	0.0173	0.0086	0.0098	
10:00-11:00	0.0207	0.0098	0.0197	0.0127	0.0177	0.0095	0.0081	
11:00-12:00	0.0189	0.0248	0.0211	0.0106	0.0196	0.0140	0.0103	
12:00-13:00	0.0192	0.0221	0.0225	0.0158	0.0179	0.0154	0.0138	
24 Hours Average	0.0164	0.0170	0.0179	0.0137	0.0178	0.0122	0.0105	-
1 Hour Maximum	0.0256	0.0371	0.0268	0.0223	0.0352	0.0228	0.0162	0.17

Remark : ¹⁾ Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995), Notification No.28, B.E.2550 (2007), published in the Royal Government Gazette No.124 Special Part 58D dated May 14, B.E.2550 (2007) and Notification No.33, B.E.2552 (2009), published in the Royal Government Gazette No.126 Special Part 114D dated August 14, B.E.2552 (2009), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).

(Ms.Piyatida Pradangkho)
Laboratory Reviewer



(Ms.Panicha Promchai)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กถลุง ระยะที่ 2
Measured Source : Ambient Air Quality
Measured Point : โรงเรียนบ้านปอวิน (ลี้ขีดราษฎร์บำรุง) ตำบลปอวิน อำเภอสรรคสาข จังหวัดชลบุรี
GPS. Coordinate : UTM (WGS84) 47P 0723965 E, 1443535 N
Measured Date : September 4-11, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : NOx Chemiluminescence Analyzer Horiba Model APNA-370 Serial Number XPWS7U3L

Quotation No. : 2023-00188
Analysis No. : 2023-AD853-008
Report No. : 2023-RAAS117
Report Date : September 25, 2023

Interval Time	Result NO ₂ (ppm)							Standard ¹⁾
	Sep 4-5, 23	Sep 5-6, 23	Sep 6-7, 23	Sep 7-8, 23	Sep 8-9, 23	Sep 9-10, 23	Sep 10-11, 23	
10:00-11:00	0.0095	0.0089	0.0090	0.0100	0.0192	0.0115	0.0078	
11:00-12:00	0.0090	0.0082	0.0093	0.0101	0.0210	0.0099	0.0078	
12:00-13:00	0.0082	0.0080	0.0082	0.0098	0.0098	0.0084	0.0075	
13:00-14:00	0.0086	0.0078	0.0084	0.0105	0.0105	0.0085	0.0074	
14:00-15:00	0.0082	0.0079	0.0105	0.0103	0.0130	0.0096	0.0073	
15:00-16:00	0.0082	0.0080	0.0130	0.0084	0.0138	0.0103	0.0075	
16:00-17:00	0.0092	0.0095	0.0112	0.0107	0.0147	0.0106	0.0077	
17:00-18:00	0.0099	0.0092	0.0111	0.0109	0.0164	0.0102	0.0080	
18:00-19:00	0.0090	0.0091	0.0130	0.0130	0.0189	0.0109	0.0087	
19:00-20:00	0.0096	0.0096	0.0116	0.0118	0.0209	0.0105	0.0086	
20:00-21:00	0.0097	0.0103	0.0112	0.0184	0.0149	0.0107	0.0082	
21:00-22:00	0.0101	0.0090	0.0116	0.0161	0.0123	0.0103	0.0076	
22:00-23:00	0.0088	0.0094	0.0101	0.0147	0.0157	0.0090	0.0072	
23:00-00:00	0.0083	0.0138	0.0089	0.0157	0.0148	0.0091	0.0073	
00:00-01:00	0.0081	0.0140	0.0089	0.0105	0.0164	0.0097	0.0071	
01:00-02:00	0.0091	0.0112	0.0088	0.0077	0.0147	0.0098	0.0071	
02:00-03:00	0.0088	0.0108	0.0095	0.0068	0.0142	0.0085	0.0071	
03:00-04:00	0.0089	0.0101	0.0109	0.0071	0.0111	0.0093	0.0069	
04:00-05:00	0.0101	0.0107	0.0120	0.0080	0.0134	0.0112	0.0074	
05:00-06:00	0.0110	0.0093	0.0099	0.0094	0.0180	0.0140	0.0082	
06:00-07:00	0.0120	0.0152	0.0167	0.0095	0.0143	0.0138	0.0094	
07:00-08:00	0.0131	0.0166	0.0177	0.0161	0.0099	0.0150	0.0178	
08:00-09:00	0.0135	0.0144	0.0158	0.0265	0.0094	0.0126	0.0158	
09:00-10:00	0.0099	0.0103	0.0107	0.0277	0.0153	0.0092	0.0079	
24 Hours Average	0.0096	0.0105	0.0112	0.0125	0.0147	0.0105	0.0085	-
1 Hour Maximum	0.0135	0.0166	0.0177	0.0277	0.0210	0.0150	0.0178	0.17

Remark : ¹⁾ Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995), Notification No.28, B.E.2550 (2007), published in the Royal Government Gazette No.124 Special Part 58D dated May 14, B.E.2550 (2007) and Notification No.33, B.E.2552 (2009), published in the Royal Government Gazette No.126 Special Part 114D dated August 14, B.E.2552 (2009), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).

(Ms.Piyatida Pradangkho)
Laboratory Reviewer



(Ms.Panicha Promchai)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กถลุง ระยะที่ 2
Measured Source : Ambient Air Quality
Measured Point : วัดพื้นเสด็จนอก ตำบลเขาคันทรง อำเภอศรีราชา จังหวัดชลบุรี
GPS. Coordinate : UTM (WGS84) 47P 0729649 E, 1447518 N
Measured Date : September 4-11, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : NOx Chemiluminescence Analyzer Horiba Model APNA-370 Serial Number AX7HSME0

Quotation No. : 2023-00188
Analysis No. : 2023-AD853-015
Report No. : 2023-RAAS120
Report Date : September 25, 2023

Interval Time	Result NO ₂ (ppm)							Standard ^{1'}
	Sep 4-5, 23	Sep 5-6, 23	Sep 6-7, 23	Sep 7-8, 23	Sep 8-9, 23	Sep 9-10, 23	Sep 10-11, 23	
12:00-13:00	0.0067	0.0065	0.0062	0.0070	0.0091	0.0071	0.0054	
13:00-14:00	0.0063	0.0054	0.0067	0.0074	0.0088	0.0071	0.0052	
14:00-15:00	0.0057	0.0055	0.0078	0.0077	0.0076	0.0068	0.0050	
15:00-16:00	0.0057	0.0064	0.0083	0.0080	0.0077	0.0068	0.0049	
16:00-17:00	0.0066	0.0059	0.0082	0.0108	0.0070	0.0063	0.0050	
17:00-18:00	0.0072	0.0067	0.0078	0.0133	0.0067	0.0054	0.0054	
18:00-19:00	0.0083	0.0070	0.0074	0.0146	0.0086	0.0056	0.0076	
19:00-20:00	0.0098	0.0080	0.0084	0.0138	0.0149	0.0083	0.0100	
20:00-21:00	0.0198	0.0105	0.0092	0.0106	0.0164	0.0085	0.0123	
21:00-22:00	0.0226	0.0085	0.0086	0.0169	0.0065	0.0145	0.0090	
22:00-23:00	0.0184	0.0082	0.0101	0.0183	0.0096	0.0136	0.0065	
23:00-00:00	0.0088	0.0167	0.0101	0.0223	0.0114	0.0082	0.0057	
00:00-01:00	0.0077	0.0167	0.0175	0.0171	0.0116	0.0057	0.0064	
01:00-02:00	0.0073	0.0160	0.0157	0.0139	0.0125	0.0070	0.0058	
02:00-03:00	0.0069	0.0131	0.0147	0.0120	0.0128	0.0101	0.0048	
03:00-04:00	0.0066	0.0135	0.0114	0.0108	0.0122	0.0066	0.0053	
04:00-05:00	0.0063	0.0146	0.0109	0.0111	0.0104	0.0063	0.0065	
05:00-06:00	0.0113	0.0149	0.0121	0.0085	0.0105	0.0085	0.0062	
06:00-07:00	0.0110	0.0195	0.0120	0.0108	0.0104	0.0096	0.0090	
07:00-08:00	0.0089	0.0168	0.0138	0.0124	0.0133	0.0101	0.0117	
08:00-09:00	0.0123	0.0134	0.0160	0.0139	0.0143	0.0094	0.0137	
09:00-10:00	0.0104	0.0094	0.0138	0.0128	0.0111	0.0085	0.0101	
10:00-11:00	0.0076	0.0082	0.0099	0.0149	0.0071	0.0060	0.0068	
11:00-12:00	0.0062	0.0075	0.0070	0.0117	0.0075	0.0051	0.0055	
24 Hours Average	0.0095	0.0108	0.0106	0.0125	0.0103	0.0080	0.0072	-
1 Hour Maximum	0.0226	0.0195	0.0175	0.0223	0.0164	0.0145	0.0137	0.17

Remark : ^{1'} Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995), Notification No.28, B.E.2550 (2007), published in the Royal Government Gazette No.124 Special Part 58D dated May 14, B.E.2550 (2007) and Notification No.33, B.E.2552 (2009), published in the Royal Government Gazette No.126 Special Part 114D dated August 14, B.E.2552 (2009), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).



(Ms.Piyatida Pradangkho)

Laboratory Reviewer



(Ms.Panicha Promchai)

Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวต ระยะที่ 2
Measured Source : Ambient Air Quality
Measured Point : พื้นที่โครงการ (สำนักงานนิคม)
GPS. Coordinate : UTM (WGS84) 47P 0726887 E, 1443658 N
Measured Date : September 4-11, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : NOx Chemiluminescence Analyzer Horiba Model APNA-370 Serial Number 4VWFEBUK

Quotation No. : 2023-00188
Analysis No. : 2023-AD853-022
Report No. : 2023-RAAS123
Report Date : September 25, 2023

Interval Time	Result NO ₂ (ppm)							Standard ^{1/}
	Sep 4-5, 23	Sep 5-6, 23	Sep 6-7, 23	Sep 7-8, 23	Sep 8-9, 23	Sep 9-10, 23	Sep 10-11, 23	
11:00-12:00	0.0198	0.0183	0.0242	0.0236	0.0238	0.0242	0.0252	
12:00-13:00	0.0175	0.0166	0.0193	0.0165	0.0258	0.0194	0.0254	
13:00-14:00	0.0230	0.0153	0.0180	0.0162	0.0384	0.0231	0.0262	
14:00-15:00	0.0243	0.0180	0.0182	0.0159	0.0374	0.0139	0.0163	
15:00-16:00	0.0159	0.0170	0.0206	0.0201	0.0171	0.0150	0.0187	
16:00-17:00	0.0170	0.0170	0.0166	0.0222	0.0191	0.0126	0.0174	
17:00-18:00	0.0173	0.0182	0.0179	0.0202	0.0154	0.0122	0.0162	
18:00-19:00	0.0153	0.0184	0.0213	0.0241	0.0142	0.0144	0.0182	
19:00-20:00	0.0190	0.0215	0.0162	0.0206	0.0140	0.0199	0.0245	
20:00-21:00	0.0249	0.0272	0.0246	0.0283	0.0309	0.0160	0.0202	
21:00-22:00	0.0162	0.0190	0.0197	0.0312	0.0142	0.0211	0.0181	
22:00-23:00	0.0107	0.0140	0.0184	0.0275	0.0051	0.0118	0.0129	
23:00-00:00	0.0109	0.0162	0.0151	0.0150	0.0075	0.0103	0.0077	
00:00-01:00	0.0100	0.0188	0.0160	0.0162	0.0057	0.0088	0.0089	
01:00-02:00	0.0103	0.0172	0.0125	0.0127	0.0098	0.0088	0.0109	
02:00-03:00	0.0120	0.0128	0.0108	0.0121	0.0091	0.0139	0.0119	
03:00-04:00	0.0137	0.0114	0.0110	0.0198	0.0077	0.0110	0.0140	
04:00-05:00	0.0121	0.0121	0.0190	0.0124	0.0091	0.0134	0.0123	
05:00-06:00	0.0124	0.0158	0.0122	0.0100	0.0092	0.0109	0.0107	
06:00-07:00	0.0167	0.0238	0.0153	0.0094	0.0091	0.0165	0.0140	
07:00-08:00	0.0263	0.0381	0.0202	0.0232	0.0141	0.0212	0.0223	
08:00-09:00	0.0294	0.0449	0.0297	0.0272	0.0205	0.0277	0.0298	
09:00-10:00	0.0301	0.0394	0.0259	0.0308	0.0324	0.0274	0.0314	
10:00-11:00	0.0197	0.0312	0.0215	0.0220	0.0339	0.0258	0.0221	
24 Hours Average	0.0177	0.0209	0.0185	0.0199	0.0176	0.0166	0.0181	-
1 Hour Maximum	0.0301	0.0449	0.0297	0.0312	0.0384	0.0277	0.0314	0.17

Remark : ^{1/} Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995), Notification No.28, B.E.2550 (2007), published in the Royal Government Gazette No.124 Special Part 58D dated May 14, B.E.2550 (2007) and Notification No.33, B.E.2552 (2009), published in the Royal Government Gazette No.126 Special Part 114D dated August 14, B.E.2552 (2009), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).

(Ms.Piyatida Pradangkho)
Laboratory Reviewer



(Ms.Panicha Promchai)
Laboratory Supervisor

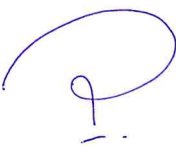
ANALYSIS REPORT


Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กถลุง ระยะที่ 2
Measured Source : Ambient Air Quality
Measured Point : โรงเรียนบ้านเขานิน (นิคมราษฎร์บำรุง) ตำบลบ่อวิน อำเภอสัตร์ราชา จังหวัดชลบุรี
 (เดิมชื่อโรงเรียนบ้านเขานินนิคมราษฎร์บำรุง)
GPS. Coordinate : UTM (WGS84) 47P 0727650 E, 1444232 N
Measured Date : September 4-11, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : CO NDIR Analyzer Horiba Model APMA-370 Serial Number JHG8PWAB

Quotation No. : 2023-00188
Analysis No. : 2023-AD853-001
Report No. : 2023-RAAS113
Report Date : September 25, 2023

Interval Time	Result CO (ppm)							
	Sep 4-5, 23		Sep 5-6, 23		Sep 6-7, 23		Sep 7-8, 23	
	1 hr Avg	8 hr Avg	1 hr Avg	8 hr Avg	1 hr Avg	8 hr Avg	1 hr Avg	8 hr Avg
13:00-14:00	0.5	-	0.5	0.4	0.5	0.4	0.5	0.5
14:00-15:00	0.4	-	0.3	0.4	0.4	0.4	0.4	0.5
15:00-16:00	0.4	-	0.4	0.4	0.4	0.4	0.5	0.5
16:00-17:00	0.5	-	0.4	0.4	0.4	0.5	0.5	0.5
17:00-18:00	0.5	-	0.4	0.4	0.4	0.5	0.5	0.5
18:00-19:00	0.5	-	0.4	0.4	0.4	0.4	0.5	0.5
19:00-20:00	0.5	-	0.4	0.4	0.5	0.4	0.4	0.5
20:00-21:00	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.5
21:00-22:00	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5
22:00-23:00	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
23:00-00:00	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
00:00-01:00	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4
01:00-02:00	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4
02:00-03:00	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
03:00-04:00	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
04:00-05:00	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
05:00-06:00	0.3	0.4	0.4	0.4	0.5	0.4	0.4	0.4
06:00-07:00	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
07:00-08:00	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4
08:00-09:00	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4
09:00-10:00	0.5	0.4	0.4	0.4	0.5	0.4	0.3	0.4
10:00-11:00	0.4	0.4	0.5	0.4	0.5	0.4	0.4	0.4
11:00-12:00	0.4	0.4	0.5	0.4	0.5	0.4	0.3	0.4
12:00-13:00	0.5	0.4	0.6	0.4	0.5	0.5	0.4	0.4
24 Hours Average	0.4	-	0.4	-	0.4	-	0.4	-
1 Hour Maximum	0.5	-	0.6	-	0.5	-	0.5	-
8 Hours Maximum	-	0.5	-	0.4	-	0.5	-	0.5

Remark : ¹ Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).


 (Ms.Piyatida Pradangkho)
 Laboratory Reviewer


 (Ms.Panicha Promchai)
 Laboratory Supervisor

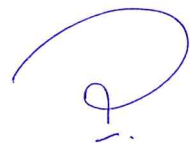
ANALYSIS REPORT

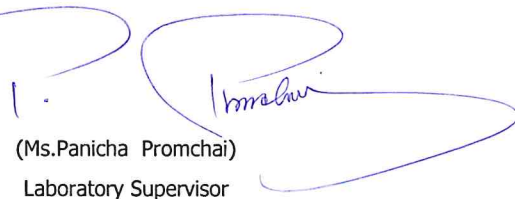
Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กถลุง ระยะที่ 2
Measured Source : Ambient Air Quality
Measured Point : โรงเรียนบ้านเขานิน (นิคมราษฎร์บำรุง) ตำบลบ่อวิน อำเภอศรีราชา จังหวัดชลบุรี
 (เดิมชื่อโรงเรียนบ้านเขานินนิคมราษฎร์บำรุง)
GPS. Coordinate : UTM (WGS84) 47P 0727650 E, 1444232 N
Measured Date : September 4-11, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : CO NDIR Analyzer Horiba Model APMA-370 Serial Number JHG8PWA8

Quotation No. : 2023-00188
Analysis No. : 2023-AD853-001
Report No. : 2023-RAAS113
Report Date : September 25, 2023

Interval Time	Result CO (ppm)						Standard ^{1'}
	Sep 8-9, 23		Sep 9-10, 23		Sep 10-11, 23		
	1 hr Avg	8 hr Avg	1 hr Avg	8 hr Avg	1 hr Avg	8 hr Avg	
13:00-14:00	0.5	0.4	0.4	0.4	0.5	0.5	
14:00-15:00	0.5	0.4	0.4	0.4	0.6	0.5	
15:00-16:00	0.5	0.4	0.5	0.4	0.4	0.5	
16:00-17:00	0.5	0.4	0.4	0.4	0.3	0.5	
17:00-18:00	0.4	0.4	0.5	0.4	0.3	0.4	
18:00-19:00	0.4	0.4	0.4	0.4	0.3	0.4	
19:00-20:00	0.4	0.4	0.4	0.4	0.4	0.4	
20:00-21:00	0.4	0.4	0.5	0.4	0.4	0.4	
21:00-22:00	0.4	0.4	0.4	0.4	0.3	0.4	
22:00-23:00	0.4	0.4	0.4	0.4	0.5	0.4	
23:00-00:00	0.4	0.4	0.5	0.4	0.6	0.4	
00:00-01:00	0.5	0.4	0.6	0.5	0.5	0.4	
01:00-02:00	0.4	0.4	0.5	0.5	0.3	0.4	
02:00-03:00	0.4	0.4	0.4	0.5	0.4	0.4	
03:00-04:00	0.4	0.4	0.6	0.5	0.4	0.4	
04:00-05:00	0.4	0.4	0.6	0.5	0.4	0.4	
05:00-06:00	0.5	0.4	0.4	0.5	0.5	0.4	
06:00-07:00	0.5	0.4	0.4	0.5	0.4	0.4	
07:00-08:00	0.4	0.4	0.5	0.5	0.3	0.4	
08:00-09:00	0.3	0.4	0.5	0.5	0.4	0.4	
09:00-10:00	0.5	0.4	0.5	0.5	0.4	0.4	
10:00-11:00	0.5	0.4	0.5	0.5	0.4	0.4	
11:00-12:00	0.4	0.4	0.4	0.5	0.4	0.4	
12:00-13:00	0.5	0.4	0.5	0.5	0.5	0.4	
24 Hours Average	0.4	-	0.5	-	0.4	-	-
1 Hour Maximum	0.5	-	0.6	-	0.6	-	30
8 Hours Maximum	-	0.4	-	0.5	-	0.5	9

Remark : ^{1'} Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).


 (Ms.Piyatida Pradangkho)
 Laboratory Reviewer


 (Ms.Panicha Promchai)
 Laboratory Supervisor

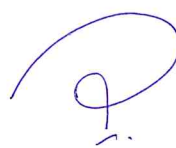
ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กถลุง ระยะที่ 2
Measured Source : Ambient Air Quality
Measured Point : โรงเรียนบ้านบ่อวิน (ลิขิตราษฎร์บำรุง) ตำบลบ่อวิน อำเภอศรีราชา จังหวัดชลบุรี
GPS. Coordinate : UTM (WGS84) 47P 0723965 E, 1443535 N
Measured Date : September 4-11, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : CO NDIR Analyzer Horiba Model APMA-370 Serial Number 4N02XP27

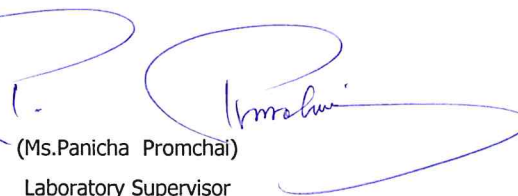
Quotation No. : 2023-00188
Analysis No. : 2023-AD853-008
Report No. : 2023-RAAS116
Report Date : September 25, 2023

Interval Time	Result CO (ppm)							
	Sep 4-5, 23		Sep 5-6, 23		Sep 6-7, 23		Sep 7-8, 23	
	1 hr Avg	8 hr Avg	1 hr Avg	8 hr Avg	1 hr Avg	8 hr Avg	1 hr Avg	8 hr Avg
10:00-11:00	0.5	-	0.4	0.4	0.4	0.4	0.4	0.4
11:00-12:00	0.5	-	0.4	0.4	0.4	0.4	0.4	0.4
12:00-13:00	0.4	-	0.4	0.4	0.4	0.4	0.4	0.4
13:00-14:00	0.4	-	0.4	0.4	0.4	0.4	0.4	0.4
14:00-15:00	0.4	-	0.4	0.4	0.4	0.4	0.4	0.4
15:00-16:00	0.4	-	0.4	0.4	0.4	0.4	0.4	0.4
16:00-17:00	0.4	-	0.4	0.4	0.4	0.4	0.4	0.4
17:00-18:00	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
18:00-19:00	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.4
19:00-20:00	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4
20:00-21:00	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.4
21:00-22:00	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.5
22:00-23:00	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5
23:00-00:00	0.4	0.4	0.5	0.4	0.4	0.4	0.5	0.5
00:00-01:00	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5
01:00-02:00	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
02:00-03:00	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
03:00-04:00	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
04:00-05:00	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
05:00-06:00	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
06:00-07:00	0.4	0.4	0.5	0.4	0.5	0.4	0.4	0.4
07:00-08:00	0.4	0.4	0.4	0.4	0.5	0.4	0.7	0.4
08:00-09:00	0.4	0.4	0.4	0.4	0.5	0.4	0.9	0.5
09:00-10:00	0.4	0.4	0.4	0.4	0.5	0.4	0.9	0.6
24 Hours Average	0.4	-	0.4	-	0.4	-	0.5	-
1 Hour Maximum	0.5	-	0.5	-	0.5	-	0.9	-
8 Hours Maximum	-	0.4	-	0.4	-	0.4	-	0.6

Remark : ¹ Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).


 (Ms.Piyatida Pradangkho)
 Laboratory Reviewer




 (Ms.Panicha Promchai)
 Laboratory Supervisor

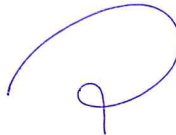
ANALYSIS REPORT

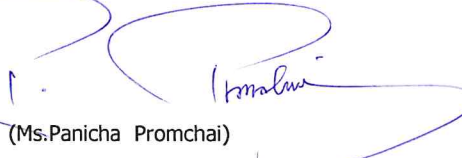
Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กถลุง ระยะที่ 2
Measured Source : Ambient Air Quality
Measured Point : โรงเรียนบ้านปอวิน (ลิขิตราษฎร์บำรุง) ตำบลปอวิน อำเภอดุสิต จังหวัดชลบุรี
GPS. Coordinate : UTM (WGS84) 47P 0723965 E, 1443535 N
Measured Date : September 4-11, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : CO NDIR Analyzer Horiba Model APMA-370 Serial Number 4N02XP27

Quotation No. : 2023-00188
Analysis No. : 2023-AD853-008
Report No. : 2023-RAAS116
Report Date : September 25, 2023

Interval Time	Result CO (ppm)						Standard ^{1'}
	Sep 8-9, 23		Sep 9-10, 23		Sep 10-11, 23		
	1 hr Avg	8 hr Avg	1 hr Avg	8 hr Avg	1 hr Avg	8 hr Avg	
10:00-11:00	0.5	0.6	0.4	0.5	0.4	0.5	
11:00-12:00	0.5	0.6	0.4	0.5	0.4	0.5	
12:00-13:00	0.4	0.6	0.4	0.5	0.4	0.5	
13:00-14:00	0.4	0.6	0.4	0.5	0.4	0.4	
14:00-15:00	0.4	0.6	0.4	0.4	0.4	0.4	
15:00-16:00	0.4	0.6	0.4	0.4	0.4	0.4	
16:00-17:00	0.5	0.5	0.4	0.4	0.4	0.4	
17:00-18:00	0.5	0.4	0.5	0.4	0.4	0.4	
18:00-19:00	0.5	0.4	0.4	0.4	0.4	0.4	
19:00-20:00	0.5	0.4	0.4	0.4	0.5	0.4	
20:00-21:00	0.5	0.5	0.4	0.4	0.5	0.4	
21:00-22:00	0.5	0.5	0.4	0.4	0.4	0.4	
22:00-23:00	0.5	0.5	0.4	0.4	0.4	0.4	
23:00-00:00	0.5	0.5	0.4	0.4	0.4	0.4	
00:00-01:00	0.5	0.5	0.4	0.4	0.4	0.4	
01:00-02:00	0.6	0.5	0.4	0.4	0.4	0.4	
02:00-03:00	0.6	0.5	0.4	0.4	0.4	0.4	
03:00-04:00	0.6	0.5	0.4	0.4	0.4	0.4	
04:00-05:00	0.6	0.6	0.4	0.4	0.4	0.4	
05:00-06:00	0.6	0.6	0.5	0.4	0.4	0.4	
06:00-07:00	0.6	0.6	0.5	0.4	0.5	0.4	
07:00-08:00	0.5	0.6	0.6	0.4	0.8	0.5	
08:00-09:00	0.5	0.6	0.5	0.5	0.6	0.5	
09:00-10:00	0.5	0.6	0.4	0.5	0.4	0.5	
24 Hours Average	0.5	-	0.4	-	0.4	-	-
1 Hour Maximum	0.6	-	0.6	-	0.8	-	30
8 Hours Maximum	-	0.6	-	0.5	-	0.5	9

Remark : ^{1'} Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).


 (Ms.Piyatida Pradangkho)
 Laboratory Reviewer


 (Ms.Panicha Promchai)
 Laboratory Supervisor


ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวอด ระยะที่ 2
Measured Source : Ambient Air Quality
Measured Point : วัดพื้นเสด็จนอก ตำบลเขาคันทรง อำเภอศรีราชา จังหวัดชลบุรี
GPS. Coordinate : UTM (WGS84) 47P 0729649 E, 1447518 N
Measured Date : September 4-11, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : CO NDIR Analyzer Horiba Model APMA-370 Serial Number RBBRW0L3

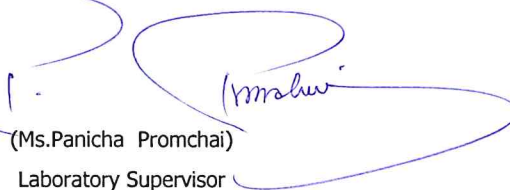
Quotation No. : 2023-00188
Analysis No. : 2023-AD853-015
Report No. : 2023-RAAS119
Report Date : September 25, 2023

Interval Time	Result CO (ppm)							
	Sep 4-5, 23		Sep 5-6, 23		Sep 6-7, 23		Sep 7-8, 23	
	1 hr Avg	8 hr Avg	1 hr Avg	8 hr Avg	1 hr Avg	8 hr Avg	1 hr Avg	8 hr Avg
12:00-13:00	0.4	-	0.3	0.3	0.3	0.4	0.3	0.4
13:00-14:00	0.4	-	0.3	0.3	0.3	0.3	0.3	0.4
14:00-15:00	0.3	-	0.3	0.3	0.3	0.3	0.4	0.4
15:00-16:00	0.3	-	0.3	0.3	0.3	0.3	0.4	0.4
16:00-17:00	0.4	-	0.3	0.3	0.3	0.3	0.4	0.4
17:00-18:00	0.4	-	0.3	0.3	0.3	0.3	0.4	0.4
18:00-19:00	0.4	-	0.4	0.3	0.3	0.3	0.4	0.4
19:00-20:00	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.4
20:00-21:00	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.4
21:00-22:00	0.4	0.4	0.3	0.3	0.4	0.3	0.5	0.4
22:00-23:00	0.4	0.4	0.3	0.3	0.4	0.4	0.5	0.4
23:00-00:00	0.3	0.4	0.4	0.4	0.3	0.4	0.5	0.4
00:00-01:00	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.4
01:00-02:00	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
02:00-03:00	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
03:00-04:00	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
04:00-05:00	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
05:00-06:00	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
06:00-07:00	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.4
07:00-08:00	0.3	0.3	0.4	0.4	0.5	0.4	0.4	0.4
08:00-09:00	0.4	0.3	0.4	0.4	0.6	0.4	0.7	0.4
09:00-10:00	0.4	0.3	0.3	0.4	0.5	0.4	0.6	0.4
10:00-11:00	0.3	0.3	0.3	0.4	0.4	0.4	0.6	0.5
11:00-12:00	0.3	0.3	0.3	0.4	0.3	0.4	0.6	0.5
24 Hours Average	0.4	-	0.4	-	0.4	-	0.4	-
1 Hour Maximum	0.4	-	0.4	-	0.6	-	0.7	-
8 Hours Maximum	-	0.4	-	0.4	-	0.4	-	0.5

Remark : ¹⁷ Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).


 (Ms.Piyatida Pradangkho)
 Laboratory Reviewer


 ENVIRONMENT RESEARCH & TECHNOLOGY CO., LTD.


 (Ms.Panicha Promchai)
 Laboratory Supervisor


ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กถลุง ระยะที่ 2
Measured Source : Ambient Air Quality
Measured Point : วัดพื้นเสด็จนอก ตำบลเขาคันทรง อำเภอศรีราชา จังหวัดชลบุรี
GPS. Coordinate : UTM (WGS84) 47P 0729649 E, 1447518 N
Measured Date : September 4-11, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : CO NDIR Analyzer Horiba Model APMA-370 Serial Number RBBRW0L3

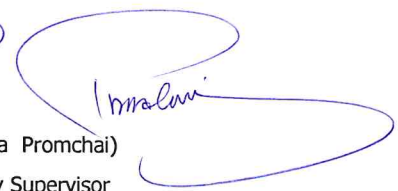
Quotation No. : 2023-00188
Analysis No. : 2023-AD853-015
Report No. : 2023-RAAS119
Report Date : September 25, 2023

Interval Time	Result CO (ppm)						Standard ^{1'}
	Sep 8-9, 23		Sep 9-10, 23		Sep 10-11, 23		
	1 hr Avg	8 hr Avg	1 hr Avg	8 hr Avg	1 hr Avg	8 hr Avg	
12:00-13:00	0.6	0.5	0.3	0.5	0.3	0.4	
13:00-14:00	0.5	0.5	0.3	0.4	0.3	0.4	
14:00-15:00	0.5	0.6	0.3	0.4	0.4	0.4	
15:00-16:00	0.5	0.6	0.3	0.4	0.3	0.4	
16:00-17:00	0.5	0.6	0.4	0.4	0.3	0.3	
17:00-18:00	0.4	0.5	0.4	0.4	0.3	0.3	
18:00-19:00	0.4	0.5	0.4	0.4	0.4	0.3	
19:00-20:00	0.4	0.5	0.4	0.4	0.4	0.3	
20:00-21:00	0.4	0.4	0.4	0.4	0.4	0.4	
21:00-22:00	0.3	0.4	0.4	0.4	0.4	0.4	
22:00-23:00	0.3	0.4	0.4	0.4	0.4	0.4	
23:00-00:00	0.4	0.4	0.4	0.4	0.4	0.4	
00:00-01:00	0.4	0.4	0.3	0.4	0.4	0.4	
01:00-02:00	0.4	0.4	0.3	0.4	0.4	0.4	
02:00-03:00	0.4	0.4	0.4	0.4	0.3	0.4	
03:00-04:00	0.4	0.4	0.4	0.4	0.3	0.4	
04:00-05:00	0.4	0.4	0.3	0.4	0.3	0.4	
05:00-06:00	0.5	0.4	0.4	0.4	0.3	0.4	
06:00-07:00	0.5	0.4	0.4	0.4	0.4	0.4	
07:00-08:00	0.5	0.4	0.4	0.4	0.4	0.4	
08:00-09:00	0.6	0.5	0.5	0.4	0.5	0.4	
09:00-10:00	0.5	0.5	0.4	0.4	0.4	0.4	
10:00-11:00	0.4	0.5	0.4	0.4	0.3	0.4	
11:00-12:00	0.4	0.5	0.3	0.4	0.3	0.4	
24 Hours Average	0.4	-	0.4	-	0.4	-	-
1 Hour Maximum	0.6	-	0.5	-	0.5	-	30
8 Hours Maximum	-	0.6	-	0.5	-	0.4	9

Remark : ^{1'} Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).


 (Ms.Piyatida Pradangkho)
 Laboratory Reviewer




 (Ms.Panicha Promchai)
 Laboratory Supervisor

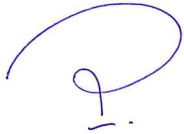
ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลว่ ระยะที่ 2
Measured Source : Ambient Air Quality
Measured Point : พื้นที่โครงการ (สำนักงานนิคม)
GPS. Coordinate : UTM (WGS84) 47P 0726887 E, 1443658 N
Measured Date : September 4-11, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : CO NDIR Analyzer Horiba Model APMA-370 Serial Number SFB4TS99

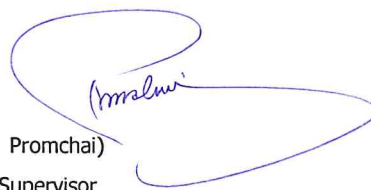
Quotation No. : 2023-00188
Analysis No. : 2023-AD853-022
Report No. : 2023-RAAS122
Report Date : September 25, 2023

Interval Time	Result CO (ppm)							
	Sep 4-5, 23		Sep 5-6, 23		Sep 6-7, 23		Sep 7-8, 23	
	1 hr Avg	8 hr Avg	1 hr Avg	8 hr Avg	1 hr Avg	8 hr Avg	1 hr Avg	8 hr Avg
11:00-12:00	0.4	-	0.4	0.5	0.4	0.5	0.4	0.5
12:00-13:00	0.5	-	0.4	0.5	0.4	0.5	0.5	0.5
13:00-14:00	0.5	-	0.4	0.5	0.4	0.5	0.4	0.5
14:00-15:00	0.5	-	0.4	0.4	0.4	0.5	0.4	0.5
15:00-16:00	0.5	-	0.4	0.4	0.4	0.4	0.5	0.4
16:00-17:00	0.5	-	0.4	0.4	0.4	0.4	0.5	0.4
17:00-18:00	0.5	-	0.5	0.4	0.5	0.4	0.6	0.5
18:00-19:00	0.5	0.5	0.5	0.4	0.5	0.4	0.5	0.5
19:00-20:00	0.6	0.5	0.5	0.4	0.5	0.4	0.6	0.5
20:00-21:00	0.5	0.5	0.5	0.4	0.5	0.4	0.7	0.5
21:00-22:00	0.5	0.5	0.4	0.4	0.5	0.5	0.6	0.6
22:00-23:00	0.4	0.5	0.5	0.5	0.4	0.5	0.6	0.6
23:00-00:00	0.4	0.5	0.5	0.5	0.4	0.5	0.5	0.6
00:00-01:00	0.4	0.5	0.4	0.5	0.4	0.5	0.5	0.6
01:00-02:00	0.4	0.5	0.4	0.5	0.5	0.5	0.4	0.6
02:00-03:00	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6
03:00-04:00	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.5
04:00-05:00	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5
05:00-06:00	0.4	0.4	0.5	0.4	0.5	0.4	0.5	0.5
06:00-07:00	0.5	0.4	0.6	0.5	0.6	0.5	0.7	0.5
07:00-08:00	0.7	0.4	0.7	0.5	0.7	0.5	0.8	0.5
08:00-09:00	0.5	0.5	0.5	0.5	0.5	0.5	0.9	0.6
09:00-10:00	0.4	0.5	0.5	0.5	0.5	0.5	0.8	0.6
10:00-11:00	0.4	0.5	0.4	0.5	0.4	0.5	0.6	0.6
24 Hours Average	0.5	-	0.5	-	0.5	-	0.6	-
1 Hour Maximum	0.7	-	0.7	-	0.7	-	0.9	-
8 Hours Maximum	-	0.5	-	0.5	-	0.5	-	0.6

Remark : ^{1/} Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).


 (Ms.Piyatida Pradangkho)
 Laboratory Reviewer




 (Ms.Panicha Promchai)
 Laboratory Supervisor


ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กถลุง ระยะที่ 2
Measured Source : Ambient Air Quality
Measured Point : พื้นที่โครงการ (สำนักงานนิคม)
GPS. Coordinate : UTM (WGS84) 47P 0726887 E, 1443658 N
Measured Date : September 4-11, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : CO NDIR Analyzer Horiba Model APMA-370 Serial Number SFB4TS99

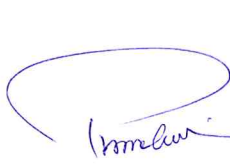
Quotation No. : 2023-00188
Analysis No. : 2023-AD853-022
Report No. : 2023-RAAS122
Report Date : September 25, 2023

Interval Time	Result CO (ppm)						Standard ^{1'}
	Sep 8-9, 23		Sep 9-10, 23		Sep 10-11, 23		
	1 hr Avg	8 hr Avg	1 hr Avg	8 hr Avg	1 hr Avg	8 hr Avg	
11:00-12:00	0.5	0.7	0.4	0.6	0.4	0.5	
12:00-13:00	0.4	0.6	0.4	0.6	0.4	0.5	
13:00-14:00	0.4	0.6	0.5	0.5	0.4	0.5	
14:00-15:00	0.5	0.6	0.5	0.5	0.4	0.5	
15:00-16:00	0.5	0.6	0.4	0.4	0.4	0.4	
16:00-17:00	0.5	0.5	0.4	0.4	0.5	0.4	
17:00-18:00	0.5	0.5	0.5	0.4	0.5	0.4	
18:00-19:00	0.5	0.5	0.5	0.4	0.5	0.4	
19:00-20:00	0.7	0.5	0.5	0.5	0.5	0.4	
20:00-21:00	0.5	0.5	0.5	0.5	0.5	0.5	
21:00-22:00	0.5	0.5	0.5	0.5	0.4	0.5	
22:00-23:00	0.5	0.5	0.4	0.5	0.4	0.5	
23:00-00:00	0.5	0.5	0.4	0.5	0.4	0.5	
00:00-01:00	0.6	0.5	0.4	0.5	0.4	0.4	
01:00-02:00	0.5	0.5	0.4	0.4	0.4	0.4	
02:00-03:00	0.5	0.5	0.4	0.4	0.4	0.4	
03:00-04:00	0.5	0.5	0.4	0.4	0.4	0.4	
04:00-05:00	0.6	0.5	0.5	0.4	0.4	0.4	
05:00-06:00	0.7	0.6	0.5	0.4	0.5	0.4	
06:00-07:00	0.8	0.6	0.6	0.4	0.8	0.5	
07:00-08:00	0.8	0.6	0.6	0.5	0.8	0.5	
08:00-09:00	0.5	0.6	0.6	0.5	0.6	0.5	
09:00-10:00	0.4	0.6	0.5	0.5	0.5	0.6	
10:00-11:00	0.4	0.6	0.4	0.5	0.5	0.6	
24 Hours Average	0.5	-	0.5	-	0.5	-	-
1 Hour Maximum	0.8	-	0.6	-	0.8	-	30
8 Hours Maximum	-	0.7	-	0.6	-	0.6	9

Remark : ^{1'} Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).


 (Ms.Piyatida Pradangkho)
 Laboratory Reviewer




 (Ms.Panicha Promchai)
 Laboratory Supervisor

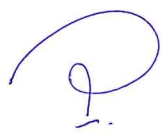
ANALYSIS REPORT

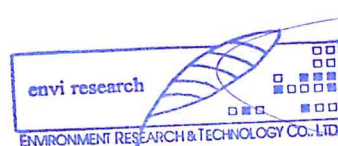
Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวอด ระยะที่ 2
Measured Source : Ambient Air Quality
Measured Point : พื้นที่โครงการ (สำนักงานนิคม)
GPS. Coordinate : UTM (WGS84) 47P 0726913 E, 1443647 N
Measured Date : September 4-11, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.

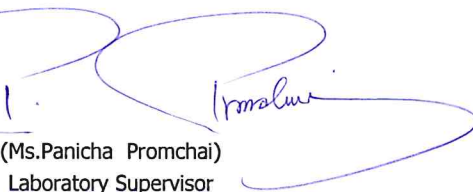
Quotation No. : 2023-00188
Analysis No. : 2023-AD853-022
Report No. : 2023-RAAR730
Report Date : September 19, 2023

Date/Time	Sep 4-5, 23		Sep 5-6, 23		Sep 6-7, 23		Sep 7-8, 23		Sep 8-9, 23		Sep 9-10, 23		Sep 10-11, 23	
	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD
11:00-12:00	2.2	W	4.0	W	2.7	WSW	2.7	WSW	0.9	SSW	3.1	WSW	2.2	WSW
12:00-13:00	3.1	W	4.9	WSW	3.6	WSW	3.1	WSW	2.2	WSW	3.6	WSW	2.7	WSW
13:00-14:00	3.1	W	4.0	WSW	4.0	WSW	3.6	W	2.2	WSW	3.6	WSW	3.1	WSW
14:00-15:00	4.0	W	4.5	WSW	4.0	WSW	3.1	WSW	2.7	NW	3.6	WSW	2.7	WSW
15:00-16:00	4.0	W	4.5	WSW	2.7	WSW	2.7	WSW	2.7	NW	3.1	WSW	3.1	WSW
16:00-17:00	2.7	WSW	3.6	WSW	3.1	WSW	2.7	WSW	2.7	WSW	3.6	WSW	2.7	WSW
17:00-18:00	2.2	W	2.7	SSW	2.7	WSW	2.2	WSW	2.2	NW	2.7	WSW	2.7	S
18:00-19:00	2.7	WSW	2.2	WSW	1.8	WSW	2.2	WSW	1.8	NW	1.8	WSW	3.1	S
19:00-20:00	2.2	SW	1.8	SW	1.3	SW	1.8	WSW	0.9	NW	2.7	S	3.1	S
20:00-21:00	2.7	SSW	1.8	SW	1.3	SSW	0.9	SW	2.2	S	3.1	S	2.7	S
21:00-22:00	1.8	SSW	2.2	SW	1.3	SW	0.9	SW	1.8	WSW	2.7	S	2.7	S
22:00-23:00	1.3	SSW	1.3	SW	0.9	S	0.4	S	0.9	ENE	1.3	S	1.8	SW
23:00-00:00	1.8	SW	0.4	NNE	0.9	WSW	0.4	SE	0.4	N	2.2	SW	2.2	SW
00:00-01:00	1.3	WSW	0.4	N	1.3	WSW	0.9	S	0.4	E	1.3	N	1.3	SW
01:00-02:00	1.8	WSW	1.8	WSW	0.4	S	0.4	S	0.4	SSE	0.4	SW	2.2	SW
02:00-03:00	1.8	W	1.8	SW	0.4	WSW	0.4	S	0.4	ENE	2.2	WSW	3.1	WSW
03:00-04:00	3.1	W	0.9	SW	0.9	WSW	0.9	SW	0.4	SSE	1.3	SW	2.2	WSW
04:00-05:00	1.8	WSW	0.4	SW	1.8	WSW	1.8	WSW	0.4	ENE	0.9	WSW	0.9	WSW
05:00-06:00	2.2	WSW	0.4	SSE	1.3	WSW	1.3	NNW	<0.4	Calm	0.4	E	0.4	SSW
06:00-07:00	0.9	WSW	0.9	S	0.4	SW	0.4	E	0.4	SSE	0.4	ENE	0.4	S
07:00-08:00	1.3	WSW	0.9	SW	0.4	SSW	0.4	SE	0.4	S	0.4	ESE	0.9	SSE
08:00-09:00	1.3	SSW	1.8	S	0.4	SW	0.4	ESE	0.9	S	1.8	SSE	1.8	SSE
09:00-10:00	2.2	WSW	1.8	S	1.3	WSW	0.4	SSE	2.2	WSW	2.2	S	2.2	S
10:00-11:00	3.6	WSW	1.8	S	2.2	WSW	0.9	S	3.1	WSW	2.2	SSW	3.1	S

Remark : WS = Wind Speed (m/s)
WD = Wind Direction
Height of wind vane and anemometer above ground 10 meters.


(Ms.Piyatida Pradangkho)
Laboratory Reviewer




(Ms.Panicha Promchai)
Laboratory Supervisor

ANALYSIS REPORT

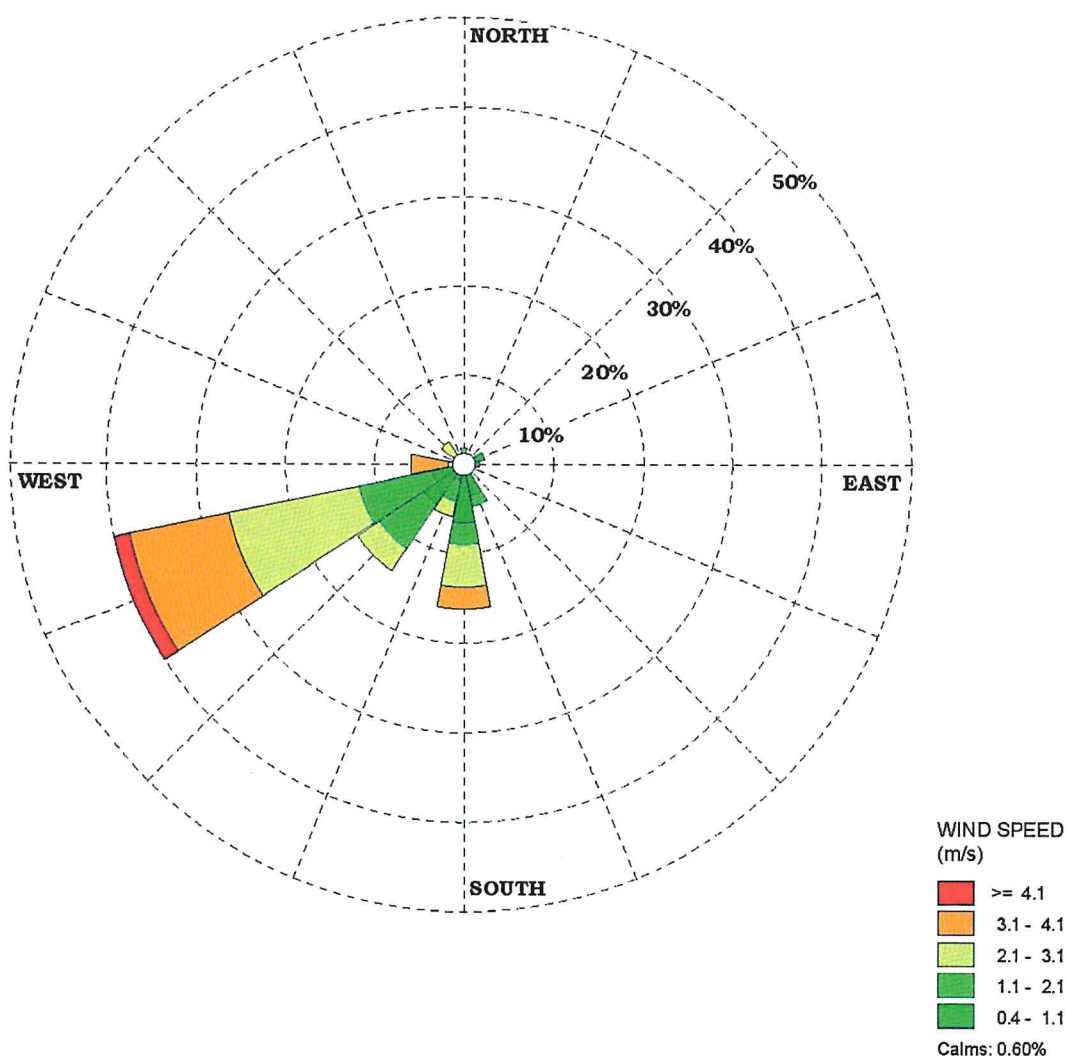
Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวอด ระยะที่ 2
Measured Source : Ambient Air Quality
Measured Point : พื้นที่โครงการ (สำนักงานนิคม)
GPS. Coordinate : UTM (WGS84) 47P 0726913 E, 1443647 N
Measured Date : September 4-11, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.

Quotation No. : 2023-00188
Analysis No. : 2023-AD853-022
Report No. : 2023-RAAR730
Report Date : September 19, 2023

Wind Direction	Percentage frequency of wind in each speed and direction					Total
	0.4-1.1	1.1-2.1	2.1-3.1	3.1-4.1	≥4.1	
N	1.19048	0.59524	0.00000	0.00000	0.00000	1.78572
NNE	0.59524	0.00000	0.00000	0.00000	0.00000	0.59524
NE	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
ENE	2.38095	0.00000	0.00000	0.00000	0.00000	2.38095
E	1.78571	0.00000	0.00000	0.00000	0.00000	1.78571
ESE	1.19048	0.00000	0.00000	0.00000	0.00000	1.19048
SE	1.19048	0.00000	0.00000	0.00000	0.00000	1.19048
SSE	3.57143	1.19048	0.00000	0.00000	0.00000	4.76191
S	6.54762	2.38095	4.76190	2.38095	0.00000	16.07142
SSW	1.78571	2.38095	1.78571	0.00000	0.00000	5.95237
SW	5.35714	5.95238	2.97619	0.00000	0.00000	14.28571
WSW	3.57143	8.33333	14.88100	11.30950	1.78571	39.88097
W	0.00000	0.59524	1.19048	4.16667	0.00000	5.95239
WNW	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NW	0.59524	0.59524	1.78571	0.00000	0.00000	2.97619
NNW	0.00000	0.59524	0.00000	0.00000	0.00000	0.59524
Calm	0.59524					

ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Project Name : โครงการขยายกำลังการผลิตเหล็กกลววด ระยะที่ 2
Measured Point : พื้นที่โครงการ (สำนักงานนิคม)
Measured Date : September 4-11, 2023
Report No. : 2023-RAAR730



ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กถลุง ระยะที่ 2
Sampling Source : Stack Air Quality
Sampling Point : ปล่องระบายอากาศของโรงหลอม
GPS. Coordinate : UTM (WGS84) 47P 0726478 E, 1443801 N
Sampling Date : September 9, 2023
Sampling Time : 14:10-14:58
Sampling Method : US.EPA. Method 1-4, 5, 6C, 7E, 10
Sampling By : Mr.Siwawut Thamnita, Registration No. ๖-099-๖-8840
Analyzed By : Environment Research & Technology Co., Ltd. Laboratory
Registration No.๖-099

Quotation No. : 2023-00188
Analysis No. : 2023-AD816-001
Received Date : September 11, 2023
Analytical Date : September 11-25, 2023
Report No. : 2023-RAAS138
Report Date : September 25, 2023

Item	Description	Method of Analysis	Unit	Result	Standard ^{2'}	Standard ^{3'}	Standard ^{4'}
1	Fuel Type	-	-	Electric	-	-	-
2	Combustion System	-	-	Open	-	-	-
3	Stack Height	Measuring Tape	m	35.0	-	-	-
4	Stack Diameter	Measuring Tape	m	4.50	-	-	-
5	Flue Gas Temperature	Thermocouple	°C	108	-	-	-
6	Pressure in Stack	Incline Manometer	mmHg	759	-	-	-
7	Oxygen Rate	Electrochemical Sensor	%	19.5	-	-	-
8	Moisture	Condensation Method	%	4.9	-	-	-
9	Air Velocity	Type S Pitot Tube	m/s	9.8	-	-	-
10	Volumetric Flow Rate	Calculate	Nm ³ /hr	416,125	-	-	-
11	Volumetric Flow Rate	Calculate	m ³ /hr	559,968	-	-	-
12	Sulfur Dioxide (SO ₂) ^{1'}	Instrumental Analyzer Method	ppm	<1.0	800	-	60
13	Sulfur Dioxide (SO ₂) ^{1'}	Instrumental Analyzer Method	mg/m ³	<2.6	2,096	-	157
14	Oxide of Nitrogen (NOx) ^{1'}	Instrumental Analyzer Method	ppm	4.3	200	-	200
15	Oxide of Nitrogen (NOx) ^{1'}	Instrumental Analyzer Method	mg/m ³	8.1	376	-	376
16	Total Suspended Particulate ^{1'}	Isokinetic, Gravimetric	mg/m ³	3.7	240	108	320
17	Carbon Monoxide (CO) ^{1'}	Instrumental Analyzer Method	ppm	101	-	-	690
18	Carbon Monoxide (CO) ^{1'}	Instrumental Analyzer Method	mg/m ³	116	-	-	790

Remark : ^{1'} Reference condition is 25 degree Celsius at 1 Atmosphere and Dry Basis.

^{2'} Notification of the Ministry of Science Technology and Environment dated March 9, B.E.2544 (2001), published in the Royal Government Gazette, Vol.118 Part 37D dated May 8, B.E.2544 (2001). (Existing Source)

^{3'} Standards as Defined in the Environmental Impact Assessment Report dated October 6, B.E.2548 (2005)

^{4'} Notification of the Ministry of Industry B.E.2549 (2006), issued under Factory Act B.E.2535 (1992), published in the Royal Government Gazette No.123 Special Part 125D dated December 4, B.E.2549 (2006).

(Ms.Natnicha Sermmatiwong)
Laboratory Reviewer No. ๖-099-๖-7666

(Ms.Ramita Taengthai)
Laboratory Supervisor No. ๖-099-๖-7664

ANALYSIS REPORT

Customer Name	: Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)	Quotation No.	: 2023-00188
Address	: 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230	Analysis No.	: 2023-AD816-001
Project Name	: โครงการขยายกำลังการผลิตเหล็กถลุง ระยะที่ 2	Received Date	: September 11, 2023
Sampling Source	: Stack Air Quality	Analytical Date	: September 11-22, 2023
Sampling Point	: ปล่องระบายอากาศของโรงหลอม	Report No.	: 2023-RAAS139
GPS. Coordinate	: UTM (WGS84) 47P 0726478 E, 1443801 N	Report Date	: September 25, 2023
Sampling Date	: September 9, 2023		
Sampling Time	: 14:10-14:58		
Sampling Method	: US.EPA. Method 1-4, 26, 29		
Sampling By	: Mr.Siwawut Thamnit, Registration No. ๖-099-๖-8840		
Analyzed By	: Environment Research & Technology Co., Ltd. Laboratory Registration No.๖-099		

Item	Description	Method of Analysis	Unit	Result	Standard ^{2'}	Standard ^{3'}	Standard ^{4'}
1	Fuel Type	-	-	Electric	-	-	-
2	Combustion System	-	-	Open	-	-	-
3	Stack Height	Measuring Tape	m	35.0	-	-	-
4	Stack Diameter	Measuring Tape	m	4.50	-	-	-
5	Flue Gas Temperature	Thermocouple	°C	108	-	-	-
6	Pressure in Stack	Incline Manometer	mmHg	759	-	-	-
7	Oxygen Rate	Electrochemical Sensor	%	19.5	-	-	-
8	Moisture	Condensation Method	%	4.9	-	-	-
9	Air Velocity	Type S Pitot Tube	m/s	9.8	-	-	-
10	Volumetric Flow Rate	Calculate	Nm ³ /hr	416,125	-	-	-
11	Volumetric Flow Rate	Calculate	m ³ /hr	559,968	-	-	-
12	Antimony ^{1'}	Isokinetic, Digestion, Inductively Coupled Plasma (ICP-OES)	mg/m ³	<0.005	-	-	16
13	Arsenic ^{1'}	Isokinetic, Digestion, Inductively Coupled Plasma (ICP-OES)	mg/m ³	<0.005	-	-	16
14	Copper ^{1'}	Isokinetic, Digestion, Inductively Coupled Plasma (ICP-OES)	mg/m ³	<0.005	-	-	24
15	Lead ^{1'}	Isokinetic, Digestion, Inductively Coupled Plasma (ICP-OES)	mg/m ³	0.009	-	-	24
16	Mercury ^{1'}	Isokinetic, Digestion, Cold-Vapor Atomic Absorption Spectrometry	mg/m ³	<0.005	-	-	2.4
17	Chlorine ^{1'}	Absorption, Ion Chromatography, Conductivity Detection	mg/m ³	3.5	-	-	24
18	Hydrogen Chloride ^{1'}	Absorption, Ion Chromatography, Conductivity Detection	mg/m ³	0.21	-	-	160

Remark : ^{1'} Reference condition is 25 degree Celsius at 1 Atmosphere and Dry Basis.

^{2'} Notification of the Ministry of Science Technology and Environment dated March 9, B.E.2544 (2001), published in the Royal Government Gazette, Vol.118 Part 37D dated May 8, B.E.2544 (2001). (Existing Source)

^{3'} Standards as Defined in the Environmental Impact Assessment Report dated October 6, B.E.2548 (2005)

^{4'} Notification of the Ministry of Industry B.E.2549 (2006), issued under Factory Act B.E.2535 (1992), published in the Royal Government Gazette No.123 Special Part 125D dated December 4, B.E.2549 (2006).

(Ms.Natnicha Sermmatiwong)

Laboratory Reviewer No. ๖-099-๖-7666

(Ms.Ramita Taengthai)

Laboratory Supervisor No. ๖-099-๖-7664

ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กถลุง ระยะที่ 2
Sampling Source : Stack Air Quality
Sampling Point : ปล่องระบายอากาศของโรงรีด 1
GPS. Coordinate : UTM (WGS84) 47P 0726366 E, 1443869 N
Sampling Date : September 9, 2023
Sampling Time : 11:30-12:28
Sampling Method : US.EPA. Method 1-4, 5, 6C, 7E, 10
Sampling By : Mr.Siwawut Thamnit, Registration No. ๖-099-๖-8840
Analyzed By : Environment Research & Technology Co., Ltd. Laboratory
Registration No.๖-099

Quotation No. : 2023-00188
Analysis No. : 2023-AD816-002
Received Date : September 11, 2023
Analytical Date : September 11-25, 2023
Report No. : 2023-RAAS140
Report Date : September 25, 2023

Item	Description	Method of Analysis	Unit	Result		Standard ^{2'}	Standard ^{3'}	Standard ^{4'}
				Actual Condition	Convert to Excess Oxygen 7%			
1	Fuel Type	-	-	Natural Gas		-	-	-
2	Combustion System	-	-	Close		-	-	-
3	Stack Height	Measuring Tape	m	25.0		-	-	-
4	Stack Diameter	Measuring Tape	m	1.90		-	-	-
5	Flue Gas Temperature	Thermocouple	°C	276	-	-	-	-
6	Pressure in Stack	Incline Manometer	mmHg	760	-	-	-	-
7	Oxygen Rate	Electrochemical Sensor	%	11.2	-	-	-	-
8	Moisture	Condensation Method	%	8.1	-	-	-	-
9	Air Velocity	Type S Pitot Tube	m/s	15.1	-	-	-	-
10	Volumetric Flow Rate ^{1'}	Calculate	Nm ³ /hr	76,879	-	-	-	-
11	Volumetric Flow Rate	Calculate	m ³ /hr	154,175	-	-	-	-
12	Sulfur Dioxide (SO ₂) ^{1'}	Instrumental Analyzer Method	ppm	<1.0	<1.0	800	60	60
13	Sulfur Dioxide (SO ₂) ^{1'}	Instrumental Analyzer Method	mg/m ³	<2.6	<2.6	2,096	157	157
14	Oxide of Nitrogen (NO _x) ^{1'}	Instrumental Analyzer Method	ppm	27	39	200	180	200
15	Oxide of Nitrogen (NO _x) ^{1'}	Instrumental Analyzer Method	mg/m ³	50	72	376	339	376
16	Total Suspended Particulate ^{1'}	Isokinetic, Gravimetric	mg/m ³	5.5	7.9	240	216	320
17	Carbon Monoxide (CO) ^{1'}	Instrumental Analyzer Method	ppm	59	85	-	-	690
18	Carbon Monoxide (CO) ^{1'}	Instrumental Analyzer Method	mg/m ³	67	96	-	-	790

Remark : ^{1'} Reference condition is 25 degree Celsius at 1 Atmosphere and Dry Basis.

^{2'} Notification of the Ministry of Science Technology and Environment dated March 9, B.E.2544 (2001), published in the Royal Government Gazette, Vol.118 Part 37D dated May 8, B.E.2544 (2001). (Existing Source)

^{3'} Standards as Defined in the Environmental Impact Assessment Report dated October 6, B.E.2548 (2005)

^{4'} Notification of the Ministry of Industry B.E.2549 (2006), issued under Factory Act B.E.2535 (1992), published in the Royal Government Gazette No.123 Special Part 125D dated December 4, B.E.2549 (2006).

Ncl

(Ms.Natnicha Sermmatiwong)

Laboratory Reviewer No. ๖-099-๖-7666



Ramita

(Ms.Ramita Taengthai)

Laboratory Supervisor No. ๖-099-๖-7664

ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวด ระยะที่ 2
Sampling Source : Stack Air Quality
Sampling Point : ปล่องระบายอากาศของโรงรีด 1
GPS. Coordinate : UTM (WGS84) 47P 0726366 E, 1443869 N
Sampling Date : September 9, 2023
Sampling Time : 11:30-12:28
Sampling Method : US.EPA. Method 1-4, 26, 29
Sampling By : Mr.Siwawut Thamnita, Registration No. ๖-099-๖-8840
Analyzed By : Environment Research & Technology Co., Ltd. Laboratory Registration No.๖-099

Quotation No. : 2023-00188
Analysis No. : 2023-AD816-002
Received Date : September 11, 2023
Analytical Date : September 11-22, 2023
Report No. : 2023-RAAS141
Report Date : September 25, 2023


Item	Description	Method of Analysis	Unit	Result		Standard ^{2'}	Standard ^{3'}	Standard ^{4'}
				Actual Condition	Convert to Excess Oxygen 7%			
1	Fuel Type	-	-	Natural Gas		-	-	-
2	Combustion System	-	-	Close		-	-	-
3	Stack Height	Measuring Tape	m	25.0		-	-	-
4	Stack Diameter	Measuring Tape	m	1.90		-	-	-
5	Flue Gas Temperature	Thermocouple	°C	276	-	-	-	-
6	Pressure in Stack	Incline Manometer	mmHg	760	-	-	-	-
7	Oxygen Rate	Electrochemical Sensor	%	11.2	-	-	-	-
8	Moisture	Condensation Method	%	8.1	-	-	-	-
9	Air Velocity	Type S Pitot Tube	m/s	15.1	-	-	-	-
10	Volumetric Flow Rate ^{1'}	Calculate	Nm ³ /hr	76,879	-	-	-	-
11	Volumetric Flow Rate	Calculate	m ³ /hr	154,175	-	-	-	-
12	Antimony ^{1'}	Isokinetic, Digestion, Inductively Coupled Plasma (ICP-OES)	mg/m ³	<0.005	<0.005	-	-	16
13	Arsenic ^{1'}	Isokinetic, Digestion, Inductively Coupled Plasma (ICP-OES)	mg/m ³	<0.005	<0.005	-	-	16
14	Copper ^{1'}	Isokinetic, Digestion, Inductively Coupled Plasma (ICP-OES)	mg/m ³	0.096	0.138	-	-	24
15	Lead ^{1'}	Isokinetic, Digestion, Inductively Coupled Plasma (ICP-OES)	mg/m ³	0.185	0.265	-	-	24
16	Mercury ^{1'}	Isokinetic, Digestion, Cold-Vapor Atomic Absorption Spectrometry	mg/m ³	<0.005	<0.005	-	-	2.4
17	Chlorine ^{1'}	Absorption, Ion Chromatography, Conductivity Detection	mg/m ³	4.8	6.9	-	-	24
18	Hydrogen Chloride ^{1'}	Absorption, Ion Chromatography, Conductivity Detection	mg/m ³	1.2	1.7	-	-	160

Remark : ^{1'} Reference condition is 25 degree Celsius at 1 Atmosphere and Dry Basis.

^{2'} Notification of the Ministry of Science Technology and Environment dated March 9, B.E.2544 (2001), published in the Royal Government Gazette, Vol.118 Part 37D dated May 8, B.E.2544 (2001). (Existing Source)

^{3'} Standards as Defined in the Environmental Impact Assessment Report dated October 6, B.E.2548 (2005)

^{4'} Notification of the Ministry of Industry B.E.2549 (2006), issued under Factory Act B.E.2535 (1992), published in the Royal Government Gazette No.123 Special Part 125D dated December 4, B.E.2549 (2006).


 (Ms.Natnicha Sermmatiwong)

Laboratory Reviewer No. ๖-099-๖-7666


 ENVIRONMENT RESEARCH & TECHNOLOGY CO., LTD.


 (Ms.Ramita Taengthai)

Laboratory Supervisor No. ๖-099-๖-7664

ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กถลุง ระยะที่ 2
Sampling Source : Stack Air Quality
Sampling Point : ปล่องระบายอากาศของโรงรีด 2
GPS. Coordinate : UTM (WGS84) 47P 0726239 E, 1443865 N
Sampling Date : September 9, 2023
Sampling Time : 10:00-10:58
Sampling Method : US.EPA. Method 1-4, 5, 6C, 7E, 10
Sampling By : Mr.Siwawut Thamnita, Registration No. ว-099-จ-8840
Analyzed By : Environment Research & Technology Co., Ltd. Laboratory Registration No.ว-099

Quotation No. : 2023-00188
Analysis No. : 2023-AD816-003
Received Date : September 11, 2023
Analytical Date : September 11-15, 2023
Report No. : 2023-RAAS142
Report Date : September 25, 2023

Item	Description	Method of Analysis	Unit	Result		Standard ^{2'}	Standard ^{3'}	Standard ^{4'}
				Actual Condition	Convert to Excess Oxygen 7%			
1	Fuel Type	-	-	Natural Gas		-	-	-
2	Combustion System	-	-	Close		-	-	-
3	Stack Height	Measuring Tape	m	65.0		-	-	-
4	Stack Diameter	Measuring Tape	m	2.30		-	-	-
5	Flue Gas Temperature	Thermocouple	°C	205	-	-	-	-
6	Pressure in Stack	Incline Manometer	mmHg	759	-	-	-	-
7	Oxygen Rate	Electrochemical Sensor	%	5.3	-	-	-	-
8	Moisture	Condensation Method	%	5.4	-	-	-	-
9	Air Velocity	Type S Pitot Tube	m/s	8.7	-	-	-	-
10	Volumetric Flow Rate ^{1'}	Calculate	Nm ³ /hr	76,691	-	-	-	-
11	Volumetric Flow Rate	Calculate	m ³ /hr	130,248	-	-	-	-
12	Sulfur Dioxide (SO ₂) ^{1'}	Instrumental Analyzer Method	ppm	<1.0	<1.0	800	60	60
13	Sulfur Dioxide (SO ₂) ^{1'}	Instrumental Analyzer Method	mg/m ³	<2.6	<2.6	2,096	157	157
14	Oxide of Nitrogen (NO _x) ^{1'}	Instrumental Analyzer Method	ppm	51	45	200	162	200
15	Oxide of Nitrogen (NO _x) ^{1'}	Instrumental Analyzer Method	mg/m ³	96	86	376	305	376
16	Total Suspended Particulate ^{1'}	Isokinetic, Gravimetric	mg/m ³	7.9	7.0	240	108	320
17	Carbon Monoxide (CO) ^{1'}	Instrumental Analyzer Method	ppm	<1.0	<1.0	-	-	690
18	Carbon Monoxide (CO) ^{1'}	Instrumental Analyzer Method	mg/m ³	<1.1	<1.1	-	-	790

Remark : ^{1'} Reference condition is 25 degree Celsius at 1 Atmosphere and Dry Basis.

^{2'} Notification of the Ministry of Science Technology and Environment dated March 9, B.E.2544 (2001), published in the Royal Government Gazette, Vol.118 Part 37D dated May 8, B.E.2544 (2001). (Existing Source)

^{3'} Standards as Defined in the Environmental Impact Assessment Report dated October 6, B.E.2548 (2005)

^{4'} Notification of the Ministry of Industry B.E.2549 (2006), issued under Factory Act B.E.2535 (1992), published in the Royal Government Gazette No.123 Special Part 125D dated December 4, B.E.2549 (2006).

Not
(Ms.Natnicha Sermmatiwong)

Laboratory Reviewer No. ว-099-จ-7666



(Ms.Ramita Taengthai)

Laboratory Supervisor No. ว-099-จ-7664

ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวด ระยะที่ 2
Sampling Source : Stack Air Quality
Sampling Point : ปล่องระบายอากาศของโรงรีด 2
GPS. Coordinate : UTM (WGS84) 47P 0726239 E, 1443865 N
Sampling Date : September 9, 2023
Sampling Time : 10:00-10:58
Sampling Method : US.EPA. Method 1-4, 26, 29
Sampling By : Mr.Siwawut Thamnita, Registration No. ว-099-จ-8840
Analyzed By : Environment Research & Technology Co., Ltd. Laboratory Registration No.ว-099

Quotation No. : 2023-00188
Analysis No. : 2023-AD816-003
Received Date : September 11, 2023
Analytical Date : September 11-22, 2023
Report No. : 2023-RAAS143
Report Date : September 25, 2023

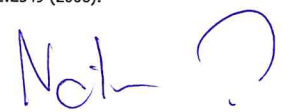
Item	Description	Method of Analysis	Unit	Result		Standard ^{2'}	Standard ^{3'}	Standard ^{4'}
				Actual Condition	Convert to Excess Oxygen 7%			
1	Fuel Type	-	-	Natural Gas		-	-	-
2	Combustion System	-	-	Close		-	-	-
3	Stack Height	Measuring Tape	m	65.0		-	-	-
4	Stack Diameter	Measuring Tape	m	2.30		-	-	-
5	Flue Gas Temperature	Thermocouple	°C	205	-	-	-	-
6	Pressure in Stack	Incline Manometer	mmHg	759	-	-	-	-
7	Oxygen Rate	Electrochemical Sensor	%	5.3	-	-	-	-
8	Moisture	Condensation Method	%	5.4	-	-	-	-
9	Air Velocity	Type S Pitot Tube	m/s	8.7	-	-	-	-
10	Volumetric Flow Rate ^{1'}	Calculate	Nm ³ /hr	76,691	-	-	-	-
11	Volumetric Flow Rate	Calculate	m ³ /hr	130,248	-	-	-	-
12	Antimony ^{1'}	Isokinetic, Digestion, Inductively Coupled Plasma (ICP-OES)	mg/m ³	<0.005	<0.005	-	-	16
13	Arsenic ^{1'}	Isokinetic, Digestion, Inductively Coupled Plasma (ICP-OES)	mg/m ³	<0.005	<0.005	-	-	16
14	Copper ^{1'}	Isokinetic, Digestion, Inductively Coupled Plasma (ICP-OES)	mg/m ³	0.161	0.143	-	-	24
15	Lead ^{1'}	Isokinetic, Digestion, Inductively Coupled Plasma (ICP-OES)	mg/m ³	0.032	0.029	-	-	24
16	Mercury ^{1'}	Isokinetic, Digestion, Cold-Vapor Atomic Absorption Spectrometry	mg/m ³	<0.005	<0.005	-	-	2.4
17	Chlorine ^{1'}	Absorption, Ion Chromatography, Conductivity Detection	mg/m ³	3.5	3.1	-	-	24
18	Hydrogen Chloride ^{1'}	Absorption, Ion Chromatography, Conductivity Detection	mg/m ³	0.24	0.21	-	-	160

Remark : ^{1'} Reference condition is 25 degree Celsius at 1 Atmosphere and Dry Basis.

^{2'} Notification of the Ministry of Science Technology and Environment dated March 9, B.E.2544 (2001), published in the Royal Government Gazette, Vol.118 Part 37D dated May 8, B.E.2544 (2001). (Existing Source)


^{3'} Standards as Defined in the Environmental Impact Assessment Report dated October 6, B.E.2548 (2005)

^{4'} Notification of the Ministry of Industry B.E.2549 (2006), issued under Factory Act B.E.2535 (1992), published in the Royal Government Gazette No.123 Special Part 125D dated December 4, B.E.2549 (2006).


(Ms.Natnicha Sermmatiwong)

Laboratory Reviewer No. ว-099-ค-7666


ENVIRONMENT RESEARCH & TECHNOLOGY CO., LTD.


(Ms.Ramita Taengthai)

Laboratory Supervisor No. ว-099-ค-7664

ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวอด ระยะที่ 2
Sampling Source : Surface Water Sampling
Sampling Point : อ่างเก็บน้ำของบริษัท
GPS. Coordinate : UTM (WGS84) 47P 0725682 E, 1443918 N
Sampling Date : September 5, 2023
Sampling Time : 12:11
Sampling Method : Grab
Sampling By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Physical Properties : Turbid, Light Yellow, Sediment, Odor

Quotation No. : 2023-00188
Analysis No. : 2023-AD753-001
Received Date : September 6, 2023
Analytical Date : September 6-14, 2023
Report No. : 2023-RAAR761
Report Date : September 19, 2023

Parameter	Unit	Method of Analysis ^{1'}	Result	Standard ^{2'}
pH	-	Electrometric	8.9	5.0-9.0
Dissolved Oxygen	mg/L	Membrane Electrode	6.2	≥2.0
Fat Oil and Grease	mg/L	Liquid-Liquid Partition, Gravimetric	1.2	-
Total Dissolved Solids	mg/L	Dried at 180°C	313	-
Total Suspended Solids	mg/L	Dried at 103-105°C	24	-

Remark : ^{1'} Standard Method for Examination of Water and Wastewater, 23rd Edition, 2017.

^{2'} Notification of the National Environment Board, No.8, B.E.2537 (1994), issued under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.111 Part 16, dated February 24, B.E.2537 (1994). (Standard Value of Surface Water for Class 4)



(Ms.Yuwadee Na Ranong)
Laboratory Reviewer




(Mr.Virat Hemvannanukul)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลววด ระยะที่ 2
Sampling Source : Surface Water Sampling
Sampling Point : อ่างเก็บน้ำของบริษัท
GPS. Coordinate : UTM (WGS84) 47P 0725682 E, 1443918 N
Sampling Date : December 26, 2023
Sampling Time : 10:25
Sampling Method : Grab
Sampling By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Physical Properties : Turbid, Light Yellow, Sediment, Odor

Quotation No. : 2023-00188
Analysis No. : 2023-AF870-001
Received Date : December 27, 2023
Analytical Date : December 27, 2023-January 10, 2024
Report No. : 2024-RAAA660
Report Date : January 11, 2024

Parameter	Unit	Method of Analysis ^{1'}	Result	Standard ^{2'}
pH	-	Electrometric	8.4	5.0-9.0
Dissolved Oxygen	mg/L	Membrane Electrode	4.6	≥2.0
Fat Oil and Grease	mg/L	Liquid-Liquid Partition, Gravimetric	<1.0	-
Total Dissolved Solids	mg/L	Dried at 180°C	365	-
Total Suspended Solids	mg/L	Dried at 103-105°C	6.8	-

Remark : ^{1'} Standard Method for Examination of Water and Wastewater, 23rd Edition, 2017.

^{2'} Notification of the National Environment Board, No.8, B.E.2537 (1994), issued under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.111 Part 16, dated February 24, B.E.2537 (1994). (Standard Value of Surface Water for Class 4)



(Ms.Yuwadee Na Ranong)
Laboratory Reviewer




(Mr.Virat Hemvannanukul)
Laboratory Supervisor

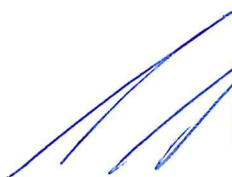
ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กถลุง ระยะที่ 2
Measured Source : Ambient Noise
Measured Point : ริมรั้วโรงงานด้านทิศใต้
GPS. Coordinate : UTM (WGS84) 47P 0725717 E, 1443549 N
Measured Date : September 7-8, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820453


Quotation No. : 2023-00188
Analysis No. : 2023-AD853-029
Report No. : 2023-RAAR741
Report Date : September 19, 2023

Interval Time	Noise Level, dB(A)		
	Leq	Lmax	L90
09:00-10:00	48.1	85.0	43.7
10:00-11:00	49.1	67.4	43.2
11:00-12:00	47.3	78.1	41.5
12:00-13:00	44.1	83.2	41.2
13:00-14:00	48.8	73.3	44.6
14:00-15:00	48.3	84.4	45.6
15:00-16:00	48.1	70.1	45.4
16:00-17:00	48.9	75.5	45.1
17:00-18:00	47.9	71.9	45.2
18:00-19:00	49.9	74.5	46.8
19:00-20:00	48.7	81.7	46.0
20:00-21:00	50.6	84.3	47.2
21:00-22:00	49.2	68.4	46.8
22:00-23:00	50.1	83.6	46.5
23:00-00:00	48.5	79.3	45.2
00:00-01:00	47.3	74.8	45.4
01:00-02:00	48.6	63.3	46.4
02:00-03:00	48.0	62.0	45.9
03:00-04:00	47.6	62.9	45.7
04:00-05:00	48.1	72.8	46.0
05:00-06:00	49.3	63.1	47.2
06:00-07:00	49.9	63.8	47.2
07:00-08:00	48.9	85.7	45.7
08:00-09:00	50.9	77.3	46.3
24 Hours Measurement	48.8	85.7	45.7
Standard^{1/}	70	115	-
Ldn	55.1	-	-

Remark : ^{1/} Notification of the Ministry of Industry B.E.2548 (2005), issued under Factory Act B.E.2535 (1992), published in the Royal Government Gazette No.123 Special Part 11D dated January 25, B.E.2549 (2006).



(Ms. Supawan Suwannapa)
Laboratory Reviewer

(Ms. Thanida Bunrungrueang)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวด ระยะที่ 2
Measured Source : Ambient Noise
Measured Point : ริมรั้วโรงงานด้านทิศใต้
GPS. Coordinate : UTM (WGS84) 47P 0725717 E, 1443549 N
Measured Date : September 8-9, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820453

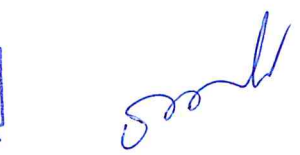
Quotation No. : 2023-00188
Analysis No. : 2023-AD853-029
Report No. : 2023-RAAR741
Report Date : September 19, 2023

Interval Time	Noise Level, dB(A)		
	Leq	Lmax	L90
09:00-10:00	49.2	73.1	47.3
10:00-11:00	48.3	66.1	45.7
11:00-12:00	48.7	85.5	44.5
12:00-13:00	44.9	63.2	43.9
13:00-14:00	48.4	64.7	46.0
14:00-15:00	48.2	71.4	46.0
15:00-16:00	48.8	64.3	46.0
16:00-17:00	49.1	83.6	45.7
17:00-18:00	48.5	62.2	45.9
18:00-19:00	49.3	89.1	46.6
19:00-20:00	48.7	75.1	46.1
20:00-21:00	53.2	77.7	47.6
21:00-22:00	51.0	68.7	48.3
22:00-23:00	51.2	84.4	48.1
23:00-00:00	50.2	83.2	48.0
00:00-01:00	49.2	61.0	47.6
01:00-02:00	49.2	58.1	46.8
02:00-03:00	48.9	59.2	47.2
03:00-04:00	47.0	57.6	44.4
04:00-05:00	46.9	70.7	44.6
05:00-06:00	49.4	61.6	46.6
06:00-07:00	50.1	65.8	47.3
07:00-08:00	48.8	64.4	43.5
08:00-09:00	48.2	61.5	45.5
24 Hours Measurement	49.3	89.1	46.4
Standard^{1'}	70	115	-
Ldn	55.7	-	-

Remark : ^{1'} Notification of the Ministry of Industry B.E.2548 (2005), issued under Factory Act B.E.2535 (1992), published in the Royal Government Gazette No.123 Special Part 11D dated January 25, B.E.2549 (2006).




(Ms. Supawan Suwannapa)
Laboratory Reviewer



(Ms. Thanida Bunrungrueang)
Laboratory Supervisor

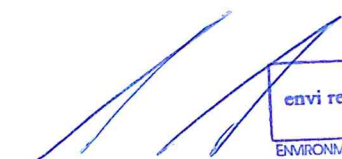
ANALYSIS REPORT


Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวด ระยะที่ 2
Measured Source : Ambient Noise
Measured Point : ริมรั้วโรงงานด้านทิศใต้
GPS. Coordinate : UTM (WGS84) 47P 0725717 E, 1443549 N
Measured Date : September 9-10, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820453


Quotation No. : 2023-00188
Analysis No. : 2023-AD853-029
Report No. : 2023-RAAR741
Report Date : September 19, 2023

Interval Time	Noise Level, dB(A)		
	Leq	Lmax	L90
09:00-10:00	48.9	70.1	44.9
10:00-11:00	47.5	61.9	44.8
11:00-12:00	46.7	63.3	42.4
12:00-13:00	45.5	67.2	42.1
13:00-14:00	48.1	66.4	44.4
14:00-15:00	47.2	62.3	44.1
15:00-16:00	51.9	80.0	44.7
16:00-17:00	48.9	81.1	43.8
17:00-18:00	47.3	79.6	43.3
18:00-19:00	48.3	61.7	45.4
19:00-20:00	48.8	71.1	46.2
20:00-21:00	48.2	72.0	45.2
21:00-22:00	47.9	75.7	44.5
22:00-23:00	50.0	83.4	45.7
23:00-00:00	50.3	76.2	46.3
00:00-01:00	48.9	66.3	45.7
01:00-02:00	53.4	70.1	48.1
02:00-03:00	50.2	63.7	46.4
03:00-04:00	47.9	64.5	45.6
04:00-05:00	44.4	66.6	43.0
05:00-06:00	45.3	67.7	42.1
06:00-07:00	46.4	63.6	44.2
07:00-08:00	45.7	64.5	43.7
08:00-09:00	48.2	79.7	43.7
24 Hours Measurement	48.7	83.4	44.8
Standard¹⁾	70	115	-
Ldn	55.6	-	-

Remark : ¹⁾ Notification of the Ministry of Industry B.E.2548 (2005), issued under Factory Act B.E.2535 (1992), published in the Royal Government Gazette No.123 Special Part 11D dated January 25, B.E.2549 (2006).


 (Ms. Supawan Suwannapa)
 Laboratory Reviewer


 ENVIRONMENT RESEARCH & TECHNOLOGY CO., LTD.


 (Ms. Thanida Bunrungrueang)
 Laboratory Supervisor


ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวอด ระยะที่ 2
Measured Source : Ambient Noise
Measured Point : ริมรั้วโรงงานด้านทิศตะวันตก
GPS. Coordinate : UTM (WGS84) 47P 0725956 E, 1444046 N
Measured Date : September 7-8, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820451


Quotation No. : 2023-00188
Analysis No. : 2023-AD853-030
Report No. : 2023-RAAR742
Report Date : September 19, 2023

Interval Time	Noise Level, dB(A)		
	Leq	Lmax	L90
09:00-10:00	50.6	82.2	45.6
10:00-11:00	51.2	77.1	45.4
11:00-12:00	50.3	76.8	44.4
12:00-13:00	47.2	74.5	43.5
13:00-14:00	50.6	74.6	45.5
14:00-15:00	49.2	78.1	45.0
15:00-16:00	48.4	73.0	44.8
16:00-17:00	48.3	81.1	44.9
17:00-18:00	49.3	68.5	44.8
18:00-19:00	50.3	75.4	46.5
19:00-20:00	50.5	72.6	46.2
20:00-21:00	49.4	81.3	46.8
21:00-22:00	52.0	77.0	47.1
22:00-23:00	49.9	69.5	47.5
23:00-00:00	48.6	75.0	46.9
00:00-01:00	48.4	72.9	47.1
01:00-02:00	50.2	73.7	47.5
02:00-03:00	50.8	77.0	47.1
03:00-04:00	50.8	68.9	46.6
04:00-05:00	48.1	74.4	46.2
05:00-06:00	49.8	68.5	47.4
06:00-07:00	51.2	73.7	47.8
07:00-08:00	48.9	70.1	47.3
08:00-09:00	54.3	74.4	46.5
24 Hours Measurement	50.2	82.2	46.3
Standard¹⁾	70	115	-
Ldn	56.4	-	-

Remark : ¹⁾ Notification of the Ministry of Industry B.E.2548 (2005), issued under Factory Act B.E.2535 (1992), published in the Royal Government Gazette No.123 Special Part 11D dated January 25, B.E.2549 (2006).



(Ms. Supawan Suwannapa)
Laboratory Reviewer

(Ms. Thanida Bunrungrueang)
Laboratory Supervisor

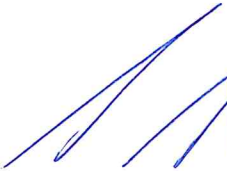
ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวด ระยะที่ 2
Measured Source : Ambient Noise
Measured Point : ริมรั้วโรงงานด้านทิศตะวันตก
GPS. Coordinate : UTM (WGS84) 47P 0725956 E, 1444046 N
Measured Date : September 8-9, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820451


Quotation No. : 2023-00188
Analysis No. : 2023-AD853-030
Report No. : 2023-RAAR742
Report Date : September 19, 2023

Interval Time	Noise Level, dB(A)		
	Leq	Lmax	L90
09:00-10:00	49.3	72.6	46.5
10:00-11:00	48.9	72.1	46.2
11:00-12:00	50.7	73.4	44.9
12:00-13:00	45.6	70.6	43.4
13:00-14:00	47.9	69.6	44.4
14:00-15:00	47.3	81.4	43.7
15:00-16:00	50.3	70.3	44.7
16:00-17:00	48.8	78.2	44.0
17:00-18:00	49.3	72.1	44.7
18:00-19:00	49.6	79.5	46.3
19:00-20:00	48.4	70.2	46.7
20:00-21:00	54.1	79.6	47.3
21:00-22:00	50.7	85.2	47.3
22:00-23:00	54.8	81.4	48.4
23:00-00:00	51.0	73.5	49.7
00:00-01:00	48.8	66.6	47.4
01:00-02:00	47.8	67.5	47.0
02:00-03:00	49.4	72.6	47.1
03:00-04:00	48.3	78.7	46.5
04:00-05:00	48.3	77.7	46.6
05:00-06:00	49.8	64.1	47.5
06:00-07:00	50.7	73.2	47.8
07:00-08:00	49.4	65.8	47.0
08:00-09:00	50.6	72.6	45.8
24 Hours Measurement	50.1	85.2	46.6
Standard^{1'}	70	115	-
Ldn	56.8	-	-

Remark : ^{1'} Notification of the Ministry of Industry B.E.2548 (2005), issued under Factory Act B.E.2535 (1992), published in the Royal Government Gazette No.123 Special Part 11D dated January 25, B.E.2549 (2006).


 (Ms. Supawan Suwannapa)
 Laboratory Reviewer




 (Ms. Thanida Bunrungrueang)
 Laboratory Supervisor

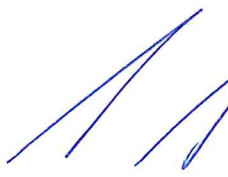
ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวด ระยะที่ 2
Measured Source : Ambient Noise
Measured Point : ริมรั้วโรงงานด้านทิศตะวันตก
GPS. Coordinate : UTM (WGS84) 47P 0725956 E, 1444046 N
Measured Date : September 9-10, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820451


Quotation No. : 2023-00188
Analysis No. : 2023-AD853-030
Report No. : 2023-RAAR742
Report Date : September 19, 2023

Interval Time	Noise Level, dB(A)		
	Leq	Lmax	L90
09:00-10:00	49.7	73.0	45.6
10:00-11:00	49.8	73.9	45.5
11:00-12:00	50.2	73.5	45.4
12:00-13:00	46.5	62.5	44.2
13:00-14:00	47.9	81.8	45.0
14:00-15:00	47.1	66.8	44.8
15:00-16:00	49.4	70.8	45.3
16:00-17:00	51.6	76.6	45.3
17:00-18:00	47.8	77.6	45.3
18:00-19:00	49.7	83.0	47.0
19:00-20:00	49.4	68.3	47.2
20:00-21:00	49.0	71.8	46.7
21:00-22:00	47.9	62.6	46.6
22:00-23:00	48.8	63.6	47.0
23:00-00:00	48.5	62.3	46.7
00:00-01:00	48.7	64.9	46.6
01:00-02:00	60.2	69.4	49.5
02:00-03:00	61.4	72.4	53.5
03:00-04:00	57.7	72.0	49.1
04:00-05:00	54.1	69.0	47.4
05:00-06:00	54.2	65.2	47.6
06:00-07:00	51.3	71.0	47.8
07:00-08:00	48.3	62.4	47.2
08:00-09:00	49.5	67.5	47.1
24 Hours Measurement	53.3	83.0	47.4
Standard^{1'}	70	115	-
Ldn	62.2	-	-

Remark : ^{1'} Notification of the Ministry of Industry B.E.2548 (2005), issued under Factory Act B.E.2535 (1992), published in the Royal Government Gazette No.123 Special Part 11D dated January 25, B.E.2549 (2006).


 (Ms. Supawan Suwannapa)
 Laboratory Reviewer




 (Ms. Thanida Bunrungrueang)
 Laboratory Supervisor


ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวอด ระยะที่ 2
Measured Source : Ambient Noise
Measured Point : หน้าอาคารสำนักงาน
GPS. Coordinate : UTM (WGS84) 47P 0726693 E, 1443425 N
Measured Date : September 7-8, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820444

Quotation No. : 2023-00188
Analysis No. : 2023-AD853-031
Report No. : 2023-RAAR743
Report Date : September 19, 2023

Interval Time	Noise Level, dB(A)		
	Leq	Lmax	L90
10:00-11:00	64.8	82.3	60.8
11:00-12:00	63.2	76.7	60.0
12:00-13:00	63.2	81.2	60.1
13:00-14:00	62.5	75.9	59.7
14:00-15:00	63.0	76.4	59.8
15:00-16:00	62.9	73.4	59.7
16:00-17:00	62.9	75.3	59.6
17:00-18:00	63.3	74.4	60.3
18:00-19:00	65.5	85.1	60.5
19:00-20:00	62.9	76.7	59.6
20:00-21:00	63.1	80.7	59.7
21:00-22:00	61.9	74.6	58.2
22:00-23:00	60.1	76.3	54.3
23:00-00:00	57.9	71.8	51.7
00:00-01:00	57.0	75.9	48.8
01:00-02:00	55.4	72.1	46.0
02:00-03:00	54.5	75.9	45.7
03:00-04:00	54.9	70.9	46.2
04:00-05:00	55.3	70.3	47.0
05:00-06:00	58.5	75.0	51.5
06:00-07:00	62.3	76.5	56.3
07:00-08:00	64.8	76.9	62.4
08:00-09:00	65.1	77.0	62.7
09:00-10:00	64.2	78.7	61.4
24 Hours Measurement	62.3	85.1	58.7
Standard¹⁾	70	115	-
Ldn	65.9	-	-

Remark : ¹⁾ Notification of the Ministry of Industry B.E.2548 (2005), issued under Factory Act B.E.2535 (1992), published in the Royal Government Gazette No.123 Special Part 11D dated January 25, B.E.2549 (2006).


 (Ms. Supawan Suwannapa)
 Laboratory Reviewer




 (Ms. Thanida Bunrungrueang)
 Laboratory Supervisor

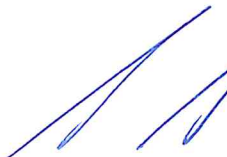
ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวอด ระยะที่ 2
Measured Source : Ambient Noise
Measured Point : หน้าอาคารสำนักงาน
GPS. Coordinate : UTM (WGS84) 47P 0726693 E, 1443425 N
Measured Date : September 8-9, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820444

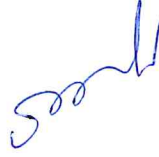
Quotation No. : 2023-00188
Analysis No. : 2023-AD853-031
Report No. : 2023-RAAR743
Report Date : September 19, 2023

Interval Time	Noise Level, dB(A)		
	Leq	Lmax	L90
10:00-11:00	63.5	74.5	60.6
11:00-12:00	63.4	81.0	59.9
12:00-13:00	63.0	78.7	59.6
13:00-14:00	62.7	72.5	59.4
14:00-15:00	62.2	76.3	59.2
15:00-16:00	63.0	80.8	59.6
16:00-17:00	63.1	77.7	60.2
17:00-18:00	63.5	77.2	60.6
18:00-19:00	63.9	77.3	61.2
19:00-20:00	63.4	78.3	60.1
20:00-21:00	62.4	80.3	58.8
21:00-22:00	60.5	76.3	55.2
22:00-23:00	57.6	70.6	52.2
23:00-00:00	57.4	74.3	51.6
00:00-01:00	56.9	76.5	48.5
01:00-02:00	56.0	74.1	45.3
02:00-03:00	55.8	74.7	46.4
03:00-04:00	55.8	72.8	46.2
04:00-05:00	59.5	80.5	50.7
05:00-06:00	61.0	76.2	55.5
06:00-07:00	64.7	81.8	61.1
07:00-08:00	64.4	74.0	61.5
08:00-09:00	63.3	76.9	60.2
09:00-10:00	63.3	75.9	60.1
24 Hours Measurement	62.1	81.8	58.5
Standard^{1'}	70	115	-
Ldn	66.6	-	-

Remark : ^{1'} Notification of the Ministry of Industry B.E.2548 (2005), issued under Factory Act B.E.2535 (1992), published in the Royal Government Gazette No.123 Special Part 11D dated January 25, B.E.2549 (2006).



(Ms. Supawan Suwannapa)
Laboratory Reviewer

(Ms. Thanida Bunrungrueang)
Laboratory Supervisor

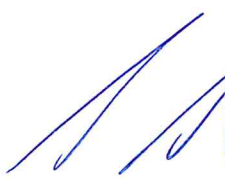
ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวด ระยะที่ 2
Measured Source : Ambient Noise
Measured Point : หน้าอาคารสำนักงาน
GPS. Coordinate : UTM (WGS84) 47P 0726693 E, 1443425 N
Measured Date : September 9-10, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820444

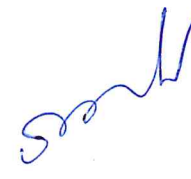
Quotation No. : 2023-00188
Analysis No. : 2023-AD853-031
Report No. : 2023-RAAR743
Report Date : September 19, 2023

Interval Time	Noise Level, dB(A)		
	Leq	Lmax	L90
10:00-11:00	63.9	87.0	60.0
11:00-12:00	63.0	82.4	59.7
12:00-13:00	62.5	79.1	59.0
13:00-14:00	63.2	81.1	59.4
14:00-15:00	62.8	76.1	59.3
15:00-16:00	62.4	76.4	59.1
16:00-17:00	63.9	88.5	59.8
17:00-18:00	64.3	83.7	60.8
18:00-19:00	63.9	77.3	61.1
19:00-20:00	63.4	73.9	59.4
20:00-21:00	61.9	77.2	58.1
21:00-22:00	60.4	78.8	55.2
22:00-23:00	58.5	76.0	52.9
23:00-00:00	56.6	70.6	49.5
00:00-01:00	57.5	74.5	48.9
01:00-02:00	61.9	72.4	57.3
02:00-03:00	58.9	68.3	55.3
03:00-04:00	58.6	71.8	55.7
04:00-05:00	58.5	72.7	54.1
05:00-06:00	59.3	73.4	53.3
06:00-07:00	63.3	84.7	58.6
07:00-08:00	64.3	82.4	60.3
08:00-09:00	63.6	75.5	60.4
09:00-10:00	64.3	79.6	60.6
24 Hours Measurement	62.3	88.5	58.4
Standard^{1'}	70	115	-
Ldn	66.9	-	-

Remark : ^{1'} Notification of the Ministry of Industry B.E.2548 (2005), issued under Factory Act B.E.2535 (1992), published in the Royal Government Gazette No.123 Special Part 11D dated January 25, B.E.2549 (2006).



(Ms. Supawan Suwannapa)
Laboratory Reviewer

(Ms. Thanida Bunrungrueang)
Laboratory Supervisor

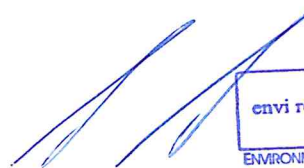

ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กถลุง ระยะที่ 2
Measured Source : Ambient Noise
Measured Point : โรงเรียนบ้านเขานิน (นิคมราษฎร์บำรุง) ตำบลปอวิน อำเภอศรีราชา จังหวัดชลบุรี
 (เดิมชื่อโรงเรียนบ้านเขานินนิคมราษฎร์บำรุง)
GPS. Coordinate : UTM (WGS84) 47P 0727620 E, 1444338 N
Quotation No. : 2023-00188
Measured Date : September 7-8, 2023
Analysis No. : 2023-AD853-032
Measured By : Mr.Akarawat Kochobog
Report No. : 2023-RAAR744
Analyzed By : Environment Research & Technology Co., Ltd.
Report Date : September 19, 2023
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820462

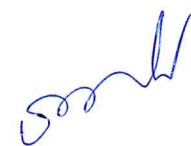
Interval Time	Noise Level, dB(A)		
	Leq	Lmax	L90
10:00-11:00	62.7	85.0	57.9
11:00-12:00	61.6	74.7	58.2
12:00-13:00	62.7	80.6	59.0
13:00-14:00	61.4	82.2	57.7
14:00-15:00	61.9	78.8	58.8
15:00-16:00	63.2	79.9	59.3
16:00-17:00	64.6	85.1	58.8
17:00-18:00	63.4	78.9	59.2
18:00-19:00	61.9	80.9	57.6
19:00-20:00	60.9	78.6	55.9
20:00-21:00	60.7	84.0	55.9
21:00-22:00	59.0	82.7	52.8
22:00-23:00	55.7	75.7	49.5
23:00-00:00	55.0	75.7	48.4
00:00-01:00	55.4	78.5	47.5
01:00-02:00	52.3	67.4	46.9
02:00-03:00	52.6	73.1	46.0
03:00-04:00	52.0	70.3	45.3
04:00-05:00	52.9	72.3	45.3
05:00-06:00	55.2	68.6	48.6
06:00-07:00	58.5	74.0	53.1
07:00-08:00	64.9	83.4	58.2
08:00-09:00	65.1	81.8	58.5
09:00-10:00	61.6	80.6	57.6
24 Hours Measurement	61.0	85.1	56.2
Standard¹⁾	70	115	-
Ldn	63.6	-	-

Remark : ¹⁾ Notification of the Ministry of Industry B.E.2548 (2005), issued under Factory Act B.E.2535 (1992), published in the Royal Government Gazette No.123 Special Part 11D dated January 25, B.E.2549 (2006).

(Ms.Supawan Suwannapa)
Laboratory Reviewer

(Ms.Thanida Bunrungrueang)
Laboratory Supervisor



ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวด ระยะที่ 2
Measured Source : Ambient Noise
Measured Point : โรงเรียนบ้านเขานิน (นิคมราษฎร์บำรุง) ตำบลปอวิน อำเภอศรีราชา จังหวัดชลบุรี
 (เดิมชื่อโรงเรียนบ้านเขานินนิคมราษฎร์บำรุง)
GPS. Coordinate : UTM (WGS84) 47P 0727620 E, 1444338 N
Measured Date : September 8-9, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820462

Quotation No. : 2023-00188

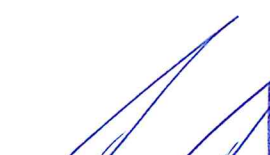
Analysis No. : 2023-AD853-032

Report No. : 2023-RAAR744


Report Date : September 19, 2023

Interval Time	Noise Level, dB(A)		
	Leq	Lmax	L90
10:00-11:00	61.3	78.4	57.7
11:00-12:00	67.9	85.6	59.8
12:00-13:00	62.0	75.7	58.7
13:00-14:00	61.5	83.6	57.8
14:00-15:00	62.0	80.7	58.0
15:00-16:00	64.4	82.3	59.9
16:00-17:00	63.7	87.9	58.9
17:00-18:00	63.0	77.9	59.4
18:00-19:00	62.1	76.7	58.3
19:00-20:00	62.5	81.7	56.9
20:00-21:00	60.5	77.5	56.3
21:00-22:00	57.9	76.5	52.0
22:00-23:00	56.1	78.6	49.0
23:00-00:00	54.2	69.6	48.9
00:00-01:00	54.8	75.2	48.8
01:00-02:00	52.7	71.0	46.3
02:00-03:00	53.6	69.8	46.8
03:00-04:00	53.0	78.2	46.1
04:00-05:00	54.3	78.3	46.5
05:00-06:00	55.1	70.2	49.2
06:00-07:00	58.5	75.8	53.5
07:00-08:00	60.9	74.3	57.0
08:00-09:00	62.0	80.2	58.5
09:00-10:00	61.7	78.6	58.1
24 Hours Measurement	61.2	87.9	56.4
Standard¹⁾	70	115	-
Ldn	63.8	-	-

Remark : ¹⁾ Notification of the Ministry of Industry B.E.2548 (2005), issued under Factory Act B.E.2535 (1992), published in the Royal Government Gazette No.123 Special Part 11D dated January 25, B.E.2549 (2006).


 (Ms. Supawan Suwannapa)
 Laboratory Reviewer




 (Ms. Thanida Bunrungrueang)
 Laboratory Supervisor

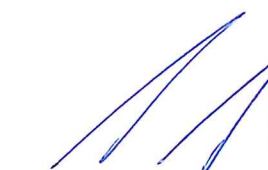
ANALYSIS REPORT

Customer Name : Tata Steel Manufacturing (Thailand) PCL. (Branch : 00001)
Address : 351 Moo 6 WHA Chonburi Industrial Estate 1, 331 Highway Road, Bo Win, Si Racha, Chon Buri 20230
Project Name : โครงการขยายกำลังการผลิตเหล็กกลวด ระยะที่ 2
Measured Source : Ambient Noise
Measured Point : โรงเรียนบ้านเขานิน (นิคมราษฎร์บำรุง) ตำบลปอวิน อำเภอสรีราชา จังหวัดชลบุรี
 (เดิมชื่อโรงเรียนบ้านเขานินนิคมราษฎร์บำรุง)
GPS. Coordinate : UTM (WGS84) 47P 0727620 E, 1444338 N
Measured Date : September 9-10, 2023
Measured By : Mr.Akarawat Kochobog
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820462


Quotation No. : 2023-00188
Analysis No. : 2023-AD853-032
Report No. : 2023-RAAR744
Report Date : September 19, 2023

Interval Time	Noise Level, dB(A)		
	Leq	Lmax	L90
10:00-11:00	62.2	86.2	58.3
11:00-12:00	61.5	80.4	58.2
12:00-13:00	61.8	77.2	57.6
13:00-14:00	61.3	80.8	57.4
14:00-15:00	61.6	81.3	57.6
15:00-16:00	60.9	73.6	57.4
16:00-17:00	61.4	79.4	57.7
17:00-18:00	62.7	81.7	58.3
18:00-19:00	61.6	79.2	57.2
19:00-20:00	61.1	78.4	56.6
20:00-21:00	60.5	78.7	55.3
21:00-22:00	59.8	79.4	52.6
22:00-23:00	59.2	80.7	51.5
23:00-00:00	54.9	72.4	46.6
00:00-01:00	56.1	79.9	44.9
01:00-02:00	60.1	80.9	46.5
02:00-03:00	59.6	69.4	49.6
03:00-04:00	52.9	75.4	45.2
04:00-05:00	52.5	83.4	43.6
05:00-06:00	54.9	79.1	45.4
06:00-07:00	56.3	79.2	49.6
07:00-08:00	59.9	82.2	53.7
08:00-09:00	60.9	78.6	57.3
09:00-10:00	61.7	74.2	58.1
24 Hours Measurement	60.2	86.2	55.4
Standard^{1'}	70	115	-
Ldn	64.4	-	-

Remark : ^{1'} Notification of the Ministry of Industry B.E.2548 (2005), issued under Factory Act B.E.2535 (1992), published in the Royal Government Gazette No.123 Special Part 11D dated January 25, B.E.2549 (2006).



(Ms. Supawan Suwannapa)
Laboratory Reviewer

(Ms. Thanida Bunrungrueang)
Laboratory Supervisor