

ภาคผนวก ก

เอกสารประกอบมาตรการติดตามตรวจสอบ

คุณภาพสิ่งแวดล้อม

ภาคผนวก ก.1

แผนสำรวจสภาพเศรษฐกิจ สังคม และความคิดเห็นของประชาชน
ประจำปี พ.ศ.2567



แผนงานการสำรวจความคิดเห็น (Social Survey)



| ขั้นตอนการดำเนินงาน | เดือนที่ 1 | | | | เดือนที่ 2 | | | | เดือนที่ 3 | | | |
|--|------------|---|---|---|------------|---|---|---|------------|---|---|---|
| | มิ.ย.67 | | | | ก.ค.67 | | | | ส.ค.67 | | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 1. การศึกษาและรวบรวมข้อมูลทุติยภูมิ (จำนวนครัวเรือน/ชุมชน รายชื่อผู้ชุมชน) และจัดเตรียมแบบสอบถาม | | | | | | | | | | | | |
| 2. ส่งจดหมายแจ้งกลุ่มเป้าหมาย (หน่วยงาน สถานที่อื่นใด ผู้นำชุมชน สถานประกอบการ กลุ่มประมง และประสานงาน ผู้นำชุมชนแจ้งช่วงเวลาที่จะลงสำรวจแก่ผู้นำชุมชน | | | | | | | | | | | | |
| 3. ดำเนินการสำรวจความคิดเห็นด้วยวิธีสัมภาษณ์โดยใช้แบบสอบถาม | | | | | 3-7 /7/67 | | | | | | | |
| 4. ประมวลผล และจัดทำรายงานผลการสำรวจในปี พ.ศ.2566 และเปรียบเทียบผลการศึกษารายการสำรวจความคิดเห็นย้อนหลัง 3 ปี (ปี พ.ศ.2565-2567) | | | | | | | | | | | | |



ภาคผนวก ก.2

ภาพถ่ายประกอบการตรวจวัดคุณภาพสิ่งแวดล้อม



วัดคลองพุทธา



บ้านบางกระสัน



โรงเรียนเจ้าฟ้าสร้าง



วัดชุมพลนิกายาราม



วัดวิเวกายุท



บ้านคลองพุทธา

ภาพถ่ายแสดงตำแหน่งตรวจวัดคุณภาพอากาศในบรรยากาศ
โรงไฟฟ้าพลังความร้อนร่วมบางปะอิน บริษัท บางปะอิน โกลเดนเนอร์ชั่น จำกัด





HRSG Stack 1



HRSG Stack 2



HRSG Stack 3



HRSG Stack 4

ภาพถ่ายแสดงตำแหน่งตรวจวัดคุณภาพอากาศจากแหล่งกำเนิด
โรงไฟฟ้าพลังความร้อนร่วมบางปะอิน บริษัท บางปะอิน โคเจนเนอเรชั่น จำกัด





บ้านคลองพุทรา



ริมรั้วโครงการด้านทิศเหนือ



ริมรั้วโครงการด้านทิศใต้



ริมรั้วโครงการด้านทิศตะวันออก



ริมรั้วโครงการด้านทิศตะวันตก

ภาพถ่ายแสดงตำแหน่งตรวจวัดระดับเสียงทั่วไป
โรงไฟฟ้าพลังความร้อนร่วมบางปะอิน บริษัท บางปะอิน โกลบอลเนอเรนซ์ จำกัด





Gas turbine Generator 1



Gas turbine Generator 2



Steam Turbine 1



Cooling Tower

ภาพถ่ายแสดงตำแหน่งตรวจวัดระดับเสียงในสถานที่ทำงาน
โรงไฟฟ้าพลังความร้อนร่วมบางปะอิน บริษัท บางปะอิน โกลบอลเนอรัชั่น จำกัด





Gas turbine Generator 3



Gas turbine Generator 4



Steam Turbine 2

ภาพถ่ายแสดงตำแหน่งตรวจวัดระดับเสียงในสถานที่ทำงาน (ต่อ)
โรงไฟฟ้าพลังความร้อนร่วมบางปะอิน บริษัท บางปะอิน โกลบอลเนอเชี่ยน จำกัด





บ่อพักน้ำทิ้งจากระบบหล่อเย็น (บ่อ Pond)



บ่อพักน้ำทิ้งจากสำนักงาน

ภาพถ่ายแสดงตำแหน่งตรวจวัดคุณภาพน้ำทิ้ง
โรงไฟฟ้าพลังความร้อนร่วมบางปะอิน บริษัท บางปะอิน โคเจนเนอเรชั่น จำกัด





Gas Turbine Generator 1



Gas Turbine Generator 2



HRSG 1



HRSG 2

ภาพถ่ายแสดงตำแหน่งตรวจวัดความร้อนภายในที่ทำงาน
โรงไฟฟ้าพลังความร้อนร่วมบางปะอิน บริษัท บางปะอิน โกลบอลเนอเธชั่น จำกัด





Gas Turbine Generator 3



Gas Turbine Generator 4



HRSG 3



HRSG 4

ภาพถ่ายแสดงตำแหน่งตรวจวัดความร้อนภายในที่ทำงาน (ต่อ)
โรงไฟฟ้าพลังความร้อนร่วมบางปะอิน บริษัท บางปะอิน โกลเดนเนอเรชั่น จำกัด



ภาคผนวก ค.3

เอกสารชี้แจงผลการตรวจวัดคุณภาพน้ำทิ้ง
บริเวณบ่อกักน้ำทิ้งจากระบบหล่อเย็น (บ่อ Pond)



Attn: Mr. Anuwat Sasakul

Date: 13 June 2023

From: Ms. Kanlapangha Khumwong

Subject: Chloride Quality effect to TDS at Waste Water

Background

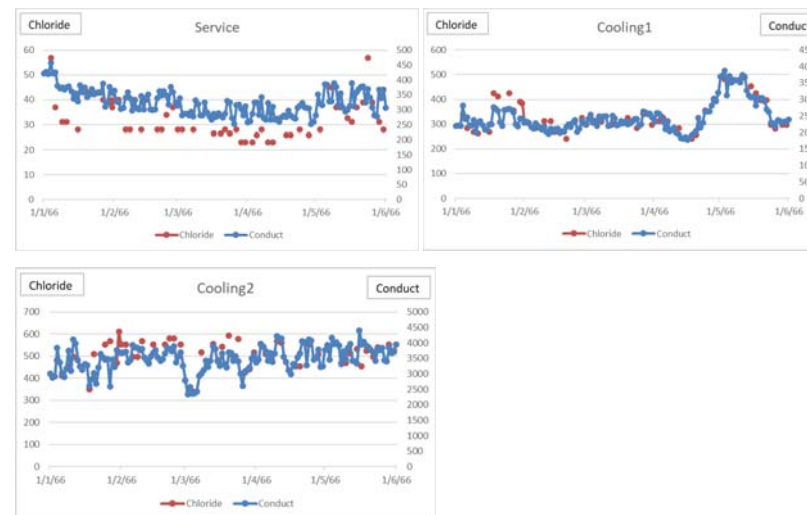
TDS ย่อมาจาก Total Dissolved Solids หมายถึงปริมาณของสารที่ละลายในของเหลว สารเหล่านี้อาจรวมถึงเกลือ แร่ธาตุ โลหะ แคลเซียม และสารประกอบอื่นๆ ที่เป็นได้ทั้งอินทรีย์และอนินทรีย์ กล่าวอย่างง่าย ๆ TDS หมายถึงสิ่งใดก็ตามที่มีอยู่ในน้ำและไม่ใช่อะไรของแข็งแขวนลอย วิธีการที่ใช้อย่างแพร่หลายในการวัดค่า TDS คือการวัดค่าการนำไฟฟ้าเพื่อตรวจพบการมีอยู่ของไอออนในน้ำ (Electrical Conductivity; EC) เมื่อกำหนด EC แล้ว จะมีการใช้ปัจจัยการแปลง (เฟกเตอร์การคูณโดยโดยมิเตอร์ที่ทำการวัด) เพื่อกำหนด TDS ปัจจัยการแปลงจะแตกต่างกันไปขึ้นอยู่กับกลุ่มตัวอย่างที่กำลังทดสอบ โดยทั่วไปปัจจัยการแปลงจะอยู่ในช่วง 0.5 – 1.0 อย่างไรก็ตามวิธีการนี้จะประเมินเฉพาะระดับ TDS เท่านั้น สำหรับการวัดค่า TDS ที่แท้จริงต้องนำตัวอย่างกลับไปห้องปฏิบัติการ และดำเนินการตามขั้นตอนการระเหยและชั่งน้ำหนัก สาเหตุส่วนหนึ่งที่ทำให้การแปลงจาก EC ไม่ถูกต้องทั้งหมดเป็นเพราะของแข็งที่ละลายน้ำบางชนิดอาจไม่เพิ่มการอ่านค่า EC (เนื่องจากสารเคมีบางชนิดไม่นำไฟฟ้า) และจะไม่ถูกเก็บในการวัด แม้ว่าค่า TDS สามารถตรวจวัดได้จาก EC แต่ทั้งสองมีความแตกต่างกัน ซึ่งเป็นสาเหตุที่ทำให้การแปลงเป็นเพียงค่าประมาณเท่านั้น EC ตรวจวัดว่ากระแสไฟฟ้าสามารถผ่านสารที่มีอยู่ในน้ำได้ดีเพียงใด ในขณะที่ TDS กำลังมองหาของแข็งที่ละลายในน้ำหรือประมาณแร่ธาตุรวมในน้ำ และดูทั้งอนุภาคที่นำไฟฟ้าและอนุภาคที่ไม่นำไฟฟ้าซึ่งเป็นจุดที่เกิดความแตกต่างหลัก ดังนั้นปัจจัยการแปลง EC เป็น TDS จะเปลี่ยนแปลงขึ้นอยู่กับสารของตัวอย่างน้ำ

ข้อมูลจาก SHE เรื่อง TDS บ่อน้ำเสียพบว่ามีแนวโน้มสูงขึ้นเกือบจะถึงค่าควบคุมที่ 3,000 ppm ในวันที่ 29 พฤษภาคม 2566 วัดโดยบริษัทซีคอต จำกัด ด้วย Method 2540 C of Standard Methods for the Examination of Water and Wastewater, 23rd Edition. เป็นวิธีการนำตัวอย่างเข้าเตาอบที่ 180 องศาเซลเซียสเป็นเวลา 60 นาที สลับกับเข้าเตาเผาที่ 550 องศาเซลเซียสเป็นเวลา 15 นาที

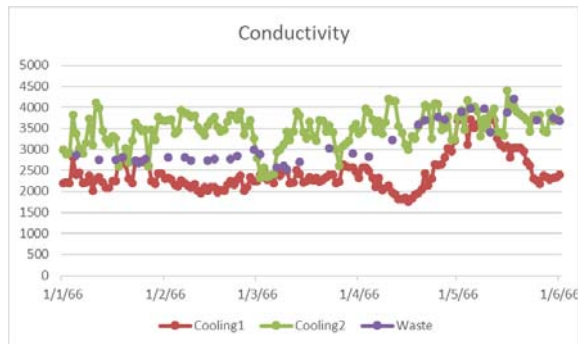
Main Body

ช่วงนั้นมีคลอรีนน้ำประปาเข้าค่อนข้างสูง ส่งผลให้เดือนพฤษภาคม 66 คลอรีนที่ cooling BIC1 สูงเกิน control (Control 350 ppm เนื่องจาก Material Condenser Cooling BIC1 เป็น Stainless 304 รับคลอรีนได้จำกัด) จึงเปิด Blow Down จาก Cooling BIC1 ลง Cooling BIC2 (ข้างอิง Project ประหยัดน้ำโดยใช้น้ำทิ้ง Cooling BIC1 เข้าเป็นน้ำ Make up

Cooling BIC2) จำนวนมากถึง 40 m³/h และส่งผลให้ Cooling BIC2 conductivity 4000 µs/cm ที่คลอรีนเกือบถึง limit 600 ppm (Control 600 ppm เนื่องจาก Material Condenser Cooling BIC2 เป็น Stainless 316 รับคลอรีนได้สูง) ส่งผลต่อเนื่องถึงบ่อน้ำทิ้งมีค่า conductivity 3700-3900 µs/cm แปลงค่าเป็น TDS ได้ถึง 2500 ppm (ที่บ่อ Holding Pond2) กราฟความสัมพันธ์ระหว่าง Conductivity กับ Chloride ของน้ำประปา, Cooling BIC1, Cooling BIC2 ดังด้านล่าง



จากกราฟจะกล่าวได้ว่า ค่า Conductivity แปรผันตามค่าคลอรีน เนื่องจากการวัดค่าน้ำเสียที่ บางปะอิน โคเจนเนอเรชั่น เป็นการเก็บน้ำตัวอย่างที่บ่อ Holding 2 โดยมีการวิเคราะห์ค่า pH, ค่าการนำไฟฟ้า (Conductivity) และค่าความขุ่น (Turbidity) เท่านั้น โดยทำการวิเคราะห์ค่าน้ำเสีย สัปดาห์ละ 2 ครั้ง จากข้างต้นที่วิเคราะห์ว่าสาเหตุที่ค่า TDS สูงเกิดจากค่าคลอรีนน้ำประปาที่สูงขึ้นนั้น น้ำทิ้งไม่ได้มีการวิเคราะห์ค่าคลอรีน จึงนำค่า Conductivity ที่เพิ่มขึ้นแบบแปรผันตรงกับคลอรีนมาเปรียบเทียบ ดังกราฟด้านล่าง



จากกราฟดังกล่าวจะเห็นว่าเดือนพฤษภาคมน้ำทิ้ง (Waste Water) มีค่า Conductivity สูงขึ้นจริงตามค่าน้ำทิ้งของ Cooling ที่สูงขึ้น ส่งผลให้ TDS ที่บริษัทรีไซเคิลนำไปวัดสูงขึ้นเช่นกัน

นอกจากนั้นจุดที่ SHE และบริษัทรีไซเคิลเก็บน้ำจะเป็นบ่อ 100 m3 ซึ่งเป็นบ่อสะสมน้ำทิ้งชุดสุดท้ายก่อนปล่อย ออก ทำให้มีความเข้มข้นเพิ่มมากขึ้นไปอีก

Conclusion

1. ค่า TDS ของน้ำ Waste Water สูงจริง ตามค่าน้ำทิ้งของ Cooling ที่สูงขึ้น
2. จากการทำโปรเจกต์ประหยัดน้ำทิ้งจาก Cooling BIC1 เข้าเป็น Make up Cooling BIC2 เนื่องจากน้ำประปาต้นทุนมีค่าคลอรีนที่สูงขึ้น ส่งผลต่อเนื่องให้ค่าคลอรีนและ Conductivity ที่น้ำ Cooling Blowdown สูงขึ้นด้วย

Action Plan

1. ทำการแก้ไข Check sheet เก็บตัวอย่างน้ำเสียเพิ่มขึ้นจากสัปดาห์ละ 2 ครั้ง เป็นทุกวันกะเช้า เพื่อ Monitor ได้อย่างใกล้ชิด
2. ทำการแก้ไขจุดเก็บน้ำจาก Holding บ่อ2 เป็นจุดเก็บน้ำบ่อ Inspection pit 100 m3 ค่าวิเคราะห์ผลน้ำจะได้เป็นจุดเดียวกันกับผู้รับเหมา

ภาคผนวก ง

ใบรับรองผลการตรวจวิเคราะห์คุณภาพสิ่งแวดล้อม

ภาคผนวก ง.1

ใบรับรองผลการตรวจวัดคุณภาพอากาศในบรรยากาศ



Meteorological Monitoring Results : Wind Rose MTR-BIC

Location : Wat Khlong Phutsa

Monitor period : 18-25 Mar 2024

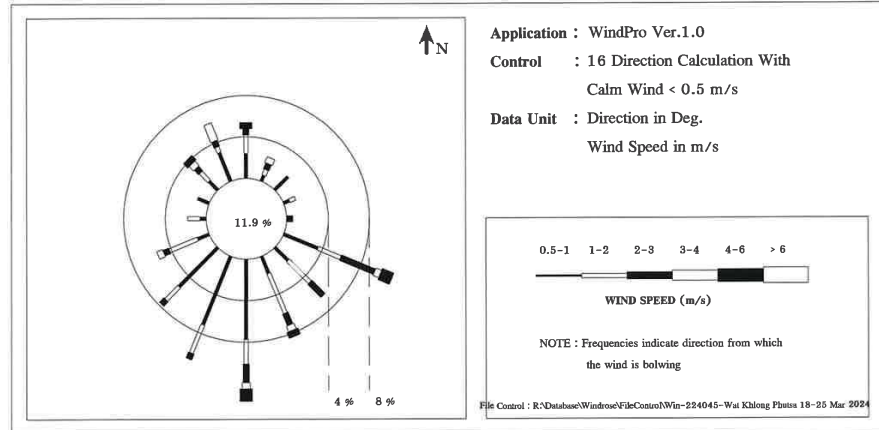
Wind Speed Model : Novalynx WS-25

Serial No : A5091

Wind Direction Model : Novalynx WS-25

Serial No : A5091

| Direction | Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed | | | | | | Total |
|-----------|---|---------|---------|---------|---------|-------------|--------|
| | 0.5-1 m/s | 1-2 m/s | 2-3 m/s | 3-4 m/s | 4-6 m/s | More than 6 | |
| N | 0.0238 | 0.0179 | 0.0060 | 0.0000 | 0.0060 | 0.0000 | 0.0536 |
| NNE | 0.0060 | 0.0060 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0238 |
| NE | 0.0179 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0179 |
| ENE | 0.0060 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0119 |
| E | 0.0000 | 0.0000 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0060 |
| ESE | 0.0357 | 0.0238 | 0.0357 | 0.0060 | 0.0119 | 0.0000 | 0.1131 |
| SE | 0.0179 | 0.0298 | 0.0179 | 0.0000 | 0.0000 | 0.0000 | 0.0655 |
| SSE | 0.0179 | 0.0417 | 0.0119 | 0.0060 | 0.0060 | 0.0000 | 0.0833 |
| S | 0.0774 | 0.0238 | 0.0179 | 0.0060 | 0.0119 | 0.0000 | 0.1369 |
| SSW | 0.0714 | 0.0298 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.1071 |
| SW | 0.0536 | 0.0179 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0774 |
| WSW | 0.0119 | 0.0298 | 0.0060 | 0.0060 | 0.0000 | 0.0000 | 0.0536 |
| W | 0.0060 | 0.0119 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0179 |
| WNW | 0.0119 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0119 |
| NW | 0.0119 | 0.0119 | 0.0060 | 0.0060 | 0.0060 | 0.0000 | 0.0417 |
| NNW | 0.0298 | 0.0060 | 0.0060 | 0.0179 | 0.0000 | 0.0000 | 0.0595 |
| CALM | 0.1190 | | | | | | |



(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team



Meteorological Monitoring Results : Wind Rose MTR-BIC

Location : Wat Khlong Phutsa

Monitor period : 18-25 Mar 2024

Wind Speed Model : Novalynx WS-25

Serial No : A5091

Wind Direction Model : Novalynx WS-25

Serial No : A5091

| Time | 18-19 Mar 2024 | | 19-20 Mar 2024 | | 20-21 Mar 2024 | | 21-22 Mar 2024 | |
|---------------|----------------|-----|----------------|-----|----------------|-----|----------------|-----|
| | WS(m/s) | WD | WS(m/s) | WD | WS(m/s) | WD | WS(m/s) | WD |
| 09:00 - 10:00 | 1.7 | S | 2.0 | S | 3.3 | NNW | 3.1 | NNE |
| 10:00 - 11:00 | 0.9 | S | 1.9 | SSE | 1.7 | NNW | 2.0 | SE |
| 11:00 - 12:00 | 1.3 | S | 2.9 | SSE | 0.3 | SW | 2.6 | NNE |
| 12:00 - 13:00 | 0.9 | SSW | 1.3 | SSE | 4.3 | N | 1.8 | N |
| 13:00 - 14:00 | 0.5 | SW | 1.3 | WSW | 0.5 | NE | 1.1 | SSW |
| 14:00 - 15:00 | 0.5 | S | 2.3 | SE | 2.5 | NW | 2.4 | SSW |
| 15:00 - 16:00 | 1.4 | WSW | 0.7 | SSW | 1.8 | NNE | 1.1 | SE |
| 16:00 - 17:00 | 1.0 | SW | 5.5 | ESE | 0.8 | S | 0.9 | ESE |
| 17:00 - 18:00 | 0.7 | SSW | 0.3 | ENE | 0.5 | SSW | 0.5 | SSE |
| 18:00 - 19:00 | 4.0 | SSE | 3.0 | NW | 0.5 | WNW | 0.8 | SSW |
| 19:00 - 20:00 | 0.4 | S | 0.3 | NNW | 0.9 | NNW | 0.5 | SSW |
| 20:00 - 21:00 | 1.8 | S | 1.0 | N | 0.5 | NW | 0.6 | SW |
| 21:00 - 22:00 | 1.3 | SSW | 0.5 | NW | 1.0 | WSW | 0.5 | SW |
| 22:00 - 23:00 | 0.6 | SSW | 0.9 | NNW | 0.7 | SW | 0.5 | SSW |
| 23:00 - 24:00 | 1.2 | SSE | 0.5 | NNW | 0.5 | N | 0.5 | SSW |
| 00:00 - 01:00 | 0.8 | S | 0.5 | N | 0.5 | W | 0.5 | SSW |
| 01:00 - 02:00 | 0.5 | SW | 0.7 | NNW | 0.7 | SW | 0.5 | SSW |
| 02:00 - 03:00 | 0.5 | S | 0.8 | NNW | 0.7 | SW | 0.5 | S |
| 03:00 - 04:00 | 0.5 | SSE | 0.1 | NW | 0.5 | WNW | 0.5 | S |
| 04:00 - 05:00 | 0.5 | NE | 0.2 | NNW | 0.9 | WSW | 0.5 | S |
| 05:00 - 06:00 | 0.5 | ESE | 1.3 | NW | 1.0 | NW | 0.5 | S |
| 06:00 - 07:00 | 0.5 | ENE | 4.0 | NW | 3.4 | NNW | 0.5 | S |
| 07:00 - 08:00 | 0.7 | NE | 2.5 | N | 2.7 | NNW | 0.5 | ESE |
| 08:00 - 09:00 | 2.3 | ESE | 1.5 | N | 3.6 | NNW | 1.1 | ESE |



(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team

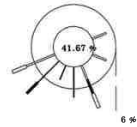
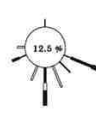
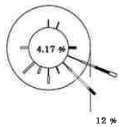


Meteorological Monitoring Results : Wind Rose MTR-BIC

Location : Wat Khlong Phutsa Monitor period : 18-25 Mar 2024
 Wind Speed Model : Novalynx WS-25 Serial No : A5091
 Wind Direction Model : Novalynx WS-25 Serial No : A5091

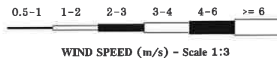
| Time | 22-23 Mar 2024 | | 23-24 Mar 2024 | | 24-25 Mar 2024 | | |
|---------------|----------------|-----|----------------|-----|----------------|-----|--|
| | WS(m/s) | WD | WS(m/s) | WD | WS(m/s) | WD | |
| 09:00 - 10:00 | 0.9 | SE | 1.3 | W | 3.1 | WSW | |
| 10:00 - 11:00 | 1.1 | SW | 2.1 | S | 0.0 | SW | |
| 11:00 - 12:00 | 2.1 | SE | 4.7 | ESE | 0.0 | NNE | |
| 12:00 - 13:00 | 1.9 | S | 2.3 | S | 1.6 | ESE | |
| 13:00 - 14:00 | 1.6 | W | 2.9 | ESE | 0.0 | ENE | |
| 14:00 - 15:00 | 1.1 | ESE | 1.2 | SSW | 0.0 | NNE | |
| 15:00 - 16:00 | 1.2 | SSW | 1.3 | SSE | 0.0 | ENE | |
| 16:00 - 17:00 | 1.9 | SE | 2.3 | ESE | 0.0 | NNE | |
| 17:00 - 18:00 | 1.9 | SE | 2.9 | ESE | 2.5 | SSE | |
| 18:00 - 19:00 | 2.5 | E | 3.0 | S | 3.0 | SSE | |
| 19:00 - 20:00 | 0.7 | ESE | 4.0 | S | 1.8 | ENE | |
| 20:00 - 21:00 | 1.2 | SE | 4.0 | S | 0.4 | ENE | |
| 21:00 - 22:00 | 3.2 | ESE | 1.8 | SSE | 0.0 | ESE | |
| 22:00 - 23:00 | 1.4 | ESE | 0.5 | SE | 0.0 | S | |
| 23:00 - 24:00 | 2.2 | ESE | 0.7 | WSW | 0.5 | S | |
| 00:00 - 01:00 | 2.1 | ESE | 0.6 | SE | 0.8 | SW | |
| 01:00 - 02:00 | 0.0 | ESE | 0.0 | SE | 0.4 | S | |
| 02:00 - 03:00 | 0.6 | ESE | 0.0 | S | 0.6 | SSW | |
| 03:00 - 04:00 | 0.5 | NNE | 0.8 | N | 0.9 | S | |
| 04:00 - 05:00 | 0.5 | N | 0.3 | SE | 1.0 | WSW | |
| 05:00 - 06:00 | 0.5 | SSE | 1.3 | SSE | 0.8 | SW | |
| 06:00 - 07:00 | 0.5 | S | 0.7 | ESE | 1.0 | WSW | |
| 07:00 - 08:00 | 1.0 | SW | 2.0 | WSW | 1.1 | SSE | |
| 08:00 - 09:00 | 1.1 | SE | 1.6 | SSW | 2.8 | SW | |

Wind Rose



12 %

6 %



WIND SPEED (m/s) - Scale 1:3

File Control : R:\Database\Windrose\FileControl\Win-224045-Wat Khlong Phutsa 18-25 Mar 2024

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

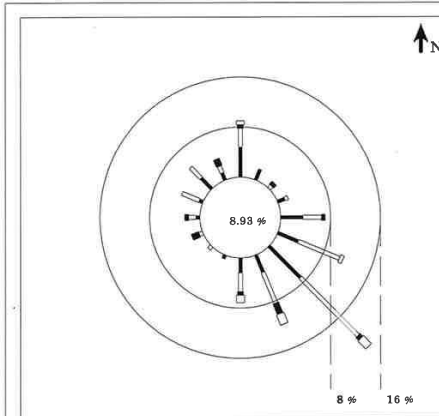
(Miss Preeda Somjai)
Technical Management Team



Meteorological Monitoring Results : Wind Rose MTR-BIC

Location : Ban Bang Krasun Monitor period : 18-25 Mar 2024
 Wind Speed Model : Novalynx WS-25 Serial No : A5084
 Wind Direction Model : Novalynx WS-25 Serial No : A5084

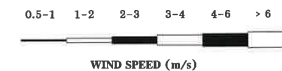
| Direction | Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed | | | | | | Total |
|-----------|---|---------|---------|---------|---------|-------------|--------|
| | 0.5-1 m/s | 1-2 m/s | 2-3 m/s | 3-4 m/s | 4-6 m/s | More than 6 | |
| N | 0.0476 | 0.0298 | 0.0060 | 0.0060 | 0.0000 | 0.0000 | 0.0893 |
| NNE | 0.0179 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0179 |
| NE | 0.0000 | 0.0060 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0119 |
| ENE | 0.0119 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0179 |
| E | 0.0357 | 0.0298 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0714 |
| ESE | 0.0357 | 0.0714 | 0.0000 | 0.0060 | 0.0000 | 0.0000 | 0.1131 |
| SE | 0.0714 | 0.1310 | 0.0060 | 0.0179 | 0.0000 | 0.0000 | 0.2262 |
| SSE | 0.0298 | 0.0536 | 0.0179 | 0.0179 | 0.0000 | 0.0000 | 0.1190 |
| S | 0.0238 | 0.0298 | 0.0060 | 0.0119 | 0.0000 | 0.0000 | 0.0714 |
| SSW | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0060 |
| SW | 0.0000 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0060 |
| WSW | 0.0000 | 0.0060 | 0.0119 | 0.0000 | 0.0000 | 0.0000 | 0.0179 |
| W | 0.0060 | 0.0119 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0238 |
| WNW | 0.0060 | 0.0298 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0357 |
| NW | 0.0238 | 0.0238 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0476 |
| NNW | 0.0119 | 0.0119 | 0.0119 | 0.0000 | 0.0000 | 0.0000 | 0.0357 |
| CALM | 0.0893 | | | | | | |



Application : WindPro Ver.1.0

Control : 16 Direction Calculation With
Calm Wind < 0.5 m/s

Data Unit : Direction in Deg.
Wind Speed in m/s



NOTE : Frequencies indicate direction from which
the wind is blowing

File Control : R:\Database\Windrose\FileControl\Win-224045-Ban Bang Krasun 18-25 Mar 2024

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team

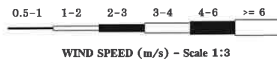


Meteorological Monitoring Results : Wind Rose MTR-BIC

Location : Ban Bang Krasun Monitor period : 18-25 Mar 2024
Wind Speed Model : Novalynx WS-25 Serial No : A5084
Wind Direction Model : Novalynx WS-25 Serial No : A5084

| Time | 18-19 Mar 2024 | | 19-20 Mar 2024 | | 20-21 Mar 2024 | | 21-22 Mar 2024 | |
|---------------|----------------|-----|----------------|-----|----------------|-----|----------------|-----|
| | WS(m/s) | WD | WS(m/s) | WD | WS(m/s) | WD | WS(m/s) | WD |
| 11:00 - 12:00 | 3.7 | SE | 1.9 | SE | 0.6 | NNE | 1.9 | N |
| 12:00 - 13:00 | 3.4 | SE | 0.1 | ESE | 0.8 | N | 0.7 | W |
| 13:00 - 14:00 | 2.3 | SE | 0.0 | SSE | 0.5 | N | 1.0 | SE |
| 14:00 - 15:00 | 0.8 | S | 3.2 | SE | 1.3 | N | 2.5 | E |
| 15:00 - 16:00 | 2.6 | SSE | 1.2 | ESE | 1.1 | WNW | 1.2 | E |
| 16:00 - 17:00 | 1.7 | SE | 1.9 | ESE | 0.6 | WNW | 1.3 | SE |
| 17:00 - 18:00 | 0.8 | SE | 0.0 | E | 1.1 | WNW | 0.7 | SSE |
| 18:00 - 19:00 | 0.8 | ESE | 0.1 | ESE | 1.3 | NW | 1.0 | S |
| 19:00 - 20:00 | 1.5 | SSE | 1.6 | ESE | 0.9 | NNW | 0.5 | S |
| 20:00 - 21:00 | 1.2 | SSE | 1.1 | N | 0.8 | NW | 0.5 | S |
| 21:00 - 22:00 | 0.9 | SE | 0.4 | E | 1.3 | NW | 0.4 | SSE |
| 22:00 - 23:00 | 0.3 | SE | 0.5 | ENE | 0.8 | NNW | 0.5 | SSE |
| 23:00 - 24:00 | 1.3 | SE | 0.7 | E | 1.2 | WNW | 0.5 | SSW |
| 00:00 - 01:00 | 0.5 | SE | 0.6 | SE | 1.1 | NW | 0.5 | SSE |
| 01:00 - 02:00 | 0.5 | ESE | 0.5 | NNE | 0.8 | NW | 0.5 | SSE |
| 02:00 - 03:00 | 0.2 | ESE | 0.5 | NNE | 1.6 | NNW | 0.7 | SE |
| 03:00 - 04:00 | 1.3 | SE | 0.8 | N | 1.1 | WNW | 0.3 | SSW |
| 04:00 - 05:00 | 0.5 | E | 0.3 | N | 0.9 | N | 0.8 | S |
| 05:00 - 06:00 | 1.0 | ESE | 0.8 | N | 0.6 | N | 0.6 | SE |
| 06:00 - 07:00 | 0.5 | ESE | 2.6 | N | 0.5 | ENE | 0.2 | ESE |
| 07:00 - 08:00 | 3.7 | SSE | 3.9 | N | 2.5 | NE | 1.0 | S |
| 08:00 - 09:00 | 1.4 | SE | 1.1 | N | 1.6 | N | 0.8 | NW |
| 09:00 - 10:00 | 3.3 | ESE | 0.6 | N | 0.7 | N | 2.7 | WSW |
| 10:00 - 11:00 | 3.1 | S | 2.7 | NNW | 2.1 | NNW | 1.5 | W |

Wind Rose



WIND SPEED (m/s) - Scale 1:3

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team

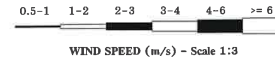


Meteorological Monitoring Results : Wind Rose MTR-BIC

Location : Ban Bang Krasun Monitor period : 18-25 Mar 2024
Wind Speed Model : Novalynx WS-25 Serial No : A5084
Wind Direction Model : Novalynx WS-25 Serial No : A5084

| Time | 22-23 Mar 2024 | | 23-24 Mar 2024 | | 24-25 Mar 2024 | |
|---------------|----------------|-----|----------------|-----|----------------|-----|
| | WS(m/s) | WD | WS(m/s) | WD | WS(m/s) | WD |
| 11:00 - 12:00 | 1.8 | SW | 1.8 | S | 1.1 | NW |
| 12:00 - 13:00 | 1.2 | WSW | 1.4 | SE | 1.9 | WNW |
| 13:00 - 14:00 | 2.1 | SSE | 1.3 | S | 1.2 | NNW |
| 14:00 - 15:00 | 2.0 | S | 1.5 | ESE | 0.8 | NW |
| 15:00 - 16:00 | 1.3 | SE | 1.2 | SE | 0.7 | SE |
| 16:00 - 17:00 | 1.5 | ESE | 3.1 | SSE | 1.3 | SE |
| 17:00 - 18:00 | 1.3 | SE | 1.5 | SE | 1.6 | SE |
| 18:00 - 19:00 | 1.5 | SE | 1.6 | ESE | 1.2 | ESE |
| 19:00 - 20:00 | 3.7 | SSE | 3.6 | S | 1.9 | SSE |
| 20:00 - 21:00 | 1.7 | SSE | 1.9 | SSE | 1.1 | SSE |
| 21:00 - 22:00 | 1.5 | SE | 1.3 | SSE | 0.3 | SSE |
| 22:00 - 23:00 | 1.4 | E | 0.3 | SE | 0.8 | SSE |
| 23:00 - 24:00 | 1.7 | ESE | 1.0 | SE | 0.5 | SE |
| 00:00 - 01:00 | 0.5 | SE | 1.5 | SE | 0.5 | SE |
| 01:00 - 02:00 | 1.3 | SE | 1.9 | E | 1.7 | SE |
| 02:00 - 03:00 | 0.5 | SE | 1.1 | ESE | 0.5 | ESE |
| 03:00 - 04:00 | 0.5 | SE | 1.9 | E | 0.5 | ESE |
| 04:00 - 05:00 | 0.5 | E | 1.3 | E | 0.5 | E |
| 05:00 - 06:00 | 0.6 | E | 1.2 | SSE | 0.9 | ESE |
| 06:00 - 07:00 | 0.2 | E | 1.4 | SE | 0.4 | ESE |
| 07:00 - 08:00 | 0.6 | E | 1.0 | ESE | 1.7 | ENE |
| 08:00 - 09:00 | 1.2 | SSE | 1.4 | SE | 1.1 | NE |
| 09:00 - 10:00 | 1.0 | ESE | 2.6 | W | 2.7 | WSW |
| 10:00 - 11:00 | 2.0 | SSE | 1.1 | S | 1.5 | W |

Wind Rose



WIND SPEED (m/s) - Scale 1:3

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

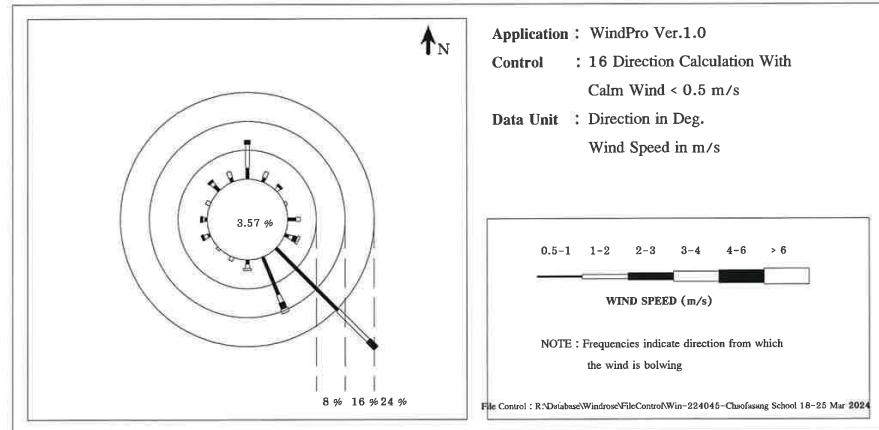
(Miss Preeda Somjai)
Technical Management Team



Meteorological Monitoring Results : Wind Rose MTR-BIC

Location : Chaofasang School Monitor period : 18-25 Mar 2024
 Wind Speed Model : Novalynx WS-25 Serial No : A4905
 Wind Direction Model : Novalynx WS-25 Serial No : A4905

| Direction | Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed | | | | | | Total |
|-----------|---|---------|---------|---------|---------|-------------|--------|
| | 0.5-1 m/s | 1-2 m/s | 2-3 m/s | 3-4 m/s | 4-6 m/s | More than 6 | |
| N | 0.0298 | 0.0655 | 0.0119 | 0.0000 | 0.0000 | 0.0000 | 0.1071 |
| NNE | 0.0119 | 0.0179 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0298 |
| NE | 0.0000 | 0.0119 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0179 |
| ENE | 0.0000 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0060 |
| E | 0.0238 | 0.0119 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0357 |
| ESE | 0.0119 | 0.0119 | 0.0119 | 0.0060 | 0.0000 | 0.0000 | 0.0417 |
| SE | 0.2440 | 0.1190 | 0.0298 | 0.0000 | 0.0000 | 0.0000 | 0.3929 |
| SSE | 0.1131 | 0.0238 | 0.0179 | 0.0119 | 0.0000 | 0.0000 | 0.1667 |
| S | 0.0119 | 0.0119 | 0.0000 | 0.0060 | 0.0000 | 0.0000 | 0.0298 |
| SSW | 0.0000 | 0.0119 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0119 |
| SW | 0.0000 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0060 |
| WSW | 0.0060 | 0.0119 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0238 |
| W | 0.0060 | 0.0060 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0179 |
| WNW | 0.0000 | 0.0119 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0119 |
| NW | 0.0179 | 0.0119 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0357 |
| NNW | 0.0119 | 0.0179 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0298 |
| CALM | 0.0357 | | | | | | |



(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Meteorological Monitoring Results : Wind Rose MTR-BIC

Location : Chaofasang School Monitor period : 18-25 Mar 2024
 Wind Speed Model : Novalynx WS-25 Serial No : A4905
 Wind Direction Model : Novalynx WS-25 Serial No : A4905

| Time | 18-19 Mar 2024 | | 19-20 Mar 2024 | | 20-21 Mar 2024 | | 21-22 Mar 2024 | |
|---------------|----------------|-----|----------------|-----|----------------|-----|----------------|-----|
| | WS(m/s) | WD | WS(m/s) | WD | WS(m/s) | WD | WS(m/s) | WD |
| 13:00 - 14:00 | 2.3 | WSW | 0.5 | W | 1.6 | N | 2.4 | SE |
| 14:00 - 15:00 | 0.8 | ESE | 3.2 | SSE | 1.3 | N | 0.7 | SE |
| 15:00 - 16:00 | 2.6 | W | 1.8 | SE | 1.1 | NE | 0.5 | SSE |
| 16:00 - 17:00 | 1.7 | SW | 1.6 | ESE | 0.6 | NNW | 0.5 | SSE |
| 17:00 - 18:00 | 0.8 | SE | 1.7 | SE | 1.1 | N | 0.5 | SSE |
| 18:00 - 19:00 | 0.8 | SSE | 0.5 | SE | 1.3 | NNW | 0.5 | SSE |
| 19:00 - 20:00 | 1.5 | SE | 1.7 | SE | 0.9 | NW | 0.5 | SSE |
| 20:00 - 21:00 | 1.2 | S | 0.5 | SE | 0.8 | N | 0.5 | SSE |
| 21:00 - 22:00 | 0.9 | SSE | 0.5 | SE | 1.3 | NNW | 0.5 | SSE |
| 22:00 - 23:00 | 0.3 | SE | 0.5 | SE | 0.8 | NNW | 0.5 | SSE |
| 23:00 - 24:00 | 1.3 | SE | 0.5 | SE | 1.2 | N | 0.5 | SSE |
| 00:00 - 01:00 | 0.5 | SE | 0.5 | ESE | 1.1 | N | 0.5 | SSE |
| 01:00 - 02:00 | 0.5 | SE | 0.5 | E | 0.8 | N | 0.5 | SSE |
| 02:00 - 03:00 | 1.4 | SE | 0.5 | E | 0.5 | N | 0.5 | SSE |
| 03:00 - 04:00 | 0.5 | SE | 0.5 | N | 1.4 | N | 0.5 | SSE |
| 04:00 - 05:00 | 0.7 | SE | 0.6 | NNE | 1.6 | N | 0.5 | SSE |
| 05:00 - 06:00 | 0.5 | SE | 2.2 | N | 1.5 | N | 0.8 | SE |
| 06:00 - 07:00 | 0.8 | SE | 1.7 | N | 1.6 | N | 0.6 | SE |
| 07:00 - 08:00 | 1.0 | SE | 3.3 | ESE | 2.5 | ESE | 0.5 | WSW |
| 08:00 - 09:00 | 1.4 | SE | 1.6 | NNE | 1.6 | NE | 1.4 | SE |
| 09:00 - 10:00 | 3.3 | SSE | 1.0 | NNE | 0.7 | NNE | 2.6 | NW |
| 10:00 - 11:00 | 3.1 | S | 1.2 | E | 2.1 | SE | 1.1 | WNW |
| 11:00 - 12:00 | 1.9 | SSW | 2.4 | NE | 0.4 | NE | 1.1 | W |
| 12:00 - 13:00 | 0.1 | WSW | 1.2 | NNW | 1.3 | ENE | 1.9 | N |



(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team

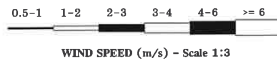
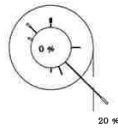
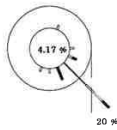
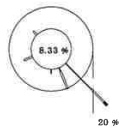


Meteorological Monitoring Results : Wind Rose MTR-BIC

Location : Chaofasang School Monitor period : 18-25 Mar 2024
Wind Speed Model : Novalynx WS-25 Serial No : A4905
Wind Direction Model : Novalynx WS-25 Serial No : A4905

| Time | 22-23 Mar 2024 | | 23-24 Mar 2024 | | 24-25 Mar 2024 | | |
|---------------|----------------|-----|----------------|-----|----------------|-----|--|
| | WS(m/s) | WD | WS(m/s) | WD | WS(m/s) | WD | |
| 13:00 - 14:00 | 1.2 | NW | 2.0 | SSE | 2.0 | N | |
| 14:00 - 15:00 | 0.8 | S | 2.1 | SSE | 1.5 | NW | |
| 15:00 - 16:00 | 0.7 | SE | 1.2 | ESE | 0.5 | SSE | |
| 16:00 - 17:00 | 1.3 | SE | 1.8 | SE | 0.5 | SE | |
| 17:00 - 18:00 | 1.6 | SSE | 2.8 | SSE | 0.5 | SE | |
| 18:00 - 19:00 | 1.2 | SSE | 2.2 | ESE | 0.5 | SE | |
| 19:00 - 20:00 | 1.9 | WSW | 1.1 | SE | 0.5 | SSE | |
| 20:00 - 21:00 | 1.1 | SSE | 1.0 | SE | 0.9 | E | |
| 21:00 - 22:00 | 0.3 | SE | 0.6 | SE | 0.5 | N | |
| 22:00 - 23:00 | 0.8 | SSE | 0.5 | SE | 0.5 | NW | |
| 23:00 - 24:00 | 0.5 | SE | 0.5 | SE | 0.5 | NW | |
| 00:00 - 01:00 | 0.5 | SE | 0.5 | SE | 0.5 | SE | |
| 01:00 - 02:00 | 1.7 | SE | 0.5 | SE | 0.5 | SE | |
| 02:00 - 03:00 | 0.5 | SE | 0.9 | SE | 0.5 | SE | |
| 03:00 - 04:00 | 0.5 | SE | 0.7 | SE | 1.0 | SE | |
| 04:00 - 05:00 | 0.9 | SE | 1.0 | SE | 0.7 | SE | |
| 05:00 - 06:00 | 0.7 | SE | 1.0 | SE | 0.7 | SE | |
| 06:00 - 07:00 | 0.8 | SE | 0.4 | SE | 0.9 | SE | |
| 07:00 - 08:00 | 1.9 | SE | 1.1 | E | 0.7 | SE | |
| 08:00 - 09:00 | 2.1 | SE | 2.4 | SE | 0.5 | S | |
| 09:00 - 10:00 | 0.0 | W | 2.5 | SE | 0.5 | E | |
| 10:00 - 11:00 | 1.3 | SSE | 1.8 | NNE | 1.0 | WNW | |
| 11:00 - 12:00 | 1.8 | SE | 1.6 | S | 1.0 | SE | |
| 12:00 - 13:00 | 1.6 | WSW | 1.1 | SSW | 0.7 | SE | |

Wind Rose



File Control : R:\Database\Windrose\FileControl\Win-224045-Chaofasang School 18-25 Mar 2024

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

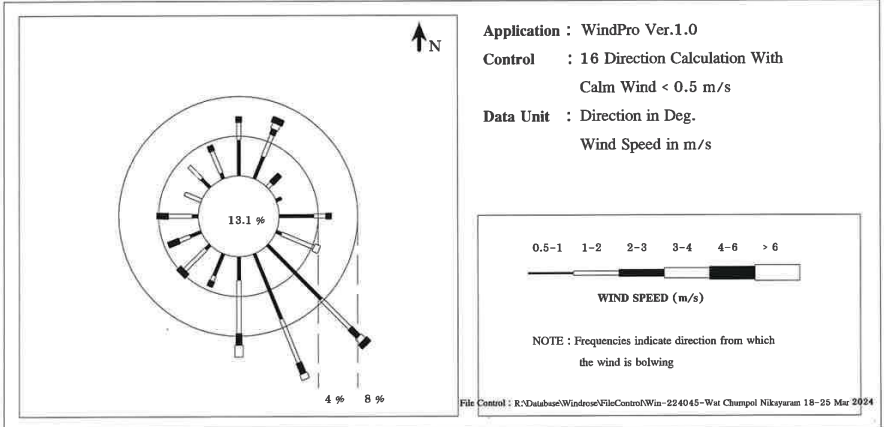
(Miss Preeda Somjai)
Technical Management Team



Meteorological Monitoring Results : Wind Rose MTR-BIC

Location : Wat Chumpol Nikayaram Monitor period : 18-25 Mar 2024
Wind Speed Model : Novalynx WS-25 Serial No : A4907
Wind Direction Model : Novalynx WS-25 Serial No : A4907

| Direction | Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed | | | | | | |
|-----------|---|---------|---------|---------|---------|-------------|--------|
| | 0.5-1 m/s | 1-2 m/s | 2-3 m/s | 3-4 m/s | 4-6 m/s | More than 6 | Total |
| N | 0.0357 | 0.0179 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0595 |
| NNE | 0.0238 | 0.0238 | 0.0060 | 0.0060 | 0.0060 | 0.0000 | 0.0655 |
| NE | 0.0000 | 0.0060 | 0.0119 | 0.0000 | 0.0000 | 0.0000 | 0.0179 |
| ENE | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0060 |
| E | 0.0357 | 0.0119 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0536 |
| ESE | 0.0060 | 0.0357 | 0.0000 | 0.0060 | 0.0000 | 0.0000 | 0.0476 |
| SE | 0.0774 | 0.0417 | 0.0119 | 0.0060 | 0.0060 | 0.0000 | 0.1429 |
| SSE | 0.0714 | 0.0476 | 0.0119 | 0.0060 | 0.0000 | 0.0000 | 0.1369 |
| S | 0.0238 | 0.0536 | 0.0119 | 0.0119 | 0.0000 | 0.0000 | 0.1012 |
| SSW | 0.0238 | 0.0060 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0357 |
| SW | 0.0060 | 0.0298 | 0.0000 | 0.0000 | 0.0060 | 0.0000 | 0.0417 |
| WSW | 0.0119 | 0.0119 | 0.0119 | 0.0000 | 0.0000 | 0.0000 | 0.0357 |
| W | 0.0060 | 0.0238 | 0.0119 | 0.0000 | 0.0000 | 0.0000 | 0.0417 |
| WNW | 0.0000 | 0.0179 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0179 |
| NW | 0.0119 | 0.0179 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0298 |
| NNW | 0.0060 | 0.0238 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0357 |
| CALM | 0.1310 | | | | | | |



(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team

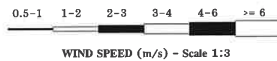
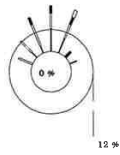
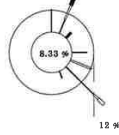
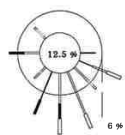


Meteorological Monitoring Results : Wind Rose MTR-BIC

Location : Wat Chumpol Nikayaram Monitor period : 18-25 Mar 2024
Wind Speed Model : Novalynx WS-25 Serial No : A4907
Wind Direction Model : Novalynx WS-25 Serial No : A4907

| Time | 18-19 Mar 2024 | | 19-20 Mar 2024 | | 20-21 Mar 2024 | | 21-22 Mar 2024 | |
|---------------|----------------|-----|----------------|-----|----------------|-----|----------------|-----|
| | WS(m/s) | WD | WS(m/s) | WD | WS(m/s) | WD | WS(m/s) | WD |
| 12:00 - 13:00 | 2.4 | W | 1.9 | SE | 2.0 | N | 1.5 | N |
| 13:00 - 14:00 | 1.8 | NW | 0.1 | ESE | 3.1 | NNE | 1.0 | W |
| 14:00 - 15:00 | 1.8 | W | 0.5 | SSE | 2.3 | NNE | 0.7 | SE |
| 15:00 - 16:00 | 0.4 | SSW | 3.2 | SE | 1.7 | NNE | 2.0 | E |
| 16:00 - 17:00 | 1.2 | S | 1.2 | ESE | 0.8 | NNE | 1.0 | E |
| 17:00 - 18:00 | 2.4 | SSW | 1.9 | ESE | 0.9 | NNE | 1.0 | SE |
| 18:00 - 19:00 | 1.2 | SSE | 0.5 | E | 1.0 | N | 0.9 | SSE |
| 19:00 - 20:00 | 2.8 | S | 0.1 | ESE | 1.0 | NNW | 1.4 | S |
| 20:00 - 21:00 | 1.5 | SW | 1.6 | ESE | 1.4 | NW | 0.5 | S |
| 21:00 - 22:00 | 1.4 | S | 0.5 | N | 1.3 | NNE | 0.5 | S |
| 22:00 - 23:00 | 1.0 | SSE | 0.5 | E | 1.3 | NNW | 0.8 | SSE |
| 23:00 - 24:00 | 0.9 | SSW | 0.5 | SE | 0.8 | NNW | 0.9 | SSE |
| 00:00 - 01:00 | 0.8 | SSW | 0.5 | SE | 1.2 | WNW | 0.8 | SSW |
| 01:00 - 02:00 | 0.2 | SSW | 0.5 | SE | 1.1 | NW | 0.7 | SSE |
| 02:00 - 03:00 | 0.1 | SSW | 0.5 | SE | 0.8 | NW | 0.5 | SSE |
| 03:00 - 04:00 | 1.4 | SSE | 0.5 | SE | 1.6 | NNW | 0.7 | SE |
| 04:00 - 05:00 | 1.3 | SE | 5.5 | NNE | 1.1 | WNW | 0.3 | SSW |
| 05:00 - 06:00 | 0.5 | E | 0.5 | NNE | 0.9 | N | 0.8 | S |
| 06:00 - 07:00 | 1.0 | ESE | 0.5 | NNE | 0.6 | N | 0.6 | SE |
| 07:00 - 08:00 | 0.5 | ESE | 0.7 | N | 0.5 | ENE | 0.2 | ESE |
| 08:00 - 09:00 | 3.7 | SSE | 2.3 | NE | 2.5 | NE | 1.0 | S |
| 09:00 - 10:00 | 1.4 | SE | 0.8 | N | 1.6 | N | 0.8 | NW |
| 10:00 - 11:00 | 3.3 | ESE | 1.3 | NNE | 0.7 | N | 2.7 | WSW |
| 11:00 - 12:00 | 3.1 | S | 1.2 | NNE | 2.0 | NNW | 1.5 | W |

Wind Rose



WIND SPEED (m/s) - Scale 1:3

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team

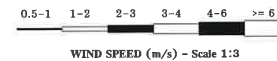
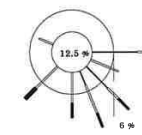
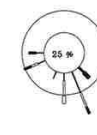


Meteorological Monitoring Results : Wind Rose MTR-BIC

Location : Wat Chumpol Nikayaram Monitor period : 18-25 Mar 2024
Wind Speed Model : Novalynx WS-25 Serial No : A4907
Wind Direction Model : Novalynx WS-25 Serial No : A4907

| Time | 22-23 Mar 2024 | | 23-24 Mar 2024 | | 24-25 Mar 2024 | |
|---------------|----------------|-----|----------------|-----|----------------|-----|
| | WS(m/s) | WD | WS(m/s) | WD | WS(m/s) | WD |
| 12:00 - 13:00 | 0.4 | WNW | 1.0 | SW | 1.0 | NE |
| 13:00 - 14:00 | 1.3 | SSE | 4.4 | SW | 1.3 | NNW |
| 14:00 - 15:00 | 2.4 | W | 1.9 | SW | 1.1 | W |
| 15:00 - 16:00 | 0.7 | WSW | 2.0 | SSE | 0.6 | WSW |
| 16:00 - 17:00 | 0.1 | SE | 1.3 | S | 0.5 | SE |
| 17:00 - 18:00 | 1.1 | S | 1.3 | S | 1.6 | S |
| 18:00 - 19:00 | 0.7 | SSW | 2.0 | SE | 1.5 | SE |
| 19:00 - 20:00 | 2.8 | SE | 2.8 | S | 1.7 | SSE |
| 20:00 - 21:00 | 0.7 | SSE | 0.8 | SSE | 1.2 | SW |
| 21:00 - 22:00 | 1.0 | S | 1.9 | SSE | 1.1 | SW |
| 22:00 - 23:00 | 4.0 | SE | 0.0 | SSE | 0.4 | SW |
| 23:00 - 24:00 | 1.7 | SSE | 1.4 | E | 0.6 | SW |
| 00:00 - 01:00 | 3.1 | S | 1.7 | ESE | 0.3 | SE |
| 01:00 - 02:00 | 0.2 | SSE | 0.5 | SE | 0.4 | SE |
| 02:00 - 03:00 | 0.9 | SSE | 1.3 | SE | 0.3 | SE |
| 03:00 - 04:00 | 0.4 | SSE | 0.0 | SE | 0.2 | SE |
| 04:00 - 05:00 | 0.5 | SSE | 0.5 | SE | 0.5 | SE |
| 05:00 - 06:00 | 0.2 | SSE | 0.8 | E | 0.2 | SE |
| 06:00 - 07:00 | 0.4 | SE | 0.6 | E | 0.7 | SSE |
| 07:00 - 08:00 | 0.8 | S | 0.2 | E | 0.8 | SE |
| 08:00 - 09:00 | 2.4 | SSE | 0.6 | E | 0.7 | SSE |
| 09:00 - 10:00 | 0.5 | W | 1.2 | SSE | 1.4 | WSW |
| 10:00 - 11:00 | 2.8 | WSW | 1.0 | ESE | 1.5 | SSW |
| 11:00 - 12:00 | 1.5 | WSW | 1.3 | WNW | 1.0 | SE |

Wind Rose



WIND SPEED (m/s) - Scale 1:3

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team

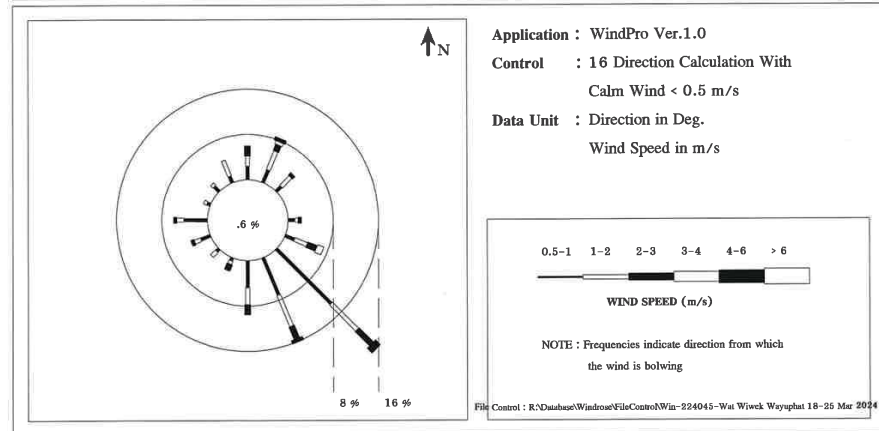


Meteorological Monitoring Results : Wind Rose

MTR-BIC

Location : Wat Wiwek Wayuphat Monitor period : 18-25 Mar 2024
 Wind Speed Model : Novalynx WS-25 Serial No : A5090
 Wind Direction Model : Novalynx WS-25 Serial No : A5090

| Direction | Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed | | | | | | Total |
|-----------|---|---------|---------|---------|---------|-------------|--------|
| | 0.5-1 m/s | 1-2 m/s | 2-3 m/s | 3-4 m/s | 4-6 m/s | More than 6 | |
| N | 0.0238 | 0.0179 | 0.0179 | 0.0000 | 0.0000 | 0.0000 | 0.0595 |
| NNE | 0.0238 | 0.0357 | 0.0119 | 0.0060 | 0.0060 | 0.0000 | 0.0833 |
| NE | 0.0119 | 0.0238 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0417 |
| ENE | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| E | 0.0119 | 0.0060 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0238 |
| ESE | 0.0179 | 0.0238 | 0.0179 | 0.0119 | 0.0000 | 0.0000 | 0.0714 |
| SE | 0.1369 | 0.0655 | 0.0357 | 0.0000 | 0.0119 | 0.0000 | 0.2500 |
| SSE | 0.0714 | 0.0595 | 0.0238 | 0.0000 | 0.0060 | 0.0000 | 0.1607 |
| S | 0.0476 | 0.0298 | 0.0179 | 0.0000 | 0.0000 | 0.0000 | 0.0952 |
| SSW | 0.0060 | 0.0060 | 0.0119 | 0.0000 | 0.0000 | 0.0000 | 0.0238 |
| SW | 0.0060 | 0.0119 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0179 |
| WSW | 0.0179 | 0.0119 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0357 |
| W | 0.0417 | 0.0119 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0595 |
| WNW | 0.0060 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0119 |
| NW | 0.0119 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0179 |
| NNW | 0.0119 | 0.0298 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0417 |
| CALM | 0.0060 | | | | | | |



(Miss Katesarin Vorradetwittaya)
 Environmental Scientist

(Miss Preeda Somjai)
 Technical Management Team



Meteorological Monitoring Results : Wind Rose

MTR-BIC

Location : Wat Wiwek Wayuphat Monitor period : 18-25 Mar 2024
 Wind Speed Model : Novalynx WS-25 Serial No : A5090
 Wind Direction Model : Novalynx WS-25 Serial No : A5090

| Time | 18-19 Mar 2024 | | 19-20 Mar 2024 | | 20-21 Mar 2024 | | 21-22 Mar 2024 | |
|---------------|----------------|-----|----------------|-----|----------------|-----|----------------|-----|
| | WS(m/s) | WD | WS(m/s) | WD | WS(m/s) | WD | WS(m/s) | WD |
| 10:00 - 11:00 | 0.5 | S | 2.0 | SE | 1.2 | NNE | 1.5 | E |
| 11:00 - 12:00 | 1.4 | WSW | 3.1 | ESE | 2.0 | N | 1.0 | N |
| 12:00 - 13:00 | 2.8 | WSW | 1.5 | SSW | 3.1 | NNE | 0.7 | NE |
| 13:00 - 14:00 | 2.4 | SE | 2.3 | ESE | 2.3 | NNE | 0.8 | NW |
| 14:00 - 15:00 | 1.0 | SW | 4.6 | SE | 1.7 | NNE | 1.2 | SSE |
| 15:00 - 16:00 | 1.0 | SSE | 4.3 | SSE | 0.8 | NNE | 1.1 | NE |
| 16:00 - 17:00 | 1.8 | S | 5.1 | SE | 0.9 | NNE | 0.7 | SE |
| 17:00 - 18:00 | 1.5 | SE | 2.4 | E | 1.0 | N | 0.5 | SE |
| 18:00 - 19:00 | 1.6 | SE | 1.0 | ESE | 1.0 | NNW | 0.6 | W |
| 19:00 - 20:00 | 2.0 | SSW | 0.5 | SE | 1.4 | NW | 0.8 | W |
| 20:00 - 21:00 | 0.9 | SE | 0.9 | ESE | 1.3 | NNE | 0.5 | W |
| 21:00 - 22:00 | 0.8 | SSE | 0.5 | SSE | 1.3 | NNW | 0.5 | W |
| 22:00 - 23:00 | 0.9 | S | 0.5 | SE | 0.5 | NNW | 0.5 | W |
| 23:00 - 24:00 | 0.5 | SSE | 0.5 | SE | 0.5 | N | 0.5 | W |
| 00:00 - 01:00 | 0.6 | SE | 0.5 | SE | 1.3 | NNW | 0.5 | W |
| 01:00 - 02:00 | 0.6 | S | 0.5 | SE | 1.0 | NE | 0.5 | S |
| 02:00 - 03:00 | 0.5 | SE | 0.5 | SE | 0.5 | NNW | 0.5 | SSE |
| 03:00 - 04:00 | 0.5 | SE | 5.5 | NNE | 1.0 | N | 0.7 | SSE |
| 04:00 - 05:00 | 0.5 | S | 0.5 | NNE | 1.0 | NE | 0.6 | SSE |
| 05:00 - 06:00 | 1.1 | ESE | 0.5 | NNE | 2.2 | NNE | 0.5 | SSE |
| 06:00 - 07:00 | 1.4 | SSE | 0.7 | N | 1.0 | NNE | 0.5 | SE |
| 07:00 - 08:00 | 1.8 | ESE | 2.3 | NE | 0.7 | N | 0.5 | E |
| 08:00 - 09:00 | 2.7 | SSE | 0.8 | N | 1.6 | NNE | 0.5 | WNW |
| 09:00 - 10:00 | 2.5 | SE | 1.3 | NNE | 1.2 | NE | 1.0 | W |



(Miss Katesarin Vorradetwittaya)
 Environmental Scientist

(Miss Preeda Somjai)
 Technical Management Team

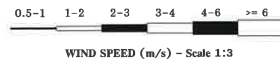


Meteorological Monitoring Results : Wind Rose MTR-BIC

Location : Wat Wiwek Wayuphat Monitor period : 18-25 Mar 2024
Wind Speed Model : Novalynx WS-25 Serial No : A5090
Wind Direction Model : Novalynx WS-25 Serial No : A5090

| Time | 22-23 Mar 2024 | | 23-24 Mar 2024 | | 24-25 Mar 2024 | | |
|---------------|----------------|-----|----------------|-----|----------------|-----|--|
| | WS(m/s) | WD | WS(m/s) | WD | WS(m/s) | WD | |
| 10:00 - 11:00 | 1.2 | WNW | 2.4 | SSE | 2.3 | ESE | |
| 11:00 - 12:00 | 1.4 | WSW | 2.1 | SE | 1.1 | NNW | |
| 12:00 - 13:00 | 2.6 | W | 1.5 | S | 2.7 | N | |
| 13:00 - 14:00 | 2.9 | SSW | 1.0 | W | 2.4 | N | |
| 14:00 - 15:00 | 2.5 | S | 3.3 | ESE | 1.3 | NNW | |
| 15:00 - 16:00 | 1.4 | S | 1.0 | SSE | 1.7 | SSE | |
| 16:00 - 17:00 | 2.0 | SSE | 1.1 | ESE | 1.7 | SE | |
| 17:00 - 18:00 | 1.1 | SE | 2.3 | SE | 1.9 | SE | |
| 18:00 - 19:00 | 1.1 | SSE | 2.5 | S | 1.5 | S | |
| 19:00 - 20:00 | 0.8 | WSW | 0.9 | SE | 2.0 | SSE | |
| 20:00 - 21:00 | 0.8 | S | 2.3 | ESE | 1.1 | SE | |
| 21:00 - 22:00 | 1.1 | SE | 0.3 | E | 0.6 | SE | |
| 22:00 - 23:00 | 0.6 | ESE | 0.5 | SE | 0.8 | SSW | |
| 23:00 - 24:00 | 0.7 | SSE | 0.5 | SE | 0.5 | SSE | |
| 00:00 - 01:00 | 1.7 | SE | 1.4 | SE | 0.5 | SE | |
| 01:00 - 02:00 | 0.7 | SE | 1.0 | SSE | 0.5 | WSW | |
| 02:00 - 03:00 | 0.9 | ESE | 0.5 | SE | 0.5 | WSW | |
| 03:00 - 04:00 | 0.5 | SE | 0.5 | NE | 0.5 | SW | |
| 04:00 - 05:00 | 0.5 | SSE | 0.5 | SSE | 1.0 | SSE | |
| 05:00 - 06:00 | 0.5 | SE | 0.5 | SSE | 0.7 | S | |
| 06:00 - 07:00 | 1.0 | SE | 1.7 | SSE | 0.6 | S | |
| 07:00 - 08:00 | 0.9 | E | 0.9 | SE | 1.1 | SW | |
| 08:00 - 09:00 | 1.6 | SE | 1.3 | SSE | 1.6 | S | |
| 09:00 - 10:00 | 2.5 | SE | 0.7 | NW | 2.5 | S | |

Wind Rose



File Control : R:\Database\Windrose\FileControl\Win-224045-Wat Wiwek Wayuphat 18-25 Mar 2024

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

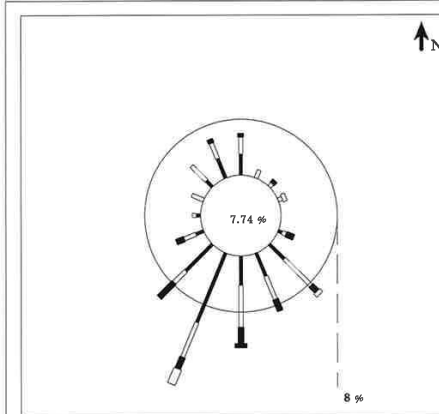
(Miss Preeda Somjai)
Technical Management Team



Meteorological Monitoring Results : Wind Rose MTR-BIC

Location : Ban Khlong Phutsa Monitor period : 18-25 Mar 2024
Wind Speed Model : Novalynx WS-25 Serial No : A5088
Wind Direction Model : Novalynx WS-25 Serial No : A5088

| Direction | Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed | | | | | | |
|-----------|---|---------|---------|---------|---------|-------------|--------|
| | 0.5-1 m/s | 1-2 m/s | 2-3 m/s | 3-4 m/s | 4-6 m/s | More than 6 | Total |
| N | 0.0298 | 0.0238 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0595 |
| NNE | 0.0000 | 0.0119 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0119 |
| NE | 0.0000 | 0.0060 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0119 |
| ENE | 0.0000 | 0.0060 | 0.0000 | 0.0060 | 0.0000 | 0.0000 | 0.0119 |
| E | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| ESE | 0.0060 | 0.0060 | 0.0119 | 0.0000 | 0.0000 | 0.0000 | 0.0238 |
| SE | 0.0298 | 0.0536 | 0.0119 | 0.0060 | 0.0000 | 0.0000 | 0.1012 |
| SSE | 0.0357 | 0.0357 | 0.0179 | 0.0000 | 0.0000 | 0.0000 | 0.0893 |
| S | 0.0417 | 0.0595 | 0.0238 | 0.0000 | 0.0060 | 0.0000 | 0.1310 |
| SSW | 0.1071 | 0.0536 | 0.0179 | 0.0238 | 0.0000 | 0.0000 | 0.2024 |
| SW | 0.0536 | 0.0238 | 0.0298 | 0.0000 | 0.0000 | 0.0000 | 0.1071 |
| WSW | 0.0119 | 0.0179 | 0.0119 | 0.0000 | 0.0000 | 0.0000 | 0.0417 |
| W | 0.0060 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0119 |
| WNW | 0.0000 | 0.0179 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0179 |
| NW | 0.0119 | 0.0298 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0417 |
| NNW | 0.0298 | 0.0238 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0595 |
| CALM | 0.0774 | | | | | | |



Application : WindPro Ver.1.0

Control : 16 Direction Calculation With
Calm Wind < 0.5 m/s

Data Unit : Direction in Deg.
Wind Speed in m/s



NOTE : Frequencies indicate direction from which
the wind is blowing

File Control : R:\Database\Windrose\FileControl\Win-224045-Ban Khlong Phutsa 18-25 Mar 2024

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team

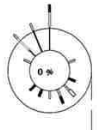


Meteorological Monitoring Results : Wind Rose MTR-BIC

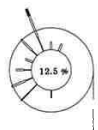
Location : Ban Khlong Phutsa Monitor period : 18-25 Mar 2024
Wind Speed Model : Novalynx WS-25 Serial No : A5088
Wind Direction Model : Novalynx WS-25 Serial No : A5088

| Time | 18-19 Mar 2024 | | 19-20 Mar 2024 | | 20-21 Mar 2024 | | 21-22 Mar 2024 | |
|---------------|----------------|-----|----------------|-----|----------------|-----|----------------|-----|
| | WS(m/s) | WD | WS(m/s) | WD | WS(m/s) | WD | WS(m/s) | WD |
| 10:00 - 11:00 | 2.6 | SSE | 1.2 | S | 0.8 | NW | 1.4 | NNE |
| 11:00 - 12:00 | 3.4 | SSW | 2.2 | SSE | 1.2 | NNW | 1.1 | SE |
| 12:00 - 13:00 | 2.6 | S | 1.2 | SSE | 1.4 | NW | 0.4 | NNE |
| 13:00 - 14:00 | 2.5 | SW | 1.9 | SE | 1.9 | N | 1.3 | N |
| 14:00 - 15:00 | 0.8 | SW | 2.8 | SW | 0.4 | NNE | 0.5 | S |
| 15:00 - 16:00 | 1.5 | S | 3.2 | SE | 1.4 | NNW | 1.2 | S |
| 16:00 - 17:00 | 2.4 | SW | 2.9 | SSW | 1.0 | NNE | 1.2 | SSE |
| 17:00 - 18:00 | 0.9 | SSW | 2.6 | ESE | 0.5 | S | 0.5 | SE |
| 18:00 - 19:00 | 1.1 | SSW | 1.1 | ENE | 0.7 | SW | 0.5 | S |
| 19:00 - 20:00 | 0.4 | S | 1.1 | WNW | 0.7 | W | 0.5 | SSW |
| 20:00 - 21:00 | 1.4 | S | 0.9 | NW | 0.8 | NNW | 0.5 | SSW |
| 21:00 - 22:00 | 0.5 | SSW | 1.8 | N | 0.4 | NW | 0.1 | SSW |
| 22:00 - 23:00 | 0.5 | SW | 1.0 | NNW | 0.9 | SW | 0.5 | SSW |
| 23:00 - 24:00 | 0.3 | SSW | 0.6 | N | 0.9 | SW | 0.5 | SSW |
| 00:00 - 01:00 | 0.5 | SSE | 0.9 | NNW | 0.6 | NNW | 0.5 | SSW |
| 01:00 - 02:00 | 0.5 | SSE | 0.7 | N | 1.0 | WSW | 0.5 | SSW |
| 02:00 - 03:00 | 0.5 | SSW | 0.7 | NNW | 0.6 | WSW | 0.5 | SSW |
| 03:00 - 04:00 | 1.4 | SSE | 1.8 | NW | 0.4 | SSW | 0.5 | SSW |
| 04:00 - 05:00 | 0.8 | SSE | 0.8 | NNW | 1.7 | W | 0.3 | SSW |
| 05:00 - 06:00 | 1.2 | NE | 0.5 | N | 1.0 | WSW | 0.5 | SSW |
| 06:00 - 07:00 | 2.3 | SE | 1.5 | NW | 1.2 | WNW | 0.5 | SSW |
| 07:00 - 08:00 | 3.2 | ENE | 1.6 | NW | 1.1 | NW | 1.0 | S |
| 08:00 - 09:00 | 2.4 | NE | 2.3 | N | 2.4 | NNW | 0.9 | SE |
| 09:00 - 10:00 | 0.8 | SE | 1.2 | N | 1.0 | NNW | 1.1 | SE |

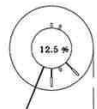
Wind Rose



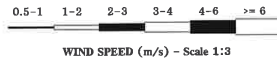
12 %



12 %



20 %



WIND SPEED (m/s) - Scale 1:3

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team

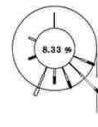


Meteorological Monitoring Results : Wind Rose MTR-BIC

Location : Ban Khlong Phutsa Monitor period : 18-25 Mar 2024
Wind Speed Model : Novalynx WS-25 Serial No : A5088
Wind Direction Model : Novalynx WS-25 Serial No : A5088

| Time | 22-23 Mar 2024 | | 23-24 Mar 2024 | | 24-25 Mar 2024 | |
|---------------|----------------|-----|----------------|-----|----------------|-----|
| | WS(m/s) | WD | WS(m/s) | WD | WS(m/s) | WD |
| 10:00 - 11:00 | 1.5 | SSE | 2.4 | WSW | 0.6 | SSW |
| 11:00 - 12:00 | 1.6 | S | 1.7 | SSW | 1.7 | S |
| 12:00 - 13:00 | 0.7 | SSE | 4.0 | S | 1.0 | SSW |
| 13:00 - 14:00 | 3.3 | SSW | 3.0 | SSW | 1.8 | SE |
| 14:00 - 15:00 | 2.6 | WSW | 1.9 | SSW | 0.9 | SSE |
| 15:00 - 16:00 | 0.3 | SW | 3.1 | SSW | 0.2 | S |
| 16:00 - 17:00 | 0.9 | SSW | 0.8 | S | 1.8 | SW |
| 17:00 - 18:00 | 1.7 | SSW | 1.9 | SE | 1.7 | SW |
| 18:00 - 19:00 | 1.4 | SE | 1.2 | SE | 1.3 | SW |
| 19:00 - 20:00 | 0.4 | E | 0.5 | S | 1.7 | S |
| 20:00 - 21:00 | 1.7 | ESE | 2.6 | S | 0.5 | SSW |
| 21:00 - 22:00 | 2.7 | SE | 2.6 | SSW | 0.5 | SW |
| 22:00 - 23:00 | 2.6 | ESE | 0.5 | S | 0.5 | SSW |
| 23:00 - 24:00 | 0.7 | SE | 0.5 | SSE | 0.5 | SSW |
| 00:00 - 01:00 | 1.5 | SE | 0.0 | S | 0.5 | S |
| 01:00 - 02:00 | 0.5 | ESE | 1.1 | SSW | 0.1 | SW |
| 02:00 - 03:00 | 0.5 | SE | 1.3 | SSW | 0.5 | SW |
| 03:00 - 04:00 | 1.4 | SE | 1.5 | S | 0.5 | WSW |
| 04:00 - 05:00 | 0.9 | N | 1.8 | S | 1.6 | WSW |
| 05:00 - 06:00 | 0.8 | N | 0.9 | SW | 0.5 | SW |
| 06:00 - 07:00 | 2.4 | SSE | 2.4 | SW | 2.7 | S |
| 07:00 - 08:00 | 1.5 | SSW | 2.9 | SW | 1.7 | SSW |
| 08:00 - 09:00 | 1.7 | WNW | 1.4 | SSE | 1.5 | SW |
| 09:00 - 10:00 | 2.6 | S | 2.0 | SSW | 1.7 | SSE |

Wind Rose



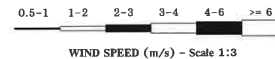
12 %



12 %



12 %



WIND SPEED (m/s) - Scale 1:3

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team



บริษัท ซีคอต จำกัด
SECOT CO., LTD.
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AMBIENT AIR QUALITY ANALYSIS REPORT

CLIENT NAME : Bangpa-in Cogeneration Co., Ltd. REFERENCE NO. : 224045/Amb(TSP)/Mar(1)
SAMPLING BY : SECOT Co., Ltd. SAMPLING DATE : 18-25/03/2024
RECEIVED DATE : 28/03/2024 ANALYTICAL DATE : 28/03/2024-01/04/2024
REPORT DATE : 05/04/2024 SAMPLE CONDITION : Normal
SITE OPERATOR : Mr. Suphanut Intharanaret
LOCATION DESCRIPTION : 1. Wat Khlong Phutsa
2. Ban Bangkrasun
3. Chaofasang School

| PARAMETER | SAMPLING DATE | UNIT | RESULT | | | STANDARD* | REFERENCE METHOD |
|-------------|---------------|-------------------|--------|-------|-------|-----------|---------------------|
| | | | 1 | 2 | 3 | | |
| TSP (24 hr) | 18-19/03/2024 | mg/m ³ | 0.160 | 0.069 | 0.064 | 0.330 | High Volume Air |
| | 19-20/03/2024 | mg/m ³ | 0.130 | 0.071 | 0.061 | | Sampler/Gravimetric |
| | 20-21/03/2024 | mg/m ³ | 0.124 | 0.078 | 0.071 | | Method |
| | 21-22/03/2024 | mg/m ³ | 0.073 | 0.141 | 0.105 | | |
| | 22-23/03/2024 | mg/m ³ | 0.067 | 0.068 | 0.064 | | |
| | 23-24/03/2024 | mg/m ³ | 0.068 | 0.054 | 0.066 | | |
| | 24-25/03/2024 | mg/m ³ | 0.084 | 0.051 | 0.055 | | |

Phatchara Samanchan
(Miss Phatchara Samanchan)

Analyst

Narisa Poowasanpetch
(Miss Narisa Poowasanpetch)

Technical Management Team

- Remark : 1. Reported analysis refers to submitted sample only.
2. This report shall not be reproduced, except in full, without official approval.
3. * Notification of the National Environment Board, No.24, B.E.2547 (2004).



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TEL : +66(0) 2959-3600 FAX : +66(0) 2959-3535 E-mail : envserv@secot.co.th

AMBIENT AIR QUALITY ANALYSIS REPORT

CLIENT NAME : Bangpa-in Cogeneration Co., Ltd. REFERENCE NO. : 224045/Amb(TSP)/Mar(2)
SAMPLING BY : SECOT Co., Ltd. SAMPLING DATE : 18-25/03/2024
RECEIVED DATE : 28/03/2024 ANALYTICAL DATE : 28/03/2024-01/04/2024
REPORT DATE : 05/04/2024 SAMPLE CONDITION : Normal
SITE OPERATOR : Mr. Suphanut Intharanaret
LOCATION DESCRIPTION : 4. Wat Chumpolnikayaram
5. Wat Wiwek Wayuphat
6. Ban Khlong Phutsa

| PARAMETER | SAMPLING DATE | UNIT | RESULT | | | STANDARD* | REFERENCE METHOD |
|-------------|---------------|-------------------|--------|-------|-------|-----------|---------------------|
| | | | 4 | 5 | 6 | | |
| TSP (24 hr) | 18-19/03/2024 | mg/m ³ | 0.084 | 0.073 | 0.143 | 0.330 | High Volume Air |
| | 19-20/03/2024 | mg/m ³ | 0.090 | 0.102 | 0.145 | | Sampler/Gravimetric |
| | 20-21/03/2024 | mg/m ³ | 0.084 | 0.063 | 0.121 | | Method |
| | 21-22/03/2024 | mg/m ³ | 0.123 | 0.107 | 0.142 | | |
| | 22-23/03/2024 | mg/m ³ | 0.080 | 0.077 | 0.117 | | |
| | 23-24/03/2024 | mg/m ³ | 0.065 | 0.060 | 0.111 | | |
| | 24-25/03/2024 | mg/m ³ | 0.064 | 0.068 | 0.101 | | |

Phatchara Samanchan
(Miss Phatchara Samanchan)

Analyst

Narisa Poowasanpetch
(Miss Narisa Poowasanpetch)

Technical Management Team

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TEL : +66(0) 2959-3600 FAX : +66(0) 2959-3535 E-mail : envserv@secot.co.th

AMBIENT AIR QUALITY ANALYSIS REPORT

CLIENT NAME : Bangpa-in Cogeneration Co., Ltd. REFERENCE NO. : 224045/Amb(PM-10)/Mar(1)
SAMPLING BY : SECOT Co., Ltd. SAMPLING DATE : 18-25/03/2024
RECEIVED DATE : 28/03/2024 ANALYTICAL DATE : 28/03/2024-01/04/2024
REPORT DATE : 05/04/2024 SAMPLE CONDITION : Normal
SITE OPERATOR : Mr. Suphanut Intharanaret
LOCATION DESCRIPTION : 1. Wat Khlong Phutsa
2. Ban Bangkrasun
3. Chaofasang School

| PARAMETER | SAMPLING DATE | UNIT | RESULT | | | STANDARD* | REFERENCE METHOD |
|---------------|---------------|-------------------|--------|-------|-------|-----------|--------------------|
| | | | 1 | 2 | 3 | | |
| PM-10 (24 hr) | 18-19/03/2024 | mg/m ³ | 0.065 | 0.051 | 0.048 | 0.120 | High Volume Air |
| | 19-20/03/2024 | mg/m ³ | 0.072 | 0.057 | 0.039 | | Sampler (Hi-Vol |
| | 20-21/03/2024 | mg/m ³ | 0.064 | 0.066 | 0.036 | | PM-10 Size |
| | 21-22/03/2024 | mg/m ³ | 0.067 | 0.044 | 0.056 | | Selective Inlet)/ |
| | 22-23/03/2024 | mg/m ³ | 0.052 | 0.051 | 0.043 | | Gravimetric Method |
| | 23-24/03/2024 | mg/m ³ | 0.046 | 0.036 | 0.030 | | |
| | 24-25/03/2024 | mg/m ³ | 0.056 | 0.042 | 0.038 | | |

Phatchara Samanchan
(Miss Phatchara Samanchan)

Analyst

Narisa Poowasanpetch
(Miss Narisa Poowasanpetch)

Technical Management Team

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AMBIENT AIR QUALITY ANALYSIS REPORT

CLIENT NAME : Bangpa-in Cogeneration Co., Ltd. REFERENCE NO. : 224045/Amb(PM-10)/Mar(2)
SAMPLING BY : SECOT Co., Ltd. SAMPLING DATE : 18-25/03/2024
RECEIVED DATE : 28/03/2024 ANALYTICAL DATE : 28/03/2024-01/04/2024
REPORT DATE : 05/04/2024 SAMPLE CONDITION : Normal
SITE OPERATOR : Mr. Suphanut Intharanaret
LOCATION DESCRIPTION : 4. Wat Chumpolnikayaram
5. Wat Wiwek Wayuphat
6. Ban Khlong Phutsa

| PARAMETER | SAMPLING DATE | UNIT | RESULT | | | STANDARD* | REFERENCE METHOD |
|---------------|---------------|-------------------|--------|-------|-------|-----------|--------------------|
| | | | 4 | 5 | 6 | | |
| PM-10 (24 hr) | 18-19/03/2024 | mg/m ³ | 0.074 | 0.062 | 0.083 | 0.120 | High Volume Air |
| | 19-20/03/2024 | mg/m ³ | 0.060 | 0.055 | 0.076 | | Sampler (Hi-Vol |
| | 20-21/03/2024 | mg/m ³ | 0.058 | 0.054 | 0.077 | | PM-10 Size |
| | 21-22/03/2024 | mg/m ³ | 0.081 | 0.070 | 0.113 | | Selective Inlet)/ |
| | 22-23/03/2024 | mg/m ³ | 0.065 | 0.064 | 0.080 | | Gravimetric Method |
| | 23-24/03/2024 | mg/m ³ | 0.050 | 0.047 | 0.065 | | |
| | 24-25/03/2024 | mg/m ³ | 0.048 | 0.057 | 0.059 | | |

Phatchara Samanchan
(Miss Phatchara Samanchan)

Analyst

Narisa Poowasanpetch
(Miss Narisa Poowasanpetch)

Technical Management Team

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Ambient Air Monitoring Results : Nitrogen dioxide MTR-BIC


Location : Wat Khlong Phutsa Monitor Period : 18-25 Mar 2024
Analyzer Model : Teledyne T200 Station No : Shelter 10
Serial No : 110 Site Operator : Mr. Suphanut Intharanaret

Calibrator Model : Teledyne 700E Serial No : 587
Calibration Gas Cylinder I.D.: EB0102326
Certified Date : 04 Jan 2024 Cal Concentration (ppb) : 0,100,200,400
Expire Date : 03 Jan 2025

| Time | NO2 Concentration (ppm) | | | | | | |
|---------------|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 18-19 Mar 2024 | 19-20 Mar 2024 | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 17:00 - 18:00 | 0.0042 | 0.0086 | 0.0042 | 0.0082 | 0.0056 | 0.0065 | 0.0059 |
| 18:00 - 19:00 | 0.0069 | 0.0084 | 0.0060 | 0.0059 | 0.0042 | 0.0083 | 0.0065 |
| 19:00 - 20:00 | 0.0061 | 0.0063 | 0.0078 | 0.0057 | 0.0059 | 0.0059 | 0.0059 |
| 20:00 - 21:00 | 0.0076 | 0.0088 | 0.0039 | 0.0086 | 0.0068 | 0.0081 | 0.0081 |
| 21:00 - 22:00 | 0.0075 | 0.0069 | 0.0088 | 0.0080 | 0.0092 | 0.0094 | 0.0058 |
| 22:00 - 23:00 | 0.0088 | 0.0078 | 0.0065 | 0.0051 | 0.0079 | 0.0059 | 0.0058 |
| 23:00 - 00:00 | 0.0068 | 0.0071 | 0.0050 | 0.0052 | 0.0079 | 0.0067 | 0.0077 |
| 00:00 - 01:00 | 0.0075 | 0.0061 | 0.0070 | 0.0085 | 0.0071 | 0.0050 | 0.0084 |
| 01:00 - 02:00 | 0.0085 | 0.0074 | 0.0095 | 0.0057 | 0.0062 | 0.0063 | 0.0077 |
| 02:00 - 03:00 | 0.0053 | 0.0054 | 0.0079 | 0.0062 | 0.0079 | 0.0047 | 0.0084 |
| 03:00 - 04:00 | 0.0080 | 0.0045 | 0.0055 | 0.0076 | 0.0062 | 0.0061 | 0.0093 |
| 04:00 - 05:00 | 0.0066 | 0.0058 | 0.0065 | 0.0068 | 0.0072 | 0.0067 | 0.0063 |
| 05:00 - 06:00 | 0.0045 | 0.0043 | 0.0095 | 0.0076 | 0.0080 | 0.0070 | 0.0090 |
| 06:00 - 07:00 | 0.0064 | 0.0060 | 0.0040 | 0.0064 | 0.0054 | 0.0080 | 0.0069 |
| 07:00 - 08:00 | 0.0085 | 0.0053 | 0.0047 | 0.0045 | 0.0078 | 0.0055 | 0.0045 |
| 08:00 - 09:00 | 0.0038 | 0.0071 | 0.0087 | 0.0049 | 0.0089 | 0.0038 | 0.0062 |
| 09:00 - 10:00 | 0.0066 | 0.0056 | 0.0061 | 0.0062 | 0.0091 | 0.0067 | 0.0045 |
| 10:00 - 11:00 | 0.0063 | 0.0084 | 0.0083 | 0.0069 | 0.0088 | 0.0071 | 0.0049 |
| 11:00 - 12:00 | 0.0088 | 0.0091 | 0.0039 | 0.0044 | 0.0064 | 0.0048 | 0.0092 |
| 12:00 - 13:00 | 0.0046 | 0.0050 | 0.0091 | 0.0089 | 0.0082 | 0.0058 | 0.0092 |
| 13:00 - 14:00 | 0.0043 | 0.0057 | 0.0076 | 0.0054 | 0.0095 | 0.0100 | 0.0048 |
| 14:00 - 15:00 | 0.0090 | 0.0047 | 0.0078 | 0.0071 | 0.0078 | 0.0067 | 0.0040 |
| 15:00 - 16:00 | 0.0095 | 0.0060 | 0.0078 | 0.0084 | 0.0061 | 0.0062 | 0.0048 |
| 16:00 - 17:00 | 0.0071 | 0.0074 | 0.0086 | 0.0049 | 0.0087 | 0.0040 | 0.0090 |
| Average-24Hr* | 0.0068 | 0.0066 | 0.0069 | 0.0065 | 0.0074 | 0.0065 | 0.0068 |
| Max-1Hr | 0.0095 | 0.0091 | 0.0095 | 0.0089 | 0.0095 | 0.0100 | 0.0093 |
| Min-1Hr | 0.0038 | 0.0043 | 0.0039 | 0.0044 | 0.0042 | 0.0038 | 0.0040 |
| Standard-1Hr | 0.17 ppm(320 ug/cu.m) | | | | | | |
| Standard-24Hr | - | | | | | | |

Remark : * Average time between 17:00-17:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Preeda Somjai)
Technical Management Team



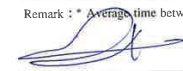
Ambient Air Monitoring Results : Nitrogen dioxide MTR-BIC


Location : Ban Bang Krasun Monitor Period : 18-25 Mar 2024
Analyzer Model : API 200A Station No : Shelter 17
Serial No : 2386 Site Operator : Mr. Suphanut Intharanaret

Calibrator Model : Teledyne 700E Serial No : 587
Calibration Gas Cylinder I.D.: EB0102326
Certified Date : 05 Jan 2024 Cal Concentration (ppb) : 0,100,200,400
Expire Date : 04 Jan 2025

| Time | NO2 Concentration (ppm) | | | | | | |
|---------------|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 18-19 Mar 2024 | 19-20 Mar 2024 | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 11:00 - 12:00 | 0.0064 | 0.0060 | 0.0059 | 0.0079 | 0.0093 | 0.0060 | 0.0078 |
| 12:00 - 13:00 | 0.0066 | 0.0086 | 0.0098 | 0.0082 | 0.0081 | 0.0081 | 0.0063 |
| 13:00 - 14:00 | 0.0095 | 0.0066 | 0.0099 | 0.0079 | 0.0095 | 0.0090 | 0.0073 |
| 14:00 - 15:00 | 0.0083 | 0.0097 | 0.0078 | 0.0073 | 0.0096 | 0.0065 | 0.0110 |
| 15:00 - 16:00 | 0.0100 | 0.0047 | 0.0070 | 0.0110 | 0.0096 | 0.0083 | 0.0112 |
| 16:00 - 17:00 | 0.0099 | 0.0064 | 0.0070 | 0.0112 | 0.0090 | 0.0098 | 0.0060 |
| 17:00 - 18:00 | 0.0094 | 0.0055 | 0.0065 | 0.0060 | 0.0074 | 0.0116 | 0.0082 |
| 18:00 - 19:00 | 0.0090 | 0.0063 | 0.0068 | 0.0082 | 0.0097 | 0.0091 | 0.0073 |
| 19:00 - 20:00 | 0.0083 | 0.0051 | 0.0064 | 0.0073 | 0.0050 | 0.0058 | 0.0051 |
| 20:00 - 21:00 | 0.0065 | 0.0088 | 0.0092 | 0.0051 | 0.0100 | 0.0081 | 0.0067 |
| 21:00 - 22:00 | 0.0074 | 0.0079 | 0.0061 | 0.0067 | 0.0085 | 0.0083 | 0.0059 |
| 22:00 - 23:00 | 0.0055 | 0.0063 | 0.0068 | 0.0059 | 0.0089 | 0.0067 | 0.0065 |
| 23:00 - 00:00 | 0.0088 | 0.0071 | 0.0077 | 0.0065 | 0.0076 | 0.0057 | 0.0056 |
| 00:00 - 01:00 | 0.0092 | 0.0069 | 0.0062 | 0.0056 | 0.0082 | 0.0052 | 0.0047 |
| 01:00 - 02:00 | 0.0082 | 0.0073 | 0.0091 | 0.0047 | 0.0071 | 0.0059 | 0.0049 |
| 02:00 - 03:00 | 0.0064 | 0.0074 | 0.0050 | 0.0049 | 0.0068 | 0.0068 | 0.0064 |
| 03:00 - 04:00 | 0.0063 | 0.0064 | 0.0058 | 0.0064 | 0.0070 | 0.0063 | 0.0045 |
| 04:00 - 05:00 | 0.0056 | 0.0073 | 0.0048 | 0.0045 | 0.0068 | 0.0058 | 0.0052 |
| 05:00 - 06:00 | 0.0055 | 0.0062 | 0.0075 | 0.0052 | 0.0052 | 0.0043 | 0.0045 |
| 06:00 - 07:00 | 0.0059 | 0.0067 | 0.0079 | 0.0045 | 0.0064 | 0.0061 | 0.0066 |
| 07:00 - 08:00 | 0.0063 | 0.0085 | 0.0085 | 0.0066 | 0.0059 | 0.0066 | 0.0079 |
| 08:00 - 09:00 | 0.0104 | 0.0070 | 0.0068 | 0.0079 | 0.0068 | 0.0073 | 0.0066 |
| 09:00 - 10:00 | 0.0111 | 0.0092 | 0.0080 | 0.0066 | 0.0062 | 0.0058 | 0.0053 |
| 10:00 - 11:00 | 0.0068 | 0.0088 | 0.0088 | 0.0053 | 0.0067 | 0.0087 | 0.0093 |
| Average-24Hr* | 0.0077 | 0.0071 | 0.0073 | 0.0087 | 0.0077 | 0.0072 | 0.0067 |
| Max-1Hr | 0.0111 | 0.0097 | 0.0099 | 0.0112 | 0.0100 | 0.0116 | 0.0112 |
| Min-1Hr | 0.0055 | 0.0047 | 0.0048 | 0.0045 | 0.0050 | 0.0043 | 0.0045 |
| Standard-1Hr | 0.17 ppm(320 ug/cu.m) | | | | | | |
| Standard-24Hr | - | | | | | | |

Remark : * Average time between 11:00-11:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Preeda Somjai)
Technical Management Team




Ambient Air Monitoring Results : Nitrogen dioxide MTR-BIC


Location : Chaofasang School Monitor Period : 18-25 Mar 2024
Analyzer Model : API 200A Station No : Shelter 19
Serial No : 2385 Site Operator : Mr. Suphanut Intharanaret

Calibrator Model : Teledyne 700E Serial No : 587
Calibration Gas Cylinder I.D.: EB0102326
Certified Date : 03 Jan 2024 Cal Concentration (ppb) : 0,100,200,400
Expire Date : 02 Jan 2025

| Time | NO2 Concentration (ppm) | | | | | | |
|---------------|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 18-19 Mar 2024 | 19-20 Mar 2024 | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 13:00 - 14:00 | 0.0065 | 0.0058 | 0.0083 | 0.0074 | 0.0092 | 0.0071 | 0.0062 |
| 14:00 - 15:00 | 0.0071 | 0.0077 | 0.0102 | 0.0083 | 0.0086 | 0.0065 | 0.0092 |
| 15:00 - 16:00 | 0.0077 | 0.0074 | 0.0096 | 0.0093 | 0.0063 | 0.0053 | 0.0056 |
| 16:00 - 17:00 | 0.0099 | 0.0093 | 0.0111 | 0.0065 | 0.0083 | 0.0092 | 0.0092 |
| 17:00 - 18:00 | 0.0077 | 0.0103 | 0.0086 | 0.0078 | 0.0069 | 0.0094 | 0.0094 |
| 18:00 - 19:00 | 0.0094 | 0.0082 | 0.0081 | 0.0083 | 0.0080 | 0.0087 | 0.0103 |
| 19:00 - 20:00 | 0.0076 | 0.0087 | 0.0099 | 0.0079 | 0.0065 | 0.0107 | 0.0055 |
| 20:00 - 21:00 | 0.0086 | 0.0112 | 0.0088 | 0.0107 | 0.0067 | 0.0074 | 0.0061 |
| 21:00 - 22:00 | 0.0098 | 0.0080 | 0.0076 | 0.0107 | 0.0104 | 0.0096 | 0.0074 |
| 22:00 - 23:00 | 0.0092 | 0.0074 | 0.0104 | 0.0098 | 0.0082 | 0.0091 | 0.0094 |
| 23:00 - 00:00 | 0.0063 | 0.0091 | 0.0103 | 0.0102 | 0.0100 | 0.0101 | 0.0098 |
| 00:00 - 01:00 | 0.0093 | 0.0099 | 0.0089 | 0.0062 | 0.0067 | 0.0058 | 0.0088 |
| 01:00 - 02:00 | 0.0104 | 0.0053 | 0.0090 | 0.0069 | 0.0065 | 0.0091 | 0.0095 |
| 02:00 - 03:00 | 0.0082 | 0.0070 | 0.0102 | 0.0111 | 0.0077 | 0.0082 | 0.0093 |
| 03:00 - 04:00 | 0.0064 | 0.0084 | 0.0102 | 0.0075 | 0.0090 | 0.0102 | 0.0112 |
| 04:00 - 05:00 | 0.0092 | 0.0094 | 0.0105 | 0.0103 | 0.0082 | 0.0072 | 0.0103 |
| 05:00 - 06:00 | 0.0088 | 0.0071 | 0.0104 | 0.0084 | 0.0081 | 0.0105 | 0.0054 |
| 06:00 - 07:00 | 0.0109 | 0.0102 | 0.0075 | 0.0103 | 0.0056 | 0.0083 | 0.0084 |
| 07:00 - 08:00 | 0.0085 | 0.0098 | 0.0076 | 0.0066 | 0.0093 | 0.0112 | 0.0102 |
| 08:00 - 09:00 | 0.0096 | 0.0087 | 0.0095 | 0.0069 | 0.0057 | 0.0078 | 0.0090 |
| 09:00 - 10:00 | 0.0083 | 0.0096 | 0.0067 | 0.0093 | 0.0099 | 0.0094 | 0.0093 |
| 10:00 - 11:00 | 0.0076 | 0.0096 | 0.0097 | 0.0060 | 0.0062 | 0.0083 | 0.0091 |
| 11:00 - 12:00 | 0.0087 | 0.0065 | 0.0103 | 0.0108 | 0.0091 | 0.0116 | 0.0074 |
| 12:00 - 13:00 | 0.0065 | 0.0065 | 0.0106 | 0.0088 | 0.0058 | 0.0106 | 0.0115 |
| Average-24Hr* | 0.0084 | 0.0084 | 0.0093 | 0.0086 | 0.0078 | 0.0088 | 0.0086 |
| Max-1Hr | 0.0109 | 0.0112 | 0.0111 | 0.0111 | 0.0104 | 0.0116 | 0.0115 |
| Min-1Hr | 0.0063 | 0.0053 | 0.0067 | 0.0060 | 0.0056 | 0.0053 | 0.0054 |
| Standard-1Hr | 0.17 ppm(320 ug/cu.m) | | | | | | |
| Standard-24Hr | - | | | | | | |

Remark : * Average time between 13:00-13:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Preeda Somjai)
Technical Management Team



Ambient Air Monitoring Results : Nitrogen dioxide MTR-BIC


Location : Wat Chumpol Nikayaram Monitor Period : 18-25 Mar 2024
Analyzer Model : API 200A Station No : Shelter 18
Serial No : 2387 Site Operator : Mr. Suphanut Intharanaret

Calibrator Model : Teledyne 700E Serial No : 587
Calibration Gas Cylinder I.D.: EB0102326
Certified Date : 05 Jan 2024 Cal Concentration (ppb) : 0,100,200,400
Expire Date : 04 Jan 2025

| Time | NO2 Concentration (ppm) | | | | | | |
|---------------|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 18-19 Mar 2024 | 19-20 Mar 2024 | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 12:00 - 13:00 | 0.0100 | 0.0093 | 0.0086 | 0.0098 | 0.0071 | 0.0086 | 0.0085 |
| 13:00 - 14:00 | 0.0071 | 0.0072 | 0.0067 | 0.0120 | 0.0065 | 0.0075 | 0.0063 |
| 14:00 - 15:00 | 0.0071 | 0.0043 | 0.0071 | 0.0053 | 0.0080 | 0.0053 | 0.0102 |
| 15:00 - 16:00 | 0.0105 | 0.0063 | 0.0087 | 0.0070 | 0.0084 | 0.0086 | 0.0118 |
| 16:00 - 17:00 | 0.0072 | 0.0113 | 0.0073 | 0.0080 | 0.0109 | 0.0076 | 0.0073 |
| 17:00 - 18:00 | 0.0105 | 0.0101 | 0.0074 | 0.0050 | 0.0076 | 0.0063 | 0.0078 |
| 18:00 - 19:00 | 0.0060 | 0.0089 | 0.0058 | 0.0068 | 0.0108 | 0.0057 | 0.0052 |
| 19:00 - 20:00 | 0.0069 | 0.0065 | 0.0053 | 0.0068 | 0.0059 | 0.0067 | 0.0053 |
| 20:00 - 21:00 | 0.0073 | 0.0048 | 0.0053 | 0.0067 | 0.0085 | 0.0065 | 0.0073 |
| 21:00 - 22:00 | 0.0043 | 0.0062 | 0.0058 | 0.0059 | 0.0074 | 0.0075 | 0.0044 |
| 22:00 - 23:00 | 0.0065 | 0.0073 | 0.0057 | 0.0047 | 0.0056 | 0.0041 | 0.0041 |
| 23:00 - 00:00 | 0.0056 | 0.0073 | 0.0051 | 0.0036 | 0.0081 | 0.0041 | 0.0056 |
| 00:00 - 01:00 | 0.0057 | 0.0074 | 0.0057 | 0.0065 | 0.0043 | 0.0050 | 0.0042 |
| 01:00 - 02:00 | 0.0059 | 0.0040 | 0.0051 | 0.0054 | 0.0055 | 0.0042 | 0.0057 |
| 02:00 - 03:00 | 0.0062 | 0.0067 | 0.0060 | 0.0050 | 0.0060 | 0.0072 | 0.0045 |
| 03:00 - 04:00 | 0.0037 | 0.0055 | 0.0061 | 0.0056 | 0.0061 | 0.0053 | 0.0042 |
| 04:00 - 05:00 | 0.0054 | 0.0057 | 0.0044 | 0.0041 | 0.0068 | 0.0046 | 0.0044 |
| 05:00 - 06:00 | 0.0055 | 0.0078 | 0.0056 | 0.0043 | 0.0063 | 0.0065 | 0.0060 |
| 06:00 - 07:00 | 0.0056 | 0.0062 | 0.0053 | 0.0068 | 0.0068 | 0.0093 | 0.0061 |
| 07:00 - 08:00 | 0.0073 | 0.0097 | 0.0068 | 0.0064 | 0.0073 | 0.0101 | 0.0090 |
| 08:00 - 09:00 | 0.0098 | 0.0077 | 0.0088 | 0.0080 | 0.0086 | 0.0075 | 0.0091 |
| 09:00 - 10:00 | 0.0102 | 0.0084 | 0.0052 | 0.0101 | 0.0110 | 0.0097 | 0.0102 |
| 10:00 - 11:00 | 0.0078 | 0.0072 | 0.0121 | 0.0067 | 0.0088 | 0.0101 | 0.0080 |
| 11:00 - 12:00 | 0.0100 | 0.0112 | 0.0066 | 0.0079 | 0.0114 | 0.0056 | 0.0043 |
| Average-24Hr* | 0.0072 | 0.0074 | 0.0065 | 0.0066 | 0.0077 | 0.0068 | 0.0066 |
| Max-1Hr | 0.0105 | 0.0113 | 0.0121 | 0.0120 | 0.0114 | 0.0101 | 0.0118 |
| Min-1Hr | 0.0037 | 0.0040 | 0.0044 | 0.0036 | 0.0043 | 0.0041 | 0.0041 |
| Standard-1Hr | 0.17 ppm(320 ug/cu.m) | | | | | | |
| Standard-24Hr | - | | | | | | |

Remark : * Average time between 12:00-12:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Preeda Somjai)
Technical Management Team

**Ambient Air Monitoring Results : Nitrogen dioxide
MTR-BIC**


Location : Wat Wiwek Wayuphat Monitor Period : 18-25 Mar 2024
Analyzer Model : API 200A Station No : Shelter 16
Serial No : 2365 Site Operator : Mr. Suphanut Intharanaret

Calibrator Model : Teledyne 700E Serial No : 587
Calibration Gas Cylinder I.D.: EB0102326
Certified Date : 05 Jan 2024 Cal Concentration (ppb) : 0,100,200,400
Expire Date : 04 Jan 2025

| Time | NO2 Concentration (ppm) | | | | | | |
|---------------|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 18-19 Mar 2024 | 19-20 Mar 2024 | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 10:00 - 11:00 | 0.0050 | 0.0041 | 0.0039 | 0.0080 | 0.0081 | 0.0072 | 0.0056 |
| 11:00 - 12:00 | 0.0045 | 0.0049 | 0.0043 | 0.0063 | 0.0061 | 0.0048 | 0.0056 |
| 12:00 - 13:00 | 0.0035 | 0.0050 | 0.0054 | 0.0040 | 0.0075 | 0.0036 | 0.0043 |
| 13:00 - 14:00 | 0.0053 | 0.0069 | 0.0049 | 0.0077 | 0.0063 | 0.0045 | 0.0066 |
| 14:00 - 15:00 | 0.0073 | 0.0059 | 0.0057 | 0.0062 | 0.0033 | 0.0072 | 0.0044 |
| 15:00 - 16:00 | 0.0054 | 0.0049 | 0.0038 | 0.0071 | 0.0045 | 0.0050 | 0.0057 |
| 16:00 - 17:00 | 0.0052 | 0.0034 | 0.0046 | 0.0058 | 0.0058 | 0.0052 | 0.0038 |
| 17:00 - 18:00 | 0.0067 | 0.0064 | 0.0068 | 0.0042 | 0.0055 | 0.0061 | 0.0047 |
| 18:00 - 19:00 | 0.0063 | 0.0061 | 0.0033 | 0.0063 | 0.0056 | 0.0044 | 0.0036 |
| 19:00 - 20:00 | 0.0061 | 0.0054 | 0.0046 | 0.0063 | 0.0075 | 0.0043 | 0.0076 |
| 20:00 - 21:00 | 0.0048 | 0.0039 | 0.0056 | 0.0052 | 0.0063 | 0.0066 | 0.0046 |
| 21:00 - 22:00 | 0.0042 | 0.0056 | 0.0076 | 0.0069 | 0.0037 | 0.0074 | 0.0042 |
| 22:00 - 23:00 | 0.0045 | 0.0044 | 0.0044 | 0.0067 | 0.0078 | 0.0049 | 0.0068 |
| 23:00 - 00:00 | 0.0053 | 0.0063 | 0.0044 | 0.0074 | 0.0061 | 0.0047 | 0.0041 |
| 00:00 - 01:00 | 0.0044 | 0.0052 | 0.0077 | 0.0046 | 0.0075 | 0.0042 | 0.0057 |
| 01:00 - 02:00 | 0.0048 | 0.0058 | 0.0048 | 0.0037 | 0.0068 | 0.0077 | 0.0058 |
| 02:00 - 03:00 | 0.0035 | 0.0066 | 0.0049 | 0.0053 | 0.0034 | 0.0040 | 0.0081 |
| 03:00 - 04:00 | 0.0045 | 0.0044 | 0.0047 | 0.0044 | 0.0043 | 0.0072 | 0.0064 |
| 04:00 - 05:00 | 0.0059 | 0.0050 | 0.0048 | 0.0057 | 0.0041 | 0.0036 | 0.0046 |
| 05:00 - 06:00 | 0.0059 | 0.0075 | 0.0065 | 0.0034 | 0.0064 | 0.0063 | 0.0037 |
| 06:00 - 07:00 | 0.0053 | 0.0052 | 0.0047 | 0.0073 | 0.0056 | 0.0037 | 0.0053 |
| 07:00 - 08:00 | 0.0057 | 0.0073 | 0.0076 | 0.0044 | 0.0068 | 0.0063 | 0.0038 |
| 08:00 - 09:00 | 0.0068 | 0.0062 | 0.0067 | 0.0045 | 0.0037 | 0.0066 | 0.0077 |
| 09:00 - 10:00 | 0.0063 | 0.0047 | 0.0072 | 0.0081 | 0.0036 | 0.0033 | 0.0057 |
| Average-24Hr* | 0.0053 | 0.0055 | 0.0054 | 0.0058 | 0.0057 | 0.0054 | 0.0054 |
| Max-1Hr | 0.0073 | 0.0075 | 0.0077 | 0.0081 | 0.0081 | 0.0077 | 0.0081 |
| Min-1Hr | 0.0035 | 0.0034 | 0.0033 | 0.0034 | 0.0033 | 0.0033 | 0.0036 |
| Standard-1Hr | 0.17 ppm(320 ug/cu.m) | | | | | | |
| Standard-24Hr | - | | | | | | |

Remark : * Average time between 10:00-10:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Preeda Somjai)
Technical Management Team

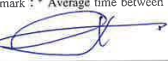
**Ambient Air Monitoring Results : Nitrogen dioxide
MTR-BIC**


Location : Ban Khlong Phutsa Monitor Period : 18-25 Mar 2024
Analyzer Model : API 200A Station No : Shelter 15
Serial No : 1528 Site Operator : Mr. Suphanut Intharanaret

Calibrator Model : Teledyne 700E Serial No : 587
Calibration Gas Cylinder I.D.: EB0102326
Certified Date : 05 Jan 2024 Cal Concentration (ppb) : 0,100,200,400
Expire Date : 04 Jan 2025

| Time | NO2 Concentration (ppm) | | | | | | |
|---------------|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 18-19 Mar 2024 | 19-20 Mar 2024 | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 10:00 - 11:00 | 0.0062 | 0.0098 | 0.0092 | 0.0090 | 0.0068 | 0.0080 | 0.0095 |
| 11:00 - 12:00 | 0.0048 | 0.0059 | 0.0068 | 0.0070 | 0.0073 | 0.0090 | 0.0054 |
| 12:00 - 13:00 | 0.0099 | 0.0108 | 0.0058 | 0.0100 | 0.0063 | 0.0057 | 0.0102 |
| 13:00 - 14:00 | 0.0078 | 0.0057 | 0.0066 | 0.0060 | 0.0068 | 0.0090 | 0.0100 |
| 14:00 - 15:00 | 0.0085 | 0.0096 | 0.0072 | 0.0064 | 0.0073 | 0.0089 | 0.0105 |
| 15:00 - 16:00 | 0.0077 | 0.0071 | 0.0067 | 0.0099 | 0.0051 | 0.0096 | 0.0056 |
| 16:00 - 17:00 | 0.0094 | 0.0095 | 0.0067 | 0.0103 | 0.0068 | 0.0096 | 0.0074 |
| 17:00 - 18:00 | 0.0052 | 0.0090 | 0.0066 | 0.0086 | 0.0092 | 0.0059 | 0.0073 |
| 18:00 - 19:00 | 0.0106 | 0.0074 | 0.0086 | 0.0099 | 0.0087 | 0.0077 | 0.0098 |
| 19:00 - 20:00 | 0.0047 | 0.0077 | 0.0067 | 0.0068 | 0.0078 | 0.0083 | 0.0070 |
| 20:00 - 21:00 | 0.0060 | 0.0073 | 0.0088 | 0.0109 | 0.0077 | 0.0073 | 0.0056 |
| 21:00 - 22:00 | 0.0092 | 0.0083 | 0.0077 | 0.0074 | 0.0072 | 0.0088 | 0.0053 |
| 22:00 - 23:00 | 0.0083 | 0.0111 | 0.0095 | 0.0074 | 0.0080 | 0.0102 | 0.0061 |
| 23:00 - 00:00 | 0.0063 | 0.0057 | 0.0049 | 0.0056 | 0.0057 | 0.0070 | 0.0073 |
| 00:00 - 01:00 | 0.0060 | 0.0070 | 0.0059 | 0.0075 | 0.0095 | 0.0075 | 0.0056 |
| 01:00 - 02:00 | 0.0055 | 0.0072 | 0.0078 | 0.0059 | 0.0099 | 0.0067 | 0.0063 |
| 02:00 - 03:00 | 0.0059 | 0.0072 | 0.0062 | 0.0068 | 0.0063 | 0.0100 | 0.0065 |
| 03:00 - 04:00 | 0.0058 | 0.0059 | 0.0060 | 0.0066 | 0.0078 | 0.0056 | 0.0081 |
| 04:00 - 05:00 | 0.0064 | 0.0056 | 0.0063 | 0.0060 | 0.0070 | 0.0067 | 0.0081 |
| 05:00 - 06:00 | 0.0066 | 0.0114 | 0.0053 | 0.0074 | 0.0082 | 0.0064 | 0.0077 |
| 06:00 - 07:00 | 0.0098 | 0.0078 | 0.0097 | 0.0067 | 0.0059 | 0.0061 | 0.0080 |
| 07:00 - 08:00 | 0.0104 | 0.0069 | 0.0091 | 0.0060 | 0.0065 | 0.0067 | 0.0074 |
| 08:00 - 09:00 | 0.0079 | 0.0056 | 0.0083 | 0.0087 | 0.0101 | 0.0080 | 0.0075 |
| 09:00 - 10:00 | 0.0059 | 0.0080 | 0.0080 | 0.0058 | 0.0074 | 0.0061 | 0.0076 |
| Average-24Hr* | 0.0073 | 0.0078 | 0.0073 | 0.0076 | 0.0075 | 0.0077 | 0.0075 |
| Max-1Hr | 0.0106 | 0.0114 | 0.0097 | 0.0109 | 0.0101 | 0.0102 | 0.0105 |
| Min-1Hr | 0.0047 | 0.0056 | 0.0049 | 0.0056 | 0.0051 | 0.0056 | 0.0053 |
| Standard-1Hr | 0.17 ppm(320 ug/cu.m) | | | | | | |
| Standard-24Hr | - | | | | | | |

Remark : * Average time between 10:00-10:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Preeda Somjai)
Technical Management Team

**Ambient Air Monitoring Results : Sulfur dioxide
MTR-BIC**


Location : Wat Khlong Phutsa Monitor Period : 18-25 Mar 2024
Analyzer Model : API 100A Station No : Shelter 10
Serial No : 376 Site Operator : Mr. Suphanut Intharanaret

Calibrator Model : Teledyne 700E Serial No : 587
Calibration Gas Cylinder I.D.: EB0102326
Certified Date : 04 Jan 2024 Cal Concentration (ppb) : 0,100,200,400
Expire Date : 03 Jan 2025

| Time | SO2 Concentration (ppm) | | | | | | |
|---------------|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 18-19 Mar 2024 | 19-20 Mar 2024 | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 17:00 - 18:00 | 0.0065 | 0.0067 | 0.0067 | 0.0066 | 0.0064 | 0.0060 | 0.0060 |
| 18:00 - 19:00 | 0.0052 | 0.0054 | 0.0066 | 0.0053 | 0.0069 | 0.0065 | 0.0052 |
| 19:00 - 20:00 | 0.0050 | 0.0056 | 0.0055 | 0.0050 | 0.0054 | 0.0064 | 0.0061 |
| 20:00 - 21:00 | 0.0055 | 0.0062 | 0.0062 | 0.0068 | 0.0070 | 0.0063 | 0.0068 |
| 21:00 - 22:00 | 0.0062 | 0.0066 | 0.0069 | 0.0058 | 0.0050 | 0.0057 | 0.0066 |
| 22:00 - 23:00 | 0.0061 | 0.0060 | 0.0066 | 0.0063 | 0.0063 | 0.0050 | 0.0056 |
| 23:00 - 00:00 | 0.0052 | 0.0060 | 0.0052 | 0.0053 | 0.0050 | 0.0064 | 0.0050 |
| 00:00 - 01:00 | 0.0053 | 0.0065 | 0.0067 | 0.0065 | 0.0061 | 0.0064 | 0.0068 |
| 01:00 - 02:00 | 0.0054 | 0.0069 | 0.0061 | 0.0061 | 0.0068 | 0.0050 | 0.0052 |
| 02:00 - 03:00 | 0.0050 | 0.0059 | 0.0055 | 0.0053 | 0.0067 | 0.0059 | 0.0058 |
| 03:00 - 04:00 | 0.0059 | 0.0050 | 0.0067 | 0.0065 | 0.0070 | 0.0064 | 0.0070 |
| 04:00 - 05:00 | 0.0066 | 0.0052 | 0.0051 | 0.0065 | 0.0052 | 0.0059 | 0.0058 |
| 05:00 - 06:00 | 0.0057 | 0.0055 | 0.0057 | 0.0056 | 0.0056 | 0.0062 | 0.0069 |
| 06:00 - 07:00 | 0.0051 | 0.0065 | 0.0061 | 0.0054 | 0.0051 | 0.0067 | 0.0064 |
| 07:00 - 08:00 | 0.0064 | 0.0052 | 0.0064 | 0.0066 | 0.0067 | 0.0055 | 0.0050 |
| 08:00 - 09:00 | 0.0054 | 0.0065 | 0.0058 | 0.0062 | 0.0053 | 0.0060 | 0.0068 |
| 09:00 - 10:00 | 0.0064 | 0.0053 | 0.0068 | 0.0065 | 0.0060 | 0.0066 | 0.0064 |
| 10:00 - 11:00 | 0.0053 | 0.0056 | 0.0067 | 0.0060 | 0.0062 | 0.0061 | 0.0063 |
| 11:00 - 12:00 | 0.0069 | 0.0058 | 0.0058 | 0.0063 | 0.0063 | 0.0065 | 0.0061 |
| 12:00 - 13:00 | 0.0067 | 0.0061 | 0.0059 | 0.0067 | 0.0063 | 0.0054 | 0.0066 |
| 13:00 - 14:00 | 0.0060 | 0.0051 | 0.0051 | 0.0063 | 0.0062 | 0.0057 | 0.0057 |
| 14:00 - 15:00 | 0.0050 | 0.0055 | 0.0069 | 0.0066 | 0.0057 | 0.0064 | 0.0067 |
| 15:00 - 16:00 | 0.0069 | 0.0060 | 0.0058 | 0.0056 | 0.0068 | 0.0054 | 0.0055 |
| 16:00 - 17:00 | 0.0061 | 0.0056 | 0.0052 | 0.0051 | 0.0060 | 0.0054 | 0.0068 |
| Average-24Hr* | 0.0058 | 0.0059 | 0.0061 | 0.0060 | 0.0061 | 0.0060 | 0.0061 |
| Max-1Hr | 0.0069 | 0.0069 | 0.0069 | 0.0068 | 0.0070 | 0.0067 | 0.0070 |
| Min-1Hr | 0.0050 | 0.0050 | 0.0051 | 0.0050 | 0.0050 | 0.0050 | 0.0050 |
| Standard-1Hr | 0.30 ppm(780 ug/cu.m) | | | | | | |
| Standard-24Hr | 0.12 ppm(300 ug/cu.m) | | | | | | |

Remark : * Average time between 17:00-17:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Preeda Somjai)
Technical Management Team

**Ambient Air Monitoring Results : Sulfur dioxide
MTR-BIC**


Location : Ban Bang Krasun Monitor Period : 18-25 Mar 2024
Analyzer Model : API 100A Station No : Shelter 17
Serial No : 342 Site Operator : Mr. Suphanut Intharanaret

Calibrator Model : Teledyne 700E Serial No : 587
Calibration Gas Cylinder I.D.: EB0102326
Certified Date : 05 Jan 2024 Cal Concentration (ppb) : 0,100,200,400
Expire Date : 04 Jan 2025

| Time | SO2 Concentration (ppm) | | | | | | |
|---------------|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 18-19 Mar 2024 | 19-20 Mar 2024 | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 11:00 - 12:00 | 0.0055 | 0.0065 | 0.0052 | 0.0060 | 0.0040 | 0.0048 | 0.0047 |
| 12:00 - 13:00 | 0.0043 | 0.0067 | 0.0055 | 0.0056 | 0.0057 | 0.0062 | 0.0045 |
| 13:00 - 14:00 | 0.0040 | 0.0068 | 0.0052 | 0.0041 | 0.0048 | 0.0061 | 0.0066 |
| 14:00 - 15:00 | 0.0049 | 0.0056 | 0.0069 | 0.0053 | 0.0048 | 0.0055 | 0.0046 |
| 15:00 - 16:00 | 0.0067 | 0.0067 | 0.0068 | 0.0052 | 0.0059 | 0.0067 | 0.0058 |
| 16:00 - 17:00 | 0.0066 | 0.0061 | 0.0040 | 0.0045 | 0.0058 | 0.0061 | 0.0048 |
| 17:00 - 18:00 | 0.0043 | 0.0053 | 0.0040 | 0.0067 | 0.0047 | 0.0048 | 0.0053 |
| 18:00 - 19:00 | 0.0044 | 0.0049 | 0.0052 | 0.0070 | 0.0062 | 0.0050 | 0.0060 |
| 19:00 - 20:00 | 0.0047 | 0.0046 | 0.0047 | 0.0049 | 0.0059 | 0.0062 | 0.0043 |
| 20:00 - 21:00 | 0.0041 | 0.0058 | 0.0045 | 0.0053 | 0.0062 | 0.0056 | 0.0053 |
| 21:00 - 22:00 | 0.0064 | 0.0068 | 0.0064 | 0.0051 | 0.0055 | 0.0064 | 0.0049 |
| 22:00 - 23:00 | 0.0065 | 0.0042 | 0.0063 | 0.0061 | 0.0066 | 0.0057 | 0.0061 |
| 23:00 - 00:00 | 0.0060 | 0.0042 | 0.0068 | 0.0067 | 0.0041 | 0.0069 | 0.0058 |
| 00:00 - 01:00 | 0.0051 | 0.0052 | 0.0063 | 0.0058 | 0.0044 | 0.0044 | 0.0059 |
| 01:00 - 02:00 | 0.0055 | 0.0048 | 0.0054 | 0.0056 | 0.0069 | 0.0067 | 0.0060 |
| 02:00 - 03:00 | 0.0065 | 0.0041 | 0.0041 | 0.0042 | 0.0051 | 0.0051 | 0.0070 |
| 03:00 - 04:00 | 0.0052 | 0.0059 | 0.0047 | 0.0045 | 0.0050 | 0.0063 | 0.0061 |
| 04:00 - 05:00 | 0.0047 | 0.0051 | 0.0068 | 0.0064 | 0.0070 | 0.0053 | 0.0047 |
| 05:00 - 06:00 | 0.0054 | 0.0041 | 0.0046 | 0.0054 | 0.0060 | 0.0048 | 0.0069 |
| 06:00 - 07:00 | 0.0057 | 0.0042 | 0.0065 | 0.0064 | 0.0060 | 0.0046 | 0.0051 |
| 07:00 - 08:00 | 0.0062 | 0.0061 | 0.0055 | 0.0041 | 0.0062 | 0.0043 | 0.0043 |
| 08:00 - 09:00 | 0.0065 | 0.0058 | 0.0049 | 0.0052 | 0.0065 | 0.0051 | 0.0067 |
| 09:00 - 10:00 | 0.0057 | 0.0041 | 0.0068 | 0.0055 | 0.0045 | 0.0059 | 0.0059 |
| 10:00 - 11:00 | 0.0061 | 0.0053 | 0.0064 | 0.0064 | 0.0046 | 0.0045 | 0.0040 |
| Average-24Hr* | 0.0055 | 0.0054 | 0.0056 | 0.0055 | 0.0055 | 0.0055 | 0.0055 |
| Max-1Hr | 0.0067 | 0.0068 | 0.0069 | 0.0070 | 0.0070 | 0.0069 | 0.0070 |
| Min-1Hr | 0.0040 | 0.0041 | 0.0040 | 0.0041 | 0.0040 | 0.0043 | 0.0040 |
| Standard-1Hr | 0.30 ppm(780 ug/cu.m) | | | | | | |
| Standard-24Hr | 0.12 ppm(300 ug/cu.m) | | | | | | |

Remark : * Average time between 11:00-11:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Preeda Somjai)
Technical Management Team



Ambient Air Monitoring Results : Sulfur dioxide MTR-BIC

| | |
|--|---|
| Location : Chaofasang School | Monitor Period : 18-25 Mar 2024 |
| Analyzer Model : Thermo 43C | Station No : Shelter 19 |
| Serial No : 60771-328-2 | Site Operator : Mr. Suphanut Intharanaret |
| Calibrator Model : Teledyne 700E | Serial No : 587 |
| Calibration Gas Cylinder I.D.: EB0102326 | |
| Certified Date : 04 Jan 2024 | Cal Concentration (ppb) : 0,100,200,400 |
| Expire Date : 03 Jan 2025 | |

| Time | SO2 Concentration (ppm) | | | | | | |
|---------------|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 18-19 Mar 2024 | 19-20 Mar 2024 | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 13:00 - 14:00 | 0.0064 | 0.0051 | 0.0066 | 0.0047 | 0.0044 | 0.0062 | 0.0053 |
| 14:00 - 15:00 | 0.0054 | 0.0046 | 0.0047 | 0.0042 | 0.0049 | 0.0058 | 0.0068 |
| 15:00 - 16:00 | 0.0061 | 0.0057 | 0.0062 | 0.0055 | 0.0070 | 0.0059 | 0.0065 |
| 16:00 - 17:00 | 0.0054 | 0.0045 | 0.0061 | 0.0050 | 0.0064 | 0.0051 | 0.0062 |
| 17:00 - 18:00 | 0.0069 | 0.0058 | 0.0068 | 0.0047 | 0.0062 | 0.0051 | 0.0057 |
| 18:00 - 19:00 | 0.0040 | 0.0066 | 0.0044 | 0.0056 | 0.0054 | 0.0069 | 0.0050 |
| 19:00 - 20:00 | 0.0054 | 0.0058 | 0.0045 | 0.0051 | 0.0065 | 0.0049 | 0.0046 |
| 20:00 - 21:00 | 0.0043 | 0.0066 | 0.0058 | 0.0047 | 0.0041 | 0.0066 | 0.0060 |
| 21:00 - 22:00 | 0.0058 | 0.0047 | 0.0058 | 0.0053 | 0.0069 | 0.0055 | 0.0069 |
| 22:00 - 23:00 | 0.0060 | 0.0052 | 0.0050 | 0.0041 | 0.0061 | 0.0050 | 0.0065 |
| 23:00 - 00:00 | 0.0052 | 0.0040 | 0.0059 | 0.0051 | 0.0052 | 0.0044 | 0.0065 |
| 00:00 - 01:00 | 0.0041 | 0.0040 | 0.0066 | 0.0045 | 0.0070 | 0.0066 | 0.0063 |
| 01:00 - 02:00 | 0.0041 | 0.0069 | 0.0067 | 0.0061 | 0.0066 | 0.0050 | 0.0043 |
| 02:00 - 03:00 | 0.0068 | 0.0045 | 0.0061 | 0.0058 | 0.0059 | 0.0054 | 0.0056 |
| 03:00 - 04:00 | 0.0064 | 0.0052 | 0.0054 | 0.0062 | 0.0049 | 0.0053 | 0.0056 |
| 04:00 - 05:00 | 0.0067 | 0.0068 | 0.0065 | 0.0063 | 0.0065 | 0.0045 | 0.0066 |
| 05:00 - 06:00 | 0.0068 | 0.0059 | 0.0040 | 0.0067 | 0.0043 | 0.0046 | 0.0062 |
| 06:00 - 07:00 | 0.0053 | 0.0061 | 0.0046 | 0.0044 | 0.0062 | 0.0040 | 0.0056 |
| 07:00 - 08:00 | 0.0059 | 0.0058 | 0.0054 | 0.0041 | 0.0055 | 0.0047 | 0.0060 |
| 08:00 - 09:00 | 0.0044 | 0.0053 | 0.0061 | 0.0063 | 0.0057 | 0.0055 | 0.0060 |
| 09:00 - 10:00 | 0.0051 | 0.0043 | 0.0050 | 0.0058 | 0.0069 | 0.0050 | 0.0055 |
| 10:00 - 11:00 | 0.0062 | 0.0051 | 0.0043 | 0.0043 | 0.0043 | 0.0055 | 0.0070 |
| 11:00 - 12:00 | 0.0051 | 0.0066 | 0.0068 | 0.0043 | 0.0061 | 0.0070 | 0.0070 |
| 12:00 - 13:00 | 0.0049 | 0.0042 | 0.0047 | 0.0046 | 0.0064 | 0.0057 | 0.0045 |
| Average-24Hr* | 0.0055 | 0.0054 | 0.0056 | 0.0051 | 0.0058 | 0.0054 | 0.0059 |
| Max-1Hr | 0.0069 | 0.0069 | 0.0068 | 0.0067 | 0.0070 | 0.0070 | 0.0070 |
| Min-1Hr | 0.0040 | 0.0040 | 0.0040 | 0.0041 | 0.0041 | 0.0040 | 0.0043 |
| Standard-1Hr | 0.30 ppm(780 ug/cu.m) | | | | | | |
| Standard-24Hr | 0.12 ppm(300 ug/cu.m) | | | | | | |

Remark : * Average time between 13:00-13:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team



Ambient Air Monitoring Results : Sulfur dioxide MTR-BIC

| | |
|--|---|
| Location : Wat Chumpol Nikayaram | Monitor Period : 18-25 Mar 2024 |
| Analyzer Model : Teledyne 100A | Station No : Shelter 18 |
| Serial No : 56682-309 | Site Operator : Mr. Suphanut Intharanaret |
| Calibrator Model : Teledyne 700E | Serial No : 587 |
| Calibration Gas Cylinder I.D.: EB0102326 | |
| Certified Date : 05 Jan 2024 | Cal Concentration (ppb) : 0,100,200,400 |
| Expire Date : 04 Jan 2025 | |

| Time | SO2 Concentration (ppm) | | | | | | |
|---------------|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 18-19 Mar 2024 | 19-20 Mar 2024 | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 12:00 - 13:00 | 0.0044 | 0.0087 | 0.0066 | 0.0078 | 0.0046 | 0.0069 | 0.0063 |
| 13:00 - 14:00 | 0.0072 | 0.0081 | 0.0073 | 0.0058 | 0.0071 | 0.0057 | 0.0072 |
| 14:00 - 15:00 | 0.0050 | 0.0069 | 0.0041 | 0.0066 | 0.0057 | 0.0067 | 0.0076 |
| 15:00 - 16:00 | 0.0065 | 0.0090 | 0.0064 | 0.0075 | 0.0058 | 0.0043 | 0.0047 |
| 16:00 - 17:00 | 0.0054 | 0.0081 | 0.0054 | 0.0060 | 0.0072 | 0.0056 | 0.0054 |
| 17:00 - 18:00 | 0.0082 | 0.0066 | 0.0079 | 0.0086 | 0.0040 | 0.0071 | 0.0075 |
| 18:00 - 19:00 | 0.0058 | 0.0085 | 0.0077 | 0.0061 | 0.0066 | 0.0065 | 0.0070 |
| 19:00 - 20:00 | 0.0084 | 0.0065 | 0.0065 | 0.0068 | 0.0074 | 0.0055 | 0.0062 |
| 20:00 - 21:00 | 0.0045 | 0.0049 | 0.0041 | 0.0071 | 0.0052 | 0.0064 | 0.0083 |
| 21:00 - 22:00 | 0.0082 | 0.0080 | 0.0080 | 0.0074 | 0.0066 | 0.0065 | 0.0078 |
| 22:00 - 23:00 | 0.0070 | 0.0088 | 0.0049 | 0.0077 | 0.0060 | 0.0044 | 0.0068 |
| 23:00 - 00:00 | 0.0046 | 0.0076 | 0.0052 | 0.0090 | 0.0066 | 0.0042 | 0.0055 |
| 00:00 - 01:00 | 0.0086 | 0.0073 | 0.0050 | 0.0067 | 0.0050 | 0.0049 | 0.0071 |
| 01:00 - 02:00 | 0.0068 | 0.0076 | 0.0081 | 0.0057 | 0.0085 | 0.0063 | 0.0067 |
| 02:00 - 03:00 | 0.0054 | 0.0057 | 0.0048 | 0.0070 | 0.0057 | 0.0076 | 0.0090 |
| 03:00 - 04:00 | 0.0050 | 0.0078 | 0.0055 | 0.0055 | 0.0085 | 0.0077 | 0.0071 |
| 04:00 - 05:00 | 0.0081 | 0.0052 | 0.0090 | 0.0064 | 0.0067 | 0.0089 | 0.0084 |
| 05:00 - 06:00 | 0.0075 | 0.0071 | 0.0075 | 0.0080 | 0.0082 | 0.0082 | 0.0060 |
| 06:00 - 07:00 | 0.0052 | 0.0083 | 0.0072 | 0.0042 | 0.0083 | 0.0050 | 0.0057 |
| 07:00 - 08:00 | 0.0060 | 0.0079 | 0.0042 | 0.0084 | 0.0076 | 0.0058 | 0.0058 |
| 08:00 - 09:00 | 0.0055 | 0.0072 | 0.0056 | 0.0043 | 0.0089 | 0.0071 | 0.0084 |
| 09:00 - 10:00 | 0.0062 | 0.0045 | 0.0078 | 0.0066 | 0.0070 | 0.0053 | 0.0051 |
| 10:00 - 11:00 | 0.0085 | 0.0056 | 0.0068 | 0.0048 | 0.0049 | 0.0047 | 0.0055 |
| 11:00 - 12:00 | 0.0089 | 0.0051 | 0.0080 | 0.0076 | 0.0056 | 0.0045 | 0.0073 |
| Average-24Hr* | 0.0065 | 0.0071 | 0.0064 | 0.0067 | 0.0066 | 0.0061 | 0.0068 |
| Max-1Hr | 0.0089 | 0.0090 | 0.0090 | 0.0090 | 0.0089 | 0.0089 | 0.0090 |
| Min-1Hr | 0.0044 | 0.0045 | 0.0041 | 0.0042 | 0.0040 | 0.0042 | 0.0047 |
| Standard-1Hr | 0.30 ppm(780 ug/cu.m) | | | | | | |
| Standard-24Hr | 0.12 ppm(300 ug/cu.m) | | | | | | |

Remark : * Average time between 12:00-12:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team



Ambient Air Monitoring Results : Sulfur dioxide MTR-BIC

Location : Wat Wiwek Wayuphat Monitor Period : 18-25 Mar 2024
Analyzer Model : API 100A Station No : Shelter 16
Serial No : 1715 Site Operator : Mr. Suphanut Intharanaret

Calibrator Model : Teledyne 700E Serial No : 587
Calibration Gas Cylinder I.D.: EB0102326
Certified Date : 05 Jan 2024 Cal Concentration (ppb) : 0,100,200,400
Expire Date : 04 Jan 2025

| Time | SO2 Concentration (ppm) | | | | | | |
|---------------|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 18-19 Mar 2024 | 19-20 Mar 2024 | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 10:00 - 11:00 | 0.0042 | 0.0064 | 0.0056 | 0.0049 | 0.0041 | 0.0052 | 0.0058 |
| 11:00 - 12:00 | 0.0055 | 0.0042 | 0.0053 | 0.0051 | 0.0041 | 0.0045 | 0.0058 |
| 12:00 - 13:00 | 0.0058 | 0.0068 | 0.0053 | 0.0060 | 0.0054 | 0.0048 | 0.0062 |
| 13:00 - 14:00 | 0.0049 | 0.0040 | 0.0059 | 0.0066 | 0.0058 | 0.0057 | 0.0055 |
| 14:00 - 15:00 | 0.0063 | 0.0042 | 0.0070 | 0.0067 | 0.0055 | 0.0053 | 0.0063 |
| 15:00 - 16:00 | 0.0057 | 0.0044 | 0.0056 | 0.0057 | 0.0044 | 0.0049 | 0.0053 |
| 16:00 - 17:00 | 0.0046 | 0.0042 | 0.0064 | 0.0042 | 0.0059 | 0.0044 | 0.0059 |
| 17:00 - 18:00 | 0.0055 | 0.0054 | 0.0066 | 0.0059 | 0.0057 | 0.0040 | 0.0062 |
| 18:00 - 19:00 | 0.0049 | 0.0070 | 0.0047 | 0.0070 | 0.0058 | 0.0044 | 0.0049 |
| 19:00 - 20:00 | 0.0063 | 0.0065 | 0.0044 | 0.0058 | 0.0070 | 0.0044 | 0.0053 |
| 20:00 - 21:00 | 0.0067 | 0.0068 | 0.0058 | 0.0058 | 0.0050 | 0.0059 | 0.0068 |
| 21:00 - 22:00 | 0.0041 | 0.0045 | 0.0044 | 0.0052 | 0.0051 | 0.0063 | 0.0053 |
| 22:00 - 23:00 | 0.0058 | 0.0065 | 0.0047 | 0.0043 | 0.0058 | 0.0059 | 0.0069 |
| 23:00 - 00:00 | 0.0064 | 0.0047 | 0.0064 | 0.0053 | 0.0056 | 0.0064 | 0.0045 |
| 00:00 - 01:00 | 0.0059 | 0.0047 | 0.0045 | 0.0058 | 0.0051 | 0.0051 | 0.0054 |
| 01:00 - 02:00 | 0.0048 | 0.0052 | 0.0040 | 0.0040 | 0.0045 | 0.0049 | 0.0055 |
| 02:00 - 03:00 | 0.0063 | 0.0069 | 0.0048 | 0.0052 | 0.0051 | 0.0045 | 0.0060 |
| 03:00 - 04:00 | 0.0056 | 0.0040 | 0.0049 | 0.0068 | 0.0049 | 0.0070 | 0.0048 |
| 04:00 - 05:00 | 0.0047 | 0.0052 | 0.0048 | 0.0046 | 0.0057 | 0.0068 | 0.0058 |
| 05:00 - 06:00 | 0.0060 | 0.0046 | 0.0053 | 0.0052 | 0.0070 | 0.0042 | 0.0065 |
| 06:00 - 07:00 | 0.0062 | 0.0067 | 0.0060 | 0.0056 | 0.0052 | 0.0067 | 0.0051 |
| 07:00 - 08:00 | 0.0042 | 0.0058 | 0.0060 | 0.0066 | 0.0056 | 0.0056 | 0.0066 |
| 08:00 - 09:00 | 0.0064 | 0.0056 | 0.0070 | 0.0057 | 0.0049 | 0.0070 | 0.0044 |
| 09:00 - 10:00 | 0.0049 | 0.0044 | 0.0070 | 0.0048 | 0.0042 | 0.0042 | 0.0056 |
| Average-24Hr* | 0.0055 | 0.0054 | 0.0055 | 0.0055 | 0.0053 | 0.0053 | 0.0057 |
| Max-1Hr | 0.0067 | 0.0070 | 0.0070 | 0.0070 | 0.0070 | 0.0070 | 0.0069 |
| Min-1Hr | 0.0041 | 0.0040 | 0.0040 | 0.0040 | 0.0041 | 0.0040 | 0.0044 |
| Standard-1Hr | 0.30 ppm(780 ug/cu.m) | | | | | | |
| Standard-24Hr | 0.12 ppm(300 ug/cu.m) | | | | | | |

Remark : * Average time between 10:00-10:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team



Ambient Air Monitoring Results : Sulfur dioxide MTR-BIC

Location : Ban Khlong Phutsa Monitor Period : 18-25 Mar 2024
Analyzer Model : Thermo 43C Station No : Shelter 15
Serial No : 0607415773 Site Operator : Mr. Suphanut Intharanaret

Calibrator Model : Teledyne 700E Serial No : 587
Calibration Gas Cylinder I.D.: EB0102326
Certified Date : 04 Jan 2024 Cal Concentration (ppb) : 0,100,200,400
Expire Date : 03 Jan 2025

| Time | SO2 Concentration (ppm) | | | | | | |
|---------------|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 18-19 Mar 2024 | 19-20 Mar 2024 | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 10:00 - 11:00 | 0.0051 | 0.0062 | 0.0064 | 0.0066 | 0.0060 | 0.0055 | 0.0058 |
| 11:00 - 12:00 | 0.0067 | 0.0059 | 0.0050 | 0.0055 | 0.0052 | 0.0063 | 0.0058 |
| 12:00 - 13:00 | 0.0050 | 0.0057 | 0.0056 | 0.0055 | 0.0050 | 0.0060 | 0.0056 |
| 13:00 - 14:00 | 0.0055 | 0.0060 | 0.0058 | 0.0052 | 0.0061 | 0.0055 | 0.0058 |
| 14:00 - 15:00 | 0.0062 | 0.0062 | 0.0049 | 0.0054 | 0.0060 | 0.0050 | 0.0055 |
| 15:00 - 16:00 | 0.0063 | 0.0055 | 0.0064 | 0.0064 | 0.0060 | 0.0062 | 0.0061 |
| 16:00 - 17:00 | 0.0059 | 0.0061 | 0.0054 | 0.0063 | 0.0055 | 0.0060 | 0.0058 |
| 17:00 - 18:00 | 0.0065 | 0.0054 | 0.0059 | 0.0060 | 0.0061 | 0.0052 | 0.0057 |
| 18:00 - 19:00 | 0.0062 | 0.0066 | 0.0059 | 0.0063 | 0.0058 | 0.0067 | 0.0063 |
| 19:00 - 20:00 | 0.0052 | 0.0060 | 0.0061 | 0.0057 | 0.0064 | 0.0054 | 0.0059 |
| 20:00 - 21:00 | 0.0055 | 0.0056 | 0.0053 | 0.0063 | 0.0062 | 0.0059 | 0.0061 |
| 21:00 - 22:00 | 0.0050 | 0.0059 | 0.0060 | 0.0056 | 0.0056 | 0.0062 | 0.0059 |
| 22:00 - 23:00 | 0.0055 | 0.0054 | 0.0055 | 0.0055 | 0.0059 | 0.0067 | 0.0063 |
| 23:00 - 00:00 | 0.0055 | 0.0055 | 0.0061 | 0.0055 | 0.0069 | 0.0061 | 0.0065 |
| 00:00 - 01:00 | 0.0066 | 0.0055 | 0.0056 | 0.0056 | 0.0059 | 0.0065 | 0.0062 |
| 01:00 - 02:00 | 0.0051 | 0.0067 | 0.0051 | 0.0061 | 0.0064 | 0.0053 | 0.0059 |
| 02:00 - 03:00 | 0.0069 | 0.0054 | 0.0066 | 0.0064 | 0.0058 | 0.0063 | 0.0061 |
| 03:00 - 04:00 | 0.0052 | 0.0063 | 0.0055 | 0.0058 | 0.0055 | 0.0053 | 0.0054 |
| 04:00 - 05:00 | 0.0053 | 0.0063 | 0.0062 | 0.0063 | 0.0059 | 0.0061 | 0.0060 |
| 05:00 - 06:00 | 0.0063 | 0.0062 | 0.0066 | 0.0057 | 0.0052 | 0.0051 | 0.0051 |
| 06:00 - 07:00 | 0.0063 | 0.0068 | 0.0064 | 0.0059 | 0.0050 | 0.0055 | 0.0053 |
| 07:00 - 08:00 | 0.0059 | 0.0061 | 0.0056 | 0.0058 | 0.0061 | 0.0061 | 0.0062 |
| 08:00 - 09:00 | 0.0065 | 0.0060 | 0.0056 | 0.0062 | 0.0063 | 0.0068 | 0.0066 |
| 09:00 - 10:00 | 0.0050 | 0.0063 | 0.0066 | 0.0050 | 0.0053 | 0.0052 | 0.0056 |
| Average-24Hr* | 0.0058 | 0.0060 | 0.0058 | 0.0059 | 0.0058 | 0.0059 | 0.0059 |
| Max-1Hr | 0.0069 | 0.0068 | 0.0066 | 0.0066 | 0.0069 | 0.0068 | 0.0066 |
| Min-1Hr | 0.0050 | 0.0054 | 0.0049 | 0.0050 | 0.0050 | 0.0050 | 0.0051 |
| Standard-1Hr | 0.30 ppm(780 ug/cu.m) | | | | | | |
| Standard-24Hr | 0.12 ppm(300 ug/cu.m) | | | | | | |

Remark : * Average time between 10:00-10:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team



Ambient Air Monitoring Results : Ozone MTR-BIC

Location : Wat Khlong Phutsa Monitor Period : 18-25 Mar 2024
Analyzer Model : Teledyne 400 Station No : Shelter 10
Serial No : 578 Site Operator : Mr. Suphanut Intharanaret

Calibrator Model : Teledyne T700 Serial No : 1367
Calibration Gas Cylinder I.D.: -
Certified Date : 05 Jan 2024 Cal Concentration (ppb) : 0,100,200,400
Expire Date : 04 Jan 2025

| Time | O3 Concentration (ppm) | | | | | | |
|---------------|------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 18-19 Mar 2024 | 19-20 Mar 2024 | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 17:00 - 18:00 | 0.0062 | 0.0063 | 0.0075 | 0.0063 | 0.0073 | 0.0065 | 0.0069 |
| 18:00 - 19:00 | 0.0065 | 0.0072 | 0.0061 | 0.0054 | 0.0063 | 0.0049 | 0.0056 |
| 19:00 - 20:00 | 0.0080 | 0.0063 | 0.0062 | 0.0074 | 0.0067 | 0.0063 | 0.0065 |
| 20:00 - 21:00 | 0.0067 | 0.0071 | 0.0075 | 0.0069 | 0.0066 | 0.0067 | 0.0067 |
| 21:00 - 22:00 | 0.0070 | 0.0073 | 0.0073 | 0.0058 | 0.0068 | 0.0071 | 0.0070 |
| 22:00 - 23:00 | 0.0070 | 0.0065 | 0.0055 | 0.0066 | 0.0064 | 0.0077 | 0.0071 |
| 23:00 - 00:00 | 0.0070 | 0.0073 | 0.0070 | 0.0064 | 0.0067 | 0.0073 | 0.0070 |
| 00:00 - 01:00 | 0.0081 | 0.0064 | 0.0058 | 0.0069 | 0.0059 | 0.0061 | 0.0060 |
| 01:00 - 02:00 | 0.0073 | 0.0070 | 0.0080 | 0.0070 | 0.0053 | 0.0068 | 0.0060 |
| 02:00 - 03:00 | 0.0064 | 0.0062 | 0.0069 | 0.0060 | 0.0061 | 0.0080 | 0.0071 |
| 03:00 - 04:00 | 0.0073 | 0.0058 | 0.0055 | 0.0068 | 0.0061 | 0.0069 | 0.0065 |
| 04:00 - 05:00 | 0.0067 | 0.0069 | 0.0069 | 0.0056 | 0.0054 | 0.0065 | 0.0060 |
| 05:00 - 06:00 | 0.0076 | 0.0075 | 0.0073 | 0.0055 | 0.0077 | 0.0095 | 0.0086 |
| 06:00 - 07:00 | 0.0063 | 0.0070 | 0.0071 | 0.0068 | 0.0066 | 0.0088 | 0.0077 |
| 07:00 - 08:00 | 0.0063 | 0.0065 | 0.0076 | 0.0068 | 0.0079 | 0.0097 | 0.0088 |
| 08:00 - 09:00 | 0.0069 | 0.0090 | 0.0071 | 0.0094 | 0.0093 | 0.0117 | 0.0105 |
| 09:00 - 10:00 | 0.0210 | 0.0082 | 0.0090 | 0.0106 | 0.0105 | 0.0106 | 0.0052 |
| 10:00 - 11:00 | 0.0117 | 0.0098 | 0.0200 | 0.0116 | 0.0140 | 0.0128 | 0.0082 |
| 11:00 - 12:00 | 0.0124 | 0.0114 | 0.0135 | 0.0115 | 0.0134 | 0.0125 | 0.0119 |
| 12:00 - 13:00 | 0.0133 | 0.0123 | 0.0138 | 0.0134 | 0.0155 | 0.0145 | 0.0128 |
| 13:00 - 14:00 | 0.0140 | 0.0121 | 0.0134 | 0.0131 | 0.0154 | 0.0143 | 0.0124 |
| 14:00 - 15:00 | 0.0138 | 0.0137 | 0.0126 | 0.0132 | 0.0140 | 0.0136 | 0.0137 |
| 15:00 - 16:00 | 0.0113 | 0.0122 | 0.0102 | 0.0104 | 0.0108 | 0.0106 | 0.0137 |
| 16:00 - 17:00 | 0.0078 | 0.0112 | 0.0087 | 0.0190 | 0.0089 | 0.0210 | 0.0094 |
| Average-24Hr* | 0.0090 | 0.0084 | 0.0088 | 0.0087 | 0.0087 | 0.0096 | 0.0084 |
| Max-1Hr | 0.0210 | 0.0137 | 0.0200 | 0.0190 | 0.0155 | 0.0210 | 0.0137 |
| Min-1Hr | 0.0062 | 0.0058 | 0.0055 | 0.0054 | 0.0053 | 0.0049 | 0.0052 |
| Standard-1Hr | 0.10 ppm(200 ug/cu.m) | | | | | | |
| Standard-24Hr | - | | | | | | |

Remark : * Average time between 17:00-17:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Ambient Air Monitoring Results : Ozone MTR-BIC

Location : Ban Bang Krasun Monitor Period : 18-25 Mar 2024
Analyzer Model : API 400 Station No : Shelter 17
Serial No : 1097 Site Operator : Mr. Suphanut Intharanaret

Calibrator Model : Teledyne T700 Serial No : 1367
Calibration Gas Cylinder I.D.: -
Certified Date : 05 Jan 2024 Cal Concentration (ppb) : 0,100,200,400
Expire Date : 04 Jan 2025

| Time | O3 Concentration (ppm) | | | | | | |
|---------------|------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 18-19 Mar 2024 | 19-20 Mar 2024 | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 11:00 - 12:00 | 0.0095 | 0.0160 | 0.0101 | 0.0133 | 0.0142 | 0.0149 | 0.0143 |
| 12:00 - 13:00 | 0.0240 | 0.0108 | 0.0120 | 0.0125 | 0.0126 | 0.0128 | 0.0128 |
| 13:00 - 14:00 | 0.0115 | 0.0121 | 0.0115 | 0.0129 | 0.0130 | 0.0128 | 0.0130 |
| 14:00 - 15:00 | 0.0123 | 0.0146 | 0.0163 | 0.0136 | 0.0210 | 0.0141 | 0.0280 |
| 15:00 - 16:00 | 0.0091 | 0.0122 | 0.0122 | 0.0220 | 0.0098 | 0.0106 | 0.0119 |
| 16:00 - 17:00 | 0.0113 | 0.0200 | 0.0080 | 0.0098 | 0.0076 | 0.0091 | 0.0096 |
| 17:00 - 18:00 | 0.0056 | 0.0081 | 0.0064 | 0.0081 | 0.0067 | 0.0084 | 0.0085 |
| 18:00 - 19:00 | 0.0078 | 0.0081 | 0.0072 | 0.0086 | 0.0076 | 0.0062 | 0.0076 |
| 19:00 - 20:00 | 0.0070 | 0.0080 | 0.0069 | 0.0069 | 0.0055 | 0.0074 | 0.0073 |
| 20:00 - 21:00 | 0.0064 | 0.0057 | 0.0084 | 0.0064 | 0.0068 | 0.0067 | 0.0067 |
| 21:00 - 22:00 | 0.0080 | 0.0066 | 0.0080 | 0.0058 | 0.0075 | 0.0058 | 0.0060 |
| 22:00 - 23:00 | 0.0079 | 0.0077 | 0.0065 | 0.0072 | 0.0067 | 0.0084 | 0.0080 |
| 23:00 - 00:00 | 0.0074 | 0.0071 | 0.0080 | 0.0067 | 0.0069 | 0.0084 | 0.0077 |
| 00:00 - 01:00 | 0.0068 | 0.0082 | 0.0054 | 0.0073 | 0.0079 | 0.0072 | 0.0074 |
| 01:00 - 02:00 | 0.0080 | 0.0074 | 0.0070 | 0.0074 | 0.0070 | 0.0084 | 0.0081 |
| 02:00 - 03:00 | 0.0071 | 0.0062 | 0.0068 | 0.0068 | 0.0074 | 0.0073 | 0.0072 |
| 03:00 - 04:00 | 0.0071 | 0.0062 | 0.0067 | 0.0068 | 0.0066 | 0.0074 | 0.0073 |
| 04:00 - 05:00 | 0.0069 | 0.0051 | 0.0054 | 0.0059 | 0.0068 | 0.0057 | 0.0059 |
| 05:00 - 06:00 | 0.0067 | 0.0077 | 0.0052 | 0.0079 | 0.0054 | 0.0069 | 0.0076 |
| 06:00 - 07:00 | 0.0073 | 0.0082 | 0.0071 | 0.0058 | 0.0064 | 0.0071 | 0.0066 |
| 07:00 - 08:00 | 0.0066 | 0.0081 | 0.0092 | 0.0074 | 0.0085 | 0.0116 | 0.0097 |
| 08:00 - 09:00 | 0.0089 | 0.0073 | 0.0109 | 0.0077 | 0.0097 | 0.0119 | 0.0100 |
| 09:00 - 10:00 | 0.0093 | 0.0103 | 0.0135 | 0.0104 | 0.0109 | 0.0124 | 0.0098 |
| 10:00 - 11:00 | 0.0089 | 0.0116 | 0.0117 | 0.0111 | 0.0139 | 0.0130 | 0.0116 |
| Average-24Hr* | 0.0088 | 0.0093 | 0.0088 | 0.0091 | 0.0090 | 0.0094 | 0.0097 |
| Max-1Hr | 0.0240 | 0.0163 | 0.0163 | 0.0220 | 0.0210 | 0.0149 | 0.0280 |
| Min-1Hr | 0.0056 | 0.0051 | 0.0052 | 0.0058 | 0.0054 | 0.0057 | 0.0059 |
| Standard-1Hr | 0.10 ppm(200 ug/cu.m) | | | | | | |
| Standard-24Hr | - | | | | | | |

Remark : * Average time between 11:00-11:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team

**Ambient Air Monitoring Results : Ozone**
MTR-BIC

Location : Chaofasang School Monitor Period : 18-25 Mar 2024
Analyzer Model : API 400 Station No : Shelter 19
Serial No : 969 Site Operator : Mr. Suphanut Intharanaret

Calibrator Model : Teledyne T700 Serial No : 1367
Calibration Gas Cylinder I.D.: -
Certified Date : 05 Jan 2024 Cal Concentration (ppb) : 0,100,200,400
Expire Date : 04 Jan 2025

| Time | O3 Concentration (ppm) | | | | | | |
|---------------|------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 18-19 Mar 2024 | 19-20 Mar 2024 | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 13:00 - 14:00 | 0.0131 | 0.0124 | 0.0140 | 0.0120 | 0.0165 | 0.0155 | 0.0140 |
| 14:00 - 15:00 | 0.0122 | 0.0133 | 0.0114 | 0.0142 | 0.0132 | 0.0167 | 0.0157 |
| 15:00 - 16:00 | 0.0126 | 0.0115 | 0.0108 | 0.0108 | 0.0099 | 0.0230 | 0.0125 |
| 16:00 - 17:00 | 0.0076 | 0.0108 | 0.0186 | 0.0109 | 0.0088 | 0.0114 | 0.0114 |
| 17:00 - 18:00 | 0.0076 | 0.0089 | 0.0093 | 0.0097 | 0.0093 | 0.0098 | 0.0100 |
| 18:00 - 19:00 | 0.0073 | 0.0073 | 0.0080 | 0.0075 | 0.0080 | 0.0086 | 0.0083 |
| 19:00 - 20:00 | 0.0078 | 0.0063 | 0.0077 | 0.0074 | 0.0093 | 0.0101 | 0.0090 |
| 20:00 - 21:00 | 0.0089 | 0.0067 | 0.0093 | 0.0083 | 0.0081 | 0.0091 | 0.0090 |
| 21:00 - 22:00 | 0.0073 | 0.0059 | 0.0066 | 0.0078 | 0.0066 | 0.0093 | 0.0088 |
| 22:00 - 23:00 | 0.0073 | 0.0070 | 0.0078 | 0.0072 | 0.0074 | 0.0072 | 0.0074 |
| 23:00 - 00:00 | 0.0080 | 0.0084 | 0.0084 | 0.0080 | 0.0093 | 0.0059 | 0.0072 |
| 00:00 - 01:00 | 0.0088 | 0.0069 | 0.0085 | 0.0082 | 0.0082 | 0.0073 | 0.0080 |
| 01:00 - 02:00 | 0.0089 | 0.0077 | 0.0079 | 0.0082 | 0.0065 | 0.0080 | 0.0083 |
| 02:00 - 03:00 | 0.0080 | 0.0060 | 0.0078 | 0.0076 | 0.0074 | 0.0083 | 0.0082 |
| 03:00 - 04:00 | 0.0086 | 0.0078 | 0.0086 | 0.0079 | 0.0082 | 0.0086 | 0.0085 |
| 04:00 - 05:00 | 0.0084 | 0.0067 | 0.0069 | 0.0078 | 0.0080 | 0.0092 | 0.0087 |
| 05:00 - 06:00 | 0.0075 | 0.0083 | 0.0069 | 0.0084 | 0.0072 | 0.0071 | 0.0080 |
| 06:00 - 07:00 | 0.0069 | 0.0072 | 0.0079 | 0.0080 | 0.0087 | 0.0082 | 0.0084 |
| 07:00 - 08:00 | 0.0200 | 0.0077 | 0.0078 | 0.0078 | 0.0069 | 0.0069 | 0.0076 |
| 08:00 - 09:00 | 0.0110 | 0.0084 | 0.0074 | 0.0071 | 0.0081 | 0.0099 | 0.0088 |
| 09:00 - 10:00 | 0.0129 | 0.0119 | 0.0083 | 0.0210 | 0.0109 | 0.0099 | 0.0084 |
| 10:00 - 11:00 | 0.0133 | 0.0109 | 0.0100 | 0.0129 | 0.0108 | 0.0107 | 0.0107 |
| 11:00 - 12:00 | 0.0135 | 0.0130 | 0.0108 | 0.0129 | 0.0129 | 0.0121 | 0.0111 |
| 12:00 - 13:00 | 0.0129 | 0.0123 | 0.0126 | 0.0139 | 0.0137 | 0.0134 | 0.0133 |
| Average-24Hr* | 0.0100 | 0.0089 | 0.0093 | 0.0098 | 0.0093 | 0.0103 | 0.0096 |
| Max-1Hr | 0.0200 | 0.0133 | 0.0166 | 0.0210 | 0.0165 | 0.0230 | 0.0157 |
| Min-1Hr | 0.0069 | 0.0059 | 0.0066 | 0.0071 | 0.0065 | 0.0059 | 0.0072 |
| Standard-1Hr | 0.10 ppm(200 ug/cu.m) | | | | | | |
| Standard-24Hr | - | | | | | | |

Remark : * Average time between 13:00-13:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team

**Ambient Air Monitoring Results : Ozone**
MTR-BIC

Location : Wat Chumpol Nikayaram Monitor Period : 18-25 Mar 2024
Analyzer Model : Thermo 49C Station No : Shelter 18
Serial No : 2009 Site Operator : Mr. Suphanut Intharanaret

Calibrator Model : Teledyne T700 Serial No : 1367
Calibration Gas Cylinder I.D.: -
Certified Date : 05 Jan 2024 Cal Concentration (ppb) : 0,100,200,400
Expire Date : 04 Jan 2025

| Time | O3 Concentration (ppm) | | | | | | |
|---------------|------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 18-19 Mar 2024 | 19-20 Mar 2024 | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 12:00 - 13:00 | 0.0123 | 0.0148 | 0.0145 | 0.0145 | 0.0138 | 0.0147 | 0.0148 |
| 13:00 - 14:00 | 0.0147 | 0.0119 | 0.0133 | 0.0163 | 0.0230 | 0.0128 | 0.0148 |
| 14:00 - 15:00 | 0.0138 | 0.0114 | 0.0104 | 0.0138 | 0.0113 | 0.0121 | 0.0131 |
| 15:00 - 16:00 | 0.0128 | 0.0088 | 0.0175 | 0.0107 | 0.0102 | 0.0121 | 0.0116 |
| 16:00 - 17:00 | 0.0097 | 0.0085 | 0.0071 | 0.0079 | 0.0094 | 0.0102 | 0.0093 |
| 17:00 - 18:00 | 0.0061 | 0.0082 | 0.0066 | 0.0072 | 0.0086 | 0.0091 | 0.0084 |
| 18:00 - 19:00 | 0.0077 | 0.0078 | 0.0082 | 0.0073 | 0.0070 | 0.0071 | 0.0075 |
| 19:00 - 20:00 | 0.0066 | 0.0070 | 0.0062 | 0.0072 | 0.0059 | 0.0075 | 0.0075 |
| 20:00 - 21:00 | 0.0063 | 0.0076 | 0.0073 | 0.0089 | 0.0076 | 0.0069 | 0.0081 |
| 21:00 - 22:00 | 0.0054 | 0.0060 | 0.0074 | 0.0077 | 0.0058 | 0.0079 | 0.0080 |
| 22:00 - 23:00 | 0.0070 | 0.0073 | 0.0075 | 0.0071 | 0.0069 | 0.0071 | 0.0074 |
| 23:00 - 00:00 | 0.0061 | 0.0059 | 0.0088 | 0.0068 | 0.0072 | 0.0069 | 0.0071 |
| 00:00 - 01:00 | 0.0076 | 0.0067 | 0.0066 | 0.0078 | 0.0059 | 0.0075 | 0.0078 |
| 01:00 - 02:00 | 0.0084 | 0.0068 | 0.0071 | 0.0079 | 0.0077 | 0.0068 | 0.0076 |
| 02:00 - 03:00 | 0.0056 | 0.0071 | 0.0062 | 0.0075 | 0.0069 | 0.0077 | 0.0078 |
| 03:00 - 04:00 | 0.0079 | 0.0067 | 0.0075 | 0.0071 | 0.0065 | 0.0074 | 0.0075 |
| 04:00 - 05:00 | 0.0075 | 0.0066 | 0.0081 | 0.0083 | 0.0076 | 0.0073 | 0.0080 |
| 05:00 - 06:00 | 0.0067 | 0.0065 | 0.0074 | 0.0078 | 0.0062 | 0.0073 | 0.0077 |
| 06:00 - 07:00 | 0.0057 | 0.0081 | 0.0067 | 0.0068 | 0.0072 | 0.0074 | 0.0074 |
| 07:00 - 08:00 | 0.0057 | 0.0073 | 0.0070 | 0.0086 | 0.0059 | 0.0076 | 0.0083 |
| 08:00 - 09:00 | 0.0230 | 0.0074 | 0.0085 | 0.0084 | 0.0075 | 0.0097 | 0.0093 |
| 09:00 - 10:00 | 0.0103 | 0.0102 | 0.0210 | 0.0109 | 0.0105 | 0.0110 | 0.0079 |
| 10:00 - 11:00 | 0.0123 | 0.0121 | 0.0128 | 0.0124 | 0.0124 | 0.0128 | 0.0089 |
| 11:00 - 12:00 | 0.0144 | 0.0133 | 0.0131 | 0.0142 | 0.0131 | 0.0133 | 0.0103 |
| Average-24Hr* | 0.0093 | 0.0085 | 0.0095 | 0.0093 | 0.0089 | 0.0092 | 0.0090 |
| Max-1Hr | 0.0230 | 0.0148 | 0.0210 | 0.0163 | 0.0230 | 0.0147 | 0.0148 |
| Min-1Hr | 0.0054 | 0.0059 | 0.0062 | 0.0068 | 0.0058 | 0.0068 | 0.0071 |
| Standard-1Hr | 0.10 ppm(200 ug/cu.m) | | | | | | |
| Standard-24Hr | - | | | | | | |

Remark : * Average time between 12:00-12:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team

**Ambient Air Monitoring Results : Ozone
MTR-BIC**

Location : Wat Wiwek Wayuphat Monitor Period : 18-25 Mar 2024
Analyzer Model : Thermo 49C Station No : Shelter 16
Serial No : 65576-349 Site Operator : Mr. Suphanut Intharanaret

Calibrator Model : Teledyne T700 Serial No : 1367
Calibration Gas Cylinder I.D.: -
Certified Date : 05 Jan 2024 Cal Concentration (ppb) : 0,100,200,400
Expire Date : 04 Jan 2025

| Time | O3 Concentration (ppm) | | | | | | |
|---------------|------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 18-19 Mar 2024 | 19-20 Mar 2024 | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 10:00 - 11:00 | 0.0124 | 0.0117 | 0.0119 | 0.0118 | 0.0126 | 0.0117 | 0.0124 |
| 11:00 - 12:00 | 0.0125 | 0.0135 | 0.0119 | 0.0141 | 0.0126 | 0.0130 | 0.0130 |
| 12:00 - 13:00 | 0.0152 | 0.0145 | 0.0125 | 0.0133 | 0.0140 | 0.0135 | 0.0140 |
| 13:00 - 14:00 | 0.0155 | 0.0161 | 0.0139 | 0.0146 | 0.0158 | 0.0131 | 0.0147 |
| 14:00 - 15:00 | 0.0130 | 0.0142 | 0.0139 | 0.0118 | 0.0164 | 0.0139 | 0.0154 |
| 15:00 - 16:00 | 0.0117 | 0.0115 | 0.0112 | 0.0086 | 0.0125 | 0.0095 | 0.0112 |
| 16:00 - 17:00 | 0.0101 | 0.0092 | 0.0102 | 0.0090 | 0.0103 | 0.0091 | 0.0099 |
| 17:00 - 18:00 | 0.0079 | 0.0061 | 0.0081 | 0.0068 | 0.0087 | 0.0068 | 0.0080 |
| 18:00 - 19:00 | 0.0060 | 0.0064 | 0.0058 | 0.0065 | 0.0068 | 0.0063 | 0.0068 |
| 19:00 - 20:00 | 0.0056 | 0.0059 | 0.0069 | 0.0066 | 0.0071 | 0.0059 | 0.0067 |
| 20:00 - 21:00 | 0.0057 | 0.0056 | 0.0061 | 0.0068 | 0.0062 | 0.0076 | 0.0071 |
| 21:00 - 22:00 | 0.0063 | 0.0062 | 0.0056 | 0.0057 | 0.0071 | 0.0073 | 0.0074 |
| 22:00 - 23:00 | 0.0056 | 0.0068 | 0.0068 | 0.0058 | 0.0072 | 0.0074 | 0.0076 |
| 23:00 - 00:00 | 0.0064 | 0.0065 | 0.0060 | 0.0064 | 0.0076 | 0.0064 | 0.0072 |
| 00:00 - 01:00 | 0.0054 | 0.0056 | 0.0066 | 0.0068 | 0.0066 | 0.0060 | 0.0065 |
| 01:00 - 02:00 | 0.0061 | 0.0061 | 0.0060 | 0.0069 | 0.0073 | 0.0068 | 0.0073 |
| 02:00 - 03:00 | 0.0064 | 0.0059 | 0.0068 | 0.0065 | 0.0067 | 0.0072 | 0.0072 |
| 03:00 - 04:00 | 0.0064 | 0.0065 | 0.0065 | 0.0063 | 0.0071 | 0.0078 | 0.0077 |
| 04:00 - 05:00 | 0.0052 | 0.0062 | 0.0064 | 0.0068 | 0.0064 | 0.0069 | 0.0069 |
| 05:00 - 06:00 | 0.0050 | 0.0068 | 0.0066 | 0.0071 | 0.0076 | 0.0062 | 0.0071 |
| 06:00 - 07:00 | 0.0059 | 0.0057 | 0.0070 | 0.0071 | 0.0069 | 0.0071 | 0.0072 |
| 07:00 - 08:00 | 0.0060 | 0.0060 | 0.0059 | 0.0065 | 0.0075 | 0.0070 | 0.0075 |
| 08:00 - 09:00 | 0.0099 | 0.0060 | 0.0075 | 0.0076 | 0.0128 | 0.0070 | 0.0101 |
| 09:00 - 10:00 | 0.0111 | 0.0113 | 0.0120 | 0.0126 | 0.0125 | 0.0128 | 0.0079 |
| Average-24Hr* | 0.0084 | 0.0083 | 0.0084 | 0.0084 | 0.0094 | 0.0086 | 0.0090 |
| Max-1Hr | 0.0155 | 0.0161 | 0.0139 | 0.0146 | 0.0164 | 0.0139 | 0.0154 |
| Min-1Hr | 0.0050 | 0.0056 | 0.0056 | 0.0057 | 0.0062 | 0.0059 | 0.0065 |
| Standard-1Hr | 0.10 ppm(200 ug/cu.m) | | | | | | |
| Standard-24Hr | - | | | | | | |

Remark : * Average time between 10:00-10:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team

**Ambient Air Monitoring Results : Ozone
MTR-BIC**

Location : Ban Khlong Phutsa Monitor Period : 18-25 Mar 2024
Analyzer Model : Teledyne 400 Station No : Shelter 15
Serial No : 2335 Site Operator : Mr. Suphanut Intharanaret

Calibrator Model : Teledyne T700 Serial No : 1367
Calibration Gas Cylinder I.D.: -
Certified Date : 05 Jan 2024 Cal Concentration (ppb) : 0,100,200,400
Expire Date : 04 Jan 2025

| Time | O3 Concentration (ppm) | | | | | | |
|---------------|------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 18-19 Mar 2024 | 19-20 Mar 2024 | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 10:00 - 11:00 | 0.0104 | 0.0100 | 0.0105 | 0.0095 | 0.0142 | 0.0085 | 0.0116 |
| 11:00 - 12:00 | 0.0133 | 0.0120 | 0.0114 | 0.0106 | 0.0148 | 0.0087 | 0.0120 |
| 12:00 - 13:00 | 0.0118 | 0.0138 | 0.0125 | 0.0145 | 0.0300 | 0.0101 | 0.0134 |
| 13:00 - 14:00 | 0.0104 | 0.0145 | 0.0145 | 0.0148 | 0.0162 | 0.0096 | 0.0131 |
| 14:00 - 15:00 | 0.0131 | 0.0129 | 0.0214 | 0.0124 | 0.0134 | 0.0093 | 0.0210 |
| 15:00 - 16:00 | 0.0059 | 0.0250 | 0.0111 | 0.0200 | 0.0113 | 0.0096 | 0.0107 |
| 16:00 - 17:00 | 0.0090 | 0.0100 | 0.0092 | 0.0095 | 0.0104 | 0.0102 | 0.0105 |
| 17:00 - 18:00 | 0.0074 | 0.0077 | 0.0096 | 0.0071 | 0.0085 | 0.0100 | 0.0094 |
| 18:00 - 19:00 | 0.0079 | 0.0071 | 0.0078 | 0.0071 | 0.0076 | 0.0076 | 0.0078 |
| 19:00 - 20:00 | 0.0093 | 0.0098 | 0.0078 | 0.0073 | 0.0092 | 0.0078 | 0.0087 |
| 20:00 - 21:00 | 0.0074 | 0.0065 | 0.0081 | 0.0071 | 0.0066 | 0.0077 | 0.0074 |
| 21:00 - 22:00 | 0.0082 | 0.0081 | 0.0090 | 0.0086 | 0.0092 | 0.0079 | 0.0088 |
| 22:00 - 23:00 | 0.0082 | 0.0075 | 0.0086 | 0.0068 | 0.0092 | 0.0091 | 0.0094 |
| 23:00 - 00:00 | 0.0072 | 0.0065 | 0.0084 | 0.0068 | 0.0081 | 0.0096 | 0.0091 |
| 00:00 - 01:00 | 0.0065 | 0.0086 | 0.0075 | 0.0066 | 0.0068 | 0.0089 | 0.0081 |
| 01:00 - 02:00 | 0.0063 | 0.0069 | 0.0070 | 0.0072 | 0.0068 | 0.0077 | 0.0074 |
| 02:00 - 03:00 | 0.0058 | 0.0067 | 0.0082 | 0.0061 | 0.0079 | 0.0097 | 0.0090 |
| 03:00 - 04:00 | 0.0077 | 0.0069 | 0.0077 | 0.0086 | 0.0079 | 0.0088 | 0.0086 |
| 04:00 - 05:00 | 0.0070 | 0.0071 | 0.0069 | 0.0072 | 0.0078 | 0.0081 | 0.0082 |
| 05:00 - 06:00 | 0.0082 | 0.0083 | 0.0082 | 0.0069 | 0.0073 | 0.0098 | 0.0088 |
| 06:00 - 07:00 | 0.0092 | 0.0075 | 0.0080 | 0.0109 | 0.0077 | 0.0076 | 0.0079 |
| 07:00 - 08:00 | 0.0079 | 0.0092 | 0.0068 | 0.0100 | 0.0095 | 0.0079 | 0.0089 |
| 08:00 - 09:00 | 0.0082 | 0.0090 | 0.0083 | 0.0102 | 0.0085 | 0.0106 | 0.0098 |
| 09:00 - 10:00 | 0.0096 | 0.0076 | 0.0103 | 0.0130 | 0.0077 | 0.0023 | 0.0092 |
| Average-24Hr* | 0.0086 | 0.0096 | 0.0095 | 0.0095 | 0.0103 | 0.0086 | 0.0100 |
| Max-1Hr | 0.0133 | 0.0250 | 0.0214 | 0.0200 | 0.0300 | 0.0106 | 0.0210 |
| Min-1Hr | 0.0058 | 0.0065 | 0.0068 | 0.0061 | 0.0066 | 0.0023 | 0.0074 |
| Standard-1Hr | 0.10 ppm(200 ug/cu.m) | | | | | | |
| Standard-24Hr | - | | | | | | |

Remark : * Average time between 10:00-10:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team

ภาคผนวก ง.2

ใบรับรองผลการตรวจวัดคุณภาพอากาศจากแหล่งกำเนิด



บริษัท ซีคोट จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพฯ 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

TEL : +66(0) 2959-3600 FAX : +66(0) 2959-3535 E-mail : envserv@secot.co.th

STACK EMISSION ANALYSIS REPORT

| | | | |
|--------------------|------------------------------------|------------------|------------------------------|
| CLIENT NAME | : Bangpa-in Cogeneration Co., Ltd. | REFERENCE NO. | : 224045-Stack_PM/HRSG 1_Mar |
| SAMPLING BY | : SECOT Co., Ltd. | SAMPLING DATE | : 21/03/2024 |
| RECEIVED DATE | : 22/03/2024 | ANALYTICAL DATE | : 22-23/03/2024 |
| REPORT DATE | : 02/04/2024 | SAMPLE CONDITION | : Good |
| STACK LOCATION | : HRSG 1 | SITE OPERATOR | : Mr. Rommadon Lemmad |
| SOURCE DESCRIPTION | : Combustion | FUEL TYPE | : Natural Gas |
| STACK DESCRIPTION | | | |

| | | | | | |
|-------------|---------|----|---------------|---------|------------|
| Height | : 45.0 | m | Gas Velocity | : 13.6 | m/s |
| Diameter | : 3.2 | m | Flow rate* | : 4,695 | Ncu.m./min |
| Temperature | : 101.0 | °C | Excess Oxygen | : 15.4 | % |
| Moisture | : 10.3 | % | | | |

| PARAMETER | UNIT | RESULT | | | STANDARD | | REFERENCE |
|--------------------|-----------|---------------------|------------------|------|-------------------------------------|--------------------|------------------|
| | | 15.4%O ₂ | 7%O ₂ | g/s | 7%O ₂ | g/s | |
| Particulate Matter | mg/Ncu.m. | 2.09 | 5.30 | 0.16 | 60 ^{1/} , 10 ^{2/} | 0.61 ^{2/} | US. EPA Method 5 |

Phatchara Samanchan

(Miss Phatchara Samanchan)

Analyst

REG.NO. 2-239-ก-0021

Narisa Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

REG.NO. 2-239-ก-0010

Remark : 1. Reported analysis refers to submitted sample only.

2. This report shall not be reproduced, except in full, without official approval.

3. * At standard pressure of 760 mm.Hg and temperature of 25 °C, dry basis.

4. ^{1/} Notification of Ministry Natural Resources and Environmental, B.E.2566 (2023).

5. ^{2/} The value was assigned in EIA report, B.E.2560

The Monitoring Result of Emission Concentration

HRSG1

BANGPA-IN COGENERATION CO., LTD.

March 21, 2024

| Run Number | Oxygen content (%) | | Oxide of Nitrogen (ppm) | | |
|------------|--------------------|--------------------|-------------------------|---|---------------------------------------|
| | RM Stack Gas Conc | Corrected Gas Conc | RM Stack Gas Conc | Corrected Gas Conc @Actual O ₂ | Corrected Gas Conc @7% O ₂ |
| 1 | 15.32 | 15.44 | 22.82 | 22.79 | 58.02 |
| 2 | 15.28 | 15.40 | 22.93 | 22.90 | 57.87 |
| 3 | 15.30 | 15.42 | 21.56 | 21.53 | 54.61 |
| Average | 15.30 | 15.42 | 22.43 | 22.41 | 56.83 |

| Run Number | Oxygen content (%) | | Sulfur dioxide (ppm) | | |
|------------|--------------------|--------------------|----------------------|---|---------------------------------------|
| | RM Stack Gas Conc | Corrected Gas Conc | RM Stack Gas Conc | Corrected Gas Conc @Actual O ₂ | Corrected Gas Conc @7% O ₂ |
| 1 | 15.32 | 15.44 | 0.13 | 0.05 | 0.13 |
| 2 | 15.28 | 15.40 | 0.15 | 0.07 | 0.18 |
| 3 | 15.30 | 15.42 | 0.19 | 0.10 | 0.25 |
| Average | 15.30 | 15.42 | 0.15 | 0.07 | 0.19 |

| Run Number | Oxygen content (%) | | Carbonmonoxide (ppm) | | |
|------------|--------------------|--------------------|----------------------|---|---------------------------------------|
| | RM Stack Gas Conc | Corrected Gas Conc | RM Stack Gas Conc | Corrected Gas Conc @Actual O ₂ | Corrected Gas Conc @7% O ₂ |
| 1 | 15.32 | 15.44 | 135.97 | 136.11 | 346.51 |
| 2 | 15.28 | 15.40 | 136.07 | 136.22 | 344.27 |
| 3 | 15.30 | 15.42 | 128.66 | 128.81 | 326.73 |
| Average | 15.30 | 15.42 | 133.57 | 133.71 | 339.16 |

BANGPA-IN COGENERATION CO., LTD. EMISSION TEST RESULT

Date: March 21, 2024
Start time: 11:30 AM
O₂ instrument Model: AMI 70
NO_x instrument Model: API 200 AH
SO₂ instrument Model: API 100 AH
CO instrument Model: THERMO 48 C
Fuel Type : Natural Gas

Run # : 1
Location : HRSG1
Finish time : 11:50 AM
Serial No.: 111117-2
Serial No.: 441
Serial No.: 060
Serial No.: 388
Test Operator : Kittipong T.

| Time, min | O ₂ (%) | NO _x (ppm) | SO ₂ (ppm) | CO (ppm) |
|-----------|--------------------|-----------------------|-----------------------|----------|
| 11:30 AM | 15.31 | 21.98 | 0.16 | 133.79 |
| 11:31 AM | 15.31 | 22.13 | 0.15 | 135.62 |
| 11:32 AM | 15.37 | 22.19 | 0.11 | 136.46 |
| 11:33 AM | 15.38 | 22.02 | 0.13 | 136.80 |
| 11:34 AM | 15.36 | 21.94 | 0.10 | 137.01 |
| 11:35 AM | 15.41 | 21.84 | 0.11 | 138.03 |
| 11:36 AM | 15.42 | 21.94 | 0.14 | 139.00 |
| 11:37 AM | 15.40 | 23.15 | 0.11 | 139.34 |
| 11:38 AM | 15.39 | 23.63 | 0.12 | 138.91 |
| 11:39 AM | 15.40 | 23.53 | 0.10 | 138.11 |
| 11:40 AM | 15.28 | 23.15 | 0.10 | 137.14 |
| 11:41 AM | 15.28 | 23.37 | 0.10 | 136.00 |
| 11:42 AM | 15.28 | 23.82 | 0.16 | 135.15 |
| 11:43 AM | 15.28 | 23.50 | 0.15 | 134.76 |
| 11:44 AM | 15.28 | 23.51 | 0.12 | 134.47 |
| 11:45 AM | 15.28 | 23.37 | 0.13 | 133.84 |
| 11:46 AM | 15.28 | 23.00 | 0.12 | 133.91 |
| 11:47 AM | 15.27 | 22.63 | 0.14 | 133.91 |
| 11:48 AM | 15.28 | 23.06 | 0.13 | 134.03 |
| 11:49 AM | 15.28 | 22.66 | 0.13 | 134.34 |
| 11:50 AM | 15.28 | 22.73 | 0.15 | 134.76 |
| Average | 15.32 | 22.82 | 0.13 | 135.97 |

Signature 
 (Miss Katesarin Vorradetwittaya)
 Environmental Scientist

BANGPA-IN COGENERATION CO., LTD. EMISSION TEST RESULT

Date: March 21, 2024
Start time: 11:51 AM
O₂ instrument Model: AMI 70
NO_x instrument Model: API 200 AH
SO₂ instrument Model: API 100 AH
CO instrument Model: THERMO 48 C
Fuel Type : Natural Gas

Run # : 2
Location : HRSG1
Finish time : 12:11 PM
Serial No.: 111117-2
Serial No.: 441
Serial No.: 060
Serial No.: 388
Test Operator : Kittipong T.

| Time, min | O ₂ (%) | NO _x (ppm) | SO ₂ (ppm) | CO (ppm) |
|-----------|--------------------|-----------------------|-----------------------|----------|
| 11:51 AM | 15.27 | 23.03 | 0.13 | 134.47 |
| 11:52 AM | 15.28 | 23.43 | 0.14 | 134.26 |
| 11:53 AM | 15.28 | 22.84 | 0.16 | 134.60 |
| 11:54 AM | 15.28 | 22.63 | 0.13 | 134.68 |
| 11:55 AM | 15.28 | 22.80 | 0.12 | 134.72 |
| 11:56 AM | 15.27 | 23.05 | 0.15 | 134.64 |
| 11:57 AM | 15.28 | 23.02 | 0.15 | 135.15 |
| 11:58 AM | 15.27 | 22.79 | 0.12 | 135.28 |
| 11:59 AM | 15.27 | 23.09 | 0.14 | 135.28 |
| 12:00 PM | 15.28 | 22.94 | 0.18 | 135.41 |
| 12:01 PM | 15.28 | 22.45 | 0.16 | 136.30 |
| 12:02 PM | 15.27 | 22.79 | 0.15 | 136.81 |
| 12:03 PM | 15.27 | 23.40 | 0.16 | 136.81 |
| 12:04 PM | 15.27 | 23.07 | 0.16 | 137.41 |
| 12:05 PM | 15.27 | 23.11 | 0.15 | 137.83 |
| 12:06 PM | 15.27 | 23.20 | 0.15 | 137.79 |
| 12:07 PM | 15.28 | 23.11 | 0.16 | 137.32 |
| 12:08 PM | 15.28 | 22.88 | 0.14 | 137.79 |
| 12:09 PM | 15.28 | 22.34 | 0.14 | 137.36 |
| 12:10 PM | 15.28 | 22.47 | 0.16 | 137.20 |
| 12:11 PM | 15.28 | 23.00 | 0.17 | 136.30 |
| Average | 15.28 | 22.93 | 0.15 | 136.07 |

Signature 
 (Miss Katesarin Vorradetwittaya)
 Environmental Scientist

BANGPA-IN COGENERATION CO., LTD. EMISSION TEST RESULT

Date: March 21, 2024
Start time: 12:12 PM
O₂ instrument Model: AMI 70
NO_x instrument Model: API 200 AH
SO₂ instrument Model: API 100 AH
CO instrument Model: THERMO 48 C
Fuel Type: Natural Gas

Run #: 3
Location: HRSG1
Finish time: 12:32 PM
Serial No.: 111117-2
Serial No.: 441
Serial No.: 060
Serial No.: 388
Test Operator: Kittipong T.

| Time, min | O ₂ (%) | NO _x (ppm) | SO ₂ (ppm) | CO (ppm) |
|-----------|--------------------|-----------------------|-----------------------|----------|
| 12:12 PM | 15.31 | 22.60 | 0.17 | 135.58 |
| 12:13 PM | 15.28 | 22.43 | 0.17 | 134.86 |
| 12:14 PM | 15.30 | 22.80 | 0.17 | 133.92 |
| 12:15 PM | 15.29 | 22.52 | 0.17 | 133.43 |
| 12:16 PM | 15.29 | 23.06 | 0.17 | 133.35 |
| 12:17 PM | 15.29 | 23.25 | 0.17 | 133.43 |
| 12:18 PM | 15.31 | 23.28 | 0.17 | 133.77 |
| 12:19 PM | 15.28 | 23.16 | 0.19 | 134.24 |
| 12:20 PM | 15.31 | 23.28 | 0.17 | 134.78 |
| 12:21 PM | 15.29 | 22.94 | 0.17 | 136.18 |
| 12:22 PM | 15.28 | 22.94 | 0.17 | 137.50 |
| 12:23 PM | 15.30 | 22.77 | 0.20 | 136.27 |
| 12:24 PM | 15.30 | 20.52 | 0.19 | 132.80 |
| 12:25 PM | 15.28 | 19.87 | 0.18 | 129.04 |
| 12:26 PM | 15.28 | 19.86 | 0.21 | 124.57 |
| 12:27 PM | 15.30 | 19.55 | 0.20 | 120.35 |
| 12:28 PM | 15.29 | 19.33 | 0.21 | 118.03 |
| 12:29 PM | 15.33 | 19.55 | 0.22 | 116.89 |
| 12:30 PM | 15.32 | 19.68 | 0.23 | 115.46 |
| 12:31 PM | 15.33 | 19.95 | 0.19 | 114.23 |
| 12:32 PM | 15.32 | 19.42 | 0.17 | 113.26 |
| Average | 15.30 | 21.56 | 0.19 | 128.66 |

Signature 
 (Miss Katesarin Vorradetwittaya)
 Environmental Scientist



บริษัท ซีคอต จำกัด

SECOT CO., LTD.

239 ถนนวิมตคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพฯ 10800

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TEL : +66(0) 2959-3600 FAX : +66(0) 2959-3535 E-mail : envserv@secot.co.th

STACK EMISSION ANALYSIS REPORT

CLIENT NAME : Bangpa-in Cogeneration Co., Ltd. **REFERENCE NO.** : 224045-Stack_PM/HRSG 2_Mar
SAMPLING BY : SECOT Co., Ltd. **SAMPLING DATE** : 21/03/2024
RECEIVED DATE : 22/03/2024 **ANALYTICAL DATE** : 22-23/03/2024
REPORT DATE : 02/04/2024 **SAMPLE CONDITION** : Good
STACK LOCATION : HRSG 2 **SITE OPERATOR** : Mr. Rommadon Lemmad
SOURCE DESCRIPTION : Combustion **FUEL TYPE** : Natural Gas

STACK DESCRIPTION

Height : 45.0 m **Gas Velocity** : 22.0 m/s
Diameter : 3.2 m **Flow rate*** : 7,377 Ncu.m./min
Temperature : 106.0 °C **Excess Oxygen** : 15.1 %
Moisture : 11.1 %

| PARAMETER | UNIT | RESULT | | | STANDARD | | REFERENCE |
|--------------------|-----------|---------------------|------------------|------|-------------------------------------|--------------------|------------------|
| | | 15.1%O ₂ | 7%O ₂ | g/s | 7%O ₂ | g/s | |
| Particulate Matter | mg/Ncu.m. | 2.01 | 4.82 | 0.25 | 60 ^{1/} , 10 ^{2/} | 0.61 ^{2/} | US. EPA Method 5 |

Phatchara Samanchan

(Miss Phatchara Samanchan)

Analyst

REG.NO. 2-239-0-0021

Miss Narisa Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

REG.NO. 2-239-0-0010

Remark : 1. Reported analysis refers to submitted sample only.

2. This report shall not be reproduced, except in full, without official approval.

3. * At standard pressure of 760 mm.Hg and temperature of 25 °C, dry basis.

4. ^{1/} Notification of Ministry Natural Resources and Environmental, B.E.2566 (2023).

5. ^{2/} The value was assigned in EIA report, B.E.2560

The Monitoring Result of Emission Concentration
HRSG2
BANGPA-IN COGENERATION CO., LTD.
March 21, 2024

| Run Number | Oxygen content (%) | | Oxide of Nitrogen (ppm) | | |
|----------------|--------------------|--------------------|-------------------------|---|---------------------------------------|
| | RM Stack Gas Conc | Corrected Gas Conc | RM Stack Gas Conc | Corrected Gas Conc @Actual O ₂ | Corrected Gas Conc @7% O ₂ |
| 1 | 14.94 | 15.05 | 19.12 | 19.09 | 45.36 |
| 2 | 15.00 | 15.11 | 20.47 | 20.44 | 49.07 |
| 3 | 15.03 | 15.14 | 19.94 | 19.91 | 48.05 |
| Average | 14.99 | 15.10 | 19.85 | 19.81 | 47.48 |

| Run Number | Oxygen content (%) | | Sulfur dioxide (ppm) | | |
|----------------|--------------------|--------------------|----------------------|---|---------------------------------------|
| | RM Stack Gas Conc | Corrected Gas Conc | RM Stack Gas Conc | Corrected Gas Conc @Actual O ₂ | Corrected Gas Conc @7% O ₂ |
| 1 | 14.94 | 15.05 | 0.15 | 0.07 | 0.17 |
| 2 | 15.00 | 15.11 | 0.21 | 0.13 | 0.31 |
| 3 | 15.03 | 15.14 | 0.20 | 0.12 | 0.29 |
| Average | 14.99 | 15.10 | 0.19 | 0.11 | 0.26 |

| Run Number | Oxygen content (%) | | Carbonmonoxide (ppm) | | |
|----------------|--------------------|--------------------|----------------------|---|---------------------------------------|
| | RM Stack Gas Conc | Corrected Gas Conc | RM Stack Gas Conc | Corrected Gas Conc @Actual O ₂ | Corrected Gas Conc @7% O ₂ |
| 1 | 14.94 | 15.05 | 13.01 | 12.97 | 30.82 |
| 2 | 15.00 | 15.11 | 12.21 | 12.17 | 29.22 |
| 3 | 15.03 | 15.14 | 13.24 | 13.20 | 31.85 |
| Average | 14.99 | 15.10 | 12.82 | 12.78 | 30.63 |

BANGPA-IN COGENERATION CO., LTD.
EMISSION TEST RESULT

Date: March 21, 2024
Start time: 11:30 AM
O₂ instrument Model: AMI 70
NO_x instrument Model: API 200 AH
SO₂ instrument Model: API 100 AH
CO instrument Model: THERMO 48 C
Fuel Type : Natural Gas

Run # : 1
Location : HRSG2
Finish time : 11:50 AM
Serial No.: 111117-2
Serial No.: 441
Serial No.: 060
Serial No.: 388
Test Operator : Kittipong T.

| Time, min | O ₂ (%) | NO _x (ppm) | SO ₂ (ppm) | CO (ppm) |
|----------------|--------------------|-----------------------|-----------------------|--------------|
| 11:30 AM | 14.97 | 18.65 | 0.10 | 13.24 |
| 11:31 AM | 14.97 | 18.60 | 0.13 | 13.75 |
| 11:32 AM | 14.97 | 18.90 | 0.08 | 13.75 |
| 11:33 AM | 14.97 | 18.86 | 0.11 | 13.75 |
| 11:34 AM | 14.97 | 18.95 | 0.11 | 13.29 |
| 11:35 AM | 14.96 | 18.85 | 0.13 | 13.03 |
| 11:36 AM | 14.95 | 19.21 | 0.13 | 12.73 |
| 11:37 AM | 14.95 | 18.92 | 0.13 | 13.03 |
| 11:38 AM | 14.94 | 18.56 | 0.14 | 13.62 |
| 11:39 AM | 14.93 | 18.76 | 0.13 | 13.62 |
| 11:40 AM | 14.93 | 19.02 | 0.14 | 13.25 |
| 11:41 AM | 14.93 | 19.08 | 0.15 | 13.41 |
| 11:42 AM | 14.92 | 18.89 | 0.14 | 13.03 |
| 11:43 AM | 14.92 | 18.87 | 0.17 | 12.38 |
| 11:44 AM | 14.91 | 19.08 | 0.18 | 12.26 |
| 11:45 AM | 14.92 | 19.47 | 0.17 | 12.46 |
| 11:46 AM | 14.92 | 19.22 | 0.20 | 12.74 |
| 11:47 AM | 14.92 | 19.61 | 0.23 | 12.70 |
| 11:48 AM | 14.93 | 19.89 | 0.19 | 12.26 |
| 11:49 AM | 14.95 | 20.07 | 0.20 | 12.58 |
| 11:50 AM | 14.95 | 20.03 | 0.20 | 12.26 |
| Average | 14.94 | 19.12 | 0.15 | 13.01 |

Signature 
 (Miss Katesarin Vorradetwittaya)
 Environmental Scientist

BANGPA-IN COGENERATION CO., LTD. EMISSION TEST RESULT

Date: March 21, 2024
Start time: 11:51 AM
O₂ instrument Model: AMI 70
NO_x instrument Model: API 200 AH
SO₂ instrument Model: API 100 AH
CO instrument Model: THERMO 48 C
Fuel Type : Natural Gas

Run # : 2
Location : HRSG2
Finish time : 12:11 PM
Serial No.: 111117-2
Serial No.: 441
Serial No.: 060
Serial No.: 388
Test Operator : Kittipong T.

| Time, min | O ₂ (%) | NO _x (ppm) | SO ₂ (ppm) | CO (ppm) |
|----------------|--------------------|-----------------------|-----------------------|----------|
| 11:51 AM | 14.97 | 20.33 | 0.19 | 12.26 |
| 11:52 AM | 14.97 | 19.96 | 0.20 | 12.09 |
| 11:53 AM | 14.97 | 20.23 | 0.22 | 11.80 |
| 11:54 AM | 14.97 | 20.37 | 0.19 | 11.88 |
| 11:55 AM | 14.98 | 20.13 | 0.19 | 12.26 |
| 11:56 AM | 14.98 | 20.49 | 0.18 | 12.27 |
| 11:57 AM | 14.99 | 20.55 | 0.21 | 12.26 |
| 11:58 AM | 14.99 | 20.71 | 0.21 | 12.27 |
| 11:59 AM | 15.00 | 20.86 | 0.25 | 11.97 |
| 12:00 PM | 15.01 | 20.83 | 0.22 | 11.76 |
| 12:01 PM | 15.02 | 20.73 | 0.19 | 11.76 |
| 12:02 PM | 15.02 | 20.63 | 0.22 | 11.76 |
| 12:03 PM | 15.02 | 20.97 | 0.22 | 11.88 |
| 12:04 PM | 15.02 | 20.65 | 0.25 | 12.27 |
| 12:05 PM | 15.02 | 20.53 | 0.21 | 12.26 |
| 12:06 PM | 15.02 | 20.85 | 0.20 | 12.26 |
| 12:07 PM | 15.02 | 20.50 | 0.18 | 12.46 |
| 12:08 PM | 15.02 | 20.20 | 0.23 | 12.74 |
| 12:09 PM | 15.02 | 20.06 | 0.20 | 12.74 |
| 12:10 PM | 15.02 | 20.02 | 0.20 | 12.74 |
| 12:11 PM | 15.02 | 20.37 | 0.19 | 12.74 |
| Average | 15.00 | 20.47 | 0.21 | 12.21 |

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist

BANGPA-IN COGENERATION CO., LTD. EMISSION TEST RESULT

Date: March 21, 2024
Start time: 12:12 PM
O₂ instrument Model: AMI 70
NO_x instrument Model: API 200 AH
SO₂ instrument Model: API 100 AH
CO instrument Model: THERMO 48 C
Fuel Type : Natural Gas

Run # : 3
Location : HRSG2
Finish time : 12:32 PM
Serial No.: 111117-2
Serial No.: 441
Serial No.: 060
Serial No.: 388
Test Operator : Kittipong T.

| Time, min | O ₂ (%) | NO _x (ppm) | SO ₂ (ppm) | CO (ppm) |
|----------------|--------------------|-----------------------|-----------------------|----------|
| 12:12 PM | 15.02 | 20.14 | 0.18 | 13.04 |
| 12:13 PM | 15.02 | 19.87 | 0.18 | 13.25 |
| 12:14 PM | 15.02 | 20.07 | 0.16 | 13.26 |
| 12:15 PM | 15.03 | 19.72 | 0.19 | 13.26 |
| 12:16 PM | 15.03 | 19.65 | 0.18 | 13.51 |
| 12:17 PM | 15.03 | 20.05 | 0.20 | 13.26 |
| 12:18 PM | 15.03 | 19.82 | 0.21 | 13.26 |
| 12:19 PM | 15.03 | 19.89 | 0.20 | 13.26 |
| 12:20 PM | 15.02 | 19.92 | 0.19 | 13.26 |
| 12:21 PM | 15.03 | 20.04 | 0.18 | 13.26 |
| 12:22 PM | 15.02 | 19.84 | 0.20 | 13.26 |
| 12:23 PM | 15.03 | 20.26 | 0.22 | 13.26 |
| 12:24 PM | 15.03 | 19.90 | 0.20 | 13.26 |
| 12:25 PM | 15.03 | 20.10 | 0.21 | 13.26 |
| 12:26 PM | 15.03 | 19.89 | 0.24 | 13.22 |
| 12:27 PM | 15.02 | 20.13 | 0.23 | 12.88 |
| 12:28 PM | 15.04 | 20.22 | 0.20 | 13.27 |
| 12:29 PM | 15.03 | 19.73 | 0.21 | 13.18 |
| 12:30 PM | 15.03 | 19.92 | 0.20 | 13.27 |
| 12:31 PM | 15.04 | 19.95 | 0.25 | 13.27 |
| 12:32 PM | 15.03 | 19.69 | 0.25 | 13.27 |
| Average | 15.03 | 19.94 | 0.20 | 13.24 |

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพฯ 10800

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TEL : +66(0) 2959-3600 FAX : +66(0) 2959-3535 E-mail : envserv@secot.co.th

STACK EMISSION ANALYSIS REPORT

| | | | |
|--------------------|------------------------------------|------------------|------------------------------|
| CLIENT NAME | : Bangpa-in Cogeneration Co., Ltd. | REFERENCE NO. | : 224045-Stack_PM/HRSG 3_Mar |
| SAMPLING BY | : SECOT Co., Ltd. | SAMPLING DATE | : 20/03/2024 |
| RECEIVED DATE | : 22/03/2024 | ANALYTICAL DATE | : 22-23/03/2024 |
| REPORT DATE | : 02/04/2024 | SAMPLE CONDITION | : Good |
| STACK LOCATION | : HRSG 3 | SITE OPERATOR | : Mr. Rommadon Lemmad |
| SOURCE DESCRIPTION | : Combustion | FUEL TYPE | : Natural Gas |

STACK DESCRIPTION

| | | | | | |
|-------------|---------|----|---------------|---------|------------|
| Height | : 45.0 | m | Gas Velocity | : 21.6 | m/s |
| Diameter | : 3.2 | m | Flow rate* | : 6,996 | Ncu.m./min |
| Temperature | : 126.0 | °C | Excess Oxygen | : 15.6 | % |
| Moisture | : 10.4 | % | | | |

| PARAMETER | UNIT | RESULT | | | STANDARD | | REFERENCE |
|--------------------|-----------|---------------------|------------------|------|-------------------------------------|--------------------|------------------|
| | | 15.6%O ₂ | 7%O ₂ | g/s | 7%O ₂ | g/s | |
| Particulate Matter | mg/Ncu.m. | 1.40 | 3.67 | 0.16 | 60 ^{1/} , 10 ^{2/} | 0.61 ^{2/} | US. EPA Method 5 |

Phatchara Samanchan

(Miss Phatchara Samanchan)

Analyst

REG.NO. 3-239-ก-0021

Maim Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

REG.NO. 3-239-ก-0010

Remark : 1. Reported analysis refers to submitted sample only.

2. This report shall not be reproduced, except in full, without official approval.

3. * At standard pressure of 760 mm.Hg and temperature of 25 °C, dry basis.

4. ^{1/} Notification of Ministry Natural Resources and Environmental, B.E.2566 (2023).

5. ^{2/} The value was assigned in EIA report, B.E.2560

The Monitoring Result of Emission Concentration

HRSG3

BANGPA-IN COGENERATION CO., LTD.

March 20, 2024

| Run Number | Oxygen content (%) | | Oxide of Nitrogen (ppm) | | |
|------------|--------------------|--------------------|-------------------------|---|---------------------------------------|
| | RM Stack Gas Conc | Corrected Gas Conc | RM Stack Gas Conc | Corrected Gas Conc @Actual O ₂ | Corrected Gas Conc @7% O ₂ |
| 1 | 15.41 | 15.53 | 17.19 | 17.16 | 44.42 |
| 2 | 15.47 | 15.59 | 17.40 | 17.37 | 45.47 |
| 3 | 15.55 | 15.68 | 16.73 | 16.69 | 44.44 |
| Average | 15.48 | 15.60 | 17.11 | 17.07 | 44.78 |

| Run Number | Oxygen content (%) | | Sulfur dioxide (ppm) | | |
|------------|--------------------|--------------------|----------------------|---|---------------------------------------|
| | RM Stack Gas Conc | Corrected Gas Conc | RM Stack Gas Conc | Corrected Gas Conc @Actual O ₂ | Corrected Gas Conc @7% O ₂ |
| 1 | 15.41 | 15.53 | 0.15 | 0.12 | 0.31 |
| 2 | 15.47 | 15.59 | 0.03 | 0.00 | 0.00 |
| 3 | 15.55 | 15.68 | 0.08 | 0.04 | 0.11 |
| Average | 15.48 | 15.60 | 0.08 | 0.05 | 0.14 |

| Run Number | Oxygen content (%) | | Carbonmonoxide (ppm) | | |
|------------|--------------------|--------------------|----------------------|---|---------------------------------------|
| | RM Stack Gas Conc | Corrected Gas Conc | RM Stack Gas Conc | Corrected Gas Conc @Actual O ₂ | Corrected Gas Conc @7% O ₂ |
| 1 | 15.41 | 15.53 | 140.69 | 140.73 | 364.27 |
| 2 | 15.47 | 15.59 | 136.62 | 136.66 | 357.74 |
| 3 | 15.55 | 15.68 | 143.05 | 143.10 | 381.05 |
| Average | 15.48 | 15.60 | 140.12 | 140.16 | 367.60 |

BANGPA-IN COGENERATION CO., LTD. EMISSION TEST RESULT

Run # : 1
Date: March 20, 2024
Start time: 11:30 AM
O₂ instrument Model: AMI 70
NO_x instrument Model: API 200 AH
SO₂ instrument Model: API 100 AH
CO instrument Model: THERMO 48 C
Fuel Type : Natural Gas
Location : HRSG3
Finish time : 11:50 AM
Serial No.: 111117-2
Serial No.: 441
Serial No.: 060
Serial No.: 388
Test Operator : Kittipong T.

| Time, min | O ₂ (%) | NO _x (ppm) | SO ₂ (ppm) | CO (ppm) |
|----------------|--------------------|-----------------------|-----------------------|----------|
| 11:30 AM | 15.76 | 19.04 | 0.20 | 117.57 |
| 11:31 AM | 15.74 | 17.27 | 0.20 | 123.52 |
| 11:32 AM | 15.38 | 16.97 | 0.21 | 133.04 |
| 11:33 AM | 15.31 | 16.73 | 0.21 | 141.93 |
| 11:34 AM | 15.32 | 16.95 | 0.21 | 147.80 |
| 11:35 AM | 15.32 | 16.88 | 0.20 | 147.50 |
| 11:36 AM | 15.32 | 16.76 | 0.17 | 147.16 |
| 11:37 AM | 15.33 | 16.90 | 0.21 | 144.97 |
| 11:38 AM | 15.35 | 17.06 | 0.21 | 143.32 |
| 11:39 AM | 15.37 | 17.17 | 0.17 | 141.97 |
| 11:40 AM | 15.37 | 17.08 | 0.16 | 140.89 |
| 11:41 AM | 15.39 | 17.10 | 0.15 | 140.71 |
| 11:42 AM | 15.40 | 16.99 | 0.13 | 141.80 |
| 11:43 AM | 15.40 | 16.95 | 0.09 | 143.31 |
| 11:44 AM | 15.42 | 16.90 | 0.12 | 144.62 |
| 11:45 AM | 15.42 | 16.90 | 0.14 | 145.21 |
| 11:46 AM | 15.42 | 17.12 | 0.11 | 144.87 |
| 11:47 AM | 15.42 | 17.34 | 0.09 | 143.77 |
| 11:48 AM | 15.42 | 17.37 | 0.08 | 142.00 |
| 11:49 AM | 15.42 | 17.75 | 0.06 | 139.99 |
| 11:50 AM | 15.42 | 17.84 | 0.03 | 138.46 |
| Average | 15.41 | 17.19 | 0.15 | 140.69 |

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

BANGPA-IN COGENERATION CO., LTD. EMISSION TEST RESULT

Run # : 2
Date: March 20, 2024
Start time: 11:51 AM
O₂ instrument Model: AMI 70
NO_x instrument Model: API 200 AH
SO₂ instrument Model: API 100 AH
CO instrument Model: THERMO 48 C
Fuel Type : Natural Gas
Location : HRSG3
Finish time : 12:11 PM
Serial No.: 111117-2
Serial No.: 441
Serial No.: 060
Serial No.: 388
Test Operator : Kittipong T.

| Time, min | O ₂ (%) | NO _x (ppm) | SO ₂ (ppm) | CO (ppm) |
|----------------|--------------------|-----------------------|-----------------------|----------|
| 11:51 AM | 15.42 | 17.56 | 0.09 | 137.36 |
| 11:52 AM | 15.42 | 17.59 | 0.07 | 136.73 |
| 11:53 AM | 15.43 | 17.55 | 0.05 | 136.09 |
| 11:54 AM | 15.44 | 17.59 | 0.03 | 135.71 |
| 11:55 AM | 15.45 | 17.49 | 0.04 | 135.62 |
| 11:56 AM | 15.46 | 17.56 | 0.06 | 135.57 |
| 11:57 AM | 15.47 | 17.54 | 0.01 | 135.57 |
| 11:58 AM | 15.47 | 17.45 | 0.02 | 135.95 |
| 11:59 AM | 15.47 | 17.41 | 0.00 | 136.07 |
| 12:00 PM | 15.47 | 17.48 | 0.02 | 136.07 |
| 12:01 PM | 15.47 | 17.42 | 0.02 | 136.37 |
| 12:02 PM | 15.47 | 17.31 | 0.02 | 136.58 |
| 12:03 PM | 15.49 | 17.38 | 0.00 | 136.62 |
| 12:04 PM | 15.50 | 17.31 | 0.02 | 137.08 |
| 12:05 PM | 15.50 | 17.25 | 0.02 | 137.17 |
| 12:06 PM | 15.50 | 17.25 | 0.04 | 137.09 |
| 12:07 PM | 15.50 | 17.35 | 0.01 | 137.08 |
| 12:08 PM | 15.50 | 17.31 | 0.02 | 137.55 |
| 12:09 PM | 15.50 | 17.23 | 0.03 | 137.59 |
| 12:10 PM | 15.50 | 17.26 | 0.02 | 137.60 |
| 12:11 PM | 15.50 | 17.20 | 0.02 | 137.60 |
| Average | 15.47 | 17.40 | 0.03 | 136.62 |

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

**BANGPA-IN COGENERATION CO., LTD.
EMISSION TEST RESULT**

Date: March 20, 2024
Start time: 12:12 PM
O₂ instrument Model: AMI 70
NO_x instrument Model: API 200 AH
SO₂ instrument Model: API 100 AH
CO instrument Model: THERMO 48 C
Fuel Type: Natural Gas

Run #: 3
Location: HRSG3
Finish time: 12:32 PM
Serial No.: 111117-2
Serial No.: 441
Serial No.: 060
Serial No.: 388
Test Operator: Kittipong T.

| Time, min | O ₂ (%) | NO _x (ppm) | SO ₂ (ppm) | CO (ppm) |
|-----------|--------------------|-----------------------|-----------------------|----------|
| 12:12 PM | 15.50 | 17.11 | 0.02 | 137.81 |
| 12:13 PM | 15.50 | 16.94 | 0.02 | 138.10 |
| 12:14 PM | 15.51 | 16.87 | 0.02 | 138.49 |
| 12:15 PM | 15.52 | 16.88 | 0.03 | 138.91 |
| 12:16 PM | 15.52 | 16.91 | 0.04 | 139.42 |
| 12:17 PM | 15.52 | 16.88 | 0.08 | 139.64 |
| 12:18 PM | 15.53 | 16.98 | 0.06 | 139.30 |
| 12:19 PM | 15.55 | 17.22 | 0.03 | 139.81 |
| 12:20 PM | 15.55 | 16.65 | 0.07 | 141.71 |
| 12:21 PM | 15.57 | 16.04 | 0.09 | 144.69 |
| 12:22 PM | 15.57 | 16.00 | 0.09 | 147.44 |
| 12:23 PM | 15.57 | 16.19 | 0.09 | 149.68 |
| 12:24 PM | 15.57 | 16.26 | 0.09 | 150.79 |
| 12:25 PM | 15.57 | 16.66 | 0.09 | 149.64 |
| 12:26 PM | 15.57 | 16.86 | 0.09 | 147.06 |
| 12:27 PM | 15.56 | 17.01 | 0.09 | 144.91 |
| 12:28 PM | 15.56 | 17.26 | 0.09 | 143.04 |
| 12:29 PM | 15.57 | 17.27 | 0.11 | 142.58 |
| 12:30 PM | 15.57 | 16.58 | 0.13 | 143.17 |
| 12:31 PM | 15.58 | 16.32 | 0.12 | 143.64 |
| 12:32 PM | 15.57 | 16.41 | 0.13 | 144.25 |
| Average | 15.55 | 16.73 | 0.08 | 143.05 |

Signature 
(Miss Katesarin Vorradetwittaya)
Environmental Scientist



บริษัท ซีคอต จำกัด
SECOT CO., LTD.
239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพฯ 10800
239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND
TEL : +66(0) 2959-3600 FAX : +66(0) 2959-3535 E-mail : envserv@secot.co.th

STACK EMISSION ANALYSIS REPORT

CLIENT NAME : Bangpa-in Cogeneration Co., Ltd. REFERENCE NO. : 224045-Stack_PM/HRSG 4_Mar
SAMPLING BY : SECOT Co., Ltd. SAMPLING DATE : 20/03/2024
RECEIVED DATE : 22/03/2024 ANALYTICAL DATE : 22-23/03/2024
REPORT DATE : 02/04/2024 SAMPLE CONDITION : Good
STACK LOCATION : HRSG 4 SITE OPERATOR : Mr. Rommadon Lemmad
SOURCE DESCRIPTION : Combustion FUEL TYPE : Natural Gas

STACK DESCRIPTION

Height : 45.0 m Gas Velocity : 22.3 m/s
Diameter : 3.2 m Flow rate* : 7,168 Ncu.m./min
Temperature : 128.0 °C Excess Oxygen : 15.4 %
Moisture : 10.7 %

| PARAMETER | UNIT | RESULT | | | STANDARD | | REFERENCE |
|--------------------|-----------|---------------------|------------------|------|-------------------------------------|--------------------|------------------|
| | | 15.4%O ₂ | 7%O ₂ | g/s | 7%O ₂ | g/s | |
| Particulate Matter | mg/Ncu.m. | 1.30 | 3.28 | 0.16 | 60 ^{1/} , 10 ^{2/} | 0.61 ^{2/} | US. EPA Method 5 |

Phatchara Samanchan
(Miss Phatchara Samanchan)

Analyst
REG.NO. 3-239-ก-0021


(Miss Narisa Poowasanpetch)

Technical Management Team
REG.NO. 3-239-ก-0010

Remark : 1. Reported analysis refers to submitted sample only.

2. This report shall not be reproduced, except in full, without official approval.

3. * At standard pressure of 760 mm.Hg and temperature of 25 °C, dry basis.

4. ^{1/} Notification of Ministry Natural Resources and Environmental, B.E.2566 (2023).

5. ^{2/} The value was assigned in EIA report, B.E.2560

The Monitoring Result of Emission Concentration
HRSG4
BANGPA-IN COGENERATION CO., LTD.
March 20, 2024

| Run Number | Oxygen content (%) | | Oxide of Nitrogen (ppm) | | |
|----------------|--------------------|--------------------|-------------------------|---|---------------------------------------|
| | RM Stack Gas Conc | Corrected Gas Conc | RM Stack Gas Conc | Corrected Gas Conc @Actual O ₂ | Corrected Gas Conc @7% O ₂ |
| 1 | 15.26 | 15.38 | 16.76 | 16.72 | 42.10 |
| 2 | 15.27 | 15.39 | 17.40 | 17.36 | 43.79 |
| 3 | 15.27 | 15.39 | 17.55 | 17.51 | 44.17 |
| Average | 15.27 | 15.39 | 17.24 | 17.20 | 43.36 |

| Run Number | Oxygen content (%) | | Sulfur dioxide (ppm) | | |
|----------------|--------------------|--------------------|----------------------|---|---------------------------------------|
| | RM Stack Gas Conc | Corrected Gas Conc | RM Stack Gas Conc | Corrected Gas Conc @Actual O ₂ | Corrected Gas Conc @7% O ₂ |
| 1 | 15.26 | 15.38 | 0.18 | 0.14 | 0.35 |
| 2 | 15.27 | 15.39 | 0.19 | 0.13 | 0.33 |
| 3 | 15.27 | 15.39 | 0.19 | 0.12 | 0.30 |
| Average | 15.27 | 15.39 | 0.19 | 0.13 | 0.33 |

| Run Number | Oxygen content (%) | | Carbonmonoxide (ppm) | | |
|----------------|--------------------|--------------------|----------------------|---|---------------------------------------|
| | RM Stack Gas Conc | Corrected Gas Conc | RM Stack Gas Conc | Corrected Gas Conc @Actual O ₂ | Corrected Gas Conc @7% O ₂ |
| 1 | 15.26 | 15.38 | 20.19 | 20.18 | 50.82 |
| 2 | 15.27 | 15.39 | 19.90 | 19.88 | 50.15 |
| 3 | 15.27 | 15.39 | 19.96 | 19.94 | 50.30 |
| Average | 15.27 | 15.39 | 20.02 | 20.00 | 50.42 |

BANGPA-IN COGENERATION CO., LTD.
EMISSION TEST RESULT

Date: March 20, 2024
 Start time: 11:30 AM
 O₂ instrument Model: AMI 70
 NO_x instrument Model: API 200 AH
 SO₂ instrument Model: API 100 AH
 CO instrument Model: THERMO 48 C
 Fuel Type : Natural Gas

Run # : 1
 Location : HRSG4
 Finish time : 11:50 AM
 Serial No.: 111117-2
 Serial No.: 441
 Serial No.: 060
 Serial No.: 388
 Test Operator : Kittipong T.

| Time, min | O ₂ (%) | NO _x (ppm) | SO ₂ (ppm) | CO (ppm) |
|----------------|--------------------|-----------------------|-----------------------|--------------|
| 11:30 AM | 15.27 | 16.17 | 0.18 | 19.94 |
| 11:31 AM | 15.25 | 16.22 | 0.18 | 20.20 |
| 11:32 AM | 15.25 | 16.22 | 0.17 | 20.19 |
| 11:33 AM | 15.25 | 16.22 | 0.18 | 20.20 |
| 11:34 AM | 15.25 | 16.35 | 0.18 | 20.20 |
| 11:35 AM | 15.25 | 16.39 | 0.18 | 20.20 |
| 11:36 AM | 15.25 | 16.43 | 0.18 | 20.20 |
| 11:37 AM | 15.25 | 16.61 | 0.18 | 20.20 |
| 11:38 AM | 15.25 | 16.67 | 0.18 | 20.20 |
| 11:39 AM | 15.25 | 16.76 | 0.18 | 20.20 |
| 11:40 AM | 15.26 | 16.81 | 0.18 | 20.20 |
| 11:41 AM | 15.27 | 16.90 | 0.18 | 20.20 |
| 11:42 AM | 15.27 | 16.94 | 0.18 | 20.20 |
| 11:43 AM | 15.27 | 17.00 | 0.18 | 20.20 |
| 11:44 AM | 15.27 | 17.05 | 0.18 | 20.20 |
| 11:45 AM | 15.27 | 17.15 | 0.19 | 20.20 |
| 11:46 AM | 15.27 | 17.18 | 0.18 | 20.20 |
| 11:47 AM | 15.28 | 17.24 | 0.18 | 20.20 |
| 11:48 AM | 15.28 | 17.23 | 0.18 | 20.20 |
| 11:49 AM | 15.29 | 17.21 | 0.18 | 20.21 |
| 11:50 AM | 15.30 | 17.19 | 0.18 | 20.21 |
| Average | 15.26 | 16.76 | 0.18 | 20.19 |

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist

BANGPA-IN COGENERATION CO., LTD. EMISSION TEST RESULT

Date: March 20, 2024
Start time: 11:51 AM
O₂ instrument Model: AMI 70
NO_x instrument Model: API 200 AH
SO₂ instrument Model: API 100 AH
CO instrument Model: THERMO 48 C
Fuel Type : Natural Gas

Run # : 2
Location : HRSG4
Finish time : 12:11 PM
Serial No.: 111117-2
Serial No.: 441
Serial No.: 060
Serial No.: 388
Test Operator : Kittipong T.

| Time, min | O ₂ (%) | NO _x (ppm) | SO ₂ (ppm) | CO (ppm) |
|-----------|--------------------|-----------------------|-----------------------|----------|
| 11:51 AM | 15.30 | 17.15 | 0.18 | 20.21 |
| 11:52 AM | 15.30 | 17.26 | 0.19 | 20.21 |
| 11:53 AM | 15.30 | 17.37 | 0.19 | 20.21 |
| 11:54 AM | 15.30 | 17.35 | 0.19 | 20.21 |
| 11:55 AM | 15.25 | 17.31 | 0.18 | 20.21 |
| 11:56 AM | 15.25 | 17.36 | 0.19 | 20.21 |
| 11:57 AM | 15.25 | 17.40 | 0.19 | 20.21 |
| 11:58 AM | 15.25 | 17.39 | 0.19 | 20.21 |
| 11:59 AM | 15.25 | 17.45 | 0.19 | 19.71 |
| 12:00 PM | 15.25 | 17.39 | 0.18 | 19.71 |
| 12:01 PM | 15.25 | 17.46 | 0.19 | 19.71 |
| 12:02 PM | 15.25 | 17.41 | 0.19 | 19.71 |
| 12:03 PM | 15.25 | 17.44 | 0.18 | 19.71 |
| 12:04 PM | 15.25 | 17.42 | 0.19 | 19.71 |
| 12:05 PM | 15.26 | 17.43 | 0.19 | 19.71 |
| 12:06 PM | 15.26 | 17.48 | 0.18 | 19.71 |
| 12:07 PM | 15.27 | 17.48 | 0.19 | 19.72 |
| 12:08 PM | 15.27 | 17.39 | 0.18 | 19.72 |
| 12:09 PM | 15.27 | 17.38 | 0.19 | 19.72 |
| 12:10 PM | 15.27 | 17.46 | 0.19 | 19.72 |
| 12:11 PM | 15.27 | 17.53 | 0.19 | 19.72 |
| Average | 15.27 | 17.40 | 0.19 | 19.90 |

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist

BANGPA-IN COGENERATION CO., LTD. EMISSION TEST RESULT

Date: March 20, 2024
Start time: 12:12 PM
O₂ instrument Model: AMI 70
NO_x instrument Model: API 200 AH
SO₂ instrument Model: API 100 AH
CO instrument Model: THERMO 48 C
Fuel Type : Natural Gas

Run # : 3
Location : HRSG4
Finish time : 12:32 PM
Serial No.: 111117-2
Serial No.: 441
Serial No.: 060
Serial No.: 388
Test Operator : Kittipong T.

| Time, min | O ₂ (%) | NO _x (ppm) | SO ₂ (ppm) | CO (ppm) |
|-----------|--------------------|-----------------------|-----------------------|----------|
| 12:12 PM | 15.27 | 17.61 | 0.19 | 19.72 |
| 12:13 PM | 15.27 | 17.41 | 0.19 | 19.72 |
| 12:14 PM | 15.27 | 17.51 | 0.19 | 19.72 |
| 12:15 PM | 15.27 | 17.53 | 0.19 | 19.89 |
| 12:16 PM | 15.27 | 17.60 | 0.19 | 20.23 |
| 12:17 PM | 15.27 | 17.54 | 0.19 | 20.23 |
| 12:18 PM | 15.27 | 17.46 | 0.19 | 20.23 |
| 12:19 PM | 15.27 | 17.51 | 0.19 | 20.23 |
| 12:20 PM | 15.27 | 17.50 | 0.19 | 19.73 |
| 12:21 PM | 15.27 | 17.52 | 0.19 | 19.73 |
| 12:22 PM | 15.27 | 17.54 | 0.19 | 19.73 |
| 12:23 PM | 15.27 | 17.52 | 0.19 | 19.73 |
| 12:24 PM | 15.27 | 17.64 | 0.19 | 19.73 |
| 12:25 PM | 15.27 | 17.67 | 0.19 | 19.73 |
| 12:26 PM | 15.27 | 17.60 | 0.20 | 19.73 |
| 12:27 PM | 15.27 | 17.66 | 0.19 | 19.98 |
| 12:28 PM | 15.27 | 17.59 | 0.19 | 20.24 |
| 12:29 PM | 15.27 | 17.54 | 0.19 | 20.24 |
| 12:30 PM | 15.28 | 17.58 | 0.20 | 20.24 |
| 12:31 PM | 15.27 | 17.58 | 0.19 | 20.24 |
| 12:32 PM | 15.28 | 17.53 | 0.19 | 20.24 |
| Average | 15.27 | 17.55 | 0.19 | 19.96 |

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist

ภาคผนวก ง.3

ใบรับรองผลการตรวจวัดระดับเสียงทั่วไป





Noise Monitoring Result : Community Noise MTR-BIC

| | | | | | |
|---|---|----------------|---------------------------------|----------------|----------------|
| Location : Ban Khlong Phutsa | | | Monitor Period : 20-25 Mar 2024 | | |
| SLM Model : Cirrus CR162B | | | Serial No : G300892 | | |
| Site Operator : Mr. Suphanut Intharanaret | | | | | |
| | | | | | |
| Calibrator Model : Cirrus CR:515 | | | Serial No : 97097 | | |
| Calibration Ref dB(A) : 94.0 | | | Certified Date : 04 Sep 2023 | | |
| SLM Reading / Adjust dB(A) : 93.7/0.0 | | | Expire Date : 03 Sep 2024 | | |
| Cal Sheet No.: CR-515-2024-072 | | | | | |
| | | | | | |
| Time | Equivalent Sound Pressure Level (dB(A)) | | | | |
| | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 12:00 - 13:00 | 55.2 | 51.3 | 50.7 | 49.9 | 49.3 |
| 13:00 - 14:00 | 44.6 | 49.4 | 51.8 | 49.2 | 52.4 |
| 14:00 - 15:00 | 44.5 | 52.7 | 51.6 | 50.4 | 51.3 |
| 15:00 - 16:00 | 47.5 | 52.1 | 53.9 | 51.5 | 50.3 |
| 16:00 - 17:00 | 53.2 | 50.5 | 60.1 | 51.4 | 51.1 |
| 17:00 - 18:00 | 53.3 | 53.6 | 53.0 | 55.2 | 53.2 |
| 18:00 - 19:00 | 52.4 | 54.4 | 52.9 | 54.8 | 52.4 |
| 19:00 - 20:00 | 53.0 | 54.2 | 52.4 | 51.9 | 52.8 |
| 20:00 - 21:00 | 51.9 | 53.2 | 51.2 | 51.5 | 51.6 |
| 21:00 - 22:00 | 52.6 | 50.6 | 49.6 | 50.0 | 49.2 |
| 22:00 - 23:00 | 46.9 | 50.6 | 50.1 | 47.7 | 47.6 |
| 23:00 - 00:00 | 61.0 | 48.8 | 49.7 | 47.0 | 49.0 |
| 00:00 - 01:00 | 62.9 | 47.4 | 47.4 | 48.6 | 45.6 |
| 01:00 - 02:00 | 54.8 | 49.2 | 47.1 | 48.6 | 44.4 |
| 02:00 - 03:00 | 51.0 | 47.7 | 46.8 | 46.2 | 45.7 |
| 03:00 - 04:00 | 50.3 | 50.0 | 52.6 | 46.9 | 50.5 |
| 04:00 - 05:00 | 50.6 | 48.8 | 47.8 | 47.6 | 50.8 |
| 05:00 - 06:00 | 50.4 | 53.4 | 52.2 | 49.3 | 54.6 |
| 06:00 - 07:00 | 48.2 | 55.9 | 55.1 | 51.9 | 54.5 |
| 07:00 - 08:00 | 48.1 | 55.4 | 54.3 | 52.3 | 55.7 |
| 08:00 - 09:00 | 46.0 | 55.6 | 51.7 | 51.0 | 53.7 |
| 09:00 - 10:00 | 42.3 | 50.8 | 52.5 | 54.3 | 52.3 |
| 10:00 - 11:00 | 46.5 | 50.6 | 51.8 | 52.7 | 55.1 |
| 11:00 - 12:00 | 52.1 | 52.8 | 51.7 | 52.0 | 55.1 |
| Leq(24)* | 54.0 | 52.3 | 52.7 | 51.2 | 52.1 |
| Ldn | 62.5 | 57.8 | 57.7 | 55.7 | 57.4 |
| Lmax ** | 92.6 | 78.9 | 86.7 | 79.1 | 81.4 |
| Standard-24Hr | 70 dB(A) | | | | |
| Standard-Max | 115 dB(A) | | | | |

Remark : * Average time between 12:00-12:00

** Maximum Sound Pressure Level between 12:00-12:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Preeda Somjai)
Technical Management Team




Noise Monitoring Result : Background Noise MTR-BIC

| Location : Ban Khlong Phutsa | | | Monitor Period : 20-25 Mar 2024 | | |
|---|----------------|----------------|---------------------------------|----------------|----------------|
| SLM Model : Cirrus CR162B | | | Serial No : G300892 | | |
| Site Operator : Mr. Suphanut Intharanaret | | | | | |
| | | | | | |
| Calibrator Model : Cirrus CR:515 | | | Serial No : 97097 | | |
| Calibration Ref dB(A) : 94.0 | | | Certified Date : 04 Sep 2023 | | |
| SLM Reading / Adjust dB(A) : 93.7/0.0 | | | Expire Date : 03 Sep 2024 | | |
| Cal Sheet No.: CR-515-2024-072 | | | | | |
| | | | | | |
| Time | L90 (dB(A)) | | | | |
| | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 12:00 – 13:00 | 38.3 | 44.3 | 45.3 | 43.3 | 42.2 |
| 13:00 – 14:00 | 36.6 | 44.6 | 44.4 | 43.3 | 42.7 |
| 14:00 – 15:00 | 36.9 | 45.0 | 44.1 | 44.4 | 42.9 |
| 15:00 – 16:00 | 40.7 | 45.2 | 46.5 | 44.9 | 43.2 |
| 16:00 – 17:00 | 43.5 | 45.1 | 47.9 | 46.1 | 44.2 |
| 17:00 – 18:00 | 49.5 | 46.6 | 47.6 | 48.6 | 47.3 |
| 18:00 – 19:00 | 50.2 | 48.3 | 48.4 | 50.0 | 46.9 |
| 19:00 – 20:00 | 49.2 | 48.3 | 48.6 | 47.4 | 48.1 |
| 20:00 – 21:00 | 48.9 | 47.4 | 47.3 | 47.7 | 46.7 |
| 21:00 – 22:00 | 51.6 | 47.6 | 45.8 | 46.2 | 45.2 |
| 22:00 – 23:00 | 40.1 | 47.4 | 46.3 | 44.9 | 44.6 |
| 23:00 – 00:00 | 43.0 | 46.9 | 45.5 | 44.2 | 43.8 |
| 00:00 – 01:00 | 53.4 | 45.0 | 44.8 | 46.5 | 43.4 |
| 01:00 – 02:00 | 53.2 | 44.9 | 44.8 | 45.7 | 42.0 |
| 02:00 – 03:00 | 48.9 | 44.5 | 45.0 | 44.4 | 42.9 |
| 03:00 – 04:00 | 49.0 | 44.9 | 45.5 | 44.4 | 42.6 |
| 04:00 – 05:00 | 47.5 | 45.0 | 45.1 | 45.7 | 43.6 |
| 05:00 – 06:00 | 44.4 | 45.3 | 44.8 | 46.1 | 45.3 |
| 06:00 – 07:00 | 41.6 | 47.0 | 47.0 | 47.3 | 46.4 |
| 07:00 – 08:00 | 39.5 | 47.9 | 47.3 | 46.6 | 47.2 |
| 08:00 – 09:00 | 39.1 | 46.4 | 45.6 | 45.6 | 45.3 |
| 09:00 – 10:00 | 38.0 | 44.9 | 45.2 | 45.8 | 44.2 |
| 10:00 – 11:00 | 37.9 | 45.5 | 45.8 | 44.7 | 46.3 |
| 11:00 – 12:00 | 40.7 | 46.4 | 44.6 | 43.4 | 46.1 |
| | | | | | |
| L90(avg)* | 47.4 | 46.2 | 46.2 | 46.1 | 45.1 |

Remark : * Average time between 12:00-12:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Preeda Somjai)
Technical Management Team



Noise Monitoring Result : Community Noise MTR-BIC

| Location : The Northeast of Fence | | | Monitor Period : 20-25 Mar 2024 | | |
|---|---|----------------|---------------------------------|----------------|----------------|
| SLM Model : Cirrus CR162B | | | Serial No : G301014 | | |
| Site Operator : Mr. Suphanut Intharanaret | | | | | |
| | | | | | |
| Calibrator Model : Cirrus CR:515 | | | Serial No : 97097 | | |
| Calibration Ref dB(A) : 94.0 | | | Certified Date : 04 Sep 2023 | | |
| SLM Reading / Adjust dB(A) : 93.7/0.0 | | | Expire Date : 03 Sep 2024 | | |
| Cal Sheet No.: CR-515-2024-072 | | | | | |
| | | | | | |
| Time | Equivalent Sound Pressure Level (dB(A)) | | | | |
| | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 11:00 - 12:00 | 63.2 | 63.0 | 63.9 | 62.7 | 61.2 |
| 12:00 - 13:00 | 62.4 | 61.4 | 61.8 | 60.9 | 60.6 |
| 13:00 - 14:00 | 62.7 | 62.6 | 62.8 | 61.9 | 60.3 |
| 14:00 - 15:00 | 63.1 | 63.0 | 63.0 | 62.2 | 60.4 |
| 15:00 - 16:00 | 63.5 | 63.4 | 63.7 | 63.3 | 60.5 |
| 16:00 - 17:00 | 63.8 | 63.5 | 63.2 | 62.6 | 61.4 |
| 17:00 - 18:00 | 63.5 | 64.2 | 63.9 | 63.3 | 60.9 |
| 18:00 - 19:00 | 64.8 | 65.7 | 65.0 | 64.7 | 63.6 |
| 19:00 - 20:00 | 65.9 | 64.7 | 63.5 | 63.0 | 64.3 |
| 20:00 - 21:00 | 65.5 | 64.0 | 65.2 | 63.1 | 63.1 |
| 21:00 - 22:00 | 64.2 | 62.7 | 62.5 | 63.2 | 61.7 |
| 22:00 - 23:00 | 63.7 | 63.3 | 63.3 | 63.2 | 62.1 |
| 23:00 - 00:00 | 63.6 | 64.6 | 63.7 | 62.5 | 60.4 |
| 00:00 - 01:00 | 62.8 | 63.0 | 61.5 | 60.9 | 60.6 |
| 01:00 - 02:00 | 62.7 | 62.9 | 60.4 | 60.5 | 60.5 |
| 02:00 - 03:00 | 62.8 | 63.1 | 60.2 | 60.5 | 60.4 |
| 03:00 - 04:00 | 62.9 | 62.7 | 60.2 | 60.6 | 60.3 |
| 04:00 - 05:00 | 63.1 | 62.9 | 60.4 | 61.6 | 60.6 |
| 05:00 - 06:00 | 63.1 | 63.4 | 61.9 | 62.1 | 61.5 |
| 06:00 - 07:00 | 63.1 | 63.4 | 61.6 | 62.0 | 61.5 |
| 07:00 - 08:00 | 63.8 | 64.3 | 62.4 | 62.2 | 62.6 |
| 08:00 - 09:00 | 63.3 | 63.7 | 62.0 | 61.5 | 61.7 |
| 09:00 - 10:00 | 63.2 | 63.4 | 62.1 | 60.8 | 62.2 |
| 10:00 - 11:00 | 63.0 | 64.0 | 62.4 | 61.1 | 62.8 |
| Leq(24)* | 63.6 | 63.5 | 62.7 | 62.2 | 61.6 |
| Ldn | 69.6 | 69.8 | 68.3 | 68.2 | 67.5 |
| Lmax ** | 87.3 | 85.6 | 88.5 | 85.3 | 87.6 |
| | | | | | |
| Standard-24Hr | 70 dB(A) | | | | |
| Standard-Max | 115 dB(A) | | | | |

Remark : * Average time between 11:00-11:00

** Maximum Sound Pressure Level between 11:00-11:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Noise Monitoring Result : Background Noise MTR-BIC

| Location : The Northeast of Fence | | | Monitor Period : 20-25 Mar 2024 | | |
|---|----------------|----------------|---------------------------------|----------------|----------------|
| SLM Model : Cirrus CR162B | | | Serial No : G301014 | | |
| Site Operator : Mr. Suphanut Intharanaret | | | | | |
| | | | | | |
| Calibrator Model : Cirrus CR:515 | | | Serial No : 97097 | | |
| Calibration Ref dB(A) : 94.0 | | | Certified Date : 04 Sep 2023 | | |
| SLM Reading / Adjust dB(A) : 93.7/0.0 | | | Expire Date : 03 Sep 2024 | | |
| Cal Sheet No.: CR-515-2024-072 | | | | | |
| | | | | | |
| Time | L90 (dB(A)) | | | | |
| | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 11:00 ~ 12:00 | 62.0 | 61.8 | 62.2 | 61.3 | 60.2 |
| 12:00 ~ 13:00 | 61.5 | 60.6 | 60.8 | 59.9 | 59.8 |
| 13:00 ~ 14:00 | 61.8 | 61.6 | 61.7 | 60.5 | 59.4 |
| 14:00 ~ 15:00 | 62.2 | 61.9 | 61.9 | 61.0 | 59.5 |
| 15:00 ~ 16:00 | 62.4 | 62.2 | 61.6 | 61.2 | 59.6 |
| 16:00 ~ 17:00 | 62.7 | 62.5 | 61.2 | 61.4 | 59.8 |
| 17:00 ~ 18:00 | 62.3 | 62.6 | 62.4 | 61.4 | 59.9 |
| 18:00 ~ 19:00 | 62.6 | 62.5 | 62.5 | 61.6 | 60.8 |
| 19:00 ~ 20:00 | 63.2 | 62.3 | 61.4 | 61.7 | 61.5 |
| 20:00 ~ 21:00 | 63.3 | 62.2 | 61.2 | 61.6 | 60.8 |
| 21:00 ~ 22:00 | 63.5 | 62.3 | 61.3 | 61.8 | 60.8 |
| 22:00 ~ 23:00 | 63.1 | 62.6 | 62.0 | 61.8 | 60.9 |
| 23:00 ~ 00:00 | 62.9 | 63.7 | 62.3 | 61.4 | 59.7 |
| 00:00 ~ 01:00 | 61.9 | 62.0 | 60.2 | 60.1 | 60.0 |
| 01:00 ~ 02:00 | 62.0 | 62.2 | 59.9 | 60.0 | 60.1 |
| 02:00 ~ 03:00 | 62.3 | 62.4 | 59.8 | 60.0 | 60.0 |
| 03:00 ~ 04:00 | 62.3 | 62.0 | 59.7 | 60.1 | 59.8 |
| 04:00 ~ 05:00 | 62.3 | 62.1 | 59.8 | 60.4 | 59.9 |
| 05:00 ~ 06:00 | 62.2 | 62.4 | 60.4 | 60.9 | 60.5 |
| 06:00 ~ 07:00 | 61.9 | 62.5 | 60.6 | 60.9 | 60.4 |
| 07:00 ~ 08:00 | 62.2 | 63.1 | 60.4 | 60.5 | 60.5 |
| 08:00 ~ 09:00 | 61.8 | 62.1 | 60.0 | 60.0 | 59.9 |
| 09:00 ~ 10:00 | 62.2 | 62.2 | 60.9 | 59.7 | 61.1 |
| 10:00 ~ 11:00 | 62.1 | 62.9 | 61.2 | 60.0 | 61.6 |
| | | | | | |
| L90(avg)* | 62.4 | 62.3 | 61.1 | 60.9 | 60.3 |

Remark : * Average time between 11:00-11:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Noise Monitoring Result : Community Noise MTR-BIC

| | | | | | |
|---|---|---------------------------------|----------------|----------------|----------------|
| Location : The South of Fence | | Monitor Period : 20-25 Mar 2024 | | | |
| SLM Model : Cirrus CR162B | | Serial No : G301027 | | | |
| Site Operator : Mr. Suphanut Intharanaret | | | | | |
| | | | | | |
| Calibrator Model : Cirrus CR:515 | | Serial No : 97097 | | | |
| Calibration Ref dB(A) : 94.0 | | Certified Date : 04 Sep 2023 | | | |
| SLM Reading / Adjust dB(A) : 93.7/0.0 | | Expire Date : 03 Sep 2024 | | | |
| Cal Sheet No.: CR-515-2024-072 | | | | | |
| Time | Equivalent Sound Pressure Level (dB(A)) | | | | |
| | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 11:00 - 12:00 | 65.8 | 64.7 | 64.2 | 63.8 | 63.7 |
| 12:00 - 13:00 | 65.2 | 64.2 | 63.6 | 63.4 | 63.4 |
| 13:00 - 14:00 | 65.6 | 64.7 | 64.1 | 63.7 | 63.4 |
| 14:00 - 15:00 | 65.5 | 64.5 | 64.0 | 63.8 | 63.4 |
| 15:00 - 16:00 | 65.5 | 64.7 | 64.2 | 64.1 | 63.9 |
| 16:00 - 17:00 | 65.4 | 64.5 | 64.2 | 64.1 | 63.7 |
| 17:00 - 18:00 | 65.6 | 64.9 | 64.6 | 64.4 | 63.8 |
| 18:00 - 19:00 | 65.7 | 65.1 | 64.6 | 64.5 | 64.7 |
| 19:00 - 20:00 | 65.4 | 64.9 | 64.6 | 64.4 | 64.5 |
| 20:00 - 21:00 | 65.4 | 65.1 | 64.6 | 64.9 | 64.5 |
| 21:00 - 22:00 | 65.4 | 65.1 | 64.7 | 64.5 | 64.6 |
| 22:00 - 23:00 | 65.4 | 65.1 | 64.6 | 64.7 | 64.6 |
| 23:00 - 00:00 | 65.4 | 65.1 | 64.7 | 64.8 | 64.3 |
| 00:00 - 01:00 | 64.9 | 64.7 | 64.2 | 64.4 | 64.4 |
| 01:00 - 02:00 | 64.9 | 64.7 | 64.2 | 64.4 | 64.3 |
| 02:00 - 03:00 | 65.1 | 64.7 | 64.5 | 64.4 | 64.3 |
| 03:00 - 04:00 | 65.1 | 64.8 | 64.4 | 64.4 | 64.3 |
| 04:00 - 05:00 | 65.0 | 64.7 | 64.5 | 64.4 | 64.4 |
| 05:00 - 06:00 | 65.2 | 64.8 | 64.6 | 64.6 | 64.6 |
| 06:00 - 07:00 | 65.1 | 64.9 | 64.8 | 64.5 | 64.6 |
| 07:00 - 08:00 | 65.2 | 65.1 | 64.8 | 64.9 | 64.8 |
| 08:00 - 09:00 | 65.0 | 64.8 | 64.5 | 64.3 | 64.5 |
| 09:00 - 10:00 | 65.0 | 65.0 | 64.5 | 64.1 | 64.6 |
| 10:00 - 11:00 | 65.0 | 64.8 | 64.1 | 63.9 | 64.4 |
| Leq(24)* | 65.3 | 64.8 | 64.4 | 64.3 | 64.3 |
| Ldn | 71.6 | 71.2 | 70.9 | 70.9 | 70.8 |
| Lmax ** | 83.6 | 82.1 | 78.4 | 89.1 | 82.1 |
| Standard-24Hr | 70 dB(A) | | | | |
| Standard-Max | 115 dB(A) | | | | |

Remark : * Average time between 11:00-11:00

** Maximum Sound Pressure Level between 11:00-11:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Noise Monitoring Result : Background Noise MTR-BIC

| Location : The South of Fence | | | Monitor Period : 20-25 Mar 2024 | | |
|---|----------------|----------------|---------------------------------|----------------|----------------|
| SLM Model : Cirrus CR162B | | | Serial No : G301027 | | |
| Site Operator : Mr. Suphanut Intharanaret | | | | | |
| | | | | | |
| Calibrator Model : Cirrus CR:515 | | | Serial No : 97097 | | |
| Calibration Ref dB(A) : 94.0 | | | Certified Date : 04 Sep 2023 | | |
| SLM Reading / Adjust dB(A) : 93.7/0.0 | | | Expire Date : 03 Sep 2024 | | |
| Cal Sheet No.: CR-515-2024-072 | | | | | |
| | | | | | |
| Time | L90 (dB(A)) | | | | |
| | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 11:00 - 12:00 | 65.1 | 64.3 | 63.9 | 63.3 | 63.3 |
| 12:00 - 13:00 | 64.9 | 64.0 | 63.3 | 63.1 | 63.1 |
| 13:00 - 14:00 | 65.3 | 64.4 | 63.8 | 63.5 | 63.1 |
| 14:00 - 15:00 | 65.3 | 64.3 | 63.6 | 63.5 | 63.2 |
| 15:00 - 16:00 | 65.3 | 64.3 | 63.9 | 63.6 | 63.4 |
| 16:00 - 17:00 | 65.2 | 64.3 | 64.0 | 63.8 | 63.5 |
| 17:00 - 18:00 | 65.2 | 64.4 | 64.2 | 64.0 | 63.6 |
| 18:00 - 19:00 | 65.4 | 64.6 | 64.3 | 64.2 | 64.0 |
| 19:00 - 20:00 | 65.3 | 64.7 | 64.4 | 64.2 | 64.3 |
| 20:00 - 21:00 | 65.3 | 64.9 | 64.4 | 64.3 | 64.4 |
| 21:00 - 22:00 | 65.3 | 65.0 | 64.5 | 64.3 | 64.5 |
| 22:00 - 23:00 | 65.3 | 65.0 | 64.5 | 64.5 | 64.5 |
| 23:00 - 00:00 | 65.3 | 64.9 | 64.5 | 64.7 | 64.1 |
| 00:00 - 01:00 | 64.8 | 64.5 | 64.0 | 64.3 | 64.3 |
| 01:00 - 02:00 | 64.8 | 64.6 | 64.1 | 64.3 | 64.3 |
| 02:00 - 03:00 | 65.0 | 64.5 | 64.3 | 64.2 | 64.2 |
| 03:00 - 04:00 | 64.9 | 64.7 | 64.3 | 64.3 | 64.2 |
| 04:00 - 05:00 | 64.9 | 64.6 | 64.4 | 64.3 | 64.2 |
| 05:00 - 06:00 | 64.8 | 64.6 | 64.4 | 64.3 | 64.4 |
| 06:00 - 07:00 | 64.8 | 64.7 | 64.5 | 64.3 | 64.4 |
| 07:00 - 08:00 | 64.8 | 64.7 | 64.4 | 64.3 | 64.4 |
| 08:00 - 09:00 | 64.5 | 64.4 | 64.2 | 64.1 | 64.1 |
| 09:00 - 10:00 | 64.8 | 64.7 | 64.2 | 63.8 | 64.3 |
| 10:00 - 11:00 | 64.7 | 64.1 | 63.9 | 63.6 | 64.1 |
| | | | | | |
| L90(avg)* | 65.0 | 64.6 | 64.2 | 64.1 | 64.0 |

Remark : * Average time between 11:00-11:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Noise Monitoring Result : Community Noise MTR-BIC

| | | | | | |
|---|---|---------------------------------|----------------|----------------|----------------|
| Location : The East of Fence | | Monitor Period : 20-25 Mar 2024 | | | |
| SLM Model : Cirrus CR162B | | Serial No : G300833 | | | |
| Site Operator : Mr. Suphanut Intharanaret | | | | | |
| | | | | | |
| Calibrator Model : Cirrus CR:515 | | Serial No : 97097 | | | |
| Calibration Ref dB(A) : 94.0 | | Certified Date : 04 Sep 2023 | | | |
| SLM Reading / Adjust dB(A) : 93.7/0.0 | | Expire Date : 03 Sep 2024 | | | |
| Cal Sheet No.: CR-515-2024-072 | | | | | |
| Time | Equivalent Sound Pressure Level (dB(A)) | | | | |
| | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 11:00 - 12:00 | 61.3 | 61.5 | 60.3 | 61.1 | 58.3 |
| 12:00 - 13:00 | 60.9 | 60.8 | 58.5 | 58.2 | 57.6 |
| 13:00 - 14:00 | 61.2 | 62.7 | 59.4 | 59.8 | 57.6 |
| 14:00 - 15:00 | 61.8 | 61.8 | 60.6 | 60.3 | 58.3 |
| 15:00 - 16:00 | 61.4 | 60.7 | 60.3 | 60.3 | 57.7 |
| 16:00 - 17:00 | 61.4 | 60.3 | 60.8 | 60.0 | 57.8 |
| 17:00 - 18:00 | 61.8 | 60.9 | 60.4 | 61.9 | 58.0 |
| 18:00 - 19:00 | 61.8 | 61.1 | 61.2 | 61.6 | 59.7 |
| 19:00 - 20:00 | 61.8 | 61.5 | 62.3 | 62.1 | 61.1 |
| 20:00 - 21:00 | 62.1 | 61.9 | 62.8 | 62.2 | 61.5 |
| 21:00 - 22:00 | 61.7 | 61.4 | 61.8 | 61.5 | 61.0 |
| 22:00 - 23:00 | 61.4 | 61.2 | 61.9 | 61.3 | 60.7 |
| 23:00 - 00:00 | 61.5 | 61.6 | 61.8 | 61.0 | 59.1 |
| 00:00 - 01:00 | 59.7 | 59.9 | 60.0 | 59.7 | 59.0 |
| 01:00 - 02:00 | 59.7 | 59.7 | 59.5 | 59.2 | 59.0 |
| 02:00 - 03:00 | 59.7 | 59.6 | 59.4 | 59.7 | 58.9 |
| 03:00 - 04:00 | 59.7 | 59.8 | 59.4 | 60.3 | 59.8 |
| 04:00 - 05:00 | 59.7 | 60.2 | 61.0 | 60.4 | 60.5 |
| 05:00 - 06:00 | 60.4 | 61.3 | 63.4 | 61.7 | 61.3 |
| 06:00 - 07:00 | 61.2 | 60.9 | 61.2 | 60.6 | 60.9 |
| 07:00 - 08:00 | 61.3 | 61.2 | 61.9 | 60.7 | 61.1 |
| 08:00 - 09:00 | 63.4 | 60.9 | 61.9 | 60.7 | 72.1 |
| 09:00 - 10:00 | 60.9 | 63.4 | 63.1 | 60.3 | 63.2 |
| 10:00 - 11:00 | 61.7 | 61.3 | 61.5 | 59.7 | 62.2 |
| Leq(24)* | 61.2 | 61.2 | 61.2 | 60.7 | 62.2 |
| Ldn | 67.0 | 67.1 | 67.5 | 67.0 | 67.0 |
| Lmax ** | 82.6 | 90.5 | 84.7 | 80.5 | 86.0 |
| Standard-24Hr | 70 dB(A) | | | | |
| Standard-Max | 115 dB(A) | | | | |

Remark : * Average time between 11:00-11:00

** Maximum Sound Pressure Level between 11:00-11:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Noise Monitoring Result : Background Noise MTR-BIC

| | | | | | |
|---|----------------|---------------------------------|----------------|----------------|----------------|
| Location : The East of Fence | | Monitor Period : 20-25 Mar 2024 | | | |
| SLM Model : Cirrus CR162B | | Serial No : G300833 | | | |
| Site Operator : Mr. Suphanut Intharanaret | | | | | |
| | | | | | |
| Calibrator Model : Cirrus CR:515 | | Serial No : 97097 | | | |
| Calibration Ref dB(A) : 94.0 | | Certified Date : 04 Sep 2023 | | | |
| SLM Reading / Adjust dB(A) : 93.7/0.0 | | Expire Date : 03 Sep 2024 | | | |
| Cal Sheet No.: CR-515-2024-072 | | | | | |
| Time | L90 (dB(A)) | | | | |
| | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 11:00 - 12:00 | 60.2 | 60.3 | 58.9 | 59.5 | 57.0 |
| 12:00 - 13:00 | 59.7 | 59.6 | 57.5 | 57.0 | 56.5 |
| 13:00 - 14:00 | 60.2 | 61.3 | 58.4 | 58.2 | 56.7 |
| 14:00 - 15:00 | 60.7 | 60.6 | 58.8 | 58.6 | 56.9 |
| 15:00 - 16:00 | 60.5 | 59.6 | 59.2 | 58.6 | 56.8 |
| 16:00 - 17:00 | 60.5 | 59.4 | 59.1 | 59.0 | 56.8 |
| 17:00 - 18:00 | 60.7 | 59.6 | 58.8 | 59.9 | 56.9 |
| 18:00 - 19:00 | 60.8 | 59.9 | 59.7 | 60.2 | 57.3 |
| 19:00 - 20:00 | 60.7 | 60.8 | 61.3 | 61.0 | 60.3 |
| 20:00 - 21:00 | 60.9 | 60.7 | 61.2 | 60.8 | 60.5 |
| 21:00 - 22:00 | 61.0 | 60.9 | 61.0 | 60.6 | 60.3 |
| 22:00 - 23:00 | 60.9 | 60.4 | 61.0 | 60.6 | 59.9 |
| 23:00 - 00:00 | 60.9 | 60.8 | 60.9 | 60.3 | 58.6 |
| 00:00 - 01:00 | 59.1 | 59.2 | 59.1 | 59.0 | 58.6 |
| 01:00 - 02:00 | 59.2 | 59.3 | 59.0 | 58.7 | 58.6 |
| 02:00 - 03:00 | 59.2 | 59.3 | 58.8 | 59.0 | 58.4 |
| 03:00 - 04:00 | 59.2 | 59.4 | 58.8 | 59.2 | 58.6 |
| 04:00 - 05:00 | 59.2 | 59.5 | 59.2 | 59.5 | 59.0 |
| 05:00 - 06:00 | 59.3 | 59.6 | 59.8 | 59.6 | 59.4 |
| 06:00 - 07:00 | 59.6 | 59.8 | 59.9 | 59.8 | 59.6 |
| 07:00 - 08:00 | 60.0 | 60.0 | 60.3 | 59.6 | 59.8 |
| 08:00 - 09:00 | 59.6 | 59.5 | 59.9 | 59.4 | 60.4 |
| 09:00 - 10:00 | 60.0 | 61.3 | 61.0 | 59.0 | 60.7 |
| 10:00 - 11:00 | 60.2 | 59.9 | 59.9 | 58.3 | 60.3 |
| | | | | | |
| L90(avg)* | 60.1 | 60.1 | 59.8 | 59.5 | 58.9 |

Remark : * Average time between 11:00-11:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Noise Monitoring Result : Community Noise MTR-BIC

| Location : The West of Fence | | Monitor Period : 20-25 Mar 2024 | | | |
|---|---|---------------------------------|----------------|----------------|----------------|
| SLM Model : Cirrus CR162B | | Serial No : G300769 | | | |
| Site Operator : Mr. Suphanut Intharanaret | | | | | |
| | | | | | |
| Calibrator Model : Cirrus CR:515 | | Serial No : 97097 | | | |
| Calibration Ref dB(A) : 94.0 | | Certified Date : 04 Sep 2023 | | | |
| SLM Reading / Adjust dB(A) : 93.7/0.0 | | Expire Date : 03 Sep 2024 | | | |
| Cal Sheet No.: CR-515-2024-072 | | | | | |
| | | | | | |
| Time | Equivalent Sound Pressure Level (dB(A)) | | | | |
| | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 11:00 - 12:00 | 64.7 | 62.9 | 62.4 | 63.2 | 61.4 |
| 12:00 - 13:00 | 66.0 | 62.1 | 61.4 | 62.1 | 61.3 |
| 13:00 - 14:00 | 65.6 | 62.9 | 62.2 | 62.9 | 61.2 |
| 14:00 - 15:00 | 65.6 | 62.9 | 62.3 | 63.5 | 61.1 |
| 15:00 - 16:00 | 64.5 | 62.9 | 62.4 | 63.3 | 61.0 |
| 16:00 - 17:00 | 64.4 | 63.1 | 63.8 | 63.5 | 61.6 |
| 17:00 - 18:00 | 63.6 | 63.6 | 63.4 | 63.8 | 61.7 |
| 18:00 - 19:00 | 63.8 | 64.1 | 65.5 | 64.7 | 63.6 |
| 19:00 - 20:00 | 63.2 | 63.9 | 64.2 | 65.3 | 64.1 |
| 20:00 - 21:00 | 61.6 | 63.7 | 64.6 | 64.7 | 63.9 |
| 21:00 - 22:00 | 61.7 | 63.5 | 64.1 | 64.8 | 63.8 |
| 22:00 - 23:00 | 60.9 | 63.5 | 64.2 | 64.1 | 63.6 |
| 23:00 - 00:00 | 60.6 | 63.6 | 64.2 | 63.8 | 63.0 |
| 00:00 - 01:00 | 60.5 | 63.0 | 63.4 | 63.1 | 63.0 |
| 01:00 - 02:00 | 60.5 | 62.9 | 63.2 | 62.8 | 62.9 |
| 02:00 - 03:00 | 61.2 | 63.1 | 62.9 | 63.1 | 63.0 |
| 03:00 - 04:00 | 61.1 | 63.4 | 62.9 | 63.1 | 63.0 |
| 04:00 - 05:00 | 61.2 | 63.6 | 63.2 | 63.6 | 63.3 |
| 05:00 - 06:00 | 61.3 | 63.8 | 63.8 | 63.7 | 63.7 |
| 06:00 - 07:00 | 62.5 | 63.6 | 63.5 | 63.4 | 63.3 |
| 07:00 - 08:00 | 62.8 | 63.4 | 63.4 | 63.4 | 63.3 |
| 08:00 - 09:00 | 65.0 | 62.9 | 63.3 | 63.2 | 63.3 |
| 09:00 - 10:00 | 63.7 | 63.3 | 63.8 | 62.8 | 63.8 |
| 10:00 - 11:00 | 63.0 | 62.9 | 63.4 | 62.1 | 63.2 |
| | | | | | |
| Leq(24)* | 63.2 | 63.3 | 63.5 | 63.6 | 62.9 |
| Ldn | 68.1 | 69.8 | 69.9 | 69.9 | 69.6 |
| Lmax ** | 89.0 | 78.4 | 83.0 | 88.1 | 79.3 |
| | | | | | |
| Standard-24Hr | 70 dB(A) | | | | |
| Standard-Max | 115 dB(A) | | | | |

Remark : * Average time between 11:00-11:00

** Maximum Sound Pressure Level between 11:00-11:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team



Noise Monitoring Result : Background Noise MTR-BIC

| | | | | | |
|---|----------------|---------------------------------|----------------|----------------|----------------|
| Location : The West of Fence | | Monitor Period : 20-25 Mar 2024 | | | |
| SLM Model : Cirrus CR162B | | Serial No : G300769 | | | |
| Site Operator : Mr. Suphanut Intharanaret | | | | | |
| | | | | | |
| Calibrator Model : Cirrus CR:515 | | Serial No : 97097 | | | |
| Calibration Ref dB(A) : 94.0 | | Certified Date : 04 Sep 2023 | | | |
| SLM Reading / Adjust dB(A) : 93.7/0.0 | | Expire Date : 03 Sep 2024 | | | |
| Cal Sheet No.: CR-515-2024-072 | | | | | |
| Time | L90 (dB(A)) | | | | |
| | 20-21 Mar 2024 | 21-22 Mar 2024 | 22-23 Mar 2024 | 23-24 Mar 2024 | 24-25 Mar 2024 |
| 11:00 - 12:00 | 63.2 | 62.1 | 61.8 | 62.5 | 60.8 |
| 12:00 - 13:00 | 64.0 | 61.5 | 60.7 | 61.5 | 60.7 |
| 13:00 - 14:00 | 64.1 | 62.3 | 61.7 | 62.1 | 60.5 |
| 14:00 - 15:00 | 63.3 | 62.4 | 61.8 | 62.5 | 60.5 |
| 15:00 - 16:00 | 62.2 | 62.5 | 62.0 | 62.7 | 60.3 |
| 16:00 - 17:00 | 62.5 | 62.6 | 62.6 | 62.9 | 61.0 |
| 17:00 - 18:00 | 62.3 | 63.0 | 63.0 | 63.2 | 61.2 |
| 18:00 - 19:00 | 62.2 | 63.4 | 63.5 | 63.6 | 61.8 |
| 19:00 - 20:00 | 60.9 | 63.3 | 63.5 | 64.1 | 63.2 |
| 20:00 - 21:00 | 60.4 | 63.3 | 63.6 | 63.8 | 63.2 |
| 21:00 - 22:00 | 59.5 | 63.2 | 63.7 | 63.9 | 63.3 |
| 22:00 - 23:00 | 59.2 | 63.3 | 63.7 | 63.6 | 63.1 |
| 23:00 - 00:00 | 59.3 | 63.4 | 63.7 | 63.4 | 62.5 |
| 00:00 - 01:00 | 59.4 | 62.5 | 62.8 | 62.5 | 62.6 |
| 01:00 - 02:00 | 59.3 | 62.6 | 62.6 | 62.4 | 62.4 |
| 02:00 - 03:00 | 59.6 | 62.8 | 62.5 | 62.7 | 62.6 |
| 03:00 - 04:00 | 60.0 | 63.0 | 62.5 | 62.8 | 62.6 |
| 04:00 - 05:00 | 60.1 | 63.0 | 62.9 | 63.0 | 62.9 |
| 05:00 - 06:00 | 59.9 | 63.2 | 63.1 | 63.2 | 63.2 |
| 06:00 - 07:00 | 60.1 | 63.1 | 63.0 | 62.9 | 62.9 |
| 07:00 - 08:00 | 60.0 | 62.8 | 62.9 | 62.8 | 62.9 |
| 08:00 - 09:00 | 61.2 | 62.3 | 62.8 | 62.6 | 62.6 |
| 09:00 - 10:00 | 61.2 | 62.6 | 63.3 | 62.2 | 63.2 |
| 10:00 - 11:00 | 62.6 | 62.3 | 62.9 | 61.4 | 62.6 |
| L90(avg)* | 61.4 | 62.8 | 62.8 | 62.9 | 62.3 |

Remark : * Average time between 11:00-11:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team

ภาคผนวก ง.4

ใบรับรองผลการตรวจวัดระดับเสียงในสถานที่ทำงาน



Noise Monitoring Result : Working Noise

MTR-BIC


| | | | |
|---------------|---------------------------|------------------|--------------|
| LOCATION | : Gas Turbine Generator 1 | MEASUREMENT DATE | : 12-02-2024 |
| SLM MODEL | : Cirrus CR162B | SERIAL No. | : G301014 |
| SITE OPERATOR | : Miss Salisa Ainree | | |

| | | | |
|---------------------------|--------------------|----------------|--------------|
| CALIBRATOR MODEL | : Cirrus CR:515 | SERIAL No. | : 97097 |
| CALIBRATION REF/EFF dB(A) | : 94.0/93.7 | CERTIFIED DATE | : 04-09-2023 |
| SLM READING/ADJUST dB(A) | : 93.7/0.0 | EXPIRE DATE | : 03-09-2024 |
| CAL SHEET No. | : CAL-2402-0054-01 | | |

| TIME | EQUIVALENT SOUND PRESSURE LEVEL (dB(A)) | |
|---------------|---|--|
| | 12-02-2024 | |
| 00:00 - 01:00 | | |
| 01:00 - 02:00 | | |
| 02:00 - 03:00 | | |
| 03:00 - 04:00 | | |
| 04:00 - 05:00 | | |
| 05:00 - 06:00 | | |
| 06:00 - 07:00 | | |
| 07:00 - 08:00 | | |
| 08:00 - 09:00 | 77.7 | |
| 09:00 - 10:00 | 77.4 | |
| 10:00 - 11:00 | 77.2 | |
| 11:00 - 12:00 | 76.6 | |
| 12:00 - 13:00 | 76.5 | |
| 13:00 - 14:00 | 77.3 | |
| 14:00 - 15:00 | 77.3 | |
| 15:00 - 16:00 | 77.9 | |
| 16:00 - 17:00 | | |
| 17:00 - 18:00 | | |
| 18:00 - 19:00 | | |
| 19:00 - 20:00 | | |
| 20:00 - 21:00 | | |
| 21:00 - 22:00 | | |
| 22:00 - 23:00 | | |
| 23:00 - 00:00 | | |
| Leq(8) | 77.3 | |
| Lmax | 79.3 | |
| Standard* | 90 dB(A) | |
| Standard-Max | 140 dB(A) | |

Remark : * Notification of Ministry of Industry, B.E.2546


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise

MTR-BIC


| | | | |
|---------------|---------------------------|------------------|--------------|
| LOCATION | : Gas Turbine Generator 2 | MEASUREMENT DATE | : 12-02-2024 |
| SLM MODEL | : Cirrus CR162B | SERIAL No. | : G302737 |
| SITE OPERATOR | : Miss Salisa Ainree | | |

| | | | |
|---------------------------|--------------------|----------------|--------------|
| CALIBRATOR MODEL | : Cirrus CR:515 | SERIAL No. | : 97097 |
| CALIBRATION REF/EFF dB(A) | : 94.0/93.7 | CERTIFIED DATE | : 04-09-2023 |
| SLM READING/ADJUST dB(A) | : 93.7/0.0 | EXPIRE DATE | : 03-09-2024 |
| CAL SHEET No. | : CAL-2402-0054-01 | | |

| TIME | EQUIVALENT SOUND PRESSURE LEVEL (dB(A)) | |
|---------------|---|--|
| | 12-02-2024 | |
| 00:00 - 01:00 | | |
| 01:00 - 02:00 | | |
| 02:00 - 03:00 | | |
| 03:00 - 04:00 | | |
| 04:00 - 05:00 | | |
| 05:00 - 06:00 | | |
| 06:00 - 07:00 | | |
| 07:00 - 08:00 | | |
| 08:00 - 09:00 | 78.8 | |
| 09:00 - 10:00 | 78.8 | |
| 10:00 - 11:00 | 78.7 | |
| 11:00 - 12:00 | 78.7 | |
| 12:00 - 13:00 | 78.6 | |
| 13:00 - 14:00 | 81.1 | |
| 14:00 - 15:00 | 82.5 | |
| 15:00 - 16:00 | 82.3 | |
| 16:00 - 17:00 | | |
| 17:00 - 18:00 | | |
| 18:00 - 19:00 | | |
| 19:00 - 20:00 | | |
| 20:00 - 21:00 | | |
| 21:00 - 22:00 | | |
| 22:00 - 23:00 | | |
| 23:00 - 00:00 | | |
| Leq(8) | 80.3 | |
| Lmax | 85.5 | |
| Standard* | 90 dB(A) | |
| Standard-Max | 140 dB(A) | |

Remark : * Notification of Ministry of Industry, B.E.2546


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise

MTR-BIC

| | | | |
|---------------|-----------------------|------------------|--------------|
| LOCATION | : Steam Turbine 1 | MEASUREMENT DATE | : 12-02-2024 |
| SLM MODEL | : SCARLET TECH ST-21D | SERIAL No. | : 820727 |
| SITE OPERATOR | : Miss Salisa Ainree | | |

| | | | |
|---------------------------|--------------------|----------------|--------------|
| CALIBRATOR MODEL | : Cirrus CR:515 | SERIAL No. | : 97097 |
| CALIBRATION REF/EFF dB(A) | : 94.0/93.8 | CERTIFIED DATE | : 04-09-2023 |
| SLM READING/ADJUST dB(A) | : 93.8/0.0 | EXPIRE DATE | : 03-09-2024 |
| CAL SHEET No. | : CAL-2402-0054-01 | | |

| TIME | EQUIVALENT SOUND PRESSURE LEVEL (dB(A)) | |
|---------------|---|--|
| | 12-02-2024 | |
| 00:00 - 01:00 | | |
| 01:00 - 02:00 | | |
| 02:00 - 03:00 | | |
| 03:00 - 04:00 | | |
| 04:00 - 05:00 | | |
| 05:00 - 06:00 | | |
| 06:00 - 07:00 | | |
| 07:00 - 08:00 | | |
| 08:00 - 09:00 | 84.6 | |
| 09:00 - 10:00 | 83.9 | |
| 10:00 - 11:00 | 84.2 | |
| 11:00 - 12:00 | 85.5 | |
| 12:00 - 13:00 | 86.7 | |
| 13:00 - 14:00 | 83.5 | |
| 14:00 - 15:00 | 84.1 | |
| 15:00 - 16:00 | 83.7 | |
| 16:00 - 17:00 | | |
| 17:00 - 18:00 | | |
| 18:00 - 19:00 | | |
| 19:00 - 20:00 | | |
| 20:00 - 21:00 | | |
| 21:00 - 22:00 | | |
| 22:00 - 23:00 | | |
| 23:00 - 00:00 | | |
| Leq(8) | 84.7 | |
| Lmax | 95.0 | |
| Standard* | 90 dB(A) | |
| Standard-Max | 140 dB(A) | |

Remark : * Notification of Ministry of Industry, B.E.2546

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise

MTR-BIC

| | | | |
|---------------|-----------------------|------------------|--------------|
| LOCATION | : Cooling Tower | MEASUREMENT DATE | : 12-02-2024 |
| SLM MODEL | : SCARLET TECH ST-21D | SERIAL No. | : 820729 |
| SITE OPERATOR | : Miss Salisa Ainree | | |

| | | | |
|---------------------------|--------------------|----------------|--------------|
| CALIBRATOR MODEL | : Cirrus CR:515 | SERIAL No. | : 97097 |
| CALIBRATION REF/EFF dB(A) | : 94.0/93.8 | CERTIFIED DATE | : 04-09-2023 |
| SLM READING/ADJUST dB(A) | : 93.8/0.0 | EXPIRE DATE | : 03-09-2024 |
| CAL SHEET No. | : CAL-2402-0054-01 | | |

| TIME | EQUIVALENT SOUND PRESSURE LEVEL (dB(A)) | |
|---------------|---|--|
| | 12-02-2024 | |
| 00:00 - 01:00 | | |
| 01:00 - 02:00 | | |
| 02:00 - 03:00 | | |
| 03:00 - 04:00 | | |
| 04:00 - 05:00 | | |
| 05:00 - 06:00 | | |
| 06:00 - 07:00 | | |
| 07:00 - 08:00 | | |
| 08:00 - 09:00 | 83.4 | |
| 09:00 - 10:00 | 83.4 | |
| 10:00 - 11:00 | 83.4 | |
| 11:00 - 12:00 | 83.4 | |
| 12:00 - 13:00 | 83.6 | |
| 13:00 - 14:00 | 83.6 | |
| 14:00 - 15:00 | 83.2 | |
| 15:00 - 16:00 | 83.1 | |
| 16:00 - 17:00 | | |
| 17:00 - 18:00 | | |
| 18:00 - 19:00 | | |
| 19:00 - 20:00 | | |
| 20:00 - 21:00 | | |
| 21:00 - 22:00 | | |
| 22:00 - 23:00 | | |
| 23:00 - 00:00 | | |
| Leq(8) | 83.4 | |
| Lmax | 89.2 | |
| Standard* | 90 dB(A) | |
| Standard-Max | 140 dB(A) | |

Remark : * Notification of Ministry of Industry, B.E.2546

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise

MTR-BIC

| | | | |
|---------------|-----------------------|------------------|--------------|
| LOCATION | : Steam Turbine 2 | MEASUREMENT DATE | : 12-02-2024 |
| SLM MODEL | : SCARLET TECH ST-21D | SERIAL No. | : 820731 |
| SITE OPERATOR | : Miss Salisa Ainree | | |

| | | | |
|---------------------------|--------------------|----------------|--------------|
| CALIBRATOR MODEL | : Cirrus CR:515 | SERIAL No. | : 97097 |
| CALIBRATION REF/EFF dB(A) | : 94.0/93.8 | CERTIFIED DATE | : 04-09-2023 |
| SLM READING/ADJUST dB(A) | : 93.8/0.0 | EXPIRE DATE | : 03-09-2024 |
| CAL SHEET No. | : CAL-2402-0054-01 | | |

| TIME | EQUIVALENT SOUND PRESSURE LEVEL (dB(A)) | |
|---------------|---|--|
| | 12-02-2024 | |
| 00:00 - 01:00 | | |
| 01:00 - 02:00 | | |
| 02:00 - 03:00 | | |
| 03:00 - 04:00 | | |
| 04:00 - 05:00 | | |
| 05:00 - 06:00 | | |
| 06:00 - 07:00 | | |
| 07:00 - 08:00 | | |
| 08:00 - 09:00 | 84.3 | |
| 09:00 - 10:00 | 83.8 | |
| 10:00 - 11:00 | 84.7 | |
| 11:00 - 12:00 | 86.6 | |
| 12:00 - 13:00 | 83.9 | |
| 13:00 - 14:00 | 83.8 | |
| 14:00 - 15:00 | 84.7 | |
| 15:00 - 16:00 | 83.8 | |
| 16:00 - 17:00 | | |
| 17:00 - 18:00 | | |
| 18:00 - 19:00 | | |
| 19:00 - 20:00 | | |
| 20:00 - 21:00 | | |
| 21:00 - 22:00 | | |
| 22:00 - 23:00 | | |
| 23:00 - 00:00 | | |
| Leq(8) | 84.6 | |
| Lmax | 91.1 | |
| Standard* | 90 dB(A) | |
| Standard-Max | 140 dB(A) | |

Remark : * Notification of Ministry of Industry, B.E.2546

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise

MTR-BIC

| | | | |
|---------------|---------------------------|------------------|--------------|
| LOCATION | : Gas Turbine Generator 3 | MEASUREMENT DATE | : 12-02-2024 |
| SLM MODEL | : SCARLET TECH ST-21D | SERIAL No. | : 820722 |
| SITE OPERATOR | : Miss Salisa Ainree | | |

| | | | |
|---------------------------|--------------------|----------------|--------------|
| CALIBRATOR MODEL | : Cirrus CR:515 | SERIAL No. | : 97097 |
| CALIBRATION REF/EFF dB(A) | : 94.0/93.8 | CERTIFIED DATE | : 04-09-2023 |
| SLM READING/ADJUST dB(A) | : 93.8/0.0 | EXPIRE DATE | : 03-09-2024 |
| CAL SHEET No. | : CAL-2402-0054-01 | | |

| TIME | EQUIVALENT SOUND PRESSURE LEVEL (dB(A)) | |
|---------------|---|--|
| | 12-02-2024 | |
| 00:00 - 01:00 | | |
| 01:00 - 02:00 | | |
| 02:00 - 03:00 | | |
| 03:00 - 04:00 | | |
| 04:00 - 05:00 | | |
| 05:00 - 06:00 | | |
| 06:00 - 07:00 | | |
| 07:00 - 08:00 | | |
| 08:00 - 09:00 | 80.6 | |
| 09:00 - 10:00 | 81.2 | |
| 10:00 - 11:00 | 81.3 | |
| 11:00 - 12:00 | 80.8 | |
| 12:00 - 13:00 | 81.0 | |
| 13:00 - 14:00 | 81.1 | |
| 14:00 - 15:00 | 81.0 | |
| 15:00 - 16:00 | 81.1 | |
| 16:00 - 17:00 | | |
| 17:00 - 18:00 | | |
| 18:00 - 19:00 | | |
| 19:00 - 20:00 | | |
| 20:00 - 21:00 | | |
| 21:00 - 22:00 | | |
| 22:00 - 23:00 | | |
| 23:00 - 00:00 | | |
| Leq(8) | 81.0 | |
| Lmax | 87.5 | |
| Standard* | 90 dB(A) | |
| Standard-Max | 140 dB(A) | |

Remark : * Notification of Ministry of Industry, B.E.2546

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise

MTR-BIC

| | | | |
|---------------|---------------------------|------------------|--------------|
| LOCATION | : Gas Turbine Generator 4 | MEASUREMENT DATE | : 12-02-2024 |
| SLM MODEL | : SCARLET TECH ST-21D | SERIAL No. | : 820728 |
| SITE OPERATOR | : Miss Salisa Ainree | | |

| | | | |
|---------------------------|--------------------|----------------|--------------|
| CALIBRATOR MODEL | : Cirrus CR:515 | SERIAL No. | : 97097 |
| CALIBRATION REF/EFF dB(A) | : 94.0/93.8 | CERTIFIED DATE | : 04-09-2023 |
| SLM READING/ADJUST dB(A) | : 93.8/0.0 | EXPIRE DATE | : 03-09-2024 |
| CAL SHEET No. | : CAL-2402-0054-01 | | |

| TIME | EQUIVALENT SOUND PRESSURE LEVEL (dB(A)) | |
|---------------|---|--|
| | 12-02-2024 | |
| 00:00 - 01:00 | | |
| 01:00 - 02:00 | | |
| 02:00 - 03:00 | | |
| 03:00 - 04:00 | | |
| 04:00 - 05:00 | | |
| 05:00 - 06:00 | | |
| 06:00 - 07:00 | | |
| 07:00 - 08:00 | | |
| 08:00 - 09:00 | 83.3 | |
| 09:00 - 10:00 | 83.3 | |
| 10:00 - 11:00 | 83.0 | |
| 11:00 - 12:00 | 83.4 | |
| 12:00 - 13:00 | 83.0 | |
| 13:00 - 14:00 | 83.3 | |
| 14:00 - 15:00 | 82.9 | |
| 15:00 - 16:00 | 83.2 | |
| 16:00 - 17:00 | | |
| 17:00 - 18:00 | | |
| 18:00 - 19:00 | | |
| 19:00 - 20:00 | | |
| 20:00 - 21:00 | | |
| 21:00 - 22:00 | | |
| 22:00 - 23:00 | | |
| 23:00 - 00:00 | | |
| Leq(8) | 83.2 | |
| Lmax | 86.4 | |
| Standard* | 90 dB(A) | |
| Standard-Max | 140 dB(A) | |

Remark : * Notification of Ministry of Industry, B.E.2546

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise

MTR-BIC

| | | | |
|---------------|---------------------------|------------------|--------------|
| LOCATION | : Gas Turbine Generator 1 | MEASUREMENT DATE | : 08-05-2024 |
| SLM MODEL | : SCARLET TECH ST-21D | SERIAL No. | : 820723 |
| SITE OPERATOR | : Miss Mareeyanee Hawae | | |

| | | | |
|---------------------------|--------------------|----------------|--------------|
| CALIBRATOR MODEL | : Cirrus CR:515 | SERIAL No. | : 97097 |
| CALIBRATION REF/EFF dB(A) | : 94.0/93.8 | CERTIFIED DATE | : 04-09-2023 |
| SLM READING/ADJUST dB(A) | : 93.8/0.0 | EXPIRE DATE | : 03-09-2024 |
| CAL SHEET No. | : CAL-2405-0183-01 | | |

| TIME | EQUIVALENT SOUND PRESSURE LEVEL (dB(A)) | |
|---------------|---|--|
| | 08-05-2024 | |
| 00:00 - 01:00 | | |
| 01:00 - 02:00 | | |
| 02:00 - 03:00 | | |
| 03:00 - 04:00 | | |
| 04:00 - 05:00 | | |
| 05:00 - 06:00 | | |
| 06:00 - 07:00 | | |
| 07:00 - 08:00 | | |
| 08:00 - 09:00 | 77.3 | |
| 09:00 - 10:00 | 77.4 | |
| 10:00 - 11:00 | 77.4 | |
| 11:00 - 12:00 | 76.7 | |
| 12:00 - 13:00 | 77.1 | |
| 13:00 - 14:00 | 77.5 | |
| 14:00 - 15:00 | 77.6 | |
| 15:00 - 16:00 | 77.7 | |
| 16:00 - 17:00 | | |
| 17:00 - 18:00 | | |
| 18:00 - 19:00 | | |
| 19:00 - 20:00 | | |
| 20:00 - 21:00 | | |
| 21:00 - 22:00 | | |
| 22:00 - 23:00 | | |
| 23:00 - 00:00 | | |
| Leq(8) | 77.3 | |
| Lmax | 83.7 | |
| Standard* | 90 dB(A) | |
| Standard-Max | 140 dB(A) | |

Remark : * Notification of Ministry of Industry, B.E.2546

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise

MTR-BIC

| | | | |
|---------------|---------------------------|------------------|--------------|
| LOCATION | : Gas Turbine Generator 2 | MEASUREMENT DATE | : 08-05-2024 |
| SLM MODEL | : SCARLET TECH ST-21D | SERIAL No. | : 820722 |
| SITE OPERATOR | : Miss Marceyanee Hawae | | |

| | | | |
|---------------------------|--------------------|----------------|--------------|
| CALIBRATOR MODEL | : Cirrus CR:515 | SERIAL No. | : 97097 |
| CALIBRATION REF/EFF dB(A) | : 94.0/93.8 | CERTIFIED DATE | : 04-09-2023 |
| SLM READING/ADJUST dB(A) | : 93.8/0.0 | EXPIRE DATE | : 03-09-2024 |
| CAL SHEET No. | : CAL-2405-0183-01 | | |

| TIME | EQUIVALENT SOUND PRESSURE LEVEL (dB(A)) | |
|---------------|---|--|
| | 08-05-2024 | |
| 00:00 - 01:00 | | |
| 01:00 - 02:00 | | |
| 02:00 - 03:00 | | |
| 03:00 - 04:00 | | |
| 04:00 - 05:00 | | |
| 05:00 - 06:00 | | |
| 06:00 - 07:00 | | |
| 07:00 - 08:00 | | |
| 08:00 - 09:00 | 81.9 | |
| 09:00 - 10:00 | 81.9 | |
| 10:00 - 11:00 | 81.0 | |
| 11:00 - 12:00 | 81.5 | |
| 12:00 - 13:00 | 81.6 | |
| 13:00 - 14:00 | 81.9 | |
| 14:00 - 15:00 | 81.4 | |
| 15:00 - 16:00 | 81.8 | |
| 16:00 - 17:00 | | |
| 17:00 - 18:00 | | |
| 18:00 - 19:00 | | |
| 19:00 - 20:00 | | |
| 20:00 - 21:00 | | |
| 21:00 - 22:00 | | |
| 22:00 - 23:00 | | |
| 23:00 - 00:00 | | |

| | |
|--------------|-----------|
| Leq(8) | 81.6 |
| Lmax | 86.4 |
| Standard* | 90 dB(A) |
| Standard-Max | 140 dB(A) |

Remark : * Notification of Ministry of Industry, B.E.2546



(Miss Katesarin Vorradetwittaya)
Environmental Scientist



(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise

MTR-BIC

| | | | |
|---------------|-------------------------|------------------|--------------|
| LOCATION | : Steam Turbine (STG) 1 | MEASUREMENT DATE | : 08-05-2024 |
| SLM MODEL | : Cirrus CR162B | SERIAL No. | : G302740 |
| SITE OPERATOR | : Miss Marceyanee Hawae | | |

| | | | |
|---------------------------|--------------------|----------------|--------------|
| CALIBRATOR MODEL | : Cirrus CR:515 | SERIAL No. | : 97097 |
| CALIBRATION REF/EFF dB(A) | : 94.0/93.7 | CERTIFIED DATE | : 04-09-2023 |
| SLM READING/ADJUST dB(A) | : 93.7/0.0 | EXPIRE DATE | : 03-09-2024 |
| CAL SHEET No. | : CAL-2405-0183-01 | | |

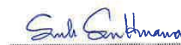
| TIME | EQUIVALENT SOUND PRESSURE LEVEL (dB(A)) | |
|---------------|---|--|
| | 08-05-2024 | |
| 00:00 - 01:00 | | |
| 01:00 - 02:00 | | |
| 02:00 - 03:00 | | |
| 03:00 - 04:00 | | |
| 04:00 - 05:00 | | |
| 05:00 - 06:00 | | |
| 06:00 - 07:00 | | |
| 07:00 - 08:00 | | |
| 08:00 - 09:00 | | |
| 09:00 - 10:00 | 88.6 | |
| 10:00 - 11:00 | 88.4 | |
| 11:00 - 12:00 | 88.5 | |
| 12:00 - 13:00 | 88.6 | |
| 13:00 - 14:00 | 89.2 | |
| 14:00 - 15:00 | 89.0 | |
| 15:00 - 16:00 | 87.3 | |
| 16:00 - 17:00 | 86.8 | |
| 17:00 - 18:00 | | |
| 18:00 - 19:00 | | |
| 19:00 - 20:00 | | |
| 20:00 - 21:00 | | |
| 21:00 - 22:00 | | |
| 22:00 - 23:00 | | |
| 23:00 - 00:00 | | |

| | |
|--------------|-----------|
| Leq(8) | 88.4 |
| Lmax | 95.2 |
| Standard* | 90 dB(A) |
| Standard-Max | 140 dB(A) |

Remark : * Notification of Ministry of Industry, B.E.2546



(Miss Katesarin Vorradetwittaya)
Environmental Scientist



(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise

MTR-BIC

| | | | |
|---------------------------|-------------------------|------------------|--------------|
| LOCATION | : Cooling Tower | MEASUREMENT DATE | : 08-05-2024 |
| SLM MODEL | : Cirrus CR162B | SERIAL No. | : G302743 |
| SITE OPERATOR | : Miss Mareeyanee Hawae | | |
| CALIBRATOR MODEL | : Cirrus CR:515 | SERIAL No. | : 97097 |
| CALIBRATION REF/EFF dB(A) | : 94.0/93.7 | CERTIFIED DATE | : 04-09-2023 |
| SLM READING/ADJUST dB(A) | : 93.7/0.0 | EXPIRE DATE | : 03-09-2024 |
| CAL SHEET No. | : CAL-2405-0183-01 | | |

| TIME | EQUIVALENT SOUND PRESSURE LEVEL (dB(A)) | |
|---------------|---|--|
| | 08-05-2024 | |
| 00:00 - 01:00 | | |
| 01:00 - 02:00 | | |
| 02:00 - 03:00 | | |
| 03:00 - 04:00 | | |
| 04:00 - 05:00 | | |
| 05:00 - 06:00 | | |
| 06:00 - 07:00 | | |
| 07:00 - 08:00 | | |
| 08:00 - 09:00 | | |
| 09:00 - 10:00 | 85.0 | |
| 10:00 - 11:00 | 84.9 | |
| 11:00 - 12:00 | 84.7 | |
| 12:00 - 13:00 | 84.2 | |
| 13:00 - 14:00 | 84.6 | |
| 14:00 - 15:00 | 84.6 | |
| 15:00 - 16:00 | 84.6 | |
| 16:00 - 17:00 | 84.7 | |
| 17:00 - 18:00 | | |
| 18:00 - 19:00 | | |
| 19:00 - 20:00 | | |
| 20:00 - 21:00 | | |
| 21:00 - 22:00 | | |
| 22:00 - 23:00 | | |
| 23:00 - 00:00 | | |
| Leq(8) | 84.7 | |
| Lmax | 86.2 | |
| Standard* | 90 dB(A) | |
| Standard-Max | 140 dB(A) | |

Remark : * Notification of Ministry of Industry, B.E.2546

(Miss Katesarin Vorradetwittaya)
Environmental Scientist(Miss Sununta Sirawuttinanon)
Technical Management Team

Noise Monitoring Result : Working Noise

MTR-BIC

| | | | |
|---------------------------|-------------------------|------------------|--------------|
| LOCATION | : Steam Turbine (STG) 2 | MEASUREMENT DATE | : 08-05-2024 |
| SLM MODEL | : Cirrus CR162B | SERIAL No. | : G301014 |
| SITE OPERATOR | : Miss Mareeyanee Hawae | | |
| CALIBRATOR MODEL | : Cirrus CR:515 | SERIAL No. | : 97097 |
| CALIBRATION REF/EFF dB(A) | : 94.0/93.7 | CERTIFIED DATE | : 04-09-2023 |
| SLM READING/ADJUST dB(A) | : 93.7/0.0 | EXPIRE DATE | : 03-09-2024 |
| CAL SHEET No. | : CAL-2405-0183-01 | | |

| TIME | EQUIVALENT SOUND PRESSURE LEVEL (dB(A)) | |
|---------------|---|--|
| | 08-05-2024 | |
| 00:00 - 01:00 | | |
| 01:00 - 02:00 | | |
| 02:00 - 03:00 | | |
| 03:00 - 04:00 | | |
| 04:00 - 05:00 | | |
| 05:00 - 06:00 | | |
| 06:00 - 07:00 | | |
| 07:00 - 08:00 | | |
| 08:00 - 09:00 | | |
| 09:00 - 10:00 | 84.3 | |
| 10:00 - 11:00 | 85.4 | |
| 11:00 - 12:00 | 86.3 | |
| 12:00 - 13:00 | 84.7 | |
| 13:00 - 14:00 | 85.2 | |
| 14:00 - 15:00 | 84.9 | |
| 15:00 - 16:00 | 86.2 | |
| 16:00 - 17:00 | 86.0 | |
| 17:00 - 18:00 | | |
| 18:00 - 19:00 | | |
| 19:00 - 20:00 | | |
| 20:00 - 21:00 | | |
| 21:00 - 22:00 | | |
| 22:00 - 23:00 | | |
| 23:00 - 00:00 | | |
| Leq(8) | 85.4 | |
| Lmax | 91.4 | |
| Standard* | 90 dB(A) | |
| Standard-Max | 140 dB(A) | |

Remark : * Notification of Ministry of Industry, B.E.2546

(Miss Katesarin Vorradetwittaya)
Environmental Scientist(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise

MTR-BIC

| | | | |
|---------------------------|---------------------------|------------------|--------------|
| LOCATION | : Gas Turbine Generator 3 | MEASUREMENT DATE | : 08-05-2024 |
| SLM MODEL | : Cirrus CR162B | SERIAL No. | : G302742 |
| SITE OPERATOR | : Miss Mareeyanee Hawae | | |
| CALIBRATOR MODEL | : Cirrus CR:515 | SERIAL No. | : 97097 |
| CALIBRATION REF/EFF dB(A) | : 94.0/93.7 | CERTIFIED DATE | : 04-09-2023 |
| SLM READING/ADJUST dB(A) | : 93.7/0.0 | EXPIRE DATE | : 03-09-2024 |
| CAL SHEET No. | : CAL-2405-0183-01 | | |

| TIME | EQUIVALENT SOUND PRESSURE LEVEL (dB(A)) | |
|---------------|---|--|
| | 08-05-2024 | |
| 00:00 - 01:00 | | |
| 01:00 - 02:00 | | |
| 02:00 - 03:00 | | |
| 03:00 - 04:00 | | |
| 04:00 - 05:00 | | |
| 05:00 - 06:00 | | |
| 06:00 - 07:00 | | |
| 07:00 - 08:00 | | |
| 08:00 - 09:00 | | |
| 09:00 - 10:00 | 80.2 | |
| 10:00 - 11:00 | 80.1 | |
| 11:00 - 12:00 | 80.1 | |
| 12:00 - 13:00 | 80.6 | |
| 13:00 - 14:00 | 79.8 | |
| 14:00 - 15:00 | 79.5 | |
| 15:00 - 16:00 | 79.5 | |
| 16:00 - 17:00 | 79.7 | |
| 17:00 - 18:00 | | |
| 18:00 - 19:00 | | |
| 19:00 - 20:00 | | |
| 20:00 - 21:00 | | |
| 21:00 - 22:00 | | |
| 22:00 - 23:00 | | |
| 23:00 - 00:00 | | |
| Leq(8) | 80.0 | |
| Lmax | 85.8 | |
| Standard* | 90 dB(A) | |
| Standard-Max | 140 dB(A) | |

Remark : * Notification of Ministry of Industry, B.E.2546


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise

MTR-BIC

| | | | |
|---------------------------|---------------------------|------------------|--------------|
| LOCATION | : Gas Turbine Generator 4 | MEASUREMENT DATE | : 08-05-2024 |
| SLM MODEL | : Cirrus CR162B | SERIAL No. | : G302741 |
| SITE OPERATOR | : Miss Mareeyanee Hawae | | |
| CALIBRATOR MODEL | : Cirrus CR:515 | SERIAL No. | : 97097 |
| CALIBRATION REF/EFF dB(A) | : 94.0/93.7 | CERTIFIED DATE | : 04-09-2023 |
| SLM READING/ADJUST dB(A) | : 93.7/0.0 | EXPIRE DATE | : 03-09-2024 |
| CAL SHEET No. | : CAL-2405-0183-01 | | |

| TIME | EQUIVALENT SOUND PRESSURE LEVEL (dB(A)) | |
|---------------|---|--|
| | 05-08-2024 | |
| 00:00 - 01:00 | | |
| 01:00 - 02:00 | | |
| 02:00 - 03:00 | | |
| 03:00 - 04:00 | | |
| 04:00 - 05:00 | | |
| 05:00 - 06:00 | | |
| 06:00 - 07:00 | | |
| 07:00 - 08:00 | | |
| 08:00 - 09:00 | | |
| 09:00 - 10:00 | 84.1 | |
| 10:00 - 11:00 | 84.0 | |
| 11:00 - 12:00 | 84.2 | |
| 12:00 - 13:00 | 81.6 | |
| 13:00 - 14:00 | 82.7 | |
| 14:00 - 15:00 | 83.7 | |
| 15:00 - 16:00 | 84.3 | |
| 16:00 - 17:00 | 84.0 | |
| 17:00 - 18:00 | | |
| 18:00 - 19:00 | | |
| 19:00 - 20:00 | | |
| 20:00 - 21:00 | | |
| 21:00 - 22:00 | | |
| 22:00 - 23:00 | | |
| 23:00 - 00:00 | | |
| Leq(8) | 83.7 | |
| Lmax | 87.4 | |
| Standard* | 90 dB(A) | |
| Standard-Max | 140 dB(A) | |

Remark : * Notification of Ministry of Industry, B.E.2546


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Sununta Sirawuttinanon)
Technical Management Team

ภาคผนวก ง.5

ใบรับรองผลการตรวจวัดคุณภาพน้ำทิ้ง



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

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TEL. (662) 959-3600 FAX (662) 959-3535 Website : secot.co.th E-mail : envserv@secot.co.th

WATER AND WASTEWATER ANALYSIS REPORT

| | | | |
|----------------------|----------------------------------|-----------------------|--------------------------|
| CLIENT NAME | : Bangpa-in Cogeneration Limited | REQUEST SERVICE No. : | 0045/67 |
| SAMPLING BY | : SECOT Co., Ltd. | SAMPLING METHOD | : Grab |
| SAMPLING DATE | : 10/01/2024 | SAMPLING TIME | : 09:50 |
| RECEIVED DATE | : 11/01/2024 | ANALYTICAL DATE | : 11-17/01/2024 |
| REPORT DATE | : 18/01/2024 | SITE OPERATOR | : Mr. Jeerawat Khotamhan |
| SAMPLE CONDITION | : Normal | FILE CODE | : 224045_WW_January |
| LOCATION DESCRIPTION | 1.บ่อดักน้ำทิ้งจากระบบหล่อเย็น | | |

| PARAMETER | UNIT | ANALYSIS METHODS | ND (non-detectable) | STATION | STANDARD ^{1/} |
|------------------------|------|-------------------------|------------------------|---------|------------------------|
| | | | | 1 | |
| Temperature | °C | 2550 B | < 0.5 | 32.4 | ≤ 45 |
| pH | - | 4500-H ⁺ B | < 0.10 | 8.12 | 5.5 - 9.0 |
| Color | ADMI | 2120 F | < 6.0 | 33.5 | ≤ 600 |
| Total Dissolved Solids | mg/l | 2540 C | < 50 | 2,440 | ≤ 3,000 |
| Total Suspended Solids | mg/l | 2540 D | < 5 | < 5 | ≤ 200 |
| Fat Oil & Grease | mg/l | 5520 B | < 0.50 | ND | ≤ 10 |
| BOD ₅ | mg/l | 5210 B | < 1.0 | 2.4 | ≤ 500 |
| TKN | mg/l | 4500-N _{org} B | < 0.20 | 3.4 | ≤ 100 |
| COD | mg/l | 5220 D | < 40.00 | 54.01 | ≤ 750 |
| Copper (Cu) | mg/l | 3120 B | < 0.001 | < 0.02 | ≤ 2.0 |
| Zinc (Zn) | mg/l | 3120 B | < 0.003 | 0.23 | ≤ 5.0 |

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED. 2017 (AWWA, APHA, WEF)

Khemchuda Insorn

(Miss Khemchuda Insorn)

Analyst

REG. NO. 3-239-ก-0005

Araya Tipparuk

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. 3-239-ก-0004

Remark : 1. Reported analysis refers to submitted sample only.

2. This report shall not be reproduced, except in full, without official approval.

3. ^{1/} Announcement of the Industrial Estate Authority of Thailand No. 76/2560 dated July 13, 2017

"Guidelines on sewage discharge from factory to central wastewater treatment plant in industrial estates".

4. - Not available.



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SECOT CO., LTD.

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TEL. (662) 959-3600 FAX (662) 959-3535 Website : secot.co.th E-mail : envserv@secot.co.th

WATER AND WASTEWATER ANALYSIS REPORT

| | | | |
|----------------------|---|-----------------------|--------------------------|
| CLIENT NAME | : Bangpa-in Cogeneration Limited | REQUEST SERVICE No. : | 0045/67 |
| SAMPLING BY | : SECOT Co., Ltd. | SAMPLING METHOD | : Grab |
| SAMPLING DATE | : 10/01/2024 | SAMPLING TIME | : 10:10 |
| RECEIVED DATE | : 11/01/2024 | ANALYTICAL DATE | : 11-17/01/2024 |
| REPORT DATE | : 18/01/2024 | SITE OPERATOR | : Mr. Jeerawat Khotamhan |
| SAMPLE CONDITION | : Normal | FILE CODE | : 224045_WW_January |
| LOCATION DESCRIPTION | 2.บ่อดักน้ำทิ้งจากภาพน้ำทิ้งก่อนระบายเข้าสู่ระบบบำบัดน้ำเสียส่วนกลางของนิคมอุตสาหกรรมบางปะอิน | | |

| PARAMETER | UNIT | ANALYSIS METHODS | ND (non-detectable) | STATION | STANDARD ^{1/} |
|------------------------|------|-----------------------|------------------------|---------|------------------------|
| | | | | 2 | |
| Temperature | °C | 2550 B | < 0.5 | 29.6 | ≤ 45 |
| pH | - | 4500-H ⁺ B | < 0.10 | 8.07 | 5.5 - 9.0 |
| Color | ADMI | 2120 F | < 6.0 | 29.5 | ≤ 600 |
| Free Chlorine | mg/l | 4500-Cl G | < 0.03 | ND | ≤ 1 |
| Total Dissolved Solids | mg/l | 2540 C | < 50 | 472 | ≤ 3,000 |
| Total Suspended Solids | mg/l | 2540 D | < 5 | < 5 | ≤ 200 |
| Fat Oil & Grease | mg/l | 5520 B | < 0.50 | ND | ≤ 10 |
| BOD ₅ | mg/l | 5210 B | < 1.0 | 2.2 | ≤ 500 |
| COD | mg/l | 5220 D | < 40.00 | < 40.00 | ≤ 750 |
| Copper (Cu) | mg/l | 3120 B | < 0.001 | < 0.02 | ≤ 2.0 |
| Zinc (Zn) | mg/l | 3120 B | < 0.003 | 0.03 | ≤ 5.0 |

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED. 2017 (AWWA, APHA, WEF)

Khemchuda Insorn

(Miss Khemchuda Insorn)

Analyst

REG. NO. 3-239-ก-0005

Araya Tipparuk

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. 3-239-ก-0004

Remark : 1. Reported analysis refers to submitted sample only.

2. This report shall not be reproduced, except in full, without official approval.

3. ^{1/} Announcement of the Industrial Estate Authority of Thailand No. 76/2560 dated July 13, 2017

"Guidelines on sewage discharge from factory to central wastewater treatment plant in industrial estates".

4. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

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TEL. (662) 959-3600 FAX (662) 959-3535 Website : secot.co.th E-mail : envserv@secot.co.th

WATER AND WASTEWATER ANALYSIS REPORT

| | | | |
|----------------------|----------------------------------|----------------------|------------------------|
| CLIENT NAME | : Bangpa-in Cogeneration Limited | REQUEST SERVICE No.: | 0234/67 |
| SAMPLING BY | : SECOT Co., Ltd. | SAMPLING METHOD | : Grab |
| SAMPLING DATE | : 07/02/2024 | SAMPLING TIME | : 09:36 |
| RECEIVED DATE | : 08/02/2024 | ANALYTICAL DATE | : 08-14/02/2024 |
| REPORT DATE | : 15/02/2024 | SITE OPERATOR | : Mr. Baworn Deechaiya |
| SAMPLE CONDITION | : Normal | FILE CODE | : 224045_WW_February |
| LOCATION DESCRIPTION | 1. บ่อพักน้ำทิ้งจากระบบหล่อเย็น | | |

| PARAMETER | UNIT | ANALYSIS METHODS | ND (non-detectable) | STATION | STANDARD ^{1/} |
|------------------------|------|-------------------------|---------------------|---------|------------------------|
| | | | | 1 | |
| Temperature | °C | 2550 B | < 0.5 | 32.5 | ≤ 45 |
| pH | - | 4500-H ⁺ B | < 0.10 | 8.21 | 5.5 - 9.0 |
| Color | ADMI | 2120 F | < 6.0 | 30.9 | ≤ 600 |
| Total Dissolved Solids | mg/l | 2540 C | < 50 | 1,818 | ≤ 3,000 |
| Total Suspended Solids | mg/l | 2540 D | < 5 | 10 | ≤ 200 |
| Fat Oil & Grease | mg/l | 5520 B | < 0.50 | ND | ≤ 10 |
| BOD ₅ | mg/l | 5210 B | < 1.0 | 2.8 | ≤ 500 |
| TKN | mg/l | 4500-N _{org} B | < 0.20 | 2.3 | ≤ 100 |
| COD | mg/l | 5220 D | < 40.00 | < 40.00 | ≤ 750 |
| Copper (Cu) | mg/l | 3120 B | < 0.001 | < 0.02 | ≤ 2.0 |
| Zinc (Zn) | mg/l | 3120 B | < 0.003 | 0.19 | ≤ 5.0 |

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 21st ED. 2017 (AWWA, APHA, WEF)

Khemchuda Insorn

(Miss Khemchuda Insorn)

Analyst

REG. NO. ๖-239-ก-0005

Araya Tipparak

(Mrs. Araya Tipparak)

Technical Management Team

REG. NO. ๖-239-ก-0004

Remark : 1. Reported analysis refers to submitted sample only.

2. This report shall not be reproduced, except in full, without official approval.

3. ^{1/} Announcement of the Industrial Estate Authority of Thailand No. 76/2560 dated July 13, 2017

"Guidelines on sewage discharge from factory to central wastewater treatment plant in industrial estates".

4. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

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TEL. (662) 959-3600 FAX (662) 959-3535 Website : secot.co.th E-mail : envserv@secot.co.th

WATER AND WASTEWATER ANALYSIS REPORT

| | | | |
|----------------------|---|----------------------|------------------------|
| CLIENT NAME | : Bangpa-in Cogeneration Limited | REQUEST SERVICE No.: | 0234/67 |
| SAMPLING BY | : SECOT Co., Ltd. | SAMPLING METHOD | : Grab |
| SAMPLING DATE | : 07/02/2024 | SAMPLING TIME | : 09:46 |
| RECEIVED DATE | : 08/02/2024 | ANALYTICAL DATE | : 08-14/02/2024 |
| REPORT DATE | : 15/02/2024 | SITE OPERATOR | : Mr. Baworn Deechaiya |
| SAMPLE CONDITION | : Normal | FILE CODE | : 224045_WW_February |
| LOCATION DESCRIPTION | 2. บ่อตรวจสอบคุณภาพน้ำทิ้งก่อนระบายเข้าสู่ระบบบำบัดน้ำเสียส่วนกลางของนิคมอุตสาหกรรมบางปะอิน | | |

| PARAMETER | UNIT | ANALYSIS METHODS | ND (non-detectable) | STATION | STANDARD ^{1/} |
|------------------------|------|-----------------------|---------------------|---------|------------------------|
| | | | | 2 | |
| Temperature | °C | 2550 B | < 0.5 | 29.9 | ≤ 45 |
| pH | - | 4500-H ⁺ B | < 0.10 | 8.12 | 5.5 - 9.0 |
| Color | ADMI | 2120 F | < 6.0 | 18.8 | ≤ 600 |
| Free Chlorine | mg/l | 4500-Cl G | < 0.03 | ND | ≤ 1 |
| Total Dissolved Solids | mg/l | 2540 C | < 50 | 598 | ≤ 3,000 |
| Total Suspended Solids | mg/l | 2540 D | < 5 | 8 | ≤ 200 |
| Fat Oil & Grease | mg/l | 5520 B | < 0.50 | ND | ≤ 10 |
| BOD ₅ | mg/l | 5210 B | < 1.0 | 3.0 | ≤ 500 |
| COD | mg/l | 5220 D | < 40.00 | 41.24 | ≤ 750 |
| Copper (Cu) | mg/l | 3120 B | < 0.001 | ND | ≤ 2.0 |
| Zinc (Zn) | mg/l | 3120 B | < 0.003 | < 0.02 | ≤ 5.0 |

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 21st ED. 2017 (AWWA, APHA, WEF)

Khemchuda Insorn

(Miss Khemchuda Insorn)

Analyst

REG. NO. ๖-239-ก-0005

Araya Tipparak

(Mrs. Araya Tipparak)

Technical Management Team

REG. NO. ๖-239-ก-0004

Remark : 1. Reported analysis refers to submitted sample only.

2. This report shall not be reproduced, except in full, without official approval.

3. ^{1/} Announcement of the Industrial Estate Authority of Thailand No. 76/2560 dated July 13, 2017

"Guidelines on sewage discharge from factory to central wastewater treatment plant in industrial estates".

4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

| | | | |
|----------------------|----------------------------------|-----------------------|-------------------------|
| CLIENT NAME | : Bangpa-in Cogeneration Limited | REQUEST SERVICE No. : | 0452/67 |
| SAMPLING BY | : SECOT Co., Ltd. | SAMPLING METHOD | : Grab |
| SAMPLING DATE | : 08/03/2024 | SAMPLING TIME | : 09:29 |
| RECEIVED DATE | : 09/03/2024 | ANALYTICAL DATE | : 09-15/03/2024 |
| REPORT DATE | : 16/03/2024 | SITE OPERATOR | : Miss Mareeyanee Hawae |
| SAMPLE CONDITION | : Normal | FILE CODE | : 224045_WW_March |
| LOCATION DESCRIPTION | 1. บ่อพักน้ำทิ้งจากระบบหล่อเย็น | | |

| PARAMETER | UNIT | ANALYSIS METHODS | ND (non-detectable) | STATION | STANDARD ^{1/} |
|------------------------|--------------------|-------------------------|---------------------|---------|------------------------|
| | | | | 1 | |
| Temperature | °C | 2550 B | < 0.5 | 33.4 | ≤ 45 |
| pH | - | 4500-H ⁺ B | < 0.10 | 8.21 | 5.5 - 9.0 |
| Color | ADMI | 2120 F | < 6.0 | 32.1 | ≤ 600 |
| Total Dissolved Solids | mg/l | 2540 C | < 50 | 1,980 | ≤ 3,000 |
| Total Suspended Solids | mg/l | 2540 D | < 5 | < 5 | ≤ 200 |
| Fat Oil & Grease | mg/l | 5520 B | < 0.50 | ND | ≤ 10 |
| BOD ₅ | mg/l | 5210 B | < 1.0 | 2.0 | ≤ 500 |
| TKN | mg/l ^{1/} | 4500-N _{org} B | < 0.20 | 2.2 | ≤ 100 |
| COD | mg/l | 5220 D | < 40.00 | < 40.00 | ≤ 750 |
| Copper (Cu) | mg/l | 3120 B | < 0.001 | < 0.02 | ≤ 2.0 |
| Zinc (Zn) | mg/l | 3120 B | < 0.003 | 0.37 | ≤ 5.0 |

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 21st ED. 2017 (AWWA APHA WEF)

Khemchuda Insorn

(Miss Khemchuda Insorn)

Analyst

REG. NO. 7-239-ก-0005

NT

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. 7-239-ก-0004

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3. ^{1/} Announcement of the Industrial Estate Authority of Thailand No. 76/2560 dated July 13, 2017

"Guidelines on sewage discharge from factory to central wastewater treatment plant in industrial estates".

4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

| | | | |
|----------------------|---|-----------------------|-------------------------|
| CLIENT NAME | : Bangpa-in Cogeneration Limited | REQUEST SERVICE No. : | 0452/67 |
| SAMPLING BY | : SECOT Co., Ltd. | SAMPLING METHOD | : Grab |
| SAMPLING DATE | : 08/03/2024 | SAMPLING TIME | : 09:20 |
| RECEIVED DATE | : 09/03/2024 | ANALYTICAL DATE | : 09-15/03/2024 |
| REPORT DATE | : 16/03/2024 | SITE OPERATOR | : Miss Mareeyanee Hawae |
| SAMPLE CONDITION | : Normal | FILE CODE | : 224045_WW_March |
| LOCATION DESCRIPTION | 2. บ่อตรวจสอบคุณภาพน้ำทิ้งก่อนระบายเข้าสู่ระบบบำบัดน้ำเสียส่วนกลางของนิคมอุตสาหกรรมบางปะอิน | | |

| PARAMETER | UNIT | ANALYSIS METHODS | ND (non-detectable) | STATION | STANDARD ^{1/} |
|------------------------|------|-----------------------|---------------------|---------|------------------------|
| | | | | 2 | |
| Temperature | °C | 2550 B | < 0.5 | 31.3 | ≤ 45 |
| pH | - | 4500-H ⁺ B | < 0.10 | 8.15 | 5.5 - 9.0 |
| Color | ADMI | 2120 F | < 6.0 | 27.5 | ≤ 600 |
| Free Chlorine | mg/l | 4500-Cl G | < 0.03 | ND | ≤ 1 |
| Total Dissolved Solids | mg/l | 2540 C | < 50 | 232 | ≤ 3,000 |
| Total Suspended Solids | mg/l | 2540 D | < 5 | < 5 | ≤ 200 |
| Fat Oil & Grease | mg/l | 5520 B | < 0.50 | ND | ≤ 10 |
| BOD ₅ | mg/l | 5210 B | < 1.0 | 1.6 | ≤ 500 |
| COD | mg/l | 5220 D | < 40.00 | < 40.00 | ≤ 750 |
| Copper (Cu) | mg/l | 3120 B | < 0.001 | < 0.02 | ≤ 2.0 |
| Zinc (Zn) | mg/l | 3120 B | < 0.003 | 0.04 | ≤ 5.0 |

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 21st ED. 2017 (AWWA APHA WEF)

Khemchuda Insorn

(Miss Khemchuda Insorn)

Analyst

REG. NO. 7-239-ก-0005

NT

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. 7-239-ก-0004

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3. ^{1/} Announcement of the Industrial Estate Authority of Thailand No. 76/2560 dated July 13, 2017

"Guidelines on sewage discharge from factory to central wastewater treatment plant in industrial estates".

4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

| | | | |
|----------------------|----------------------------------|-----------------------|-------------------------|
| CLIENT NAME | : Bangpa-in Cogeneration Limited | REQUEST SERVICE No. : | 0823/67 |
| SAMPLING BY | : SECOT Co., Ltd. | SAMPLING METHOD | : Grab |
| SAMPLING DATE | : 29/04/2024 | SAMPLING TIME | : 09:00 |
| RECEIVED DATE | : 30/04/2024 | ANALYTICAL DATE | : 30/04/2024-06/05/2024 |
| REPORT DATE | : 07/05/2024 | SITE OPERATOR | : Miss Mareeyanee Hawae |
| SAMPLE CONDITION | : Normal | FILE CODE | : 224045_WW_April |
| LOCATION DESCRIPTION | 1. บ่อพักน้ำทิ้งจากระบบหล่อเย็น | | |

| PARAMETER | UNIT | ANALYSIS METHODS | ND (non-detectable) | STATION | |
|------------------------|------|-------------------------|---------------------|---------|------------------------|
| | | | | 1 | STANDARD ^{1/} |
| Temperature | °C | 2550 B | < 0.5 | 34.4 | ≤ 45 |
| pH | - | 4500-H ⁺ B | < 0.10 | 8.36 | 5.5 - 9.0 |
| Color | ADMI | 2120 F | < 6.0 | 36.2 | ≤ 600 |
| Total Dissolved Solids | mg/l | 2540 C | < 50 | 2,606 | ≤ 3,000 |
| Total Suspended Solids | mg/l | 2540 D | < 5 | 8 | ≤ 200 |
| Fat Oil & Grease | mg/l | 5520 B | < 0.50 | ND | ≤ 10 |
| BOD ₅ | mg/l | 5210 B | < 1.0 | 2.1 | ≤ 500 |
| TKN | mg/l | 4500-N _{org} B | < 0.20 | 2.5 | ≤ 100 |
| COD | mg/l | 5220 D | < 40.00 | 69.84 | ≤ 750 |
| Copper (Cu) | mg/l | 3120 B | < 0.001 | < 0.02 | ≤ 2.0 |
| Zinc (Zn) | mg/l | 3120 B | < 0.003 | 0.24 | ≤ 5.0 |

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED. 2017 (AWWA, APHA, WEF)

Khemchuda Insorn

(Miss Khemchuda Insorn)

Analyst

REG. NO. 2-239-ก-0005

NR

(Mrs. Araya Tipparak)

Technical Management Team

REG. NO. 2-239-ก-0004

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3. ^{1/} Announcement of the Industrial Estate Authority of Thailand No. 76/2560 dated July 13, 2017

"Guidelines on sewage discharge from factory to central wastewater treatment plant in industrial estates".

4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

| | | | |
|----------------------|---|-----------------------|-------------------------|
| CLIENT NAME | : Bangpa-in Cogeneration Limited | REQUEST SERVICE No. : | 0823/67 |
| SAMPLING BY | : SECOT Co., Ltd. | SAMPLING METHOD | : Grab |
| SAMPLING DATE | : 29/04/2024 | SAMPLING TIME | : 09:10 |
| RECEIVED DATE | : 30/04/2024 | ANALYTICAL DATE | : 30/04/2024-06/05/2024 |
| REPORT DATE | : 07/05/2024 | SITE OPERATOR | : Miss Mareeyanee Hawae |
| SAMPLE CONDITION | : Normal | FILE CODE | : 224045_WW_April |
| LOCATION DESCRIPTION | 2. บ่อตรวจสอบคุณภาพน้ำทิ้งก่อนระบายเข้าสู่ระบบบำบัดน้ำเสียส่วนกลางของนิคมอุตสาหกรรมบางปะอิน | | |

| PARAMETER | UNIT | ANALYSIS METHODS | ND (non-detectable) | STATION | |
|------------------------|------|-----------------------|---------------------|---------|------------------------|
| | | | | 2 | STANDARD ^{1/} |
| Temperature | °C | 2550 B | < 0.5 | 33.7 | ≤ 45 |
| pH | - | 4500-H ⁺ B | < 0.10 | 8.25 | 5.5 - 9.0 |
| Color | ADMI | 2120 F | < 6.0 | 23.1 | ≤ 600 |
| Free Chlorine | mg/l | 4500-Cl G | < 0.03 | ND | ≤ 1 |
| Total Dissolved Solids | mg/l | 2540 C | < 50 | 358 | ≤ 3,000 |
| Total Suspended Solids | mg/l | 2540 D | < 5 | < 5 | ≤ 200 |
| Fat Oil & Grease | mg/l | 5520 B | < 0.50 | ND | ≤ 10 |
| BOD ₅ | mg/l | 5210 B | < 1.0 | < 1.0 | ≤ 500 |
| COD | mg/l | 5220 D | < 40.00 | < 40.00 | ≤ 750 |
| Copper (Cu) | mg/l | 3120 B | < 0.001 | ND | ≤ 2.0 |
| Zinc (Zn) | mg/l | 3120 B | < 0.003 | 0.07 | ≤ 5.0 |

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED. 2017 (AWWA, APHA, WEF)

Khemchuda Insorn

(Miss Khemchuda Insorn)

Analyst

REG. NO. 2-239-ก-0005

NR

(Mrs. Araya Tipparak)

Technical Management Team

REG. NO. 2-239-ก-0004

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"Guidelines on sewage discharge from factory to central wastewater treatment plant in industrial estates".

4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

| | | | |
|----------------------|----------------------------------|----------------------|-------------------------|
| CLIENT NAME | : Bangpa-in Cogeneration Limited | REQUEST SERVICE No.: | 0890/67 |
| SAMPLING BY | : SECOT Co., Ltd. | SAMPLING METHOD | : Grab |
| SAMPLING DATE | : 08/05/2024 | SAMPLING TIME | : 09:38 |
| RECEIVED DATE | : 09/05/2024 | ANALYTICAL DATE | : 09-16/05/2024 |
| REPORT DATE | : 17/05/2024 | SITE OPERATOR | : Miss Mareeyanee Hawae |
| SAMPLE CONDITION | : Normal | FILE CODE | : 224045_WW_May |
| LOCATION DESCRIPTION | 1.บ่อดักน้ำทิ้งจากกระบวนการผลิต | | |

| PARAMETER | UNIT | ANALYSIS METHODS | ND (non-detectable) | STATION | STANDARD ^{1/} |
|------------------------|------|-------------------------|---------------------|---------|------------------------|
| | | | | 1 | |
| Temperature | °C | 2550 B | < 0.5 | 32.0 | ≤ 45 |
| pH | | 4500-H ⁺ B | < 0.10 | 8.14 | 5.5 - 9.0 |
| Color | ADMI | 2120 F | < 6.0 | 19.8 | ≤ 600 |
| Total Dissolved Solids | mg/l | 2540 C | < 50 | 1,950 | ≤ 3,000 |
| Total Suspended Solids | mg/l | 2540 D | < 5 | 10 | ≤ 200 |
| Fat Oil & Grease | mg/l | 5520 B | < 0.50 | ND | ≤ 10 |
| BOD ₅ | mg/l | 5210 B | < 1.0 | 1.5 | ≤ 500 |
| TKN | mg/l | 4500-N _{org} B | < 0.20 | 1.3 | ≤ 100 |
| COD | mg/l | 5220 D | < 40.00 | 46.41 | ≤ 750 |
| Copper (Cu) | mg/l | 3120 B | < 0.001 | < 0.02 | ≤ 2.0 |
| Zinc (Zn) | mg/l | 3120 B | < 0.003 | 0.20 | ≤ 5.0 |

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 21st ED. 2017 (AWWA, APHA, WEF)

Khemchuda Insorn

(Miss' Khemchuda Insorn)

Analyst

REG. NO. 2-239-ก-0005

Araya Tipparuk

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. 2-239-ก-0004

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3. ^{1/} Announcement of the Industrial Estate Authority of Thailand No. 76/2560 dated July 13, 2017

" Guidelines on sewage discharge from factory to central wastewater treatment plant in industrial estates".

4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

| | | | |
|----------------------|----------------------------------|----------------------|-------------------------|
| CLIENT NAME | : Bangpa-in Cogeneration Limited | REQUEST SERVICE No.: | 0890/67 |
| SAMPLING BY | : SECOT Co., Ltd. | SAMPLING METHOD | : Grab |
| SAMPLING DATE | : 08/05/2024 | SAMPLING TIME | : 09:41 |
| RECEIVED DATE | : 09/05/2024 | ANALYTICAL DATE | : 09-16/05/2024 |
| REPORT DATE | : 17/05/2024 | SITE OPERATOR | : Miss Mareeyanee Hawae |
| SAMPLE CONDITION | : Normal | FILE CODE | : 224045_WW_May |
| LOCATION DESCRIPTION | 2.บ่อดักน้ำทิ้งจากกระบวนการผลิต | | |

| PARAMETER | UNIT | ANALYSIS METHODS | ND (non-detectable) | STATION | STANDARD ^{1/} |
|------------------------|------|-----------------------|---------------------|---------|------------------------|
| | | | | 2 | |
| Temperature | °C | 2550 B | < 0.5 | 31.7 | ≤ 45 |
| pH | | 4500-H ⁺ B | < 0.10 | 7.72 | 5.5 - 9.0 |
| Color | ADMI | 2120 F | < 6.0 | 17.8 | ≤ 600 |
| Free Chlorine | mg/l | 4500-Cl G | < 0.03 | ND | ≤ 1 |
| Total Dissolved Solids | mg/l | 2540 C | < 50 | 666 | ≤ 3,000 |
| Total Suspended Solids | mg/l | 2540 D | < 5 | < 5 | ≤ 200 |
| Fat Oil & Grease | mg/l | 5520 B | < 0.50 | ND | ≤ 10 |
| BOD ₅ | mg/l | 5210 B | < 1.0 | 2.4 | ≤ 500 |
| COD | mg/l | 5220 D | < 40.00 | < 40.00 | ≤ 750 |
| Copper (Cu) | mg/l | 3120 B | < 0.001 | ND | ≤ 2.0 |
| Zinc (Zn) | mg/l | 3120 B | < 0.003 | 0.04 | ≤ 5.0 |

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 21st ED. 2017 (AWWA, APHA, WEF)

Khemchuda Insorn

(Miss' Khemchuda Insorn)

Analyst

REG. NO. 2-239-ก-0005

Araya Tipparuk

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. 2-239-ก-0004

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" Guidelines on sewage discharge from factory to central wastewater treatment plant in industrial estates".

4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

| | | | |
|----------------------|----------------------------------|-----------------------|-------------------------------|
| CLIENT NAME | : Bangpa-in Cogeneration Limited | REQUEST SERVICE No. : | 1201/67 |
| SAMPLING BY | : SECOT Co., Ltd. | SAMPLING METHOD | : Grab |
| SAMPLING DATE | : 12/06/2024 | SAMPLING TIME | : 09:27 |
| RECEIVED DATE | : 13/06/2024 | ANALYTICAL DATE | : 13-20/06/2024 |
| REPORT DATE | : 21/06/2024 | SITE OPERATOR | : Mr.Sittichai Sawangwongchai |
| SAMPLE CONDITION | : Normal | FILE CODE | : 224045_WW_June |
| LOCATION DESCRIPTION | 1.บ่อกักน้ำทิ้งจากระบบหล่อเย็น | | |

| PARAMETER | UNIT | ANALYSIS METHODS | ND (non-detectable) | STATION | |
|------------------------|------|-------------------------|---------------------|---------|------------------------|
| | | | | 1 | STANDARD ^{1/} |
| Temperature | °C | 2550 B | < 0.5 | 31.9 | ≤ 45 |
| pH | - | 4500-H ⁺ B | < 0.10 | 8.26 | 5.5 - 9.0 |
| Color | ADMI | 2120 F | < 6.0 | 17.9 | ≤ 600 |
| Total Dissolved Solids | mg/l | 2540 C | < 50 | 2,650 | ≤ 3,000 |
| Total Suspended Solids | mg/l | 2540 D | < 5 | 11 | ≤ 200 |
| Fat Oil & Grease | mg/l | 5520 B | < 0.50 | ND | ≤ 10 |
| BOD ₅ | mg/l | 5210 B | < 1.0 | < 1.0 | ≤ 500 |
| TKN | mg/l | 4500-N _{org} B | < 0.20 | 2.2 | ≤ 100 |
| COD | mg/l | 5220 D | < 40.00 | 60.00 | ≤ 750 |
| Copper (Cu) | mg/l | 3120 B | < 0.001 | < 0.02 | ≤ 2.0 |
| Zinc (Zn) | mg/l | 3120 B | < 0.003 | 0.42 | ≤ 5.0 |

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED. 2017 (AWWA, APHA, WEF)

(Miss Khemchuda Insorn)

Analyst

REG. NO. 2-239-ก-0005

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. 2-239-ก-0004

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"Guidelines on sewage discharge from factory to central wastewater treatment plant in industrial estates".

4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

| | | | |
|----------------------|---|-----------------------|-------------------------------|
| CLIENT NAME | : Bangpa-in Cogeneration Limited | REQUEST SERVICE No. : | 1201/67 |
| SAMPLING BY | : SECOT Co., Ltd. | SAMPLING METHOD | : Grab |
| SAMPLING DATE | : 12/06/2024 | SAMPLING TIME | : 09:37 |
| RECEIVED DATE | : 13/06/2024 | ANALYTICAL DATE | : 13-20/06/2024 |
| REPORT DATE | : 21/06/2024 | SITE OPERATOR | : Mr.Sittichai Sawangwongchai |
| SAMPLE CONDITION | : Normal | FILE CODE | : 224045_WW_June |
| LOCATION DESCRIPTION | 2.บ่อดักของสับคุณภาพน้ำทิ้งก่อนระบายเข้าสู่ระบบ บำบัดน้ำเสียส่วนกลางของนิคมอุตสาหกรรมบางปะอิน | | |

| PARAMETER | UNIT | ANALYSIS METHODS | ND (non-detectable) | STATION | |
|------------------------|------|-----------------------|---------------------|---------|------------------------|
| | | | | 2 | STANDARD ^{1/} |
| Temperature | °C | 2550 B | < 0.5 | 32.3 | ≤ 45 |
| pH | - | 4500-H ⁺ B | < 0.10 | 7.45 | 5.5 - 9.0 |
| Color | ADMI | 2120 F | < 6.0 | 16.7 | ≤ 600 |
| Free Chlorine | mg/l | 4500-Cl G | < 0.03 | ND | ≤ 1 |
| Total Dissolved Solids | mg/l | 2540 C | < 50 | 367 | ≤ 3,000 |
| Total Suspended Solids | mg/l | 2540 D | < 5 | < 5 | ≤ 200 |
| Fat Oil & Grease | mg/l | 5520 B | < 0.50 | ND | ≤ 10 |
| BOD ₅ | mg/l | 5210 B | < 1.0 | < 1.0 | ≤ 500 |
| COD | mg/l | 5220 D | < 40.00 | < 40.00 | ≤ 750 |
| Copper (Cu) | mg/l | 3120 B | < 0.001 | < 0.02 | ≤ 2.0 |
| Zinc (Zn) | mg/l | 3120 B | < 0.003 | 0.06 | ≤ 5.0 |

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED. 2017 (AWWA, APHA, WEF)

(Miss Khemchuda Insorn)

Analyst

REG. NO. 2-239-ก-0005

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. 2-239-ก-0004

Remark : 1. Reported analysis refers to submitted sample only.

2. This report shall not be reproduced, except in full, without official approval.

3. ^{1/} Announcement of the Industrial Estate Authority of Thailand No. 76/2560 dated July 13, 2017

"Guidelines on sewage discharge from factory to central wastewater treatment plant in industrial estates".

4. - Not available.