Environmental Monitoring Report

For

30 MW Ground Mounted Solar Power Plant Project Connected to Thapyaywa Substation

(Operation Phase)

(April 2026 – September 2026)

(8th Time)

Proposed by

Clean Power Energy Co., Ltd.

Prepared by

E Guard Environmental Services

October, 2026

Table of Contents

List of Figure..... iii

List of Table.....iv

1. Introduction.....1

2. Environmental Quality Measurement and Results (April 2026 – September 2026)..6

2.1 Ambient Air Quality (April 2026 – September 2026).....6

2.1.1 Methodology for Air Quality.....6

2.1.2 Monitoring Location for Air Quality.....6

2.1.3 Measurement Results and Comparison for Air Quality.....7

2.2 Ambient Noise (April 2026 – September 2026).....12

2.2.1 Methodology for Noise.....12

2.2.2 Monitoring Location for Noise.....12

2.2.3 Measurement Results and Comparison for Noise.....14

2.3 Weather Condition (April 2026 – September 2026).....18

2.3.1 Wind Speed and Direction.....18

2.3.2 Significant natural or manmade disaster (April 2026 – September 2026).....19

2.4 Water Quality (April 2026 – September 2026).....19

2.4.1 Methodology for Water Quality.....19

2.4.2 Monitoring and Sampling Locations.....20

2.4.3 Water quality.....21

3. ENVIRONMENTAL MONITORING PLAN (April 2026 – September 2026).....25

3.1 Monitoring Records for Safety Plan (April 2026 – September 2026).....25

4. Records for CSR activities (April 2026 – September 2026).....29

5. Records for GRM (April 2026 – September 2026).....32

6. Records for Waste Disposal (April 2026 – September 2026).....34

Appendix 1 (Water Results) (April 2026 – September 2026) 36

List of Figure

Figure 2. 1 Air Quality Monitoring Locations of Thapyaywa Solar Power Project 7

Figure 2. 2 Air Quality Measuring during Operation Period 7

Figure 2. 3 PM Monitoring Results at Thapyaywa Solar Power Project 8

Figure 2. 4 Fluctuation of Air Pollutants during Dial Cycle at Thapyaywa Solar Power Project 8

Figure 2. 5 Noise Quality Monitoring Locations of Thapyaywa Solar Power Project 13

Figure 2. 6 Noise Quality Measuring during Operation Period 13

Figure 2. 7 Noise Level at Project Site 15

Figure 2. 8 Noise Level at Staff Housing 16

Figure 2. 9 Wind Speed and Wind Direction (Blowing From) at Project Site 18

Figure 2. 10 Wind Class Frequency Distribution at Project Site 18

Figure 2. 11 Equipment for Water Sampling 20

Figure 2. 12 Water Quality Sampling Locations of Thapyaywa Solar Power Project 20

Figure 2. 13 Water Quality Measuring during Operation Period 21

List of Table

Table 1. 1 Monitoring Study Team and their Responsibilities 2

Table 2. 1 Ambient Air Quality Measurement 6

Table 2. 2 Equipment used to measure ambient air and noise measurement 6

Table 2. 3 Locations of Environmental Quality sampling points 7

Table 2. 4 Air Monitoring Results (Project Site) 10

Table 2. 5 Air Emission Levels (Standard) 11

Table 2. 6 Observed Ambient Air Quality Results from Selected Points 11

Table 2. 7 Noise level monitoring 12

Table 2. 8 Equipment used to measure ambient noise measurement 12

Table 2. 9 Locations of Environmental Quality sampling points 13

Table 2. 10 Observed Values of Noise Level Measurement at Project Site 14

Table 2. 11 Observed Values of Noise Level Measurement at Staff Housing 15

Table 2. 12 National Environmental Quality (Emission) Guidelines Values for Noise Level 17

Table 2. 13 Observed Ambient Noise Level Results from Selected Points 17

Table 2. 14 Environmental Quality Parameters for Water quality 19

Table 2. 15 Locations of Environmental Quality sampling points 21

Table 2. 16 Ground Water Quality of Thapyaywa Solar Power Project 22

Table 2. 17 Wastewater Quality of Thapyaywa Solar Power Project 22

Table 2. 18 Monthly Wastewater Quality of Thapyaywa Solar Power Project (October) 23

Table 2. 19 Monthly Wastewater Quality of Thapyaywa Solar Power Project (November) .. 23

Table 2. 20 Monthly Wastewater Quality of Thapyaywa Solar Power Project (December) ... 23

Table 2. 21 Monthly Wastewater Quality of Thapyaywa Solar Power Project (January) 23

Table 2. 22 Monthly Wastewater Quality of Thapyaywa Solar Power Project (February) 23

Table 2. 23 Monthly Wastewater Quality of Thapyaywa Solar Power Project (March).....24
.....

CLEAN POWER ENERGY COMPANY LIMITED
503, 5th Floor, Hledan Center, Corner of Pyay Road & Hledan Road, Kamayut Township, Yangon Region, Myanmar.
Ph; +95 9 444805511 Email; cleanpowerenergycompany@gmail.com

စီမံကိန်းအဆိုပြုသူ၏ ကတိကဝတ်ပြုမှု

မန္တလေးတိုင်းဒေသကြီး၊ မိတ္ထီလာခရိုင်၊ သာစည်မြို့နယ်၊ သပြေဝကျေးရွာအုပ်စုတွင် Clean Power Co., Ltd. က ဆောင်ရွက်လျက်ရှိသည့် ၃၀ မဂ္ဂါဝပ် နေရောင်ခြည်စွမ်းအင်သုံး လျှပ်စစ်ဓာတ်အားပေးစက်ရုံ စီမံကိန်းနှင့်ပတ်သက်၍ လုပ်ငန်းလည်ပတ်သည့်ကာလနှင့် လုပ်ငန်းပိတ်သိမ်းပြီးကာလအထိ စောင့်ကြပ်ကြည့်ရှုမှု အစီအစဉ်များကို ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်တွင် ကတိကဝတ်ပြု ဖော်ပြချက်များနှင့်အညီ အကောင်အထည်ဖော် ဆောင်ရွက်မည်ဖြစ်ပါကြောင်းနှင့် အတည်ပြုပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်တွင် ဖော်ပြထားသည့်အစီအစဉ်ခွဲများအား ဆက်လက်လိုက်နာ အကောင်အထည်ဖော်မည်ဖြစ်ပါကြောင်း ကတိကဝတ်ပြု ဖော်ပြအပ်ပါသည်။

လေးစားမှုဖြင့်

ဇော်ဝင်း
Managing Director
Clean Power Energy Co.,Ltd

E GUARD ENVIRONMENTAL SERVICES
No. 145 (A2-3), Thiri Mingalar Street (သီရိမင်္ဂလာ လမ်းသွယ်),
Ward No. (4), 8 Mile-Pyay Road, Mayangone Township, 11062, Yangon,
the Republic of the Union of Myanmar
Ph: (+95) 1 9667757, (+95) 1 8658422, (+95) 9 797005151
www.eguardservices.com; info@eguardservices.com

ပတ်ဝန်းကျင်ဆိုင်ရာ အကြံပေးအဖွဲ့၏ ကတိကဝတ်ပြုမှု

မန္တလေးတိုင်းဒေသကြီး၊ မိတ္ထီလာခရိုင်၊ သာစည်မြို့နယ်၊ သပြေဝကျေးရွာအုပ်စုတွင် Clean Power Co., Ltd. က ဆောင်ရွက်လျက်ရှိသည့် ၃၀ မဂ္ဂါဝပ် နေရောင်ခြည် စွမ်းအင်သုံး လျှပ်စစ်ဓာတ်အား ထုတ်လုပ်ရေး လုပ်ငန်း စီမံကိန်း၏ အဋ္ဌမအကြိမ် စောင့်ကြပ်ကြည့်ရှုမှုအစီရင်ခံစာအား တာဝန်ယူ ရေးသားပြုစုသည့် ပတ်ဝန်းကျင် ဆိုင်ရာ တွဲဖက်အကြံပေး ပုဂ္ဂိုလ်မှ အောက်ပါ တို့ကို ကတိပြုအပ်ပါသည်-

(က) EMR မှာ အဆိုပြုစီမံကိန်း၏ အတည်ပြု EMP တွင်ဖော်ပြထားသည့် စောင့်ကြပ်ကြည့်ရှုမှု အစီအစဉ် များအား တိကျစွာလိုက်နာ၍ရေးသားပြုစုထားပါကြောင်း၊

(ခ) လိုအပ်သည့်ကိန်းဂဏာန်းအချက်အလက်များအား ၂၀၂၆ ခုနှစ် မေလအတွင်း စီမံကိန်း တည်နေရာသို့ ကွင်း ဆင်း၍ တိုင်းတာမှတ်တမ်းယူခြင်း၊ နမူနာများရယူ၍ ဓာတ်ခွဲခန်းသို့ ပေးပို့စမ်းသပ်ခြင်း နည်းလမ်းများ ဖြင့် ကောက်ယူထားပါကြောင်း၊

(ဂ) ကိန်းဂဏာန်းအချက်အလက်ကောက်ယူခြင်းအား သင့်တော်သည့်ကိရိယာနှင့် မှန်ကန်သည့် နည်းလမ်း များ အသုံးပြု၍ ဆောင်ရွက်ထားပါကြောင်း၊

(ဃ) EMR အား ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်း၊ အပိုဒ် (၁၀၉) တွင် ပြဋ္ဌာန်းထား ချက်များနှင့်အညီ လိုက်နာဆောင်ရွက်ပြီးလေ့လာပြုစု ထားပါကြောင်း၊

(င) EMR အတွက်လေ့လာမှုနှင့် အစီရင်ခံစာရေးသားပြုစုမှုအား တတိယအဖွဲ့အစည်း၏ ကျင့်ဝတ်အပေါ် အ ခြေတည်၍ ကောင်းမွန်မှန်ကန်စွာရေးသားပြုစုထားပါကြောင်း။



အောင်မိုးဦး
ပတ်ဝန်းကျင်ဆိုင်ရာ တွဲဖက်အကြံပေးပုဂ္ဂိုလ်
(EIA/AC 010/2023)

www.facebook.com/EGuardmm/

1. Introduction

This Environmental Management Plan (EMP) report is for the 30 MW Ground Mounted Solar Power Plant Project Connected to Thapyaywa Substation, which is proposed by Clean Power Energy Co., Ltd. The project proponent, Clean Power Energy Co., Ltd., is formed by the consortium with these two members: Gold Energy Co., Ltd. (95 share percentage) and Universal Energy Co., Ltd. (5 share percentage) for the proposed project. The project proponent won tender from the Ministry of Electricity and Energy and obtained permits for construction and electricity generation from solar energy of the proposed project. The proposed project will contribute to fulfill a goal for achieving universal access to electricity by 2030 as per Myanmar National Electrification Plan (NEP). Myanmar has one of the lowest rates of electrification in Southeast Asia; almost 50 percent of households in Myanmar have access to electricity and electricity consumption per capita is among the lowest in the world, therefore, development of electricity generation projects, especially for electricity generation from renewable energy projects are urgently required in Myanmar.

The proposed project is located at Thapyaywa Village Tract, Thazi Township, Meiktilar District, Mandalay Region, Myanmar. Its coordinate points are 20° 58' 39.33" N, 96° 0' 45.20" E and the average altitude of the site is 167 m. The construction of the proposed project includes box transformer foundation, supporting bracket and foundation of solar power station, multiple-use building and outdoor equipment foundation construction as well as construction and stringing of 33 kV overhead transmission line. The construction processes of the proposed project will take about 6 months and then operation processes to generate electricity from solar energy and distribute to the Thapyaywa Substation will take 20 years (lifespan of the project). The total capacity of capacity of AC side of the proposed project is 31.45 MW and DC side is 37.27 MW, including five photovoltaic power generation units. The photovoltaic power station is connected to the 33 kV bus side of the 230 kV main transformer in the Thapyaywa Substation. Total land area of solar power plant is 133.44 acres (54 hectares) and the annual average horizontal global radiation and diffuse radiation are 1,850.5 kWh/m2 and 833.69 kWh/m2 respectively, therefore, annual total solar radiation level of the project site is rich. The direct radiation amount takes a large proportion of the total radiation and the project site has a good development prospect, where is suitable for the construction of large-scale grid connected photovoltaic power station.

Environmental quality monitoring team included U Aung Myint Myat, U Aung Moe Oo, U Han Lin Zaw and U Htet Aung Hlaing. The environmental quality monitoring report includes air, water and noise. Air quality monitoring was carried out in one location as source (Project Site) and water quality test was carried out in two places as ground water (GW- project site) and wastewater (WW- Outlet of wastewater cannel from the project site). Noise is also measured in two locations as source (Project Site) and receptor (staff housing). Most of the environmental monitoring results (air, water and noise) are within the guidelines.

Table 1. 1 Monitoring Study Team and their Responsibilities

Sr.	Name	Position	License No.	Expertise
1	U Aung Myint Myat	Team Member	EIA-C 008/2023	1. Ecology and Biodiversity, 2. Noise and Vibration
2	U Aung Moe Oo	Deputy Team Leader	EIA-AC 010/2023	1. Air Pollution Monitoring, 2. Solid Waste and Hazardous Waste Management
3	U Aung Myint Myat	Supporting Team Member	-	1. Air Pollution Prevention and Control 2. Water Pollution Prevention, Control, Monitoring and Prediction of Impacts
4	U Aung Moe Oo	Supporting Team Member	-	1. Air Pollution Prevention and Control 2. Water Pollution Prevention, Control, Monitoring and Prediction of Impacts
5	U Han Lin Zaw	Supporting Team Member	-	1. Noise and Vibration
6	U Htet Aung Hlaing	Supporting Team Member	-	1. Environmental Quality Surveyor 2. Air Pollution Monitoring

Environmental Monitoring Plan for EMP Approved Report

C.	Operation Phase					
1.	Air quality	PM_{10}, $PM_{2.5}$, CO, CO_2, SO_2, NO_2	Twice a year	In front of power station	Already included in cost estimation for EMP	Clean Power Energy Co., Ltd.

171

Prepared by E Guard Environmental Services Co., Ltd.

No.	Environmental Concerns	Parameters	Frequency	Location	Estimated Cost	Responsible Party
2.	Groundwater quality	pH, Color (true), Turbidity, Conductivity, Total Alkalinity, Iron, Chloride, Manganese, Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Oil and Grease, Total Coliform Bacteria, Total Nitrogen, Total Phosphorus, Total Suspended Solids	Twice a year	An outlet from a tube well within the project site	Already included in cost estimation for EMP	Clean Power Energy Co., Ltd.
3.	Discharged water quality	pH, Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Oil and Grease, Total Coliform Bacteria, Total Nitrogen, Total Phosphorus, Total Suspended Solids	Twice a year	At final outlet of drainage system	Already included in cost estimation for EMP	Clean Power Energy Co., Ltd.
4.	Discharged water quality	pH, Conductivity, Total Dissolved Solids, Temperature	Monthly	At final outlet of drainage system	Already included in cost estimation for EMP	Clean Power Energy Co., Ltd.
5.	Noise level	Equivalent Noise Level dB (A)	Twice a year	In front of power station and staff quarter	Already included in cost estimation for EMP	Clean Power Energy Co., Ltd.
6.	Waste Quantity	Amount of domestic solid waste and hazardous waste disposal	Quarterly	All operation area	Already included in cost estimation for EMP	Clean Power Energy Co., Ltd.

172

Prepared by E Guard Environmental Services Co., Ltd.

No.	Environmental Concerns	Parameters	Frequency	Location	Estimated Cost	Responsible Party
7.	Environmental auditing	Assess the compliances with this EMP as well as laws, rules, policies and regulations	Once a year	At the project office	Already included in cost estimation for EMP	Clean Power Energy Co., Ltd.

ECC Letter of Thapyaywa Solar Power Project



ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်အစိုးရ
သယံဇာတနှင့်သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာန
ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဆိုင်ရာလိုက်နာဆောင်ရွက်မှု သက်သေခံလက်မှတ်
(Environmental Compliance Certificate – ECC)

သက်သေခံလက်မှတ်အမှတ်။ ECC (၁၁၆) ရက်စွဲ ။ ၂ ဝ၂ ၃ ခုနှစ် မတ်လ ၃ ၁ ရက်

၁။ သယံဇာတနှင့် သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာနသည် ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဥပဒေ (ပြည်ထောင်စုလွှတ်တော် ဥပဒေအမှတ် ၉/၂၀၁၂) နှင့် ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာလုပ်ထုံးလုပ်နည်း (အမိန့်ကြော်ငြာစာအမှတ် ၆၁၆/၂၀၁၅) တို့အရ နောက်ဆက်တွဲ(က) တွင် ဖော်ပြထားသော အဆိုပြုစီမံကိန်းအား နောက်ဆက်တွဲ(ခ) ပါ စည်းကမ်းချက်များကို လိုက်နာဆောင်ရွက်စေလျက် ဤပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဆိုင်ရာ လိုက်နာဆောင်ရွက်မှု သက်သေခံလက်မှတ် (Environmental Compliance Certificate – ECC) ကို ထုတ်ပေးလိုက်သည်-

(က) **စီမံကိန်းအဆိုပြုသူ** - ဦးဇော်ဝင်း
မန်နေဂျင်းဒါရိုက်တာ
Clean Power Energy ကုမ္ပဏီလီမိတက်

(ခ) **ဆက်သွယ်ရန် လိပ်စာ** - အမှတ် (၅၀၃)၊ ပြည်လမ်းနှင့်
လှည်းတန်းလမ်းထောင့်၊ လှည်းတန်းစင်တာ၊
ကမာရွတ်မြို့နယ်၊ ရန်ကုန်တိုင်းဒေသကြီး၊
၀၉- ၂၅၄၅၄၂၉၇၊ ၀၉- ၆၉၂၀၂၀၉၅၀
u.zaw.win123@gmail.com

(ဂ) **စီမံကိန်းအမျိုးအစား** - နေရောင်ခြည်စွမ်းအင်သုံး ဓာတ်အားပေးစက်ရုံ

(ဃ) **စီမံကိန်းကာလ** - အခွင့်အမိန့်အရ အဖွဲ့အစည်းက ခွင့်ပြုကာလ

(င) **စီမံကိန်း၏ အရွယ်အစား** - ၃၀ မီဂါဝပ်

(စ) **စီမံကိန်းတည်နေရာ** - မန္တလေးတိုင်းဒေသကြီး၊ မိတ္ထီလာခရိုင်၊ သာစည်မြို့နယ်၊ သပြေဝကျေးရွာအုပ်စု

(ဆ) **ECC သက်တမ်း** - (၅)နှစ်
စတင်ထုတ်ပေးရက် - ၁၉-၁၂-၂၀၂၂
သက်တမ်းကုန်ဆုံးရက် - ၁၈-၁၂-၂၀၂၇

(ဇ) **အတည်ပြုအစီရင်ခံစာ** - လျှပ်စစ်စွမ်းအားဝန်ကြီးဌာန၊ လျှပ်စစ်ဓာတ်အား ထုတ်လုပ်ရေးလုပ်ငန်း၏ ၂၇-၇-၂၀၂၂ ရက်စွဲပါ စာအမှတ်၊ ၃၃၉၂/လစထလ/ပစရအ/စ-၅၂/၂၀၂၂ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်

J

စည်းကမ်းချက်များသတ်မှတ်ခြင်း

၂။ အောက်ဖော်ပြပါ ရည်ရွယ်ချက်များ ရရှိနိုင်ရေးအတွက် ဤသက်သေခံလက်မှတ်၏ နောက်ဆက်တွဲပါ စည်းကမ်းချက်များကို လိုက်နာဆောင်ရွက်ရန် သတ်မှတ်ထားခြင်းဖြစ်ပါသည်-

(က) ပတ်ဝန်းကျင်နှင့် လူမှုဆိုင်ရာ ဆိုးကျိုးသက်ရောက်မှုများကို ကြိုတင်ကာကွယ်ရေး၊ အနိမ့်ဆုံးဖြစ်စေရေးနှင့် ထိခိုက်မှုများကို ပြန်လည်ကုစားရေး ဆောင်ရွက်ပေးရန်၊

(ခ) စီမံကိန်းအဆိုပြုသူ၏ စီမံကိန်းဆိုင်ရာ ကတိကဝတ်များနှင့် လိုက်နာထမ်းဆောင်ရမည့် တာဝန်များကို သတ်မှတ်ရန်၊

(ဂ) လက်ခံနိုင်သော ပတ်ဝန်းကျင်အရည်အသွေး ဖြစ်စေရေးအတွက် စံချိန်စံညွှန်းများနှင့် အရည်အသွေးတိုင်းတာရေးနည်းလမ်းများ သတ်မှတ်ရန်၊

(ဃ) စောင့်ကြပ်ကြည့်ရှုခြင်းနှင့် အစီရင်ခံခြင်းတို့ကို ပုံမှန်ဆောင်ရွက်စေရန်၊

(င) စီမံကိန်းတွင် စဉ်ဆက်မပြတ် ဆောင်ရွက်သွားရမည့် ပတ်ဝန်းကျင်စီမံခန့်ခွဲရေး အစီအမံတစ်ရပ်ကို ရေးဆွဲဆောင်ရွက်ရန်။

(လှမောင်သိန်း)
အမြဲတမ်းအတွင်းဝန်
သယံဇာတနှင့်သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာန

2. Environmental Quality Measurement and Results (April 2026 – September 2026)

Baseline environmental parameters and sampling locations were defined according to the objectives for environmental impact assessment, and monitoring purposes. Locations for sampling and analysis of water quality, ambient air quality and noise level of the project site were identified by e Guard Environmental Services Co., Ltd.

2.1 Ambient Air Quality (April 2026 – September 2026)

2.1.1 Methodology for Air Quality

The emissions of dust particles and gases were measured for 24hrs continuously at the selected sites using the Environmental Perimeter Air Station (EPAS). The results were compared with National Environmental Quality (Emission) Guidelines NEQEG, American Conference of Governmental Industrial Hygienists (ACGIH) and National Ambient Air Quality Standards (NAAQS). EPAS provides direct readings in real time with data-logging capabilities. Air quality is composed of dust and gas emissions of the ambient air.

Table 2. 1 Ambient Air Quality Measurement

Ambient Air Quality (1 locations)	
Gas Emission	CO, CO_2, SO_2, NO_2
Dust Emission	PM_{10}, $PM_{2.5}$

Table 2. 2 Equipment used to measure ambient air and noise measurement

Micro air quality monitoring system (YF-IAQM-V1) CO, CO_2, NO_2, O_3, SO_2, VOC, H_2S, PM_{10}, $PM_{2.5}$, TSP, Temperature, Humidity, Wind Speed, Wind Direction, Noise	

2.1.2 Monitoring Location for Air Quality

Sampling locations were confirmed by environmental specialist on site before doing the sampling. Air quality was monitored at the selected one location (Thapyaywa solar power project site (source) that can get results of the existing ambient air quality.



Figure 2. 1 Air Quality Monitoring Locations of Thapyaywa Solar Power Project

Table 2. 3 Locations of Environmental Quality sampling points

Locations No.	Points	Coordinate	Locations
Ambient Air Quality Monitoring Location			
1.	AQ	Lat - 20°58'30.73"N, Long - 96° 0'34.17"E	Project Site

Figure 2. 2 Air Quality Measuring during Operation Period



Air quality measuring
at Thapyaywa Solar Power Project
05.05.2026 - 06.05.2026
(Project Site)

2.1.3 Measurement Results and Comparison for Air Quality

The air quality monitoring was done at selected locations from 5th to 6th May 2026. During this survey, these parameters were measured with adequate devices named Environmental Perimeter Air Station (EPAS) viz; Particulate Matters (PM_{10} and $PM_{2.5}$) and gases CO_2, CO,

SO_2 and NO_2 via 24-hour basis. The results and guidelines of all emission pollutants are shown in table.

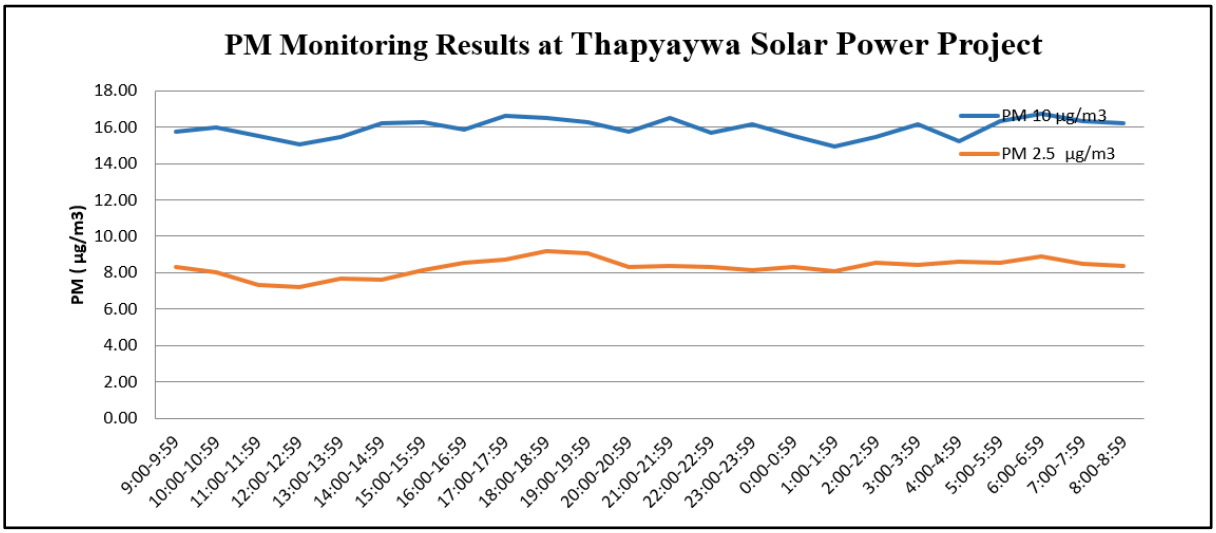

Figure 2. 3 PM Monitoring Results at Thapyaywa Solar Power Project

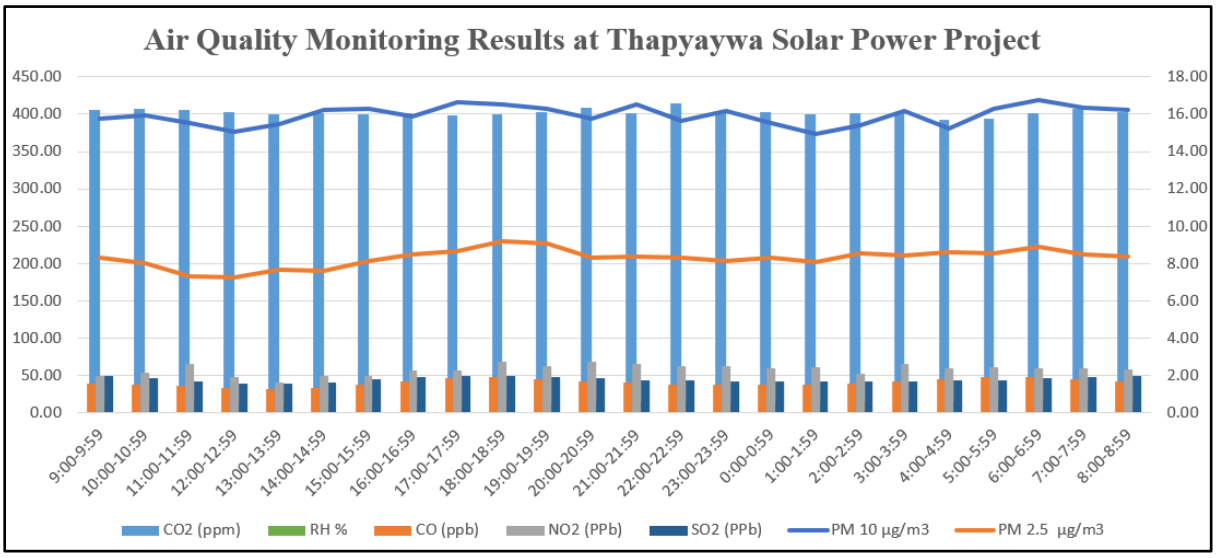

Figure 2. 4 Fluctuation of Air Pollutants during Dial Cycle at Thapyaywa Solar Power Project

Particulate matters (PM_{10} and $PM_{2.5}$) results are within guideline values as shown in table. Atmospheric particulate matters such as PM_{10} and $PM_{2.5}$ have their ability to reach the deepest part of lungs and so affect respiratory process. In this air quality survey of the project site, the surveyed results of these particulate matters gathered from EPAS. The results with one-hour intervals are shown in the following table.

Sulfur Dioxide (SO_2) is generated from combustion of fuels such as oil and coal, and as by-product from some chemical production or wastewater treatment processes. On-road and off-road vehicles are also emission sources of SO_2. SO_2 irritates the respiratory tract, injures lung tissues and reduces visibility and level of sunlight. The emission can be controlled by implementation of manufacturer recommended engine maintenance programs, good driving

practices, installing and maintaining emissions control devices, and implementing a regular vehicle maintenance and repair program.

Nitrogen Oxides (NO_X) in the ambient air consist of nitric oxide (NO), nitrogen dioxide (NO_2) and nitrous oxide (N_2O). NO_2 is formed by chemical reaction of NO and ozone. The main sources of NO_2 are combustion of fuel and on-road and off-road vehicles. NO_2 decreases lung function and resistance to infection. The gas emission can be monitored by combustion modification, flue gas recirculation, water/ steam injection and the same measures for SO_2 reduction.

Likewise, **Carbon Monoxide (CO) and Carbon dioxide (CO_2)** have the same emission sources and mitigation measures for SO_2 and NO_2. They are poisonous gases and cause damage to the respiratory organ. Guidelines 2013 adopted threshold limit values of CO_2 are 5,000 ppm for 8-hour, time-weighted average. Thus, it can be concluded that the existing CO_2 level is acceptable for human health.

Detail results and variation patterns with one-hour interval of pollutants are shown in tables and figures below. Results of average, peak and minimum of a day are calculated in the table.

Table 2. 4 Air Monitoring Results (Project Site)

Date	Time		CO_2 (ppm)	CO (ppb)	NO_2 (ppb)	PM_{10} µg/m^3	$PM_{2.5}$ µg/m^3	RH%	SO_2 (ppb)
05.05.2026	9:00-9:59	Average	405.25	1.59	2.01	15.76	8.29	15.05	1.99
05.05.2026	10:00-10:59	Average	407.37	1.51	2.19	15.97	8.02	15.05	1.88
05.05.2026	11:00-11:59	Average	406.02	1.44	2.65	15.53	7.32	14.97	1.72
05.05.2026	12:00-12:59	Average	403.05	1.35	1.93	15.09	7.24	14.96	1.58
05.05.2026	13:00-13:59	Average	399.38	1.27	1.62	15.45	7.69	14.98	1.56
05.05.2026	14:00-14:59	Average	401.51	1.33	2.01	16.24	7.60	14.84	1.65
05.05.2026	15:00-15:59	Average	400.35	1.52	2.00	16.30	8.16	15.09	1.80
05.05.2026	16:00-16:59	Average	401.19	1.72	2.28	15.89	8.52	14.95	1.93
05.05.2026	17:00-17:59	Average	398.35	1.88	2.26	16.65	8.70	15.26	2.01
05.05.2026	18:00-18:59	Average	399.67	1.91	2.74	16.52	9.17	15.28	1.99
05.05.2026	19:00-19:59	Average	402.78	1.81	2.49	16.31	9.06	15.11	1.95
05.05.2026	20:00-20:59	Average	409.35	1.69	2.73	15.77	8.31	15.19	1.84
05.05.2026	21:00-21:59	Average	402.06	1.61	2.62	16.54	8.38	15.03	1.77
05.05.2026	22:00-22:59	Average	415.14	1.52	2.49	15.67	8.34	15.11	1.74
05.05.2026	23:00-23:59	Average	404.90	1.50	2.51	16.17	8.15	15.09	1.72
06.05.2026	0:00-0:59	Average	402.97	1.50	2.42	15.55	8.31	14.94	1.71
06.05.2026	1:00-1:59	Average	399.72	1.54	2.43	14.95	8.11	15.07	1.70
06.05.2026	2:00-2:59	Average	401.04	1.58	2.12	15.44	8.53	15.08	1.71
06.05.2026	3:00-3:59	Average	402.24	1.69	2.65	16.16	8.44	15.23	1.70
06.05.2026	4:00-4:59	Average	392.58	1.80	2.41	15.23	8.61	15.16	1.72
06.05.2026	5:00-5:59	Average	394.25	1.91	2.46	16.32	8.53	15.33	1.77
06.05.2026	6:00-6:59	Average	401.52	1.90	2.40	16.76	8.91	15.31	1.86
06.05.2026	7:00-7:59	Average	406.62	1.84	2.38	16.33	8.48	15.24	1.94
06.05.2026	8:00-8:59	Average	402.61	1.68	2.32	16.23	8.40	15.10	2.00
Average			**402.50**	**1.63**	**2.34**	**15.95**	**8.30**	**15.10**	**1.80**
1 hour Minimum			392.58	1.27	1.62	14.95	7.24	14.84	1.56

1 hour Maximum	415.14	1.91	2.74	16.76	9.17	15.33	2.01

Table 2. 5 Air Emission Levels (Standard)

No.	Parameter	Unit	Maximum Concentration	
			National	Average Period
1.	Carbon monoxide	mg/m^3	9	8-hour
2.	Carbon dioxide	ppm	5000	8-hour
3.	Sulfur dioxide	$\mu g/m^3$	20 500	24-hour 10-minute
4.	Nitrogen dioxide	$\mu g/m^3$	40 200	1 year 1 hour
5.	Particulate matter PM_{10}	$\mu g/m^3$	20 50	1-year 24-hour
6.	Particulate matter $PM_{2.5}$	$\mu g/m^3$	10 25	1-year 24-hour

Source: Myanmar National Environmental Quality (Emission) Guidelines, National Ambient Air Quality Standards (NAAQS), American Conference of Governmental Industrial Hygienists (ACGIH).

Detail results with one-hour interval of pollutants are shown in **Table 2. 4**. The average, peak and minimum values of results per day are calculated. All results are under the Myanmar National Environmental Quality (emission) Guidelines.

Table 2. 6 Observed Ambient Air Quality Results from Selected Points

Parameters	8th Time Monitoring Results	Previous Monitoring Results	EMP Baseline Results	NEQG Guidelines Value	ACGIH Guidelines Value	NAAQS Guidelines Value	Unit	Averaging Period
PM_{10}	15.95	14.48	27.11	50	-	-	$\mu g/m^3$	24hrs
$PM_{2.5}$	8.30	7.53	9.00	25	-	-	$\mu g/m^3$	24hrs
CO	0.0017	0.0022	0.01	-	-	9	ppm	8hrs
CO_2	404.40	393.35	496.32	-	5000	-	ppm	8hrs
SO_2	4.72	6.28	3.92	20	-	-	$\mu g/m^3$	24hrs
NO_2	5.16	6.18	58.97	200	-	-	$\mu g/m^3$	1hrs

2.2 Ambient Noise (April 2026 – September 2026)

2.2.1 Methodology for Noise

Noise level LAeq (dBA) will be measured at the selected locations that can reflect the exposure of the nearest local community and sensitive locations. Duration and frequency were measured for 24hrs continuously at the selected site using the Sound Pressure Level Meter.

The monitoring procedures, data analysis and interpretation were carried out in accordance with the instrument's manufacture and National Environmental Quality (Emission) Guidelines, World Health Organization (WHO) and International Finance Corporation (IFC) guidelines in order to be in line with Environmental Conservation Department, Ministry of Natural Resources and Environment Conservation (MONREC). "National Environmental Quality (Emission) Guidelines" for Myanmar was also presented the value of noise level as LAeq (dBA).

Table 2. 7 Noise level monitoring

Noise monitoring (2 locations)	
Noise Emission	LAeq (dBA) (1hrs, 24 hrs.)

Table 2. 8 Equipment used to measure ambient noise measurement

Digital Sound Level Meter Noise	
Micro air quality monitoring system (YF-IAQM-V1) CO, CO_2, NO_2, O_3, SO_2, VOC, H_2S, PM_{10}, $PM_{2.5}$, TSP, Temperature, Humidity, Wind Speed, Wind Direction, Noise	

2.2.2 Monitoring Location for Noise

Sampling locations were confirmed by environmental specialist on site before doing the sampling. Noise quality was monitored at the selected two locations as source as NQ 1- Project Site and NQ 2- staff housing that can get results of the existing noise.



Figure 2. 5 Noise Quality Monitoring Locations of Thapyaywa Solar Power Project

Table 2. 9 Locations of Environmental Quality sampling points

Locations No.	Points	Coordinate	Locations
Noise Monitoring Location			
1.	N1	Lat - 20°58'30.73"N, Long - 96° 0'34.17"E	Project Site
2.	N2	Lat - 20°58'36.06"N, Long - 96° 0'45.24"E	Project Site (Receptor)

Figure 2. 6 Noise Quality Measuring during Operation Period

	Noise quality measuring at Thapyaywa Solar Power Project 05.05.2026 - 06.05.2026 (Project Site)

	Noise quality measuring at Thapyaywa Solar Power Project 05.05.2026 - 06.05.2026 (Staff Housing)

2.2.3 Measurement Results and Comparison for Noise

Ambient noise level for the proposed project was measured with Digital Sound Level Meter at the project site. The noise level measurement is conducted at Thapyaywa solar power project points: these points are near the air monitoring points and staff housing on 5th to 6th May 2026. Measuring period is 24 hours continuously. The observed values are described in Table 2. 10 and Table 2. 11 and the following figures are noise level measurement at the proposed project.

Table 2. 10 Observed Values of Noise Level Measurement at Project Site

No.	Date	Time	Observed Mean Value (Source)	Weight	Day/Night	Average
1	06.05.2026	7:00:31-7:59:31	67.60	A	Day	50.90
2	06.05.2026	8:00:31-8:59:31	68.87	A	Day	
3	05.05.2026	9:00:31-9:59:31	56.70	A	Day	
4	05.05.2026	10:00:31-10:59:31	48.47	A	Day	
5	05.05.2026	11:00:31-11:59:31	48.67	A	Day	
6	05.05.2026	12:00:31-12:59:31	48.64	A	Day	
7	05.05.2026	13:00:31-13:59:31	48.51	A	Day	
8	05.05.2026	14:00:31-14:59:31	48.83	A	Day	
9	05.05.2026	15:00:31-15:59:31	49.10	A	Day	
10	05.05.2026	16:00:31-16:59:31	48.99	A	Day	
11	05.05.2026	17:00:31-17:59:31	46.76	A	Day	
12	05.05.2026	18:00:31-18:59:31	45.84	A	Day	
13	05.05.2026	19:00:31-19:59:31	45.67	A	Day	
14	05.05.2026	20:00:31-20:59:31	45.43	A	Day	
15	05.05.2026	21:00:31-21:59:31	45.48	A	Day	
16	05.05.2026	22:00:31-22:59:31	45.66	A	Night	46.01
17	05.05.2026	23:00:31-23:59:31	45.68	A	Night	
18	06.05.2026	0:00:31-0:59:31	45.59	A	Night	

No.	Date	Time	Observed Mean Value (Source)	Weight	Day/Night	Average
19	06.05.2026	1:00:31-1:59:31	45.84	A	Night	
20	06.05.2026	2:00:31-2:59:31	46.91	A	Night	
21	06.05.2026	3:00:31-3:59:31	46.92	A	Night	
22	06.05.2026	4:00:31-4:59:31	46.72	A	Night	
23	06.05.2026	5:00:31-5:59:31	45.42	A	Night	
24	06.05.2026	6:00:31-6:59:31	45.32	A	Night	
Average			**49.07**			

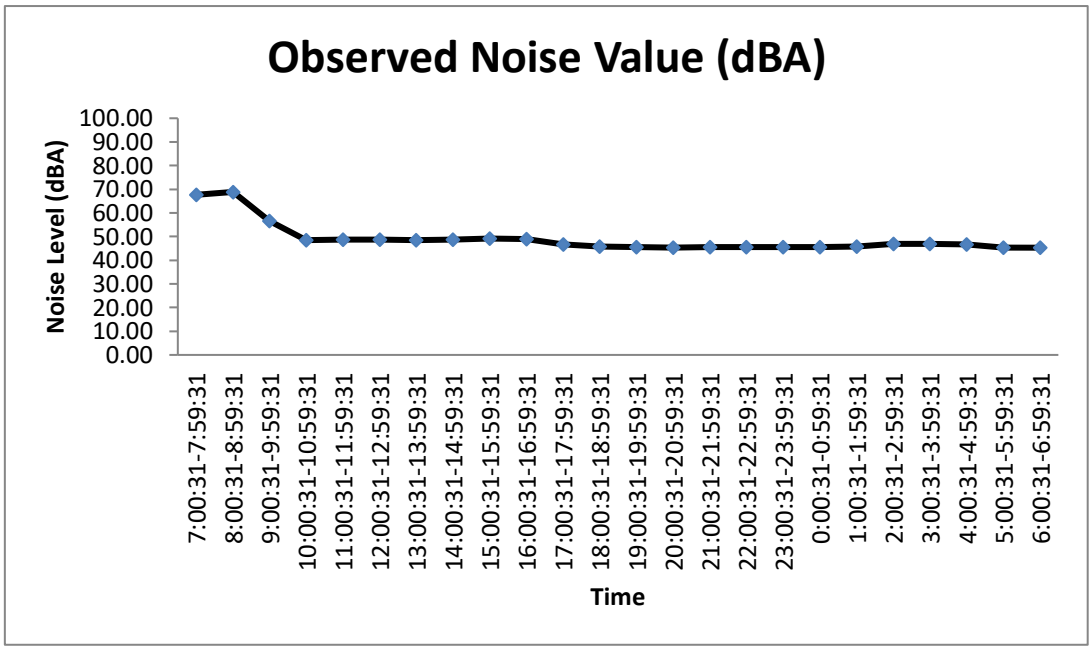

Figure 2. 7 Noise Level at Project Site

Table 2. 11 Observed Values of Noise Level Measurement at Staff Housing

No.	Date	Time	Observed Mean Value (Source)	Weight	Day/Night	Average
1	06.05.2026	7:00:31-7:59:31	55.31	A	Day	
2	06.05.2026	8:00:31-8:59:31	59.76	A	Day	
3	05.05.2026	9:00:31-9:59:31	52.02	A	Day	
4	05.05.2026	10:00:31-10:59:31	52.66	A	Day	
5	05.05.2026	11:00:31-11:59:31	51.63	A	Day	51.96
6	05.05.2026	12:00:31-12:59:31	52.30	A	Day	
7	05.05.2026	13:00:31-13:59:31	54.55	A	Day	
8	05.05.2026	14:00:31-14:59:31	52.05	A	Day	
9	05.05.2026	15:00:31-15:59:31	52.48	A	Day	

No.	Date	Time	Observed Mean Value (Source)	Weight	Day/Night	Average
10	05.05.2026	16:00:31-16:59:31	54.20	A	Day	
11	05.05.2026	17:00:31-17:59:31	49.30	A	Day	
12	05.05.2026	18:00:31-18:59:31	49.61	A	Day	
13	05.05.2026	19:00:31-19:59:31	52.16	A	Day	
14	05.05.2026	20:00:31-20:59:31	45.86	A	Day	
15	05.05.2026	21:00:31-21:59:31	45.43	A	Day	
16	05.05.2026	22:00:31-22:59:31	49.15	A	Night	
17	05.05.2026	23:00:31-23:59:31	47.29	A	Night	
18	06.05.2026	0:00:31-0:59:31	45.21	A	Night	
19	06.05.2026	1:00:31-1:59:31	48.22	A	Night	
20	06.05.2026	2:00:31-2:59:31	50.66	A	Night	50.55
21	06.05.2026	3:00:31-3:59:31	49.91	A	Night	
22	06.05.2026	4:00:31-4:59:31	53.22	A	Night	
23	06.05.2026	5:00:31-5:59:31	56.10	A	Night	
24	06.05.2026	6:00:31-6:59:31	55.15	A	Night	
Average			**51.43**			

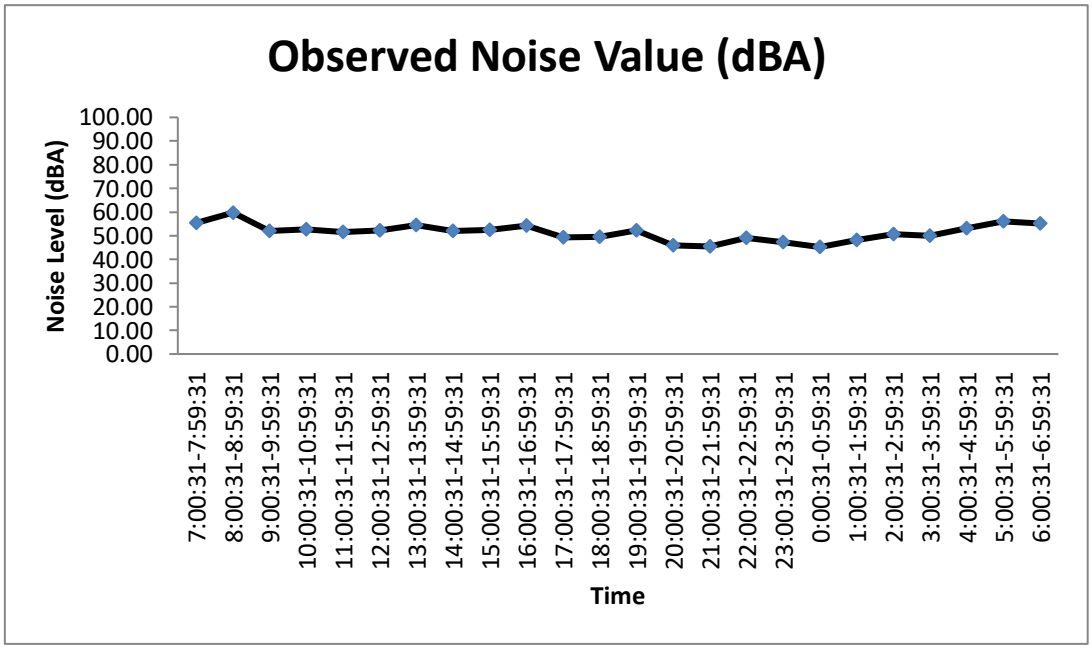

Figure 2. 8 Noise Level at Staff Housing

Table 2. 12 National Environmental Quality (Emission) Guidelines Values for Noise Level

Receptor	One Hour LAeq (dBA)	
	Daytime 07:00 - 22:00 (10:00 - 22:00 for Public Holidays)	Nighttime 22:00 - 07:00 (22:00 - 10:00 for Public Holidays)
Residential, institutional, educational	55	45
Industrial, commercial	70	70

The observed values are compared with the National Environmental Quality (Emission) Guidelines as shown in Table 2. 13 which indicates the separate level for residential and industrial points.

Table 2. 13 Observed Ambient Noise Level Results from Selected Points

Point	Thapyaywa Solar Power Project	
	Day Time	Nighttime
8th time Monitoring Results Project Site (Source)	**50.90**	**46.01**
Previous Monitoring Result (At Source)	**54.54**	**45.92**
EMP Baseline Results (Point 1)	**49.11**	**42.40**
Guideline Values for Industrial	**70**	**70**
8th time Monitoring Results Staff Housing (Receptor)	**51.96**	**50.55**
Previous Monitoring Result (At Receptor)	**54.21**	**50.60**
EMP Baseline Results (Point 2)	**40.20**	**43.08**
Guideline Values for Residential	**55**	**45**

The observed values of the proposed project for daytime at Thapyaywa Solar Power Project Site (source) and Staff Housing (Receptor) are 50.90 dB (A) and 51.96 dB (A). The observed values of the proposed project for nighttime at Thapyaywa Solar Power Project Site (source) and Staff Housing (Receptor) are 46.01 dB (A) and 50.55 dB (A). So, the observed daytime value and nighttime value for Thapyaywa Solar Power Project Site (source) are lower than the guideline value. But the observed nighttime value for staff housing (receptor) is higher than the guideline value because monitoring location is near Meikhtila – Hanza Village Road, this

road is passing through more motorcycle and car and dog barking and bird chirping and raining at the time of measurement.

2.3 Weather Condition (April 2026 – September 2026)

2.3.1 Wind Speed and Direction

The following figures describe the wind speed and wind direction of the proposed project site (Thapyaywa solar power project Site at source) on 5th to 6th May 2026 respectively. According to the data, the wind direction is following Figure 2. 9 and Figure 2. 10.

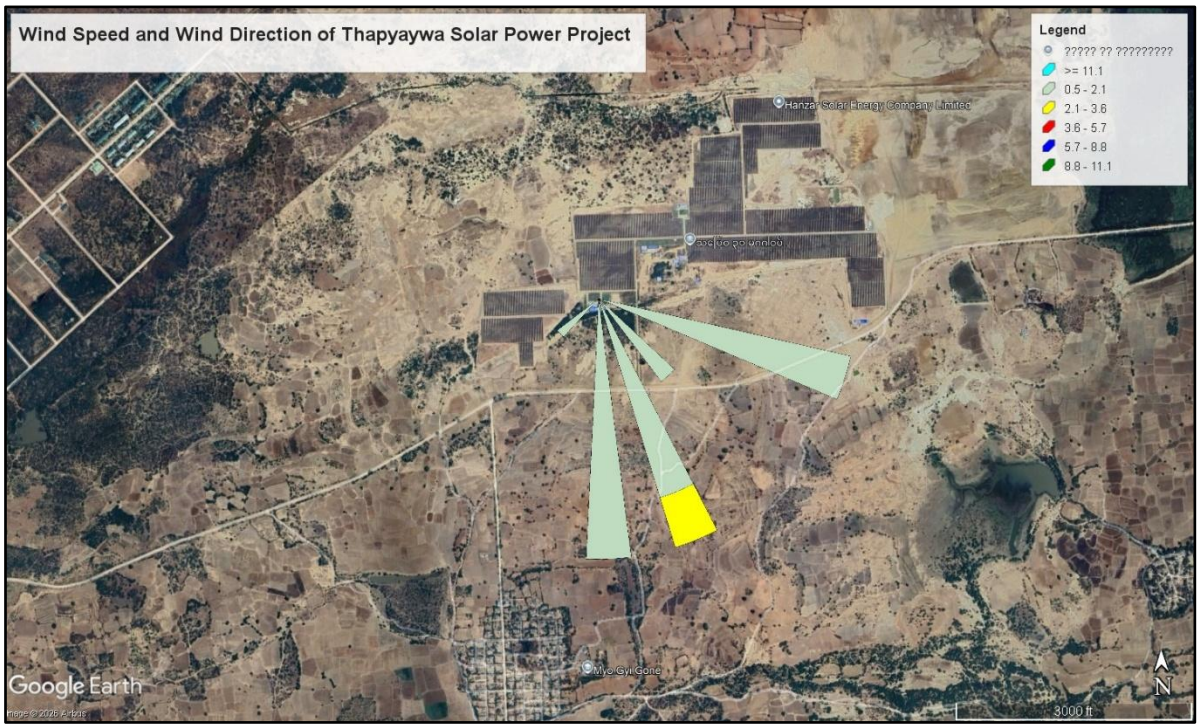

Figure 2. 9 Wind Speed and Wind Direction (Blowing From) at Project Site

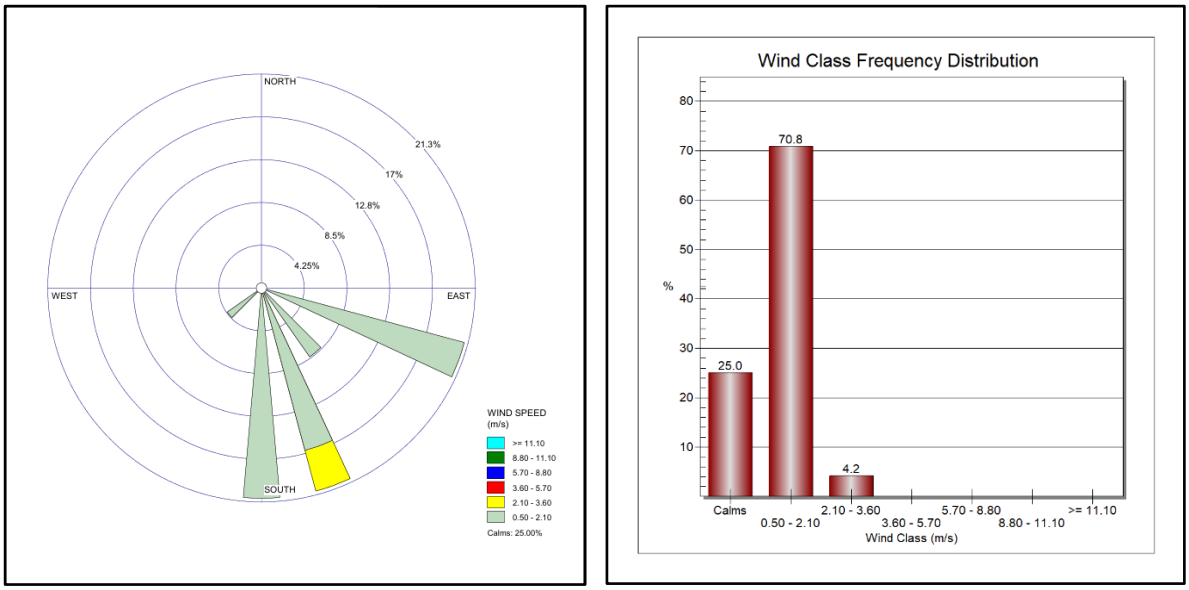

Figure 2. 10 Wind Class Frequency Distribution at Project Site

2.3.2 Significant natural or manmade disaster (April 2026 – September 2026)

From April to September 2026, Thapyaywa Village Tract experienced continued recovery from the devastating Mandalay earthquake together with seasonal hazards including extreme heat, strong thunderstorms, localized flooding, and agricultural impacts. Although no single catastrophic disaster was reported within the village tract during this period, the combination of earthquake-related structural vulnerability and monsoon weather increased risks to infrastructure, livelihoods, and public health. Continued disaster preparedness, resilient infrastructure, and environmental management are important for reducing future disaster risks in Thapyaywa Village Tract.

2.4 Water Quality (April 2026 – September 2026)

2.4.1 Methodology for Water Quality

Water samples were collected on site with appropriate sampling equipment and procedures. The sampling team has pre-arranged the labs in Yangon for analysis and logistic arrangement made to reach the preserved samples with unique IDs to the designated labs within 48hrs.

The sampling and survey team has a list of local laboratories providing analytical services for ground water and wastewater quality analysis. Up to this date, there is no laboratory having accredited certification for water quality testing (environmental analysis) in Myanmar. PRO Lab (Myanmar), Water Quality Laboratory (Forest Research Institute). Laboratories have used for water quality analysis among the list of laboratories. These laboratories have been recognized as a long-term establishment in Myanmar and employed qualified technical staffs.

The following laboratories were used for analysis of water.

1. PRO Lab, No. (9), Sabae Housing, Pyi Htaung Su Road, (26) Ward, South Dagon Tsp, Yangon, Myanmar. Tel: 09 893 767424
2. Water Quality Laboratory, Forest Research Institute, Yezin, Nay Pyi Taw. Tel: 09 430 19169, 09 420 705131

Water samplings are conducted using the following equipment as shown in figure.

Table 2. 14 Environmental Quality Parameters for Water quality

Wastewater Parameters (1 location)	
Physical Parameter	Total Suspended Solids
Chemical Parameter	BOD, COD, pH
Biological Parameter	Total Coliform Bacteria
Nutrients	Total Nitrogen, Total Phosphorus
Compounds	Oil & grease
Ground Water Parameters (1 location)	
Physical Parameter	Total Suspended Solids, Color, Turbidity

Chemical Parameter	BOD, COD, pH, EC, Total Alkalinity
Biological Parameter	Total Coliform Bacteria
Metal	Iron, Manganese
Nutrients	Total Nitrogen, Total Phosphorus, Chloride
Compounds	Oil & grease

Figure 2. 11 Equipment for Water Sampling

Water Sampling Bottle	

2.4.2 Monitoring and Sampling Locations

Sampling locations were confirmed by environmental specialist on site before doing the sampling. Water quality sampling locations consist of 2 sampling locations (GWQ: from the project site and WWQ: from the discharge water channel of the project site).



Figure 2. 12 Water Quality Sampling Locations of Thapyaywa Solar Power Project

Table 2. 15 Locations of Environmental Quality sampling points

Locations No.	Points	Coordinate	Locations
Ground Water Quality Monitoring Location			
1.	GWQ	Lat - 20°58'35.36"N, Long - 96° 0'45.74"E	Project Site
Waste Water Quality Monitoring Location			
1.	WWQ	Lat - 20°58'29.10"N, Long - 96° 0'34.42"E	Outlet of wastewater cannel from the project site

Figure 2. 13 Water Quality Measuring during Operation Period

	Ground Water Quality Sampling at Thapyaywa Solar Power Project 5.5.2026 (from the project site)
	Waste Water Quality Sampling at Thapyaywa Solar Power Project 5.5.2026 (from the discharge water channel of the project site)

2.4.3 Water quality

The project proponent is responsible for ensuring the drainage or runoff from the project or its related activities do not deteriorate the existing ground water, and wastewater quality before the project implementation. Ground water and wastewater quality were recorded by laboratory analysis at two selected locations systematically. The field surveys for environmental quality monitoring and sampling were done during 5th May 2026.

Objectives of the sampling and analysis of ground water and wastewater is to understand the existing water quality at the selected locations and to monitor the impacts during operation period.

Table 2. 16 Ground Water Quality of Thapyaywa Solar Power Project

Item	Unit	8th Monitoring Results (GW)	7th Monitoring Results	Baseline Results	WHO Drinking Water Guideline
Biological Oxygen Demand (BOD)	mg/l	0.37	2.52	6	-
Chemical Oxygen Demand (COD)	mg/l	4	2.8	32	-
Chloride	mg/l	5.2	9.00	-	-
Electrical Conductivity (On-site)	mS/m	1.03	1.05	1.39	-
pH (On-site)	-	7.54	7.75	7.36	6.5-8.5
Oil & Grease	mg/l	1	2	<5	-
Turbidity (On-site)	FNU	0.0	0.0	5.3	-
Total Alkalinity	mg/l	773.05	717.53	-	-
Total Nitrogen	mg/l	2.1	2.52	0.84	-
Total Phosphorus	mg/l	0.00395	0.0099	0.012	-
Total suspended solid (TSS)	mg/l	2	0.4	28	-
Total coliform bacteria	MPN/ml	<0.3	<0.3	4.5	Not detected
Iron	mg/l	Nil	0.01	-	-
Manganese	mg/l	< 0.1	0.1	-	-

Table 2. 17 Wastewater Quality of Thapyaywa Solar Power Project

Item	Unit	8th Monitoring Results (WW)	7th Monitoring Results	National Environmental Quality (Emission) Guideline for Electric Power Transmission and Distribution
Biological Oxygen Demand (BOD)	mg/l	0.78	5.7	30
Chemical Oxygen Demand (COD)	mg/l	5.6	6.9	125
pH	-	8.64	8.63	6-9
Total Nitrogen	mg/l	1.5	1.26	10
Total Phosphorus	mg/l	0.00868	0.08888	2
Oil and grease	mg/l	4	4	10
Total suspended solid (TSS)	mg/l	0.3	0.2	50
Total coliform bacteria	CFU/100ml	24	230	400

Table 2. 18 Monthly Wastewater Quality of Thapyaywa Solar Power Project (April)

Item	Unit	Waste Water	National Environmental Quality (Emission) Guideline for Electric Power Transmission and Distribution
Electrical Conductivity	uS/cm	8.44	-
pH	-	8.63	6-9
Temperature	℃	26.63	-
Total Dissolved Solids	mg/l	582	-

Table 2. 19 Monthly Wastewater Quality of Thapyaywa Solar Power Project (May)

Item	Unit	Waste Water	National Environmental Quality (Emission) Guideline for Electric Power Transmission and Distribution
Electrical Conductivity	uS/cm	5.16	-
pH	-	8.62	6-9
Temperature	℃	26.91	-
Total Dissolved Solids	mg/l	563	-

Table 2. 20 Monthly Wastewater Quality of Thapyaywa Solar Power Project (June)

Item	Unit	Waste Water	National Environmental Quality (Emission) Guideline for Electric Power Transmission and Distribution
Electrical Conductivity	uS/cm	75.08	-
pH	-	8.53	6-9
Temperature	℃	29.28	-
Total Dissolved Solids	mg/l	238	-

Table 2. 21 Monthly Wastewater Quality of Thapyaywa Solar Power Project (July)

Item	Unit	Waste Water	National Environmental Quality (Emission) Guideline for Electric Power Transmission and Distribution
Electrical Conductivity	uS/cm	76.80	-
pH	-	8.41	6-9
Temperature	℃	28.82	-
Total Dissolved Solids	mg/l	214	-

Table 2. 22 Monthly Wastewater Quality of Thapyaywa Solar Power Project (August)

Item	Unit	Waste Water	National Environmental Quality (Emission) Guideline for Electric Power Transmission and Distribution
Electrical Conductivity	uS/cm	76.23	-
pH	-	8.63	6-9
Temperature	℃	29.01	-
Total Dissolved Solids	mg/l	272	-

Table 2. 23 Monthly Wastewater Quality of Thapyaywa Solar Power Project (September)

Item	Unit	Waste Water	National Environmental Quality (Emission) Guideline for Electric Power Transmission and Distribution
Electrical Conductivity	uS/cm	76.39	-
pH	-	8.66	6-9
Temperature	℃	28.74	-
Total Dissolved Solids	mg/l	261	-

3. ENVIRONMENTAL MONITORING PLAN (April 2026 – September 2026)

3.1 Monitoring Records for Safety Plan (April 2026 – September 2026)

Monitoring Records for Safety Plan

Monthly Record					
Date	**Place**	**Activity**	**Organization**	**Number of Attendees**	**Remark**
April	PV Field	Hazard and Safety Training	Thapyaywa Solar Power Plant	25	
May	Working Area	Aware Training About PPE	Thapyaywa Solar Power Plant	30	
June	Power Station	Fire Safety Training	Thapyaywa Solar Power Plant	75	
July	Working Area	Electrical Safety Training	Thapyaywa Solar Power Plant	25	
August	Power Station	Provide PPE Safety Equipment	Thapyaywa Solar Power Plant	35	
September	Office Meeting Room	Health Care	Thapyaywa Solar Power Plant	75	

Monitoring Record for Occupational Safety Equipment

Date	Place	Type	Quantity	Inspected By	Supervisor	Remark
31-June-2026	Store	Safety Shoe	22	U Zaw Zaw Min	U Saw Paing Satt Naing	
31-June-2026	Store	Safety Helmet	22	U Zaw Zaw Min	U Saw Paing Satt Naing	
31-June-2026	Store	Safety Gloves	22	U Zaw Zaw Min	U Saw Paing Satt Naing	
31-June-2026	Store	Safety Belt	22	U Zaw Zaw Min	U Saw Paing Satt Naing	

Records Photo of Health and Safety Plan Activities









အရေးပေါ်အခြေအနေ တုန့်ပြန်မှု အခြေအနေ			
စီမံကိန်းလုပ်ငန်းအတွင်းမှ အရေးကြီးဆက်သွယ်ရမည့် ဖုန်းနံပါတ်များ			
စဉ်	အမည်	ရာထူး	ဖုန်းနံပါတ်
၁	ဦးစည်သူဖြိုးဆွေ	စက်ရုံမှူး	09-777464755
၂	ဦးစောပိုင်ဆက်နိုင်	ဒုစက်ရုံမှူး	09-740886478
၃	ဦးဇော်ဇော်မင်း	အန္တရာယ်ကင်းရှင်းရေးအရာရှိ	09-782513771
၄	ဦးသက်ပိုင်စိုး	ကြီးကြပ်ရေးမှူး	09-693000681
၅	ဦးရဲမင်းသူ	ရှေးဦးသူနာပြု	09-784539212
၆	ဦးဖြိုးဝေလျှံကျော်	အရေးပေါ်အခြေအနေထိန်းချုပ်ရေးမှူး	09-404126924
အရေးကြီးဆက်သွယ်ရမည့် ဒေသတွင်းဖုန်းနံပါတ်များ			
စဉ်	အမည်/ဌာန	အကြောင်းအရာ	ဖုန်းနံပါတ်
၁	မြို့နယ်မီးသတ်ဦးစီးဌာန	မီးလောင်ခြင်းအတွက်	09-402665664
၂	တိုက်နယ်ရဲစခန်း	လုံခြုံရေးကိစ္စရပ်များအတွက်	09-450337701
၃	အနီးဆုံးတိုက်နယ်ဆေးရုံ	ထိခိုက်ဒဏ်ရာရရှိသူများအတွက်	09-449872690
၄	မြို့နယ်လျှပ်စစ်ဌာန	လျှပ်စစ်မီးကိစ္စ	09-256592220
၅	မြို့နယ်အထွေထွေအုပ်ချုပ်ရေးဦးစီးဌာန	အထွေထွေအုပ်ချုပ်ရေးကိစ္စ	-

CLEAN POWER ENERGY

Fire Extinguisher Check List

No.	Date	Description	Location	Existing	Unit
1	1.9.2026	Fire Extinguisher (50) kg	Power Station	1	nos
2	1.9.2026	Fire Extinguisher (3) kg	Power Station	3	nos
3	1.9.2026	Fire Extinguisher (3) kg	Briefing Hall	3	nos
4	1.9.2026	Fire Extinguisher (5) kg	Briefing Hall Office	1	nos
5	1.9.2026	Fire Extinguisher (5) kg	Briefing Hall Generator (65kVA)	1	nos
6	1.9.2026	Fire Extinguisher (4) kg	EP Generator (56kVA)	1	nos
7	1.9.2026	Fire Extinguisher (4) kg	6 Unit (1)	3	nos
8	1.9.2026	Fire Extinguisher (5) kg	6 Unit (2)	2	nos
9	1.9.2026	Fire Extinguisher (5) kg	6 Unit (3)	2	nos
10	1.9.2026	Fire Extinguisher (5) kg	6 Unit (4)	2	nos
11	1.9.2026	Fire Extinguisher (3) kg	Staff Office	2	nos
12	1.9.2026	Fire Extinguisher (5) kg	Construction Office	1	nos
13	1.9.2026	Fire Extinguisher (3) kg	Store	2	nos
14	1.9.2026	Fire Extinguisher (10) kg	Store	1	nos
15	1.9.2026	Fire Extinguisher (5) kg	Oil Farm	3	nos
16	1.9.2026	Fire Extinguisher (3) kg	Messing	2	nos
17	1.9.2026	Fire Extinguisher (5) kg	Main Gate	2	nos
18	1.9.2026	Fire Extinguisher (5) kg	Power Station Gate	2	nos
19	1.9.2026	Fire Extinguisher (5) kg	East Gate	2	nos
20	1.9.2026	Fire Extinguisher (5) kg	Kitchen Room	2	nos
21	1.9.2026	Fire Extinguisher (5) kg	Tower (1)	2	nos
22	1.9.2026	Fire Extinguisher (5) kg	Tower (2)	2	nos
23	1.9.2026	Fire Extinguisher (5) kg	Tower (3)	2	nos
24	1.9.2026	Fire Extinguisher (3) kg	Box X' mer 1	3	nos
25	1.9.2026	Fire Extinguisher (5) kg	Box X' mer 2	3	nos
26	1.9.2026	Fire Extinguisher (5) kg	Box X' mer 3	3	nos
27	1.9.2026	Fire Extinguisher (5) kg	Box X' mer 4	3	nos
28	1.9.2026	Fire Extinguisher (5) kg	Box X' mer 5	3	nos
	Total			**59**	

4. Records for CSR activities (April 2026 – September 2026)

Records for CSR Activities

CLEAN POWER ENERGY

CSR Activities

Place	Type	Received
ဟံဇား	ဟံဇားဘုန်းကြီးကျောင်းအသံမစဲပဌာန်းပွဲတွင် နေ့ဆွမ်းကပ်လှူခြင်း။	
ဝမ်းသာ	ဝမ်းသာကျေးရွာဘုန်းကြီးကျောင်းတွင်အလှူငွေဆပ်ကပ်လှူဒါန်းခြင်း။	
မြို့ကြီးကုန်းရွာ	မြို့ကြီးကုန်းစာသင်ကျောင်းတွင်ဆန်ပြုတ်အာဟာရကျွေးမွေးခြင်းနှင့် ပညာရေးသင်ထောက်ကူပစ္စည်းများလှူဒါန်းခြင်း။	
ဝမ်းသာ	ဝမ်းသာကျေးရွာနှင့်ဟံဇားစာသင်ကျောင်းတွင်ပညာရေးသင်ထောက်ကူပစ္စည်းများလှူဒါန်းခြင်း။	
မြို့ကြီးကုန်းရွာ၊ ထန်းကန်ကျေးရွာ၊ တမာကျေးရွာ	မြို့ကြီးကုန်းကျေးရွာ၊ ထန်းကန်ကျေးရွာ၊ တမာကျေးရွာများ၌ Solar Street Light တပ်ဆင်ပေးခြင်း။	
ဟံဇား	ဟံဇားအင်း၌ဖိဝိတဒါန ငါးလွှတ်ပွဲကျင်းပခြင်း။	
ဟံဇား	၂၀၂၆ ခုနှစ်တက္ကသိုလ်ဝင်တန်းအောင် မြန်မာစာဂုဏ်ထူးရှင်များအားဂုဏ်ပေးခြင်း။	
ထန်းကန်	ထန်းကန်ကျေးရွာစာသင်ကျောင်းတွင်ပညာရေးသင်ထောက်ကူပစ္စည်းများလှူဒါန်းခြင်း။	
တမာ	တမာကျေးရွာစာသင်ကျောင်းတွင်ပညာရေးသင်ထောက်ကူပစ္စည်းများလှူဒါန်းခြင်း။	
ညောင်ပင်သာ	ညောင်ပင်သာကျေးရွာစာသင်ကျောင်းတွင်ပညာရေးသင်ထောက်ကူပစ္စည်းများလှူဒါန်းခြင်း။	

CLEAN POWER ENERGY

CSR Activities

Place	Type	Received
စက်ရုံအနီးပတ်ဝန်းကျင်ရှိ ကျေးရွာများ	စက်ရုံအနီးပတ်ဝန်းကျင်ရှိကျေးရွာများတွင် အမှိုခိုကင်းမဲ့နေသော အဖိုအဖွားများအား ဆန်၊ ဆီ၊ ကြက်သွန်၊ ပဲ နှင့် လိုအပ်သောပစ္စည်းများ လှူဒါန်းပေးခြင်း	
ရွှေဘုံသာကျောင်း	ရွှေဘုံသာဘုရားအတွက် ကျပ်သိန်း (၂၀၀) လှူဒါန်ခြင်း	
ရွာကြီးကျေးရွာ	ရွှေရင်မျှော်ဘုရားအတွက် ကျပ်သိန်း (၁၀၀) လှူဒါန်ခြင်း	
ထန်ကန်	ဖိုးမြရွဲဘုရားအတွက် ကျပ်သိန်း (၁၀၀) လှူဒါန်ခြင်း	
သာစည်	ငါးဆူဘုရားအတွက် ကျပ်သိန်း (၁၀၀) လှူဒါန်ခြင်း	
သပြေဝကျေးရွာ	သပြေဝကျောင်းသံဃာ့ဒါနဆွမ်းလောင်းလှူပွဲအား ၂၂သိန်း ၅ သောင်း ကျပ် လှူဒါန်းခြင်း	
ဝက်တိုးကျေးရွာ	ဝက်တိုးကျောင်းသံဃာ့ဒါနဆွမ်းလောင်းလှူပွဲအား ၆ သိန်း ကျပ် လှူဒါန်းခြင်း	
ညောင်ပင်သာကျေးရွာ	ညောင်ပင်သာကျောင်းသံဃာ့ဒါနဆွမ်းလောင်းလှူပွဲအား ၇ သိန်း ၅သောင်း ကျပ် လှူဒါန်းခြင်း	
ထန်ကန်ကျေးရွာ	ဖိုမြရွဲဘုရား ဘုရားထီးတင်ပွဲ ကျင်းပပြုလုပ်ခြင်း (သိန်း ၂၄၀၈၂၉၀ ကျပ်)	
သပြေဆိုလာစက်ရုံ	လစဉ်ဝန်ထမ်းများအား ကျန်းမာရေးစောင့်ရှောက်မှုပေးခြင်း	

Photo Record for CSR Activities









5. Records for GRM (April 2026 – September 2026)

Monitoring Records for GRM

Monthly Record					
Date	**Place**	**Issue**	**Organization or Individual**	**Action Plan**	**Recorded by**
April-2026	Thapyaywa Solar Power Plant	-	-	-	U Si Thu Phyo Swe
May-2026	Thapyaywa Solar Power Plant	-	-	-	U Si Thu Phyo Swe
June-2026	Thapyaywa Solar Power Plant	-	-	-	U Si Thu Phyo Swe
July-2026	Thapyaywa Solar Power Plant	-	-	-	U Si Thu Phyo Swe
Aug-2026	Thapyaywa Solar Power Plant	-	-	-	U Si Thu Phyo Swe
Sep-2026	Thapyaywa Solar Power Plant	-	-	-	U Si Thu Phyo Swe

GRM Organization of Thapyaywa Solar Power Project

မကျေလည်မှုများ ဖြေရှင်းပေးရေးကော်မတီ			
စဉ်	အမည်	တာဝန်	ဌာန
၁	ဦးခင်မောင်တင့်	ဥက္ကဋ္ဌ	သပြေဝကျေးရွာ
၂	ဦးအောင်ကျော်ခိုင်	အတွင်းရေးမှူး	CPE Co.,Ltd
၃	ဦးမြင့်စိုး	အဖွဲ့ဝင်(၁)	သပြေဝကျေးရွာ
၄	ဦးချစ်ညို	အဖွဲ့ဝင်(၂)	သပြေဝကျေးရွာ
၅	ဦးအောင်နိုင်ဝင်း	အဖွဲ့ဝင်(၃)	CPE Co.,Ltd

6. Records for Waste Disposal (April 2026 – September 2026)

Records for Waste Disposal

Monthly Record				
Date	**Place**	**Type**	**Amount**	**Inspected by**
15-April-2026	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	60 Kg	U Zaw Zaw Min
31-April-2026	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	75 Kg	U Zaw Zaw Min
1-May-2026	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	80 Kg	U Zaw Zaw Min
30-May-2026	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	50 Kg	U Zaw Zaw Min
15-June-2026	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	90 Kg	U Zaw Zaw Min
31-June-2026	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	55 Kg	U Zaw Zaw Min
15-July-2026	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	80 Kg	U Zaw Zaw Min
30-July-2026	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	65 Kg	U Zaw Zaw Min
15-Aug-2026	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	70 Kg	U Zaw Zaw Min
30-Aug-2026	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	100 Kg	U Zaw Zaw Min
15-Sep-2026	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	60 Kg	U Zaw Zaw Min
30-Sep-2026	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	60 Kg	U Zaw Zaw Min

Records Photo for Waste Disposal









Appendix 1 (Water Results) (April 2026 – September 2026)

PRO LAB
ANALYTICAL LABORATORY

Myanmar Innovation Group of Co., Ltd
Address : No. (9), Sabae Housing, Pyi Htaung Su Road,
(26) Ward, South Dagon Tsp, Yangon, Myanmar.
Tel : 09-893 767 424
E-mail : info@prolabmyanmar.com

LABORATORY ANALYSIS REPORT

1	Client Name	: Thapyaywa Solar Power Project
2	Location	: Thazi Township
3	Type of Sample	: Ground Water
4	Sample No.	: 00506/2026
5	Contact Person	: Eguard Enviromental Services
6	Phone No.	: 09-797005218
7	Date Received	: 07.05.2026
8	Date of Test Performed	: 07.05.2026
9	Date of Issued	: 13.05.2026
10	Result	:

No.	Parameter	Result	Unit	WHO STD 2018	Method
1	Iron	Nil	mg/L	0.3 mg/L	[a] 3500-F B, Phenanthroline Method
2	Manganese	< 0.1	mg/L	0.4 mg/L	Hach DR 3900 Spectrophotometer, USEPA Periodate Oxidation Method
3	Oil and Grease	1	mg/L	NA	[a] 5520D, Soxhlet Extraction Method
4	Total Coliform	< 0.3	MPN/ml	ND per 100 mL	FDA-BAM: MPN Method

Remark:
This certificate is issued only for the receipt of the test sample.
[a] American Public Health Association, Standard Methods for the Examination of Water and Wastewater.

Tested By
Name : PHYO PHYO AUNG
Position : Laboratory Technician
Signature :.....

Approved By
Name : KYAWT KYAWT YIN
Position : Technical Consultant Manager
Signature :.....

Myanmar Innovation Group of Co., Ltd. PRO LAB

LAB-FO-024-00

The Government of the Republic of the Union of Myanmar

Ministry of Natural Resources and Environmental Conservation

Department of Forest

Forest Research Institute

Water Quality Laboratory, Yezin

Ref : WQL/0229/2026
Date: 20-5-2026

ANALYTICAL TEST REPORT

Customer Name: **Thapyaywa Solar Power Project**

Customer Address : **E Guard Environmental Service Co.,Ltd**

Assignment number	WQL/2026-85-1	Sampling Location	Thazi Township
Sample number	**GW**	Sampling Date	-
Sample type	**Ground Water**	Sample received date	4-5-2026
Comments			

Parameter	Result	Unit	Method reference	Instruments
Biological Oxygen Demand	0.37	mg/L	Manual	YSI ProDO Tester
Chemical Oxygen Demand	4	mg/L	Titrimetric	Titrator
Total Phosphorus	3.95	µg /L	NS 4725	SFA(SKALAR SAN plus Analyzer)SA 3000/5000,SA 1100
Total Nitrogen	2.1	mg/L	Kjeldahl	Kjeldahl Digestion & Distillation Unit
Total Suspended Solid	2	mg/L	NS 4733:1983/NS-EU 872:2005	Circulation and Filtration System
Chloride	5.2	mg/L	Titrimetric	Titrator
Total Alkalinity	773.05	mg/L	NS-ISO 7888:1993	ManTech Conductivity, Model 4510 Conductivity/TDS meter

*ND - Not Detected

Remark: This certificate is issued only for the receipt of the test sample.

Tested by

Signature:

Name: Dr. Thida Cho
Research Officer

Approved by

Signature:

Name: Dr. Thida Swe
Research Officer

PRO LAB
ANALYTICAL LABORATORY

Myanmar Innovation Group of Co., Ltd
Address : No. (9), Sabae Housing, Pyi Htaung Su Road,
(26) Ward, South Dagon Tsp, Yangon, Myanmar.
Tel : 09-893 767 424
E-mail : info@prolabmyanmar.com

LABORATORY ANALYSIS REPORT

1	Client Name	: Thapyaywa Solar Power Project
2	Location	: Thazi Township
3	Type of Sample	: Waste Water
4	Sample No.	: 00507/2026
5	Contact Person	: Eguard Enviromental Services
6	Phone No.	: 09-797005218
7	Date Received	: 07.05.2026
8	Date of Test Performed	: 07.05.2026
9	Date of Issued	: 13.05.2026
10	Result	:

No.	Parameter	Result	Unit	WHO STD 2018	Method
1	Oil and Grease	4	mg/L	-	[a] 5520D, Soxhlet Extraction Method
2	Total Coliform	24	MPN/ml	-	FDA-BAM: MPN Method

Remark:
This certificate is issued only for the receipt of the test sample.
Dispose treated waste water according to state and local regulations.
[a] American Public Health Association, Standard Methods for the Examination of Water and Wastewater.

Tested By
Name : PHYO PHYO AUNG
Position : Laboratory Technician
Signature :.....

Approved By
Name : KYAWT KYAWT YIN
Position : Technical Consultant Manager
Signature :.....

Myanmar Innovation Group of Co., Ltd PRO LAB

LAB-FO-024-00

The Government of the Republic of the Union of Myanmar

Ministry of Natural Resources and Environmental Conservation

Department of Forest

Forest Research Institute

Water Quality Laboratory, Yezin

Ref: WQL/0201/2026
Date: 10-5-2026

ANALYTICAL TEST REPORT

Customer Name: **Thapyaywa Solar Power Project**

Customer Address: **E Guard Environmental Service Co.,Ltd**

Assignment number	WQL/2026-75-3	Sampling Location	Thazi Township
Sample number	**WW**	Sampling Date	-
Sample type	**Waste Water**	Sample received date	30-4-2026
Comments			

Parameter	Result	Unit	Method reference	Instruments
pH	8.63	-	ISO 10523:2008	ManTech Robot (PC-1300-475E)
Temperature	26.63	°C	ISO 10523:2008	ManTech Robot (PC-1300-475E)
Electrical Conductivity	8.44	uS/cm	NS-ISO 7888:1993	ManTech Conductivity, Model 4510 Conductivity/TDS meter
Total Dissolved Solid	582	mg/L	Potentiometric	TDS & EC meter (hold) PROZOR®

*ND - Not Detected

Remark: This certificate is issued only for the receipt of the test sample.

Tested by

Signature:

Name: Dr. Thida Cho
Research Officer

Approved by

Signature:

Na me: Dr. Thida Swe
Research Officer

The Government of the Republic of the Union of Myanmar

Ministry of Natural Resources and Environmental Conservation

Department of Forest

Forest Research Institute

Water Quality Laboratory, Yezin

Ref : WQL/0230/2026
Date: 20-5-2026

ANALYTICAL TEST REPORT

Customer Name: **Thapyaywa Solar Power Project**

Customer Address : **E Guard Environmental Service Co.,Ltd**

Assignment number	WQL/2026-85-2	Sampling Location	Thazi Township
Sample number	**WW**	Sampling Date	-
Sample type	**Waste Water**	Sample received date	4-5-2026
Comments			

Parameter	Result	Unit	Method reference	Instruments
Biological Oxygen Demand	0.78	mg/L	Manual	YSI ProDO Tester
Chemical Oxygen Demand	5.6	mg/L	Titrimetric	Titrator
Total Phosphorus	8.68	µg /L	NS 4725	SFA(SKALAR SAN plus Analyzer)SA 3000/5000,SA 1100
Total Nitrogen	1.5	mg/L	Kjeldahl	Kjeldahl Digestion & Distillation Unit
Total Suspended Solid	0.3	mg/L	NS 4733:1983/NS-EU 872:2005	Circulation and Filtration System
pH	8.64	-	ISO 10523:2008	ManTech Robot (PC-1300-475E)

*ND - Not Detected

Remark: This certificate is issued only for the receipt of the test sample.

Tested by

Signature:

Name: Dr. Thida Cho
Research Officer

Approved by

Signature:

Name: Dr. Thida Swe
Research Officer

The Government of the Republic of the Union of Myanmar

Ministry of Natural Resources and Environmental Conservation

Department of Forest

Forest Research Institute

Water Quality Laboratory, Yezin

Ref : WQL/0232/2026
Date: 20-5-2026

ANALYTICAL TEST REPORT

Customer Name: **Thapyaywa Solar Power Project**

Customer Address : **E Guard Environmental Service Co.,Ltd**

Assignment number	WQL/2026-85-4	Sampling Location	Thazi Township(May)
Sample number	**WW**	Sampling Date	-
Sample type	**Waste Water**	Sample received date	4-5-2026
Comments			

Parameter	Result	Unit	Method reference	Instruments
pH	8.62	-	ISO 10523:2008	ManTech Robot (PC-1300-475E)
Temperature	26.91	°C	ISO 10523:2008	ManTech Robot (PC-1300-475E)
Electrical Conductivity	5.16	uS/cm	NS-ISO 7888:1993	ManTech Conductivity, Model 4510 Conductivity/TDS meter
Total Dissolved Solid	563	mg/L	Potentiometric	TDS & EC meter (hold) PROZOR®

*ND - Not Detected

Remark: This certificate is issued only for the receipt of the test sample.

Tested by

Signature:

Name: Dr. Thida Cho
Research Officer

Approved by

Signature:

Name: Dr. Thida Swe
Research Officer

The Government of the Republic of the Union of Myanmar

Ministry of Natural Resources and Environmental Conservation

Department of Forest

Forest Research Institute

Water Quality Laboratory, Yezin

Ref: WQL/0564/2026
Date: 10-06-2026

ANALYTICAL TEST REPORT

Customer Name: **Thapyaewa Solar Power Project**

Customer Address: **E Guard Environmental Service Co., Ltd.**

Assignment number	WQL/2026-180-1	Sampling Location	Thazi Township
Sample number	**WW**	Sampling Date	-
Sample type	**Waste Water**	Sample received date	5-6-2026
Comments			

Parameter	Result	Unit	Method reference	Instruments
pH	8.53	-	ISO 10523:2008	ManTech Robot (PC-1300-475E)
Electrical Conductivity	75.08	uS/cm	NS-ISO 7888:1993	ManTech Conductivity, Model 4510 Conductivity/TDS meter
Temperature	29.28	°C	ISO 10523:2008	ManTech Robot (PC-1300-475E)
Total Dissolved Solid	238	mg/L	Potentiometric	AQUAREAD Portable Field Case

Remark: This certificate is issued only for the receipt of the test sample.

Tested by

Signature:

Name: Dr. Thida Cho
Research Officer

Approved by

Signature:

Name: Dr. Thida Swe
Research Officer

The Government of the Republic of the Union of Myanmar

Ministry of Natural Resources and Environmental Conservation

Department of Forest

Forest Research Institute

Water Quality Laboratory, Yezin

Ref: WQL/0590/2026
Date: 18-07-2026

ANALYTICAL TEST REPORT

Customer Name: **Thapyaewa Solar Power Project**

Customer Address: **E Guard Environmental Service Co., Ltd.**

Assignment number	WQL/2026-200-2	Sampling Location	Thazi Township
Sample number	**WW**	Sampling Date	-
Sample type	**Waste Water**	Sample received date	13-7-2026
Comments			

Parameter	Result	Unit	Method reference	Instruments
pH	8.41	-	ISO 10523:2008	ManTech Robot (PC-1300-475E)
Electrical Conductivity	76.80	uS/cm	NS-ISO 7888:1993	ManTech Conductivity, Model 4510 Conductivity/TDS meter
Temperature	28.82	°C	ISO 10523:2008	ManTech Robot (PC-1300-475E)
Total Dissolved Solid	214	mg/L	Potentiometric	AQUAREAD Portable Field Case

*ND - Not Detected

Remark: This certificate is issued only for the receipt of the test sample.

Tested by

Signature:

Name: Dr. Thida Cho
Research Officer

Approved by

Signature:

Name: Dr. Thida Swe
Research Officer

The Government of the Republic of the Union of Myanmar

Ministry of Natural Resources and Environmental Conservation

Department of Forest

Forest Research Institute

Water Quality Laboratory, Yezin

Ref: WQL/0603/2026
Date: 18-08-2026

ANALYTICAL TEST REPORT

Customer Name: **Thapyaewa Solar Power Project**

Customer Address: **E Guard Environmental Service Co., Ltd.**

Assignment number	WQL/2026-210-3	Sampling Location	Thazi Township
Sample number	**WW**	Sampling Date	-
Sample type	**Waste Water**	Sample received date	15-8-2026
Comments			

Parameter	Result	Unit	Method reference	Instruments
pH	8.63	-	ISO 10523:2008	ManTech Robot (PC-1300-475E)
Electrical Conductivity	76.23	uS/cm	NS-ISO 7888:1993	ManTech Conductivity, Model 4510 Conductivity/TDS meter
Temperature	29.01	°C	ISO 10523:2008	ManTech Robot (PC-1300-475E)
Total Dissolved Solid	272	mg/L	Potentiometric	AQUAREAD Portable Field Case

*ND - Not Detected

Remark: This certificate is issued only for the receipt of the test sample.

Tested by

Signature:

Name: Dr. Thida Cho
Research Officer

Approved by

Signature:

Name: Dr. Thida Swe
Research Officer

The Government of the Republic of the Union of Myanmar

Ministry of Natural Resources and Environmental Conservation

Department of Forest

Forest Research Institute

Water Quality Laboratory, Yezin

Ref: WQL/0643/2026
Date: 25-09-2026

ANALYTICAL TEST REPORT

Customer Name: **Thapyaewa Solar Power Project**

Customer Address: **E Guard Environmental Service Co., Ltd.**

Assignment number	WQL/2026-227-4	Sampling Location	Thazi Township
Sample number	**WW**	Sampling Date	-
Sample type	**Waste Water**	Sample received date	21-9-2026
Comments			

Parameter	Result	Unit	Method reference	Instruments
pH	8.66	-	ISO 10523:2008	ManTech Robot (PC-1300-475E)
Electrical Conductivity	76.39	uS/cm	NS-ISO 7888:1993	ManTech Conductivity, Model 4510 Conductivity/TDS meter
Temperature	28.74	°C	ISO 10523:2008	ManTech Robot (PC-1300-475E)
Total Dissolved Solid	261	mg/L	Potentiometric	AQUAREAD Portable Field Case

*ND - Not Detected

Remark: This certificate is issued only for the receipt of the test sample.

Tested by

Signature:

Name: Dr. Thida Cho
Research Officer

Approved by

Signature:

Na me: Dr. Thida Swe
Research Officer