Environmental Monitoring Report

For

20 MW Ground Mounted Solar Power Plant Project Connected to Taungdawgwin Substation

(Operation Phase)

(3rd August 2025 – 3rd February 2026)

(7th Time)

Proposed by

Green Power Energy Co., Ltd.

Prepared by

E Guard Environmental Services

February, 2026

Table of Contents

List of Figure

List of Table

1. Introduction

The proposed project is developed by Green Power Energy Co., Ltd. is located on an 80.9-hectare site southeast of Kyaukse, Myit Thar Township, Mandalay Region, Myanmar. Its coordinate points are 21° 26' 31.62" N, 96° 17' 10.63" E and the average altitude of the site is 0 m. is the second mega-scale solar PV project by Gold Energy Company Limited (the first being the 30-MW Thapyay Wa project – also in Manadalay district). Taungdawgwin involved a foundation of 6,807 piles to enable solar tracking so as to maximize PV energy captured by 45,980 solar panels. The project can generate 25.1 MW of direct current, or 22.9 MW of alternating current, per year. About 14% of the energy generated will go towards the nearby Kyaukse town, while the remainder will be linked to the Thapyay Wa substation and connected to the national grid via 6.05 miles of 33-kV transmission line, also built by GPE.With domestic energy consumption forecast to grow between 15-17% per year, solar power has been identified as a potentially significant source of renewable energy. While solar PV energy had been introduced for several years in Myanmar it accounted for about 1% of the country's installed energy generation capacity as at 2020.The solar PV tenders announced by MOEE form the country's largest-ever tender exercise for mega-scale solar projects (between 30 MW to 50 MW each) with a combined potential new capacity of 1.06 gigawatts (GW). However, the COVID-19 pandemic in 2020 and 2021 disrupted business travel and the supply and raised the costs of imported components such as PV panels and equipment. The operating environment was also affected by an economic slowdown and domestic issues. As a result, most of the 28 successful bidders did not complete their projects.Despite these immense challenges, Clean Power Energy Co., Ltd completed the Thapyay Wa (30 MW) project – the first among the 28 eventual bidders to do so.

Key Information

Project Details	Taungdawgwin
Location	Kyaukse, Myit Thar Township (Mandalay Division)
Capacity	20 MW
Nature of Project	BOO *
PPA #	20 years
Total Occupied Area	80.9 hectares
No. of panels	45,980
PV efficiency	545 Watts/panel (solar tracking capability)
Annual Generating Power	25.059 MW DC – 22.90 MW AC
Transmission Line	6.05 miles
Project Commencement	Dec-21
Project Commissioning	Nov-22
Commercial Operation Date	Nov-17-2022
Developer	Green Power Energy Limited

Environmental quality monitoring team included U Aung Myint Myat, U Aung Moe Oo, U Ye Chit Zaw and U Wanna Zaw. The environmental quality monitoring report includes air, water and noise. Air quality monitoring was carried out in one location as source (Project Site) and also water quality test was carried out in three places as ground water (GW- project site), surface water (SW- from Myo Gyi Dam Channel) and waste water (WW- from the discharge water channel of the project site). Noise are 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 Ye Chit Zaw	Supporting Team Member	-	1. Noise and Vibration
6	U Wanna Zaw	Supporting Team Member	-	1. Environmental Quality Surveyor

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 staff quarter	Already included in cost estimation for EMP	Green Power Energy Co., Ltd.
2.	Groundwater quality	pH, EC, TDS, Salinity, DO, Turbidity, Oxidation Reduction Potential (ORP), Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Nitrogen, Total Phosphorus, Potassium, Oil and Grease, Total Suspended Solid (TSS), Total Coliform Bacteria	Twice a year	An outlet from tube well within the project site	Already included in cost estimation for EMP	Green Power Energy Co., Ltd.
3.	Surface water quality	pH, EC, TDS, Salinity, DO, Turbidity, Oxidation Reduction Potential (ORP), Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Nitrogen, Total	Twice a year	Downstream of Myo Gyi Dam Channel	Already included in cost estimation for EMP	Green Power Energy Co., Ltd.

No.	Environmental Concerns	Parameters	Frequency	Location	Estimated Cost	Responsible Party
		Phosphorus, Potassium, Oil and Grease, Total Suspended Solid (TSS)				
4.	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	Green Power Energy Co., Ltd.
5.	Noise level	Equivalent Noise Level dB (A)	Twice a year	Point 1 (In front of staff quarter) Point 2 (Junction of main access road and Myo Gyi Dam Channel)	Already included in cost estimation for EMP	Green 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	Green Power Energy Co., Ltd.
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	Green Power Energy Co., Ltd.

ECC Letter of Taungdawgwin Solar Power Project

ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်အစိုးရ
သယံဇာတနှင့်သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာန
ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဆိုင်ရာလိုက်နာဆောင်ရွက်မှု သက်သေခံလက်မှတ်
(Environmental Compliance Certificate – ECC)

သက်သေခံလက်မှတ်အမှတ်။ ECC (၁၁၅) ရက်စွဲ ။ ၂ ၀ ၂ ၃ ခု နှစ် မတ် လ ၃၁ 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
Green Power Energy ကုမ္ပဏီလီမိတက်

(ခ) **ဆက်သွယ်ရန် လိပ်စာ** - အမှတ် (၅၁၁-ဘီ)၊ 5th Floor, ပြည်လမ်းနှင့် လှည်းတန်းလမ်းထောင့်၊ လှည်းတန်းစင်တာ၊ ကမာရွတ်မြို့နယ်၊ ရန်ကုန်တိုင်းဒေသကြီး၊ ၀၉- ၄၄၄၈၀၅၅၁၁၊ ၀၉- ၂၀၀၀၉၅၀
greenpowerenergycoltd@gmail.com

(ဂ) **စီမံကိန်းအမျိုးအစား** - နေရောင်ခြည်စွမ်းအင်သုံး ဓာတ်အားပေးစက်ရုံ

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

(င) **စီမံကိန်း၏ အရွယ်အစား** - ၂၀ မီဂါဝပ်

(စ) **စီမံကိန်းတည်နေရာ** - မန္တလေးတိုင်းဒေသကြီး၊ ကျောက်ဆည်ခရိုင်၊ မြစ်သားမြို့နယ်၊ တောင်းကျေးရွာအုပ်စု

(ဆ) **ECC သက်တမ်း** - (၅)နှစ်
စတင်ထုတ်ပေးရက် - ၃-၈-၂၀၂၂
သက်တမ်းကုန်ဆုံးရက် - ၂- ၈-၂၀၂၇

(ဇ) **အတည်ပြုအစီရင်ခံစာ** - လျှပ်စစ်စွမ်းအားဝန်ကြီးဌာန၊ လျှပ်စစ်ဓါတ်အား ထုတ်လုပ်ရေးလုပ်ငန်း၏ ၂၁-၆-၂၀၂၂ ရက်စွဲပါ စာအမှတ်၊ ၂၇၁၈ / လစထလ / ပစရအ / ၈ (၅၆)/ ၂၀၂၂
ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်

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 (3rd August 2025 – 3rd February 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 (3rd August 2025 – 3rd February 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 Micro air quality monitoring system (YF-IAQM-V1). 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 (Taungdawgwin solar power project site (source) that can get results of the existing ambient air quality.

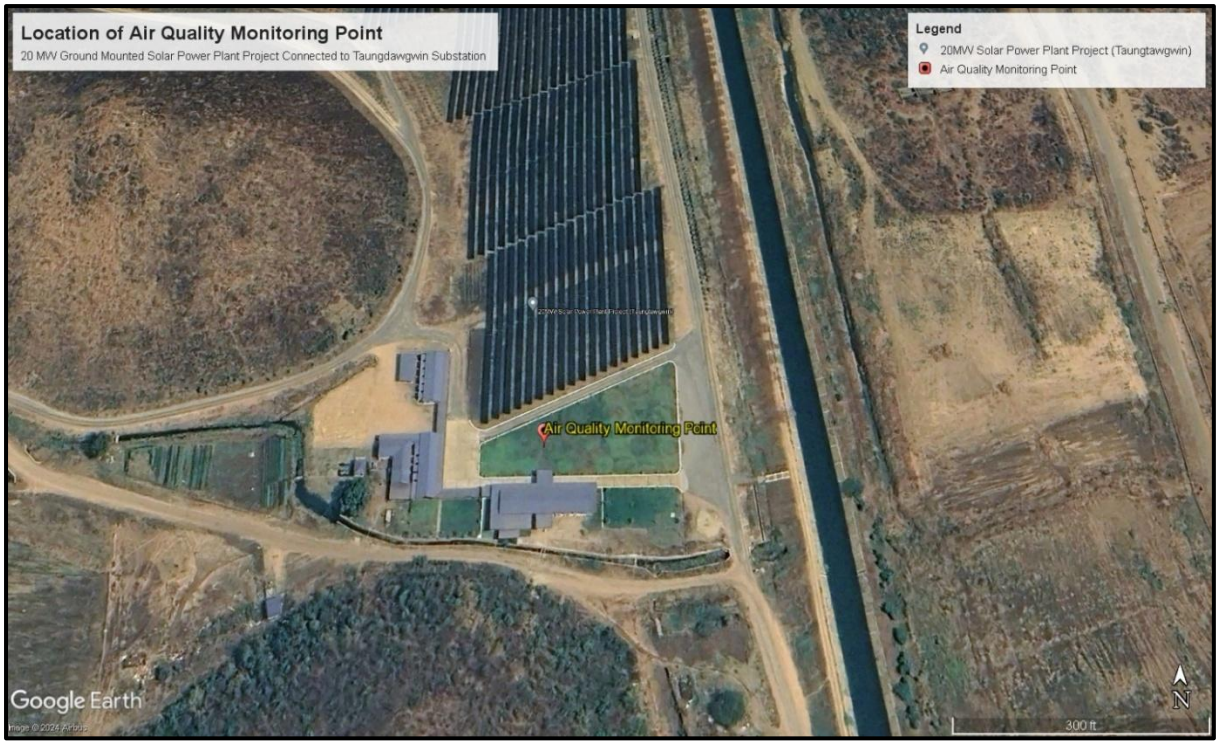


Figure 2. 1 Air Quality Monitoring Locations of Taungdawgwin Solar Power Project

Table 2. 3 Locations of Environmental Quality sampling points

Locations No.	Points	Coordinate	Locations
Ambient Air Quality Monitoring Location			
1.	AQ	Lat - 21°26'31.90"N Long - 96°17'11.29"E	in front of the office in the project site of Taungdawgwin Solar Power project site

Figure 2. 2 Air Quality Measuring during Operation Period

Air quality measuring
at Taungdawgwin Solar Power Project
24.11.2025 - 25.11.2025
(Project Site)

2.1.3 Measurement Results and Comparison for Air Quality

The air quality monitoring was done at selected locations during 24th to 25th November 2025. 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.

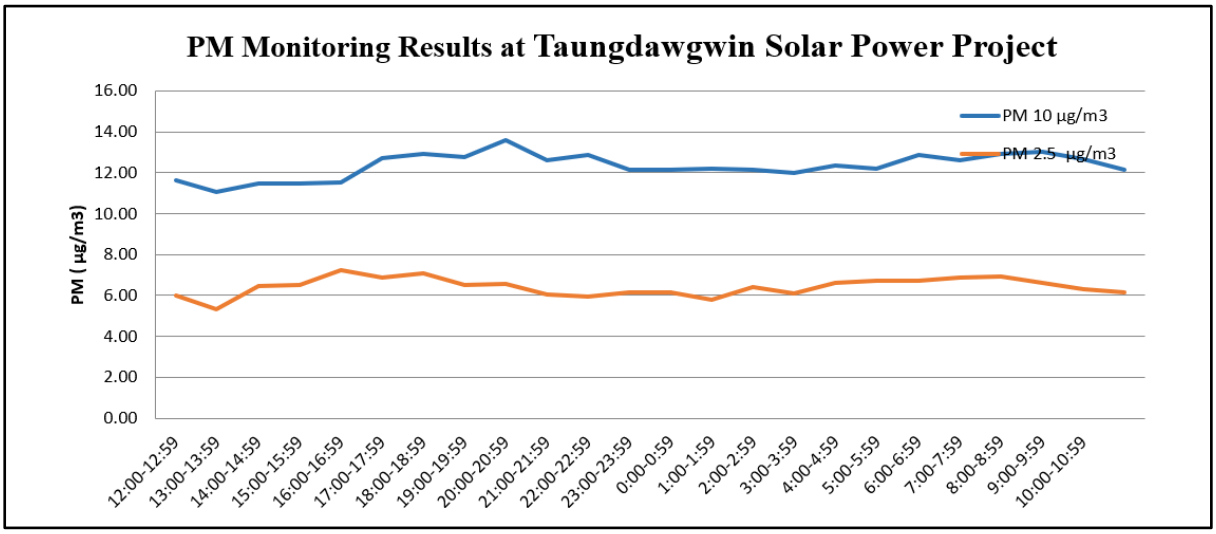


Figure 2. 3 PM Monitoring Results at Taungdawgwin Solar Power Project

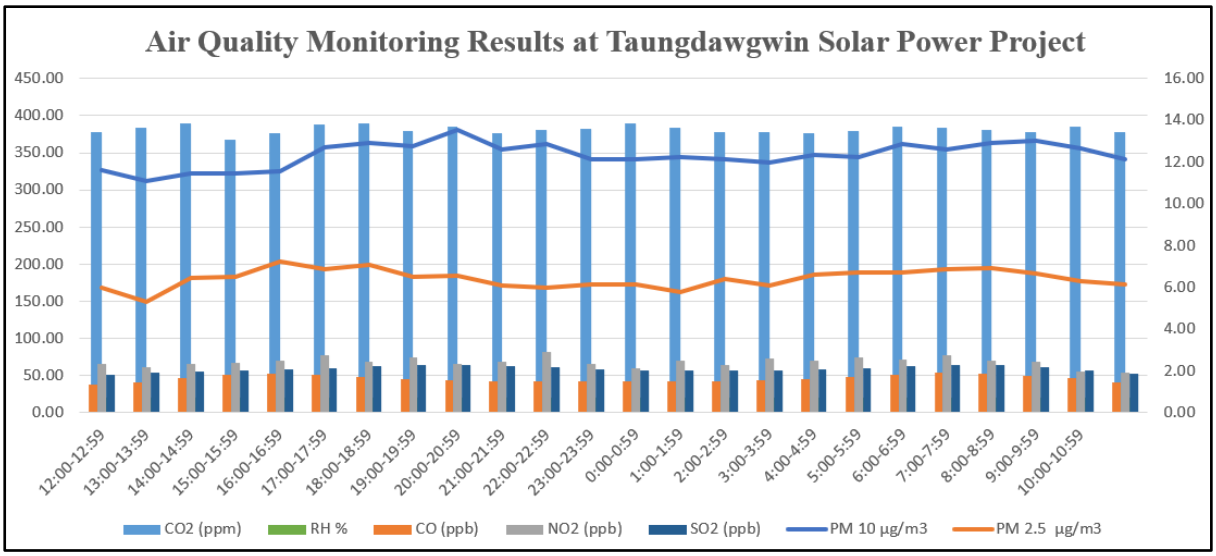


Figure 2. 4 Fluctuation of Air Pollutants during Dial Cycle at Taungdawgwin Solar Power Project

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)
24.11.2025	12:00-12:59	Average	377.38	1.36	2.31	11.61	5.97	19.82	1.83
24.11.2025	13:00-13:59	Average	383.72	1.44	2.19	11.08	5.32	19.89	1.90
24.11.2025	14:00-14:59	Average	389.16	1.65	2.32	11.45	6.46	19.84	1.95
24.11.2025	15:00-15:59	Average	367.97	1.83	2.41	11.45	6.51	19.82	2.00
24.11.2025	16:00-16:59	Average	377.10	1.87	2.49	11.54	7.26	19.92	2.07
24.11.2025	17:00-17:59	Average	387.52	1.80	2.76	12.69	6.85	19.83	2.14
24.11.2025	18:00-18:59	Average	388.99	1.70	2.44	12.93	7.08	19.62	2.23
24.11.2025	19:00-19:59	Average	379.78	1.60	2.65	12.78	6.52	19.99	2.31
24.11.2025	20:00-20:59	Average	384.96	1.53	2.34	13.57	6.54	19.75	2.30
24.11.2025	21:00-21:59	Average	376.49	1.52	2.47	12.61	6.07	19.70	2.24
24.11.2025	22:00-22:59	Average	380.46	1.50	2.93	12.89	5.96	19.67	2.17
24.11.2025	23:00-23:59	Average	382.46	1.49	2.35	12.12	6.15	19.69	2.08
25.11.2025	0:00-0:59	Average	389.71	1.50	2.14	12.15	6.14	19.80	2.01
25.11.2025	1:00-1:59	Average	383.98	1.49	2.51	12.22	5.79	19.72	2.01
25.11.2025	2:00-2:59	Average	377.36	1.51	2.26	12.16	6.40	19.74	2.01
25.11.2025	3:00-3:59	Average	378.59	1.55	2.61	11.98	6.11	19.77	2.02
25.11.2025	4:00-4:59	Average	376.29	1.61	2.50	12.33	6.59	19.75	2.07
25.11.2025	5:00-5:59	Average	379.25	1.70	2.64	12.22	6.72	19.74	2.15
25.11.2025	6:00-6:59	Average	384.60	1.81	2.55	12.88	6.72	19.84	2.24
25.11.2025	7:00-7:59	Average	383.25	1.91	2.78	12.61	6.88	19.76	2.30
25.11.2025	8:00-8:59	Average	380.96	1.89	2.49	12.94	6.94	19.98	2.29
25.11.2025	9:00-9:59	Average	378.52	1.79	2.44	13.00	6.64	20.04	2.19
25.11.2025	10:00-10:59	Average	385.24	1.64	2.00	12.66	6.32	19.84	2.02
25.11.2025	11:00-11:59	Average	377.95	1.45	1.92	12.15	6.14	19.92	1.87
Average			**381.32**	**1.63**	**2.44**	**12.33**	**6.42**	**19.81**	**2.10**
1 hour Minimum			367.97	1.36	1.92	11.08	5.32	19.62	1.83

1 hour Maximum	389.71	1.91	2.93	13.57	7.26	20.04	2.31

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	7th Time Monitoring Results	Previous Monitoring Results	EMP Baseline Results	NEQG Guidelines Value	ACGIH Guidelines Value	NAAQS Guidelines Value	Unit	Averaging Period
PM_{10}	12.33	11.62	25.13	50	-	-	$\mu g/m^3$	24hrs
$PM_{2.5}$	6.42	5.77	10.84	25	-	-	$\mu g/m^3$	24hrs
CO	0.0017	0.00098	0.01	-	-	9	ppm	8hrs
CO_2	381.75	391.39	451.72	-	5000	-	ppm	8hrs
SO_2	5.50	4.70	0.14	20	-	-	$\mu g/m^3$	24hrs
NO_2	5.51	4.91	28.97	200	-	-	$\mu g/m^3$	1hrs

2.2 Ambient Noise (3rd August 2025 – 3rd February 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 and Micro air quality monitoring system (YF-IAQM-V1).

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 Taungdawgwin Solar Power Project

Table 2. 9 Locations of Environmental Quality sampling points

Locations No.	Points	Coordinate	Locations
Noise Monitoring Location			
1.	N1	Lat - 21°26'32.52"N Long - 96°17'10.79"E	in front of the office in the project site of Taungdawgwin Solar Power project site
2.	N2	Lat - 21°26'33.83"N Long - 96°16'55.30"E	near the labor camp as receptor

Figure 2. 6 Noise Quality Measuring during Operation Period

Noise quality measuring
at Taungdawgwin Solar Power Project
24.11.2025 - 25.11.2025
(Project Site)

	Noise quality measuring at Taungdawgwin Solar Power Project 24.11.2025 - 25.11.2025 (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 Taungdawgwin solar power project points: these points are near the air monitoring points and staff housing on 24th to 25th November 2025. 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	24.11.2025	12:00:31-12:59:31	66.23	A	Day	**57.75**
2	24.11.2025	13:00:31-13:59:31	53.44	A	Day	
3	24.11.2025	14:00:31-14:59:31	61.30	A	Day	
4	24.11.2025	15:00:31-15:59:31	58.55	A	Day	
5	24.11.2025	16:00:31-16:59:31	58.94	A	Day	
6	24.11.2025	17:00:31-17:59:31	54.49	A	Day	
7	24.11.2025	18:00:31-18:59:31	50.68	A	Day	
8	24.11.2025	19:00:31-19:59:31	45.12	A	Day	
9	24.11.2025	20:00:31-20:59:31	42.79	A	Day	
10	24.11.2025	21:00:31-21:59:31	46.32	A	Day	
11	24.11.2025	22:00:31-22:59:31	51.18	A	Night	**56.75**
12	24.11.2025	23:00:31-23:59:31	53.72	A	Night	
13	25.11.2025	0:00:31-0:59:31	55.78	A	Night	
14	25.11.2025	1:00:31-1:59:31	50.07	A	Night	
15	25.11.2025	2:00:31-2:59:31	55.18	A	Night	
16	25.11.2025	3:00:31-3:59:31	58.85	A	Night	
17	25.11.2025	4:00:31-4:59:31	64.26	A	Night	

18	25.11.2025	5:00:31-5:59:31	62.51	A	Night	
19	25.11.2025	6:00:31-6:59:31	59.19	A	Night	
20	25.11.2025	7:00:31-7:59:31	65.40	A	Day	
21	25.11.2025	8:00:31-8:59:31	58.95	A	Day	
22	25.11.2025	9:00:31-9:59:31	67.39	A	Day	
23	25.11.2025	10:00:31-10:59:31	67.77	A	Day	
24	25.11.2025	11:00:31-11:59:31	68.87	A	Day	
Average			**57.37**			

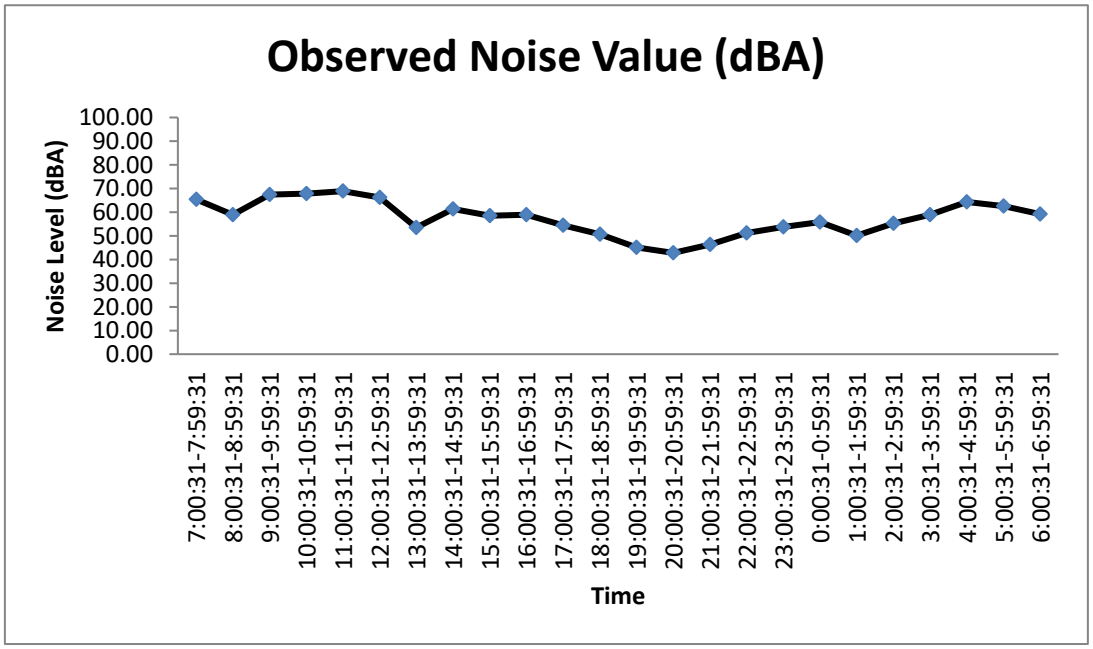


Figure 2. 7 Noise Level at Project Site

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

No.	Date	Time	Observed Mean Value (Source)	Weight	Day/Night	Average
1	24.11.2025	12:00:16-12:59:16	47.80	A	Day	
2	24.11.2025	13:00:16-13:59:16	46.60	A	Day	
3	24.11.2025	14:00:16-14:59:16	47.35	A	Day	
4	24.11.2025	15:00:16-15:59:16	46.00	A	Day	
5	24.11.2025	16:00:16-16:59:16	46.53	A	Day	
6	24.11.2025	17:00:16-17:59:16	40.22	A	Day	46.03
7	24.11.2025	18:00:16-18:59:16	42.73	A	Day	
8	24.11.2025	19:00:16-19:59:16	47.14	A	Day	
9	24.11.2025	20:00:16-20:59:16	46.25	A	Day	
10	24.11.2025	21:00:16-21:59:16	46.78	A	Day	
11	24.11.2025	22:00:16-22:59:16	40.28	A	Night	

12	24.11.2025	23:00:16-23:59:16	41.08	A	Night	42.76
13	25.11.2025	0:00:16-0:59:16	42.17	A	Night	
14	25.11.2025	1:00:16-1:59:16	40.22	A	Night	
15	25.11.2025	2:00:16-2:59:16	42.35	A	Night	
16	25.11.2025	3:00:16-3:59:16	41.32	A	Night	
17	25.11.2025	4:00:16-4:59:16	45.44	A	Night	
18	25.11.2025	5:00:16-5:59:16	45.82	A	Night	
19	25.11.2025	6:00:16-6:59:16	46.18	A	Night	
20	25.11.2025	7:00:16-7:59:16	46.64	A	Day	
21	25.11.2025	8:00:16-8:59:16	49.95	A	Day	
22	25.11.2025	9:00:16-9:59:16	44.95	A	Day	
23	25.11.2025	10:00:16-10:59:16	45.45	A	Day	
24	25.11.2025	11:00:16-11:59:16	46.07	A	Day	
Average			**44.80**			

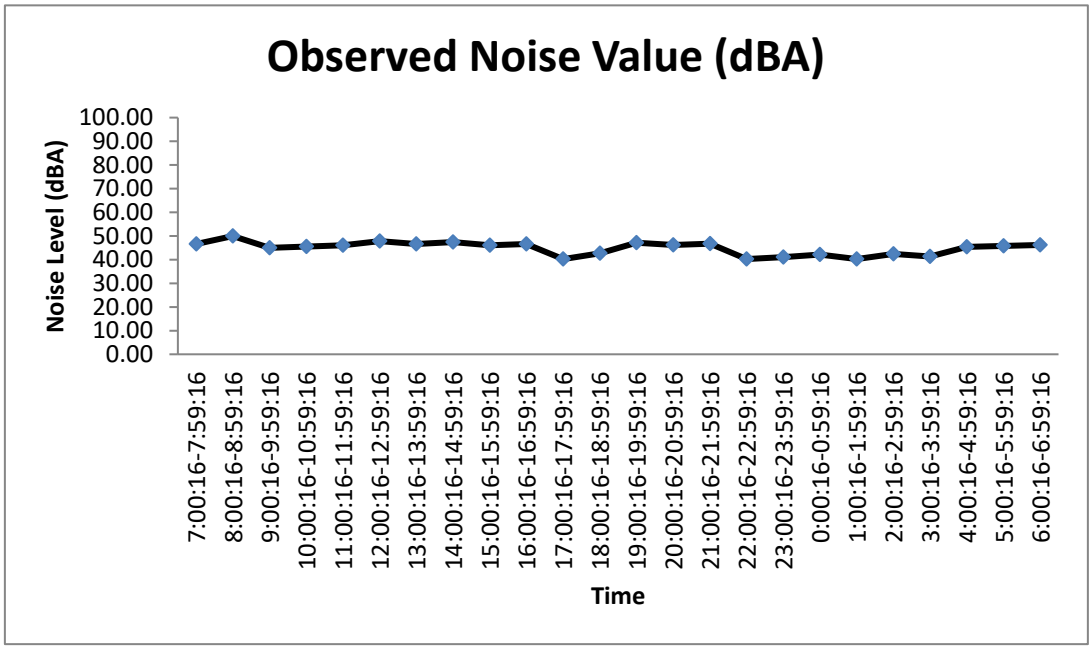


Figure 2. 8 Noise Level at Staff Housing

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	Taungdawgwin Solar Power Project	
	Day Time	Nighttime
Project Site (Source)	**57.75**	**56.75**
Previous Monitoring Result (At Source)	53.50	51.48
EMP Baseline Results (Point 1)	52.92	41.55
Guideline Values for Industrial	**70**	**70**
Staff Housing (Receptor)	**46.03**	**42.76**
Previous Monitoring Result (At Receptor)	46.33	41.89
EMP Baseline Results (Point 2)	54.22	40.64
Guideline Values for Residential	**55**	**45**

The observed values of the proposed project for daytime at Taungdawgwin Solar Power Project Site (source) and Staff Housing (Receptor) are 57.75 dB (A) and 46.03 dB (A). The observed values of the proposed project for nighttime at Taungdawgwin Solar Power Project Site (source) and Staff Housing (Receptor) are 56.75 dB (A) and 42.76 dB (A). So, the observed daytime value and nighttime value for Taungdawgwin Solar Power Project Site (source) and staff housing (receptor) are lower than the guideline value.

2.3 Weather Condition (3rd August 2025 – 3rd February 2026)

2.3.1 Wind Speed and Direction

The following figures describe the wind speed and wind direction of the proposed project site (Taungdawgwin solar power project Site at source) from 24th to 25th November 2025 respectively. According to the data, the wind direction is following Figure 2. 9 and Figure 2. 10.

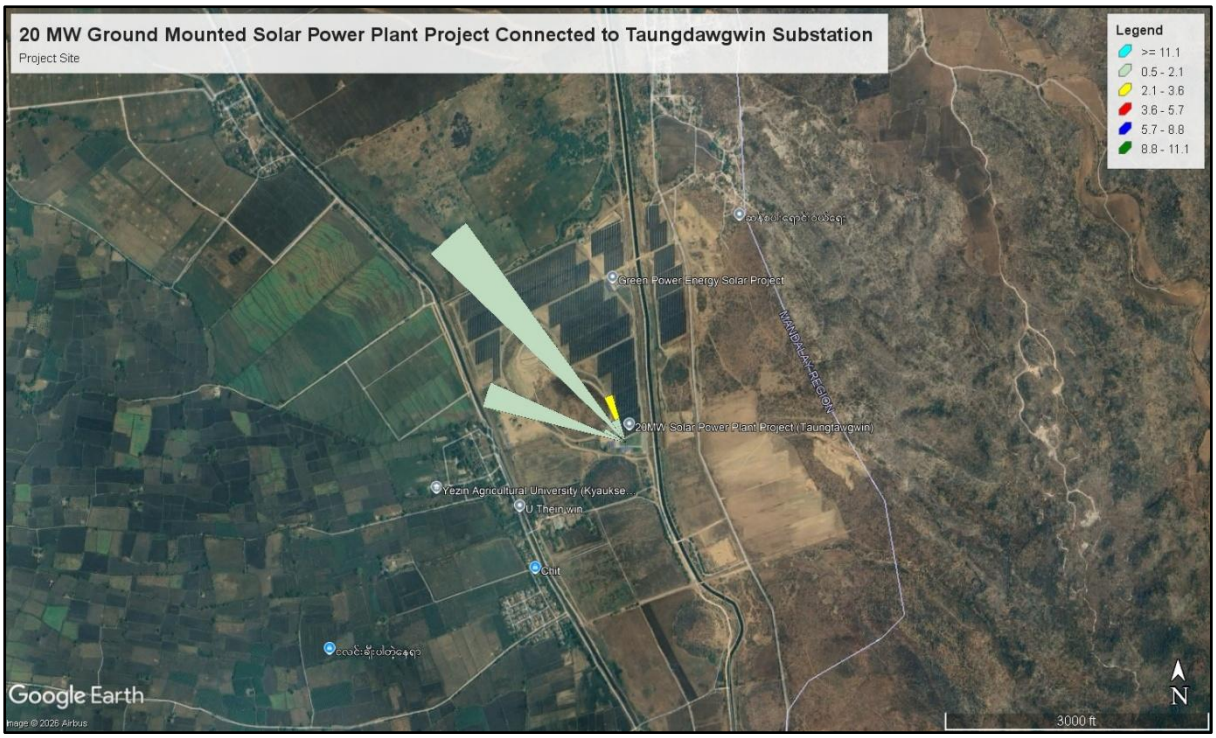


Figure 2. 9 Wind Speed and Wind Direction (Blowing From) at Project Site

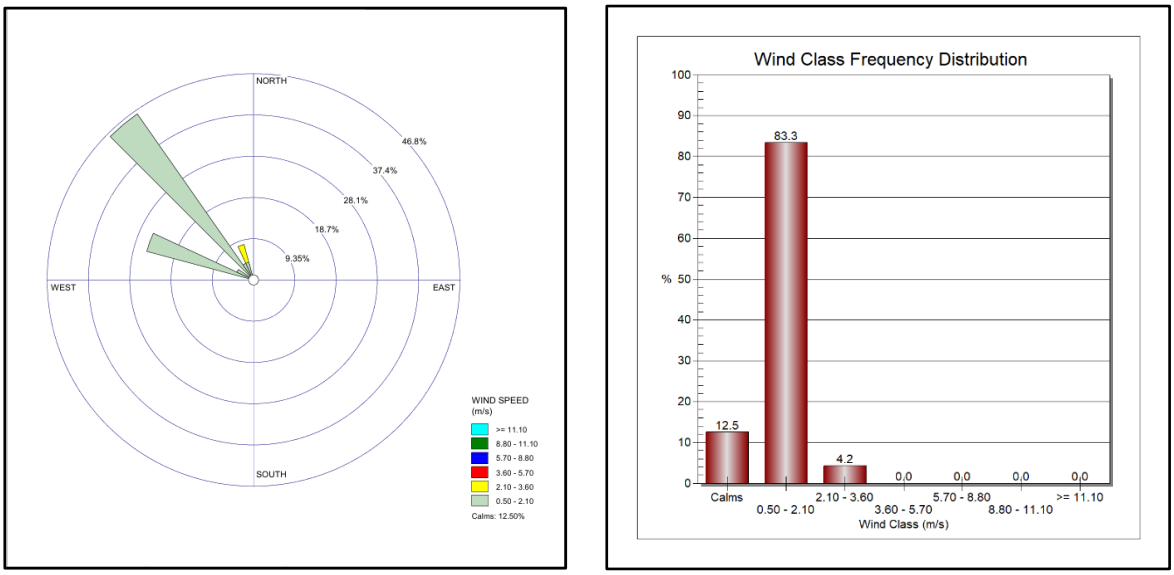


Figure 2. 10 Wind Class Frequency Distribution at Project Site

2.3.2 Significant natural or manmade disaster (3rd August 2025 – 3rd February 2026)

Aftershock Activity Following the March 28, 2025, Earthquake

Continued seismic activity near Kyaukse

Aftershocks into late 2025: In September 2025, a magnitude 4.2 aftershock was reported about 11 km west-southwest of Kyaukse town, part of ongoing tremors following the massive March 28 quake. Residents in Mandalay Region including Kyaukse felt the tremors, and it was noted as the 227th registered aftershock since the March disaster.

Impacts on Myit Thar / Kyaukse area (Aug-Dec 2025):

While not causing major new structural destruction, these repeated aftershocks contributed to long-term risk perceptions, ongoing anxiety among residents, and delayed full recovery of buildings already compromised by the main quake. Aftershocks are typical in the months after a large seismic event and can further destabilize damaged structures.

Continuing Humanitarian and Recovery Challenges from the March 28, 2025, Earthquake

Although the main quake occurred prior to the specified period, the humanitarian impact extended into the timeframe you asked about (Aug 2025 to Feb 2026):

Local Disaster Assistance in Myit Thar / Kyaukse District

- **August 2025:** The Myanmar Red Cross Society provided cash assistance to earthquake-affected households in Myittha Township (Kyaukse District). This aid was part of ongoing relief because many families were still coping with loss of homes and income more than four months after the quake.

Ongoing Structural and Community Impacts

- **Regional Damage from the March Event:** Mandalay Region including Kyaukse Township experienced significant fatalities (e.g., at least 129 deaths in Kyaukse), structural collapse (homes, schools), and widespread damage that continued to affect infrastructure, housing, and services well into the latter half of 2025.

Aftershocks and Local Felt Events

- Multiple smaller magnitude earthquakes (e.g., M 3.5–5.2) were reported in and around the Mandalay/Kyaukse region over months following the main quake, with many felt by communities including Myit Thar, indicating prolonged seismic unrest. (Note: these are crowd-sourced seismic reports and not official event records, but they reflect felt activity in the Kyaukse area during and beyond 2025.)

2.4 Water Quality (3rd August 2025 – 3rd February 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 with 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, waste water and surface water 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

Surface Water Parameters (1 location)	
Physical Parameter	Total Suspended Solids, Turbidity, Oil and Grease
Chemical Parameter	pH, EC, DO, TDS, Salinity, COD, Total Nitrogen, Total Phosphorus, Potassium
Biological Parameter	BOD
Ground Water Parameters (1 location)	
Physical Parameter	Total Suspended Solids, Turbidity, Oil and Grease
Chemical Parameter	pH, EC, DO, TDS, Salinity, COD, Total Nitrogen, Total Phosphorus, Potassium
Biological Parameter	BOD, Total Coliform Bacteria
Waste Water Parameters (1 location)	
Physical Parameter	Total Suspended Solids, Oil and Grease
Chemical Parameter	pH, COD, Total Nitrogen, Total Phosphorus
Biological Parameter	BOD, Total Coliform Bacteria

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 3 sampling locations (SWQ: from Myo Gyi Dam Channel, GWQ: from the project site and WWQ: from the discharge water channel of the project site).

Figure 2. 12 Water Quality Sampling Locations of Taungdawgwin 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 - 21°26'34.49"N Long - 96°16'55.23"E	from the project site
Surface Water Quality Monitoring Location			
1.	SWQ	Lat - 21°26'54.43"N Long - 96°17'12.94"E	from Myo Gyi Dam Channel
Waste Water Quality Monitoring Location			
1.	WWQ	Lat - 21°26'31.92"N Long - 96°17'7.54"E	from the discharge water channel of the project site

Figure 2. 13 Water Quality Measuring during Operation Period

	Ground Water Quality Sampling at Taungdawgwin Solar Power Project 25.11.2025 (from the project site)
	Surface Water Quality Sampling at Taungdawgwin Solar Power Project 25.11.2025 (from Myo Gyi Dam Channel)
	Waste Water Quality Sampling at Taungdawgwin Solar Power Project 25.11.2025 (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, surface water and wastewater quality before the project implementation. Ground water, surface 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 25th November 2025.

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

Water Quality Measurement

Surveyor: Han Lin Zaw	**Date: 25.11.2025**
Location: Surface Water (from Myo Gyi Dam Channel)	**Time: 11:40 Am**
Lat. & Long.: 21°26'54.43"N, 96°17'12.94"E	**Instrument: Horiba U-50**
Temperature: 25.89°C	

Onsite Surface Water Measurement Results

Sr. No.	pH	Electrical Conductivity			DO (mg/l)	Turbidity (NTU)	Remarks
		EC (ms/cm)	TDS (g/l)	Salinity (ppt)			
1	7.89	0.280	0.182	0.1	8.15	72.8	-

Water Quality Measurement

Surveyor: Han Lin Zaw	**Date: 25.11.2025**
Location: Ground Water (from the project site)	**Time: 9:03 Am**
Lat. & Long.: 21°26'34.49"N, 96°16'55.23"E	**Instrument: Horiba U-50**
Temperature: 27.63°C	

Onsite Ground Water Measurement Results

Sr. No.	pH	Electrical Conductivity			DO (mg/l)	Turbidity (NTU)	Remarks
		EC (ms/cm)	TDS (g/l)	Salinity (ppt)			
1	7.13	0.985	0.630	0.5	6.06	130.0	-

Table 2. 16 Comparison of Surface Water Quality, Ground Water Quality and Wastewater Quality with Guidelines (7th Time)

Parameter	Unit	SWQ	GWQ	WWQ	GWQ (Baseline Results)	SWQ (Baseline Results)	International and National Guideline				
							A	B	C	D	E
Dissolved Oxygen (DO)	mg/l	3.80	3.98	-	-	-	-	-	6	-	>2
Oil and grease	mg/l	3	4	6	<5	<5	-	-	Substantially absent	10	-
Total Coliform	MPN/ml	-	<0.3	0.92	6	-	-	-	5	400	-
Total Dissolved Solids	mg/l	517	1701	-	-	-	-	No guideline	-	-	-
Turbidity	NTU	4.15	0.31	-	-	-	-	Not mentioned	<10	-	-
Biochemical Oxygen Demand (BOD)	mg/l	0.44	0.75	0.88	2	2	-	-	-	30	30
Chemical Oxygen Demand (COD)	mg/l	5.2	7.2	7.2	32	32	-	-	-	125	100
Total Nitrogen	mg/l	5.88	3.36	4.06	1.12	1.12	-	-	-	10	-
Total Phosphorus	mg/l	0.00552	0.0058	0.04918	< 0.01	< 0.01	-	-	-	2	-
Total Suspended Solids	mg/l	5.6	0.53	9.8	19	8	-	-	10	50	150
Potassium	mg/l	4.22	1.78	-	0.88	1.66	-	-	-	-	-
pH		7.95	7.43	8.18	-	-					-
Water Quality Result of Previous Monitoring (6th Time)											
Parameter	**Unit**	**SWQ**	**GWQ**	**WWQ**	**GWQ (Baseline Results)**	**SWQ (Baseline Results)**	**International and National Guideline**				
							A	**B**	**C**	**D**	**E**
Dissolved Oxygen (DO)	mg/l	18.72	15.75	-	-	-	-	-	6	-	>2
Oil and grease	mg/l	9	9	8	<5	<5	-	-	Substantially absent	10	-
Total Coliform	MPN/ml	-	< 0.3	24	6	-	-	-	5	400	-

Total Dissolved Solids	mg/l	197	641	-	-	-	-	No guideline	-	-	-
Turbidity	NTU	39.8	0.0	-	-	-	-	Not mentioned	<10	-	-
Biochemical Oxygen Demand (BOD)	mg/l	0.42	0.32	0.67	2	2	-	-	-	30	30
Chemical Oxygen Demand (COD)	mg/l	7.2	6	8	32	32	-	-	-	125	100
Total Nitrogen	mg/l	0.84	1.82	1.40	1.12	1.12	-	-	-	10	-
Total Phosphorus	mg/l	0.01928	0.02915	0.02039	< 0.01	< 0.01	-	-	-	2	-
Total Suspended Solids	mg/l	18	2	19	19	8	-	-	10	50	150
Potassium	mg/l	2.35	5.47	-	0.88	1.66	-	-	-	-	-

SWQ = from Myo Gyi Dam Channel
GWQ = from the project site
WWQ = from the discharge water channel of the project site

A= WHO (Normally found in fresh water/surface water/ground water)
B= WHO (DW) (Health based guideline by the WHO)
C= Ambient water quality standards for the protection of aquatic life
D= National Environmental Quality Emission Guideline (Electric Power Transmission and Distribution)
E= National Surface Water Quality Standard

3. ENVIRONMENTAL MONITORING PLAN (3rd August 2025 – 3rd February 2026)

3.1 Monitoring Records for Safety Plan (3rd August 2025 – 3rd February 2026)

Monitoring Records for Safety Plan

Monthly Record					
Date	**Place**	**Activity**	**Organization**	**Number of Attendees**	**Remarks**
September, 2025	Working Area	Aware Training About PPE	Taung Taw Gwin Solar Power Plant	15	
September, 2025	Briefing Hall	Electrical Safety Training	Taung Taw Gwin Solar Power Plant	15	
November, 2025	Working Area	Electrical Safety Training	Taung Taw Gwin Solar Power Plant	20	
November, 2025	Power Station	Provide PPE Safety Equipment	Taung Taw Gwin Solar Power Plant	20	
December, 2025	Briefing Hall	Fire Safety Training	Taung Taw Gwin Solar Power Plant	25	
January, 2026	Working Area	Provide PPE Safety Equipment	Taung Taw Gwin Solar Power Plant	15	
January, 2026	Briefing Hall	Electrical Safety Training	Taung Taw Gwin Solar Power Plant	15	

Monitoring Record for Occupational Safety Equipment

Date	Place	Type	Quantity	Inspected By	Supervisor	Remark
20.November.2025	Store	Safety Shoe	20	Daw Aye Thida Soe	U Kyaw Zin Htet	
20.November.2025	Store	Safety Gloves	20	Daw Aye Thida Soe	U Kyaw Zin Htet	
20.November.2025	Store	Safety Helmet	20	Daw Aye Thida Soe	U Kyaw Zin Htet	
20.November.2025	Store	Safety Belt	20	Daw Aye Thida Soe	U Kyaw Zin Htet	

Records Photo of Health and Safety Plan Activities

Green Power Energy Company Limited

Fire Extinguisher Check List

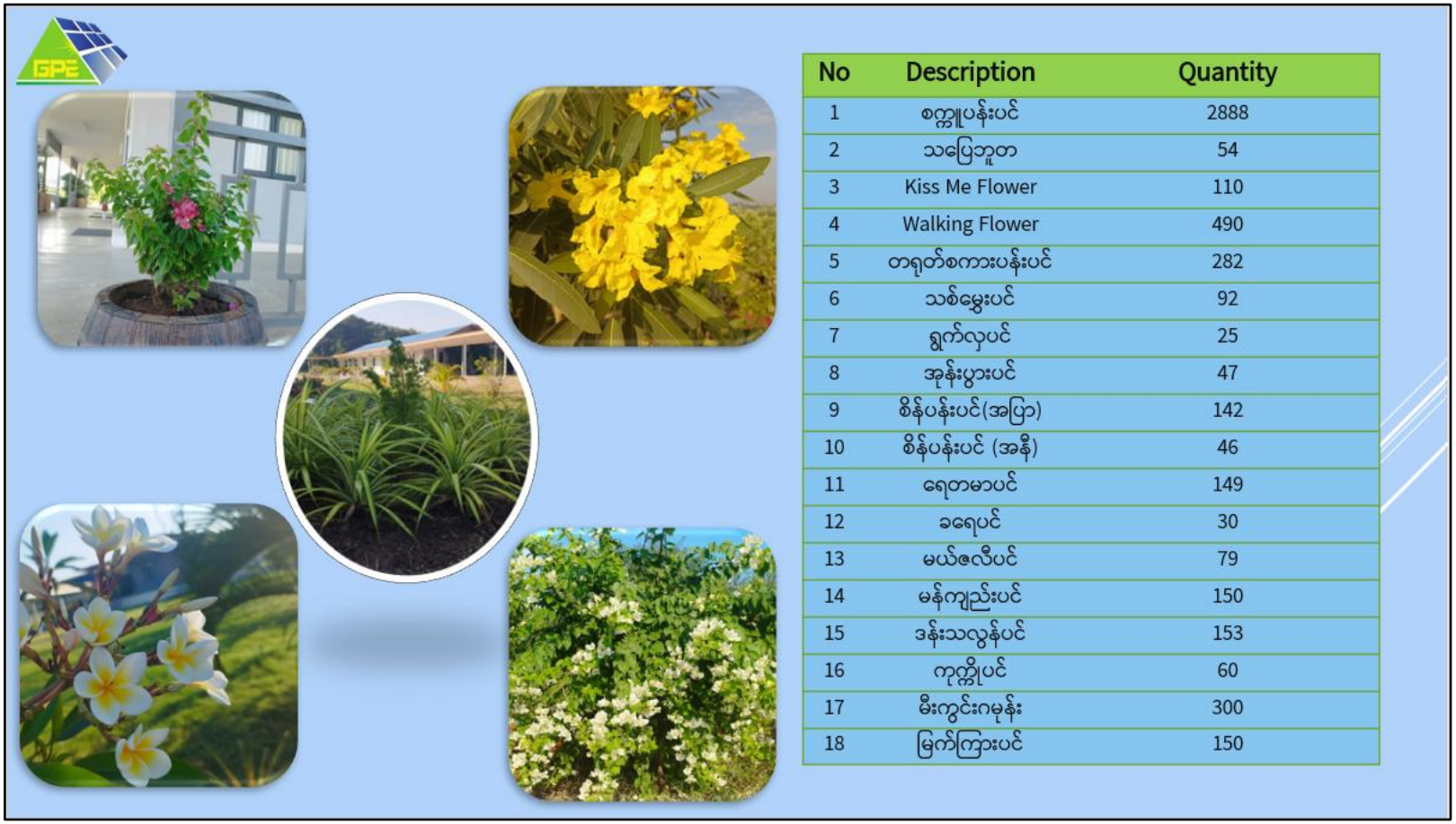
No	Date	Description	Location	Number	Unit	Remarks
1	15/12/2025	Fire Extinguisher (50Kg)	Power Station	2	Nos	
2	15/12/2025	Fire Extinguisher (10Kg)	Power Station	2	Nos	
3	15/12/2025	Fire Extinguisher (10Kg)	Briefing Hall	2	Nos	
4	15/12/2025	Fire Extinguisher (10Kg)	Office	2	Nos	
5	15/12/2025	Fire Extinguisher (5Kg)	6Unit (1)	2	Nos	
6	15/12/2025	Fire Extinguisher (5Kg)	6Unit (2)	2	Nos	
7	15/12/2025	Fire Extinguisher (5Kg)	6Unit (3)	2	Nos	
8	15/12/2025	Fire Extinguisher (5Kg)	6Unit (4)	2	Nos	
9	15/12/2025	Fire Extinguisher (5Kg)	Staff Housing	2	Nos	
10	15/12/2025	Fire Extinguisher (5Kg)	Store	2	Nos	
11	15/12/2025	Fire Extinguisher (5Kg)	Messing	2	Nos	
12	15/12/2025	Fire Extinguisher (10Kg)	Kitchen Room	2	Nos	
13	15/12/2025	Fire Extinguisher (5Kg)	Main Gate	1	Nos	
14	15/12/2025	Fire Extinguisher (5Kg)	Gate (1)	1	Nos	
15	15/12/2025	Fire Extinguisher (5Kg)	Gate (2)	1	Nos	
16	15/12/2025	Fire Extinguisher (5Kg)	On Hill Gate	1	Nos	
17	15/12/2025	Fire Extinguisher (5Kg)	Tower	1	Nos	
18	15/12/2025	Fire Extinguisher (10Kg)	Box X'mer (1)	3	Nos	
19	15/12/2025	Fire Extinguisher (10Kg)	Box X'mer (2)	3	Nos	
20	15/12/2025	Fire Extinguisher (10Kg)	Box X'mer (3)	3	Nos	
21	15/12/2025	Fire Extinguisher (10Kg)	Box X'mer (4)	3	Nos	
	Total			**45**	**Nos**	

Green Power Energy Company Limited

အရေးပေါ်အခြေအနေတုန့်ပြန်မှုအခြေအနေ			
စီမံကိန်းလုပ်ငန်းအတွင်းမှ အရေးကြီးဆက်သွယ်ရမည့် ဖုန်းနံပါတ်များ			
စဉ်	အမည်	ရာထူး	ဖုန်းနံပါတ်
၁	ဦးကျော်ဇင်ထက်	စက်ရုံမှူး	09-259201955
၂	ဦးသိန်းစိုးမင်း	ဒုစက်ရုံမှူး	09-695619295
၃	ဦးဖြိုးသူရကျော်	အန္တရာယ်ကင်းရှင်းရေးအရာရှိ	09-677076529
၄	ဦးကျော်သက်အောင်	ကြီးကြပ်ရေးမှူး	09-695535654
၅	ဦးစိုးမင်းဟိန်း	ရှေ့ဦးသူနာပြု	09-689279663
၆	ဦးကောင်းမြတ်သူ	အရေးပေါ်အခြေအနေထိန်းချုပ်ရေးမှူး	09-674685343

အရေးကြီးဆက်သွယ်ရမည့် ဒေသတွင်းဖုန်းနံပါတ်များ			
စဉ်	အမည်/ဌာန	အကြောင်းအရာ	ဖုန်းနံပါတ်
၁	မြို့နယ်မီးသတ်ဦးစီးဌာန	မီးလောင်ခြင်းအတွက်	09-267780853
၂	တိုက်နယ်ရဲစခန်း	လုံခြုံရေးကိစ္စရပ်များအတွက်	09-757757042
၃	အနီးဆုံးတိုက်နယ်ဆေးရုံ	ထိခိုက်ဒဏ်ရာရရှိသူများအတွက်	09-421209833
၄	မြို့နယ်လျှပ်စစ်ဌာန	လျှပ်စစ်မီးကိစ္စ	09-661906744
၅	မြို့နယ်အထွေထွေအုပ်ချုပ်ရေးဦးစီးဌာန	အထွေထွေအုပ်ချုပ်ရေးကိစ္စ	

4. Environmental Monitoring Record for Reforestation (Plantation) (3rd August 2025 – 3rd February 2026)



No	Description	Quantity
1	စက္ကူပန်းပင်	2888
2	သပြေဘူတ	54
3	Kiss Me Flower	110
4	Walking Flower	490
5	တရုတ်စကားပန်းပင်	282
6	သစ်မွေးပင်	92
7	ရွက်လှပင်	25
8	အုန်းပွားပင်	47
9	စိန်ပန်းပင်(အပြာ)	142
10	စိန်ပန်းပင် (အနီ)	46
11	ရေတမာပင်	149
12	ခရေပင်	30
13	မယ်ဇလီပင်	79
14	မန်ကျည်းပင်	150
15	ဒန်းသလွန်ပင်	153
16	ကုက္ကိုပင်	60
17	မီးကွင်းဂမုန်း	300
18	မြက်ကြားပင်	150

No	Description	Quantity
1	နဂါးမောက်	1100
2	စပျစ်ပင်	350
3	အုန်းပင်	20
4	မာလကာပင်	25
5	ငွေးချိုးပင်	20
6	သံပုရာပင်	25
7	သရက်ပင်	89
8	ပိန္နဲပင်	67
9	ငှက်ပျောပင်	207
10	ဘူးပင်	6
11	ခဝဲပင်	20
12	ရွှေဖရုံပင်	5
13	ကျောက်ဖရုံ	10
14	သဘော်ပင်	20
15	ငရုတ်ပင်	50
16	တိုင်ထောင်ပဲသီး	100
17	ရုံးပတီသီး	200
18	ချဉ်ပေါင်ပင်	500

Photo Records of Reforestation (Plantation)

5. Records for CSR activities (3rd August 2025 – 3rd February 2026)

Records for CSR Activities

Date	Place	Type	Amount (MMK) / Activities	Received by
27.9.2025	ကျောက်ဆည်	ကျောက်ဆည်မြို့ဆင်ကအလှပြိုင်ပွဲ	1,000,000	ကျောက်ဆည်စီမံခန့်ခွဲရေးနှင့်အုပ်ချုပ်ရေး ကော်မတီ
13.10.2025	တောင်တော်ဘုရား	ဆွမ်းဆန်စိမ်းလောင်းလှူခြင်း	500,000	တောင်တော်ရွာ
4.11.2025	အမှတ်(၄) ကျေးရွာ	ကထိန်သင်္ကန်းလှူဒါန်းခြင်း	500,000	အမှတ်(၄) ကျေးရွာ
4.11.2025	အမှတ်(၁) ကျေးရွာ	ကထိန်သင်္ကန်းလှူဒါန်းခြင်း	500,000	အမှတ်(၁) ကျေးရွာ
4.11.2025	ပခန တပ်	ကထိန်သင်္ကန်းလှူဒါန်းခြင်း	500,000	ပခန တပ်
16.1.2026	အမှတ်(၂) ကျေးရွာ	ပညာရေးစုံညီပွဲတော်ရန်ပုံငွေလှူဒါန်းခြင်း	500,000	အမှတ်(၂) ကျေးရွာ

Photo Record for CSR Activities

Green Power Energy Company Limited

ကျောက်ဆည်ခရိုင်စီမံခန့်ခွဲရေးနှင့်အုပ်ချုပ်ရေးကော်မတီ
ကျောက်ဆည်မြို့

ဂုဏ်ပြုမှတ်တမ်းလွှာ

ဒကွာက်ဆည်နေရှိ မြန်မာနိုင်ငုသားဒကျးုပ် ဆို၊ က၊ ဒေး၊ တီး မြို့ပ်ခွဲနှုန်
ဒကွာက်ဆည်မြို့ဆင်အကအလုပ်ြိုင်ခွဲ ဒည်ကားသို့က်မြို့က်စွာ ကွင်းပန်ိုင်ဒေ
အတွက်.....မြို့နယ်၊ .....ရုပ်ကွက်/ဒကျးွာဒုပ
ဦး/ဒခါ်.....Green Power Energy.....သုပ်ခန်း)သည်
အလုုဒခွကျပ်(--၁၀၀၀၀၀၀၀/-) (ကျပ်ဒေါ်ကြေးတိ)အား
လှုုခါန်းနဲပါသမြို့ ဤ "ဂုဏ်ပြုမှတ်တမ်းလွှာ"ကို ချီးမြှင့်အပ်ပါသည်၊

ဥက္ကဋ္ဌ
ခရိုင်စီမံခန့်ခွဲရေးနှင့်အုပ်ချုပ်ရေးကော်မတီ
ကျောက်ဆည်ခရိုင်

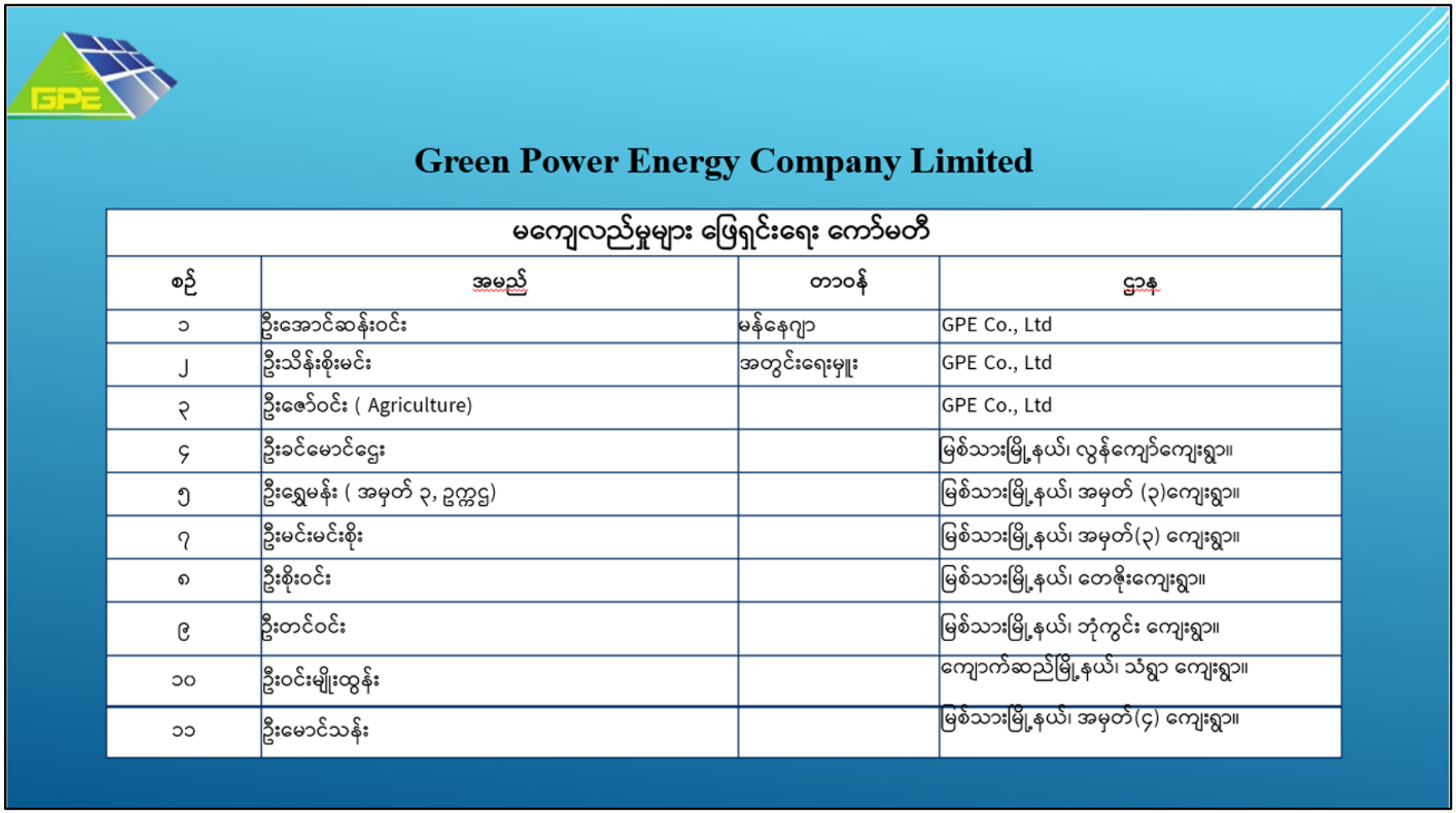
ရက်နဲ့ ၂၀၂၅ ခုနှစ်၊ ဧပြီလ ၁၂ ရက်

6. Records for GRM (3rd August 2025 – 3rd February 2026)

Monitoring Records for GRM

Monthly Record					
Date	**Place**	**Activity**	**Organization or Individual**	**Action Plan**	**Recorded by**
August, 2025	Green Power Energy Plant	-	-	-	U Kyaw Zin Htet
September, 2025	Green Power Energy Plant	-	-	-	U Kyaw Zin Htet
October, 2025	Green Power Energy Plant	-	-	-	U Kyaw Zin Htet
November, 2025	Green Power Energy Plant	-	-	-	U Kyaw Zin Htet
December, 2025	Green Power Energy Plant	-	-	-	U Kyaw Zin Htet
January, 2026	Green Power Energy Plant	-	-	-	U Kyaw Zin Htet

GRM Organization of Taungdawgwin Solar Power Project



Green Power Energy Company Limited

မကျေလည်မှုများ ဖြေရှင်းရေး ကော်မတီ

စဉ်	အမည်	တာဝန်	ဌာန
၁	ဦးအောင်ဆန်းဝင်း	မန်နေဂျာ	GPE Co., Ltd
၂	ဦးသိန်းစိုးမင်း	အတွင်းရေးမှူး	GPE Co., Ltd
၃	ဦးဇော်ဝင်း (Agriculture)		GPE Co., Ltd
၄	ဦးခင်မောင်ဌေး		မြစ်သားမြို့နယ်၊ လွန်ကျော်ကျေးရွာ။
၅	ဦးရွှေမန်း (အမှတ် ၃, ဥက္ကဋ္ဌ)		မြစ်သားမြို့နယ်၊ အမှတ် (၃)ကျေးရွာ။
၆	ဦးမင်းမင်းစိုး		မြစ်သားမြို့နယ်၊ အမှတ်(၃) ကျေးရွာ။
၇	ဦးစိုးဝင်း		မြစ်သားမြို့နယ်၊ တောဇီးကျေးရွာ။
၈	ဦးတင်ဝင်း		မြစ်သားမြို့နယ်၊ ဘုံကွင်း ကျေးရွာ။
၁၀	ဦးဝင်းမျိုးထွန်း		ကျောက်ဆည်မြို့နယ်၊ သံရွာ ကျေးရွာ။
၁၁	ဦးမောင်သန်း		မြစ်သားမြို့နယ်၊ အမှတ်(၄) ကျေးရွာ။

7. Records for Waste Disposal (3rd August 2025 – 3rd February 2026)

Records for Waste Disposal

Date	Place	Type	Amount	Inspected By
31-August, 2025	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	50 Kg	U Phyo Thura Kyaw
15-September, 2025	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	63 Kg	U Phyo Thura Kyaw
30-September, 2025	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	55 Kg	U Phyo Thura Kyaw
15-October, 2025	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	40 Kg	U Phyo Thura Kyaw
31-October, 2025	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	53 Kg	U Phyo Thura Kyaw
15-November, 2025	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	45 Kg	U Phyo Thura Kyaw
30-November, 2025	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	60 Kg	U Phyo Thura Kyaw
15-December, 2025	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	45 Kg	U Phyo Thura Kyaw
31-December, 2025	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	55 Kg	U Phyo Thura Kyaw
15-January,2026	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	40 Kg	U Phyo Thura Kyaw
31-January,2026	ဝန်ထမ်းလိုင်းများရုံး	အမှိုက်စို/အမှိုက်ခြောက်	30 Kg	U Phyo Thura Kyaw

Records Photo for Waste Disposal

Appendix 1 (Water Results) (3rd August 2025 – 3rd February 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	: Taung Daw Gwin Solar Project
2	Location	: Kyaukse, Mandalay Region
3	Type of Sample	: Ground Water
4	Sample No.	: 01551/2025
5	Contact Person	: Eguard Environmental Services
6	Phone No.	: 09-797005212
7	Date Received	: 27.11.2025
8	Date of Test Performed	: 27.11.2025
9	Date of Issued	: 11.12.2025
10	Result	:

No.	Parameter	Result	Unit	WHO STD 2018	Method
1	Dissolved Oxygen	3.98	mg/L	6 mg/L	Hanna HI98193 - DO and BOD Meter
2	Oil and Grease	4	mg/L	NA	[a] 5520D, Soxhlet Extraction Method
3	Salinity	41.53	mg/L	NA	[a] 4500-Cl- B, Argentometric Method
4	Total Coliform	< 0.3	MPN/ml	ND per 100 mL	FDA-BAM: MPN Method

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 : NAW EH THA KU
Position : Laboratory Technician
Signature :.....

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

Myanmar Innovation Group of Co., Ltd. PRO LAB ANALYTICAL LABORATORY

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/0926/2025
Date: 29-12-2025

ANALYTICAL TEST REPORT

Project Name: **Taung Daw Gwin Solar Project**

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

Assignment number	2025-204-1	Sampling Location	Kyaukse, Mandalay Region
Sample name	GW	Sampling Date	-
Sample type	**Ground Water**	Sample received date	26-11-2025
Comments			

Parameter	Result	Unit	Method reference	Instruments
pH	7.43	-	ISO 10523:2008	ManTech Robot (PC-1300-475E)
Electrical Conductivity	82.21	uS/cm	NS-ISO 7888:1993	ManTech Conductivity, Model 4510 Conductivity/TDS meter
Total Dissolved Solid	1701	mg/L	Potentiometric	Multi-parameter Field Tester
Biological Oxygen Demand	0.75	mg/L	Potentiometric	YSI Pro DO Tester
Chemical Oxygen Demand	7.2	mg/L	Titrimetric	Titrator
Total Nitrogen	3.36	mg/L	Kjeldahl	Kjeldahl Digestion & Distillation Unit
Total Phosphorus	5.8	µg /L	NS 4725	SFA(SKALAR SAN plus Analyzer)SA 3000/5000,SA 1100
Potassium	1.78	mg/L	Spectrophotometric	Atomic Absorption Spectrophoto-meter,AA 7000,SHIMADZU
Total Suspended Solid	0.53	mg/L	NS 4733:1983/NS-EU 872:2005	Circulation and Filtration System
Turbidity	0.31	NTU	ISO 7027:1999	ManTech Robot (MT-165-981)

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

Tested by

Signature:

Name: Dr. Thida Cho
Assistant 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	: Taung Daw Gwin Solar Project
2	Location	: Kyaukse, Mandalay Region
3	Type of Sample	: Surface Water
4	Sample No.	: 01552/2025
5	Contact Person	: Eguard Environmental Services
6	Phone No.	: 09-797005212
7	Date Received	: 27.11.2025
8	Date of Test Performed	: 27.11.2025
9	Date of Issued	: 11.12.2025
10	Result	:

No.	Parameter	Result	Unit	WHO STD 2018	Method
1	Dissolved Oxygen	3.80	mg/L	6 mg/L	Hanna HI98193 - DO and BOD Meter
2	Oil and Grease	3	mg/L	NA	[a] 5520D, Soxhlet Extraction Method
3	Salinity	10.84	mg/L	NA	[a] 4500-Cl- B, Argentometric Method

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 : NAW EH THA KU
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/0928/2025
Date: 29-12-2025

ANALYTICAL TEST REPORT

Project Name: **Taung Daw Gwin Solar Project**

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

Assignment number	2025-204-3	Sampling Location	Kyaukse, Mandalay Region
Sample name	SW	Sampling Date	-
Sample type	**Surface Water**	Sample received date	26-11-2025
Comments			

Parameter	Result	Unit	Method reference	Instruments
pH	7.95	-	ISO 10523:2008	ManTech Robot (PC-1300-475E)
Electrical Conductivity	28.85	uS/cm	NS-ISO 7888:1993	ManTech Conductivity, Model 4510 Conductivity/TDS meter
Total Dissolved Solid	517	mg/L	Potentiometric	Multi-parameter Field Tester
Biological Oxygen Demand	0.44	mg/L	Potentiometric	YSI Pro DO Tester
Chemical Oxygen Demand	5.2	mg/L	Titrimetric	Titrator
Total Nitrogen	5.88	mg/L	Kjeldahl	Kjeldahl Digestion & Distillation Unit
Total Phosphorus	5.52	µg /L	NS 4725	SFA(SKALAR SAN plus Analyzer)SA 3000/5000,SA 1100
Potassium	4.22	mg/L	Spectrophotometric	Atomic Absorption Spectrophoto-meter,AA 7000,SHIMADZU
Total Suspended Solid	5.6	mg/L	NS 4733:1983/NS-EU 872:2005	Circulation and Filtration System
Turbidity	4.15	NTU	ISO 7027:1999	ManTech Robot (MT-165-981)

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

Tested by

Signature:

Name: Dr. Thida Cho
Assistant 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	: Taung Daw Gwin Solar Project
2	Location	: Kyaukse, Mandalay Region
3	Type of Sample	: Waste Water
4	Sample No.	: 01553/2025
5	Contact Person	: Eguard Environmental Services
6	Phone No.	: 09-797005212
7	Date Received	: 27.11.2025
8	Date of Test Performed	: 27.11.2025
9	Date of Issued	: 11.12.2025
10	Result	:

No.	Parameter	Result	Unit	WHO STD 2018	Method
1	Oil and Grease	6	mg/L	-	[a] 5520D, Soxhlet Extraction Method
2	Total Coliform	0.92	MPN/ml	-	FDA-BAM: MPN Method

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 : NAW EH THA KU
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/0927/2025
Date: 29-12-2025

ANALYTICAL TEST REPORT

Project Name: **Taung Daw Gwin Solar Project**

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

Assignment number	2025-204-2	Sampling Location	Kyaukse, Mandalay Region
Sample name	WW	Sampling Date	-
Sample type	**Waste Water**	Sample received date	26-11-2025
Comments			

Parameter	Result	Unit	Method reference	Instruments
pH	8.18	-	ISO 10523:2008	ManTech Robot (PC-1300-475E)
Biological Oxygen Demand	0.88	mg/L	Potentiometric	YSI Pro DO Tester
Chemical Oxygen Demand	7.2	mg/L	Titrimetric	Titrator
Total Nitrogen	4.06	mg/L	Kjeldahl	Kjeldahl Digestion & Distillation Unit
Total Phosphorus	49.18	µg /L	NS 4725	SFA(SKALAR SAN plus Analyzer)SA 3000/5000,SA 1100
Total Suspended Solid	9.8	mg/L	NS 4733:1983/NS-EU 872:2005	Circulation and Filtration System

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

Tested by

Signature:

Name: Dr. Thida Cho
Assistant Research Officer

Approved by

Signature:

Name: Dr. Thida Swe
Research Officer