

**Environmental Monitoring Report**  
**For**  
**20 MW Ground Mounted Solar Power Plant Project**  
**Connected to Taungdawgwin Substation**  
**(Operation Phase)**  
**(3<sup>rd</sup> February 2025 – 3<sup>rd</sup> August 2025)**  
**(6<sup>th</sup> Time)**

Proposed by



Green Power Energy Co., Ltd.

Prepared by



E Guard Environmental Services

**August, 2025**

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## 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 Mandalay 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 <sub>10</sub> , PM <sub>2.5</sub> , CO, CO <sub>2</sub> , SO <sub>2</sub> , NO <sub>2</sub>	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.

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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.

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စည်းကမ်းချက်များသတ်မှတ်ခြင်း

၂။ အောက်ဖော်ပြပါ ရည်ရွယ်ချက်များ ရရှိနိုင်ရေးအတွက် ဤသက်သေခံလက်မှတ်၏ နောက်ဆက်တွဲပါ စည်းကမ်းချက်များကို လိုက်နာဆောင်ရွက်ရန် သတ်မှတ်ထားခြင်းဖြစ်ပါ သည်-

- (က) ပတ်ဝန်းကျင်နှင့် လူမှုဆိုင်ရာ ဆိုးကျိုးသက်ရောက်မှုများကို ကြိုတင်ကာကွယ်ရေး၊ အနိမ့်ဆုံးဖြစ်စေရေးနှင့် ထိခိုက်မှုများကို ပြန်လည်ကုစားရေး ဆောင်ရွက်ပေးရန်၊
- (ခ) စီမံကိန်းအဆိုပြုသူ၏ စီမံကိန်းဆိုင်ရာ ကတိကဝတ်များနှင့် လိုက်နာထမ်းဆောင် ရမည့် တာဝန်များကို သတ်မှတ်ရန်၊
- (ဂ) လက်ခံနိုင်သော ပတ်ဝန်းကျင်အရည်အသွေး ဖြစ်စေရေးအတွက် စံချိန်စံညွှန်းများ နှင့် အရည်အသွေးတိုင်းတာရေးနည်းလမ်းများ သတ်မှတ်ရန်၊
- (ဃ) စောင့်ကြပ်ကြည့်ရှုခြင်းနှင့် အစီရင်ခံခြင်းတို့ကို ပုံမှန်ဆောင်ရွက်စေရန်၊
- (င) စီမံကိန်းတွင် စဉ်ဆက်မပြတ် ဆောင်ရွက်သွားရမည့် ပတ်ဝန်းကျင်စီမံခန့်ခွဲရေး အစီအမံတစ်ရပ်ကို ရေးဆွဲဆောင်ရွက်ရန်။



(လှမောင်သိန်း)

အမြဲတမ်းအတွင်းဝန်

သယံဇာတနှင့်သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာန

## 2. Environmental Quality Measurement and Results (3<sup>rd</sup> February 2025 – 3<sup>rd</sup> August 2025)

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 (3<sup>rd</sup> February 2025 – 3<sup>rd</sup> August 2025)

#### 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 Guidelines NEQG, 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

<b>Ambient Air Quality (1 locations)</b>	
Gas Emission	CO, CO <sub>2</sub> , SO <sub>2</sub> , NO <sub>2</sub>
Dust Emission	PM <sub>10</sub> , PM <sub>2.5</sub>

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

<p><b>Davis Vantage Pro2 Wireless Weather Station</b> Provides detailed current weather conditions and expanded forecasts - all at a glance The Vantage Pro2 uses a frequency-hopping spread spectrum radio from 902 MHz to 928 MHz to transmit and receive data up to 1,000' (300m) line of sight. In addition, the weather station features a bubble level, improved anemometer base, redesigned wind cups, and factory-calibrated wind direction. The integrated sensor suite combines temperature and humidity sensors, rain collector with an aluminum-plated tipping bucket, and anemometer into one package for easy setup. Measure inside and outside temperature and humidity, heat index, barometric pressure, dew point, rainfall, wind direction and speed, and wind chill.</p>	
<p><b>Haz-Scanner EPAS</b> PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>2</sub>, SO<sub>2</sub>, CO, CO<sub>2</sub>, Temperature, and Relative Humidity</p>	

### 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.

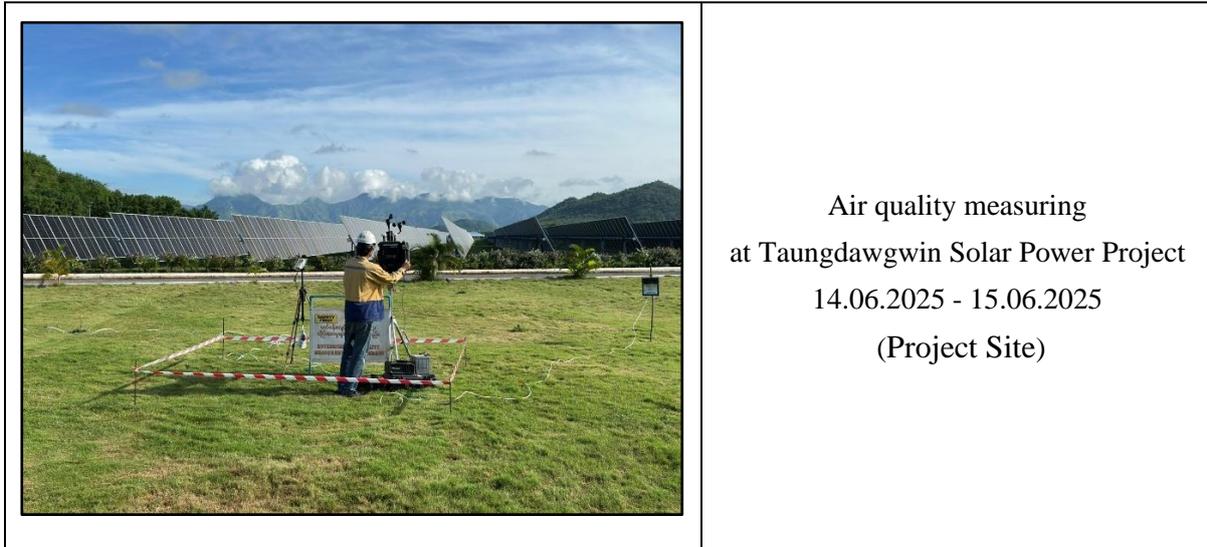


Figure 2. 1 Air Quality Monitoring Locations of Taungdawgwin Solar Power Project

Table 2. 3 Locations of Environmental Quality sampling points

Locations No.	Points	Coordinate	Locations
<b>Ambient Air Quality Monitoring Location</b>			
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



### 2.1.3 Measurement Results and Comparison for Air Quality

The air quality monitoring was done at selected locations during 14<sup>th</sup> to 15<sup>th</sup> June 2025. During this survey, these parameters were measured with adequate devices named Environmental Perimeter Air Station (EPAS) viz; Particulate Matters (PM<sub>10</sub> and PM<sub>2.5</sub>) and gases CO<sub>2</sub>, CO, SO<sub>2</sub> and NO<sub>2</sub> via 24-hour basis. The results and guidelines of all emission pollutants are shown in table.

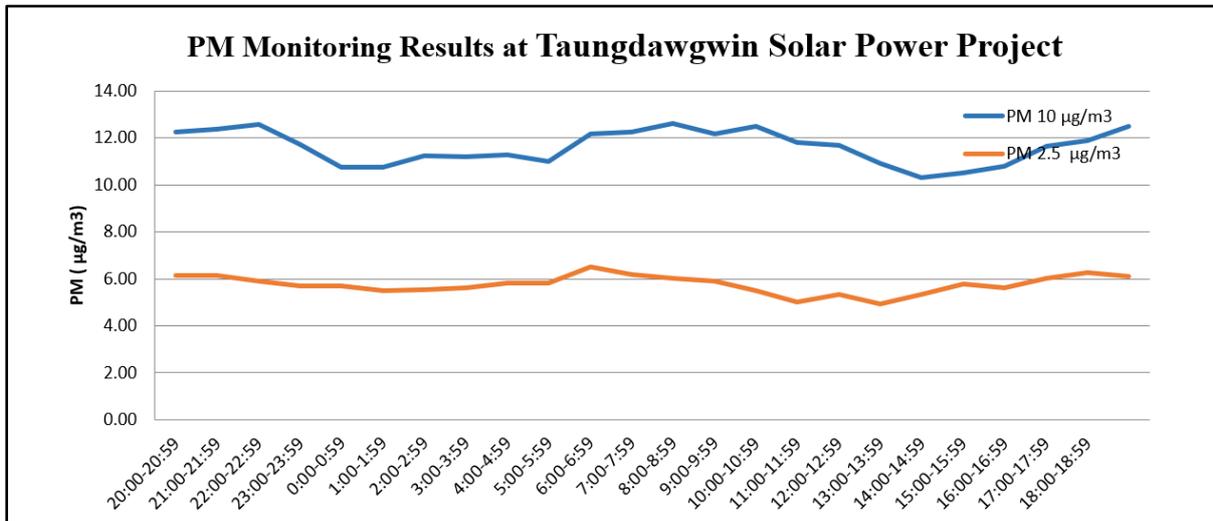


Figure 2. 3 PM Monitoring Results at Taungdawgwin Solar Power Project

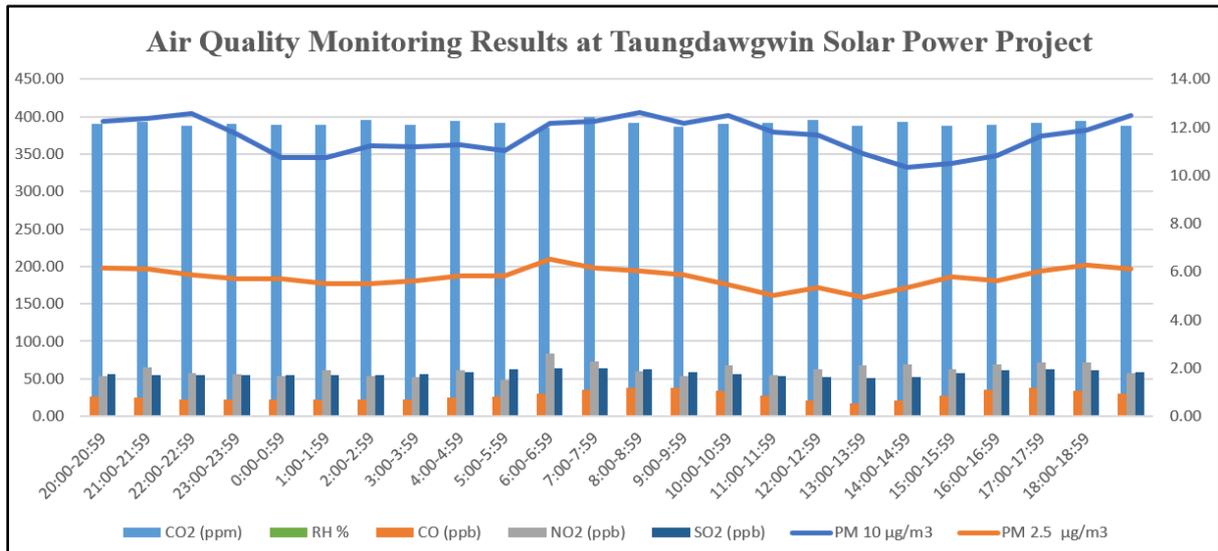


Figure 2. 4 Fluctuation of Air Pollutants during Dial Cycle at Taungdawgwin Solar Power Project

**Particulate matters (PM<sub>10</sub> and PM<sub>2.5</sub>)** results are within guideline values as shown in table. Atmospheric particulate matters such as PM<sub>10</sub> and PM<sub>2.5</sub> 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 interval are shown in the following table.

**Sulfur Dioxide (SO<sub>2</sub>)** 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 source of SO<sub>2</sub>. SO<sub>2</sub> 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<sub>x</sub>)** in the ambient air consist of nitric oxide (NO), nitrogen dioxide (NO<sub>2</sub>) and nitrous oxide (N<sub>2</sub>O). NO<sub>2</sub> is formed by chemical reaction of NO and ozone. The main sources of NO<sub>2</sub> are combustion of fuel and on-road and off-road vehicles. NO<sub>2</sub> 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<sub>2</sub> reduction.

Likewise, **Carbon Monoxide (CO) and Carbon dioxide (CO<sub>2</sub>)** have the same emission sources and mitigation measures for SO<sub>2</sub> and NO<sub>2</sub>. They are poisonous gas and cause damage to the respiratory organ. Guidelines 2013, adopted threshold limit values of CO<sub>2</sub> is 5,000 ppm for 8-hour, time-weighted average. Thus, it can be concluded that the existing CO<sub>2</sub> 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 <sub>2</sub> (ppm)	CO (ppb)	NO <sub>2</sub> (ppb)	PM <sub>10</sub> µg/m <sup>3</sup>	PM <sub>2.5</sub> µg/m <sup>3</sup>	RH%	SO <sub>2</sub> (ppb)
14.06.2025	20:00-20:59	Average	390.51	0.81	1.67	12.23	6.16	19.85	1.76
14.06.2025	21:00-21:59	Average	392.33	0.77	2.05	12.38	6.13	20.52	1.71
14.06.2025	22:00-22:59	Average	388.28	0.71	1.78	12.58	5.88	19.78	1.71
14.06.2025	23:00-23:59	Average	389.86	0.71	1.76	11.71	5.72	19.29	1.71
15.06.2025	0:00-0:59	Average	388.48	0.69	1.66	10.75	5.70	19.27	1.70
15.06.2025	1:00-1:59	Average	388.41	0.69	1.93	10.76	5.50	19.80	1.71
15.06.2025	2:00-2:59	Average	396.14	0.71	1.68	11.23	5.52	19.68	1.73
15.06.2025	3:00-3:59	Average	389.13	0.71	1.63	11.18	5.61	20.05	1.76
15.06.2025	4:00-4:59	Average	393.80	0.76	1.90	11.27	5.83	20.48	1.84
15.06.2025	5:00-5:59	Average	391.75	0.81	1.52	11.01	5.81	19.68	1.93
15.06.2025	6:00-6:59	Average	385.57	0.94	2.61	12.16	6.51	18.81	1.98
15.06.2025	7:00-7:59	Average	399.55	1.09	2.29	12.26	6.17	19.13	1.98
15.06.2025	8:00-8:59	Average	392.31	1.19	1.86	12.59	6.04	19.45	1.94
15.06.2025	9:00-9:59	Average	386.97	1.17	1.67	12.15	5.89	19.92	1.83
15.06.2025	10:00-10:59	Average	390.06	1.06	2.12	12.48	5.48	19.51	1.76
15.06.2025	11:00-11:59	Average	391.09	0.85	1.70	11.80	5.03	19.56	1.68
15.06.2025	12:00-12:59	Average	395.83	0.67	1.97	11.70	5.35	19.30	1.62
15.06.2025	13:00-13:59	Average	387.21	0.54	2.11	10.90	4.94	18.93	1.58
15.06.2025	14:00-14:59	Average	392.52	0.64	2.17	10.33	5.34	20.35	1.65
15.06.2025	15:00-15:59	Average	387.41	0.87	1.95	10.50	5.79	19.47	1.80
15.06.2025	16:00-16:59	Average	388.65	1.08	2.16	10.81	5.64	19.58	1.93
15.06.2025	17:00-17:59	Average	391.08	1.16	2.23	11.66	6.03	19.62	1.97
15.06.2025	18:00-18:59	Average	393.98	1.07	2.23	11.89	6.28	20.06	1.92
15.06.2025	19:00-19:59	Average	388.18	0.94	1.81	12.51	6.12	20.03	1.84
<b>Average</b>			<b>390.80</b>	<b>0.86</b>	<b>1.94</b>	<b>11.62</b>	<b>5.77</b>	<b>19.67</b>	<b>1.79</b>
<b>1 hour Minimum</b>			385.57	0.54	1.52	10.33	4.94	18.81	1.58

<b>1 hour Maximum</b>	399.55	1.19	2.61	12.59	6.51	20.52	1.98
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Table 2. 5 Air Emission Levels (Standard)

No.	Parameter	Unit	Maximum Concentration	
			National	Average Period
1.	Carbon monoxide	mg/m <sup>3</sup>	9	8-hour
2.	Carbon dioxide	ppm	5000	8-hour
3.	Sulfur dioxide	µg/m <sup>3</sup>	20 500	24-hour 10-minute
4.	Nitrogen dioxide	µg/m <sup>3</sup>	40 200	1 year 1 hour
5.	Particulate matter PM <sub>10</sub>	µg/m <sup>3</sup>	20 50	1-year 24-hour
6.	Particulate matter PM <sub>2.5</sub>	µg/m <sup>3</sup>	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	6 <sup>th</sup> Time Monitoring Results	Previous Monitoring Results	EMP Baseline Results	NEQG Guidelines Value	ACGIH Guidelines Value	NAAQS Guidelines Value	Unit	Averaging Period
PM <sub>10</sub>	11.62	6.12	25.13	50	-	-	µg/m <sup>3</sup>	24hrs
PM <sub>2.5</sub>	5.77	3.33	10.84	25	-	-	µg/m <sup>3</sup>	24hrs
CO	0.00098	0.00045	0.01	-	-	9	ppm	8hrs
CO <sub>2</sub>	391.39	422.32	451.72	-	5000	-	ppm	8hrs
SO <sub>2</sub>	4.70	0.15	0.14	20	-	-	µg/m <sup>3</sup>	24hrs
NO <sub>2</sub>	4.91	6.87	28.97	200	-	-	µg/m <sup>3</sup>	1hrs

## 2.2 Ambient Noise (3<sup>rd</sup> February 2025 – 3<sup>rd</sup> August 2025)

### 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

<b>Noise monitoring (2 locations)</b>	
<b>Noise Emission</b>	LAeq (dBA) (1hrs, 24 hrs.)

Table 2. 8 Equipment used to measure ambient noise measurement

<p><b>Digital Sound Level Meter</b> Noise</p>	
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### 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.

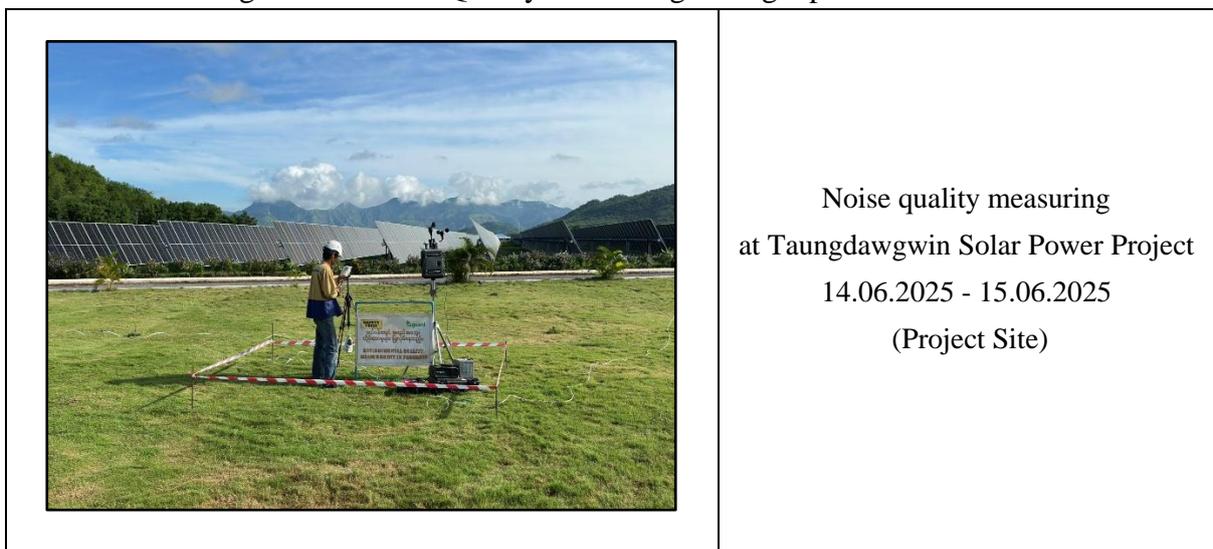


Figure 2. 5 Noise Quality Monitoring Locations of Taungdawgwin Solar Power Project

Table 2. 9 Locations of Environmental Quality sampling points

Locations No.	Points	Coordinate	Locations
<b>Noise Monitoring Location</b>			
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  
14.06.2025 - 15.06.2025  
(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 nearly the air monitoring points and staff housing on 14<sup>th</sup> to 15<sup>th</sup> June 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	14.06.2025	20:00:05-20:59:05	52.14	A	Day	51.48
2	14.06.2025	21:00:05-21:59:05	58.08	A	Day	
3	14.06.2025	22:00:05-22:59:05	49.00	A	Night	
4	14.06.2025	23:00:05-23:59:05	49.71	A	Night	
5	15.06.2025	0:00:05-0:59:05	50.01	A	Night	
6	15.06.2025	1:00:05-1:59:05	49.58	A	Night	
7	15.06.2025	2:00:05-2:59:05	50.59	A	Night	
8	15.06.2025	3:00:05-3:59:05	50.68	A	Night	
9	15.06.2025	4:00:05-4:59:05	53.98	A	Night	
10	15.06.2025	5:00:05-5:59:05	53.95	A	Night	
11	15.06.2025	6:00:05-6:59:05	55.79	A	Night	
12	15.06.2025	7:00:05-7:59:05	51.85	A	Day	53.50
13	15.06.2025	8:00:05-8:59:05	49.89	A	Day	
14	15.06.2025	9:00:05-9:59:05	50.17	A	Day	
15	15.06.2025	10:00:05-10:59:05	49.44	A	Day	
16	15.06.2025	11:00:05-11:59:05	49.72	A	Day	
17	15.06.2025	12:00:05-12:59:05	55.94	A	Day	

18	15.06.2025	13:00:05-13:59:05	60.55	A	Day	
19	15.06.2025	14:00:05-14:59:05	69.79	A	Day	
20	15.06.2025	15:00:05-15:59:05	49.87	A	Day	
21	15.06.2025	16:00:05-16:59:05	51.48	A	Day	
22	15.06.2025	17:00:05-17:59:05	48.34	A	Day	
23	15.06.2025	18:00:05-18:59:05	53.62	A	Day	
24	15.06.2025	19:00:05-19:59:05	51.53	A	Day	
<b>Average</b>			<b>52.74</b>			

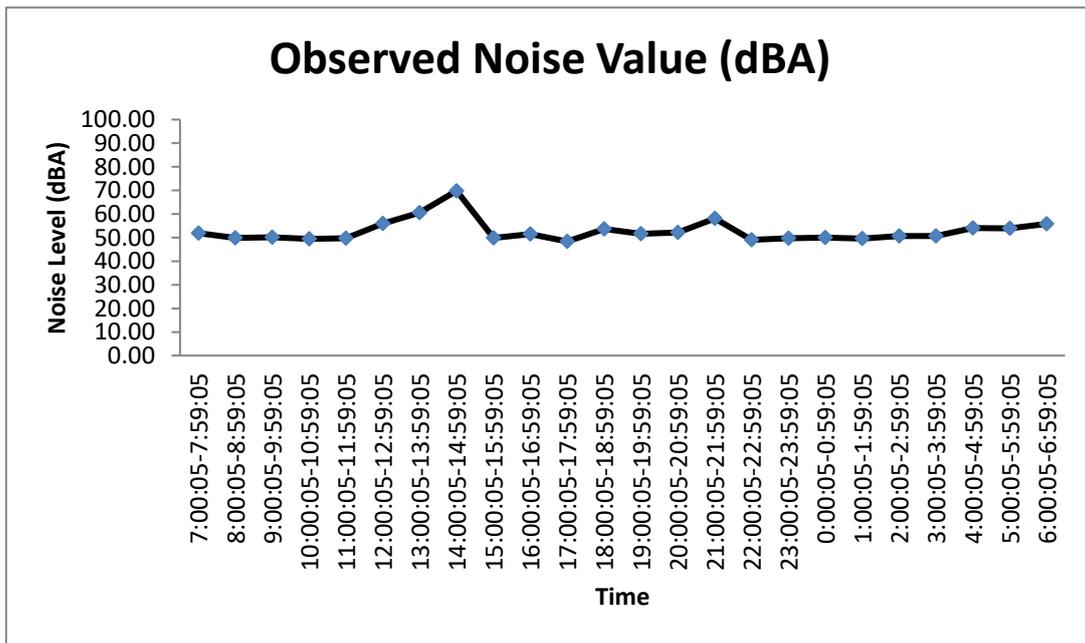


Figure 2. 7 Noise Level at Project Site

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

No.	Date	Time	Observed Mean Value (Source)	Weight	Day/Night	Average
1	14.06.2025	20:00:57-20:59:57	40.97	A	Day	41.89
2	14.06.2025	21:00:57-21:59:57	41.08	A	Day	
3	14.06.2025	22:00:57-22:59:57	39.22	A	Night	
4	14.06.2025	23:00:57-23:59:57	43.41	A	Night	
5	15.06.2025	0:00:57-0:59:57	44.87	A	Night	
6	15.06.2025	1:00:57-1:59:57	40.55	A	Night	
7	15.06.2025	2:00:57-2:59:57	42.40	A	Night	
8	15.06.2025	3:00:57-3:59:57	40.25	A	Night	
9	15.06.2025	4:00:57-4:59:57	39.75	A	Night	
10	15.06.2025	5:00:57-5:59:57	40.22	A	Night	
11	15.06.2025	6:00:57-6:59:57	46.31	A	Night	

12	15.06.2025	7:00:57-7:59:57	39.83	A	Day	46.33
13	15.06.2025	8:00:57-8:59:57	39.07	A	Day	
14	15.06.2025	9:00:57-9:59:57	50.38	A	Day	
15	15.06.2025	10:00:57-10:59:57	48.99	A	Day	
16	15.06.2025	11:00:57-11:59:57	43.45	A	Day	
17	15.06.2025	12:00:57-12:59:57	52.44	A	Day	
18	15.06.2025	13:00:57-13:59:57	48.86	A	Day	
19	15.06.2025	14:00:57-14:59:57	48.65	A	Day	
20	15.06.2025	15:00:57-15:59:57	48.82	A	Day	
21	15.06.2025	16:00:57-16:59:57	45.70	A	Day	
22	15.06.2025	17:00:57-17:59:57	50.88	A	Day	
23	15.06.2025	18:00:57-18:59:57	43.57	A	Day	
24	15.06.2025	19:00:57-19:59:57	52.28	A	Day	
<b>Average</b>			<b>44.66</b>			

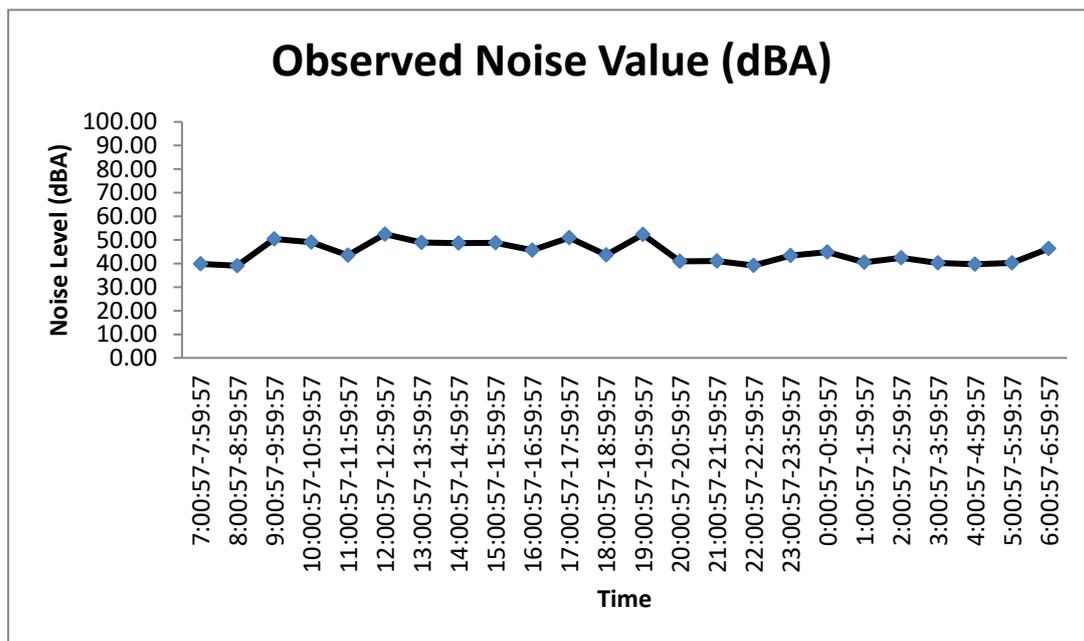


Figure 2. 8 Noise Level at Staff Housing

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	Thazi Solar Power Project	
	Day Time	Night Time
<b>Project Site (Source)</b>	<b>53.50</b>	<b>51.48</b>
<b>Previous Monitoring Result (At Source)</b>	46.07	46.88
<b>EMP Baseline Results (Point 1)</b>	52.92	41.55
<b>Guideline Values for Industrial</b>	<b>70</b>	<b>70</b>
<b>Staff Housing (Receptor)</b>	<b>46.33</b>	<b>41.89</b>
<b>Previous Monitoring Result (At Receptor)</b>	48.87	44.35
<b>EMP Baseline Results (Point 2)</b>	54.22	40.64
<b>Guideline Values for Residential</b>	<b>55</b>	<b>45</b>

The observed values of the proposed project for daytime at Taungdawgwin Solar Power Project Site (source) and Staff Housing (Receptor) are 53.50 dB (A) and 46.33 dB (A). The observed values of the proposed project for nighttime at Taungdawgwin Solar Power Project Site (source) and Staff Housing (Receptor) are 51.48 dB (A) and 41.89 dB (A). So, the observed daytime value and night time value for Taungdawgwin Solar Power Project Site (source) and staff housing (receptor) are lower than the guideline value.

## **2.3 Weather Condition (3<sup>rd</sup> February 2025 – 3<sup>rd</sup> August 2025)**

### **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) on 14<sup>th</sup> to 15<sup>th</sup> June 2025 respectively. According to the data, the wind direction is following Figure 2. 9 and Figure 2. 10.

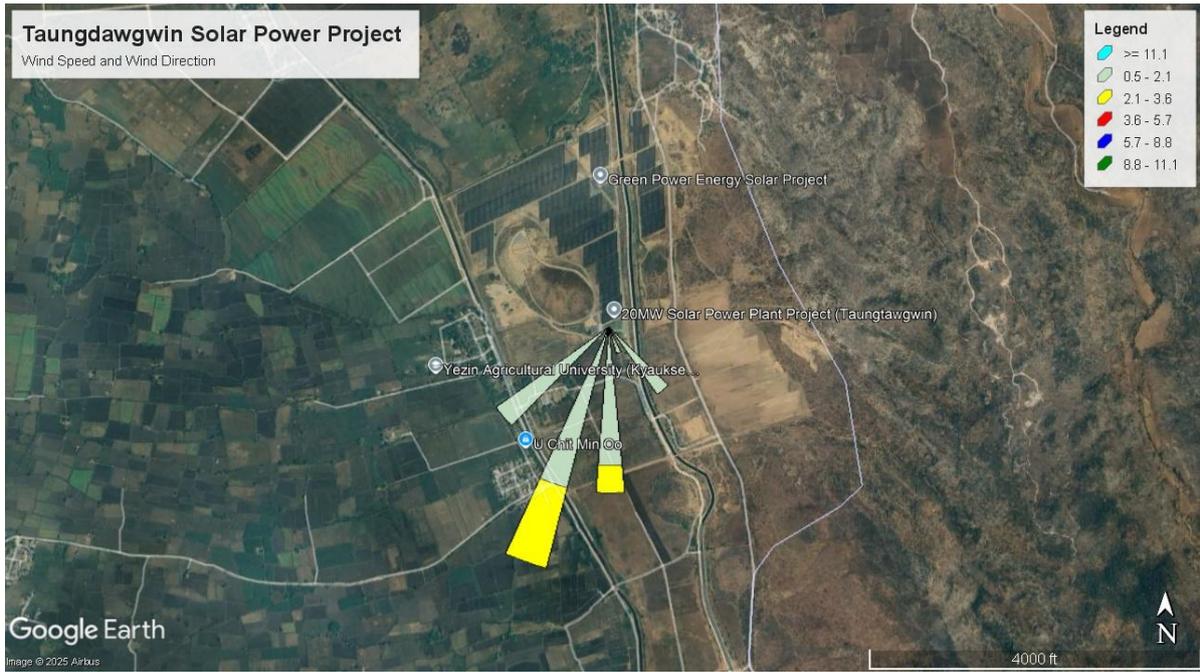


Figure 2. 9 Wind Speed and Wind Direction (Blowing From) at Project Site

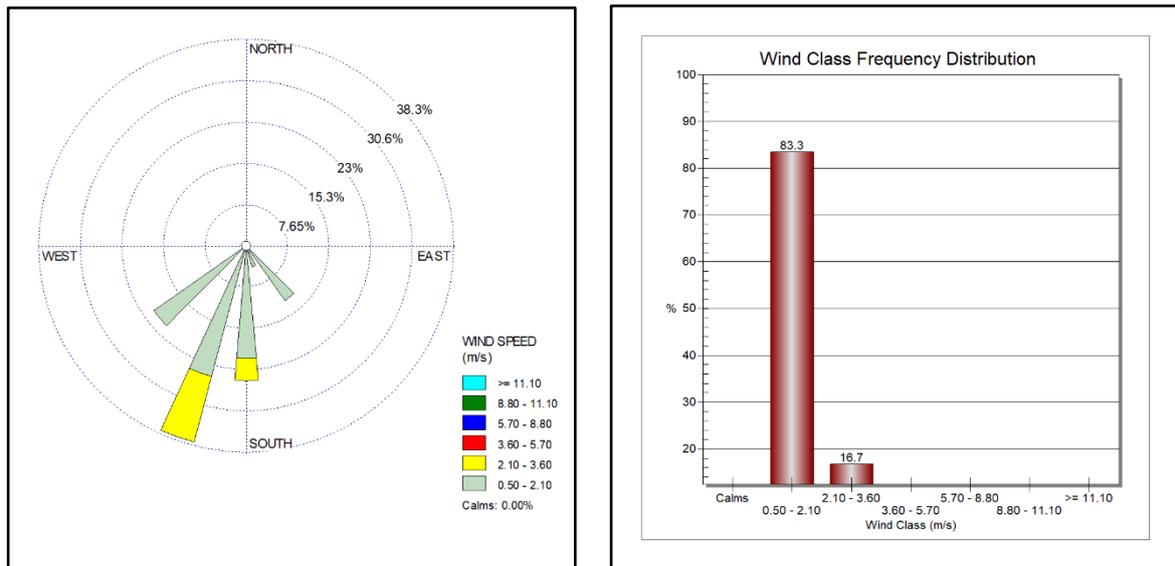


Figure 2. 10 Wind Class Frequency Distribution at Project Site

### 2.3.2 Significant natural or manmade disaster (3<sup>rd</sup> February 2025 – 3<sup>rd</sup> August 2025)

#### Flooding

The aftermath of Typhoon Yagi caused unprecedented flooding and landslides, considered the worst central Myanmar had seen in six decades. Mandalay Region was significantly affected, with 53,972 people impacted. Specifically, four villages in Myit Thar Township remained flooded, leaving over 5,000 residents urgently needing food, clean water, and resources as of mid-September. During the monitoring period, there is no flooding in Myit Thar Township from 3<sup>rd</sup> February 2025 – 3<sup>rd</sup> August 2025.

## **Earthquake**

A massive 7.7-magnitude earthquake struck near Mandalay, causing widespread destruction across central Myanmar.

In the Mandalay Region:

- Approximately 3,325 people were killed, and 2,642 injured across multiple townships—but Myit Thar is not explicitly named among them.
- Infrastructure damage was extensive: collapsed bridges, damaged railways, university buildings, mosques, temples, and more.

The region’s emergency response was overwhelmed, with relief operations severely hampered by damaged infrastructure and ongoing aftershocks.

Myit Thar Township may have experienced effects like tremors, possible damage to structures, and disruption of services due to its location in Mandalay Region, but specific reports for Myit Thar are not documented.

A severe earthquake in 1839 caused catastrophic damage in the Inwa (Ava) area, including Mandalay surroundings: collapsed pagodas, liquefaction, chasms, and even reversal of river flow. While not recent, this event underscores the long-standing seismic vulnerability of the region.

During the monitoring period, there is earthquake in Myit Thar Township from 3rd February 2025 – 3rd August 2025.

## **2.4 Water Quality (3<sup>rd</sup> February 2025 – 3<sup>rd</sup> August 2025)**

### **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.

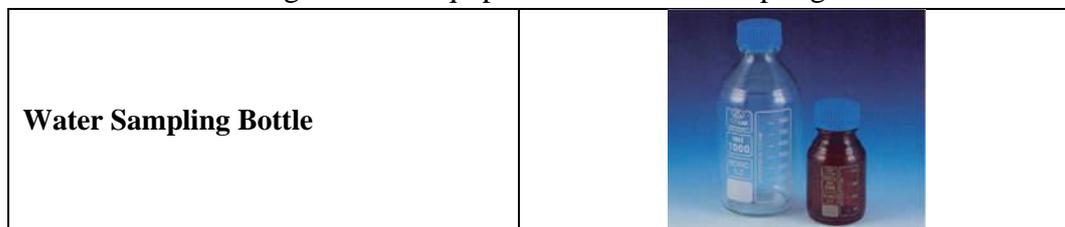
1. PRO Lab, No. (9), Sabae Housing, Pyi Htaung Su Road, (26) Ward, South Dagon Tsp, Yangon, Myanmar. Tel: 09 893 767424
2. Water Quality Laboratory, Forest Research Institute, Yezin, Nay Pyi Taw. Tel: 09 430 19169, 09 420 705131

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

Table 2. 14 Environmental Quality Parameters for Water quality

<b>Surface Water Parameters (1 location)</b>	
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
<b>Ground Water Parameters (1 location)</b>	
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
<b>Waste Water Parameters (1 location)</b>	
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



#### 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).

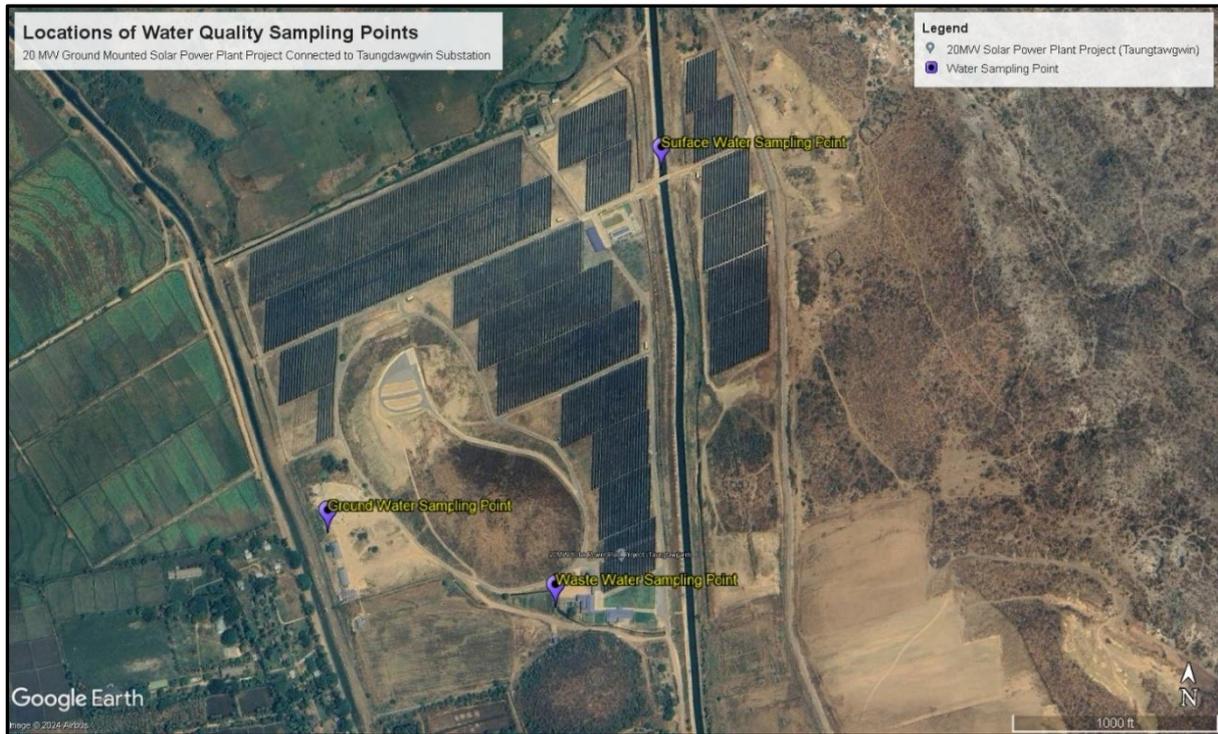


Figure 2. 12 Water Quality Sampling Locations of Taungdawgwin Solar Power Project

Table 2. 15 Locations of Environmental Quality sampling points

Locations No.	Points	Coordinate	Locations
<b>Ground Water Quality Monitoring Location</b>			
1.	GWQ	Lat - 21°26'34.49"N Long - 96°16'55.23"E	from the project site
<b>Surface Water Quality Monitoring Location</b>			
1.	SWQ	Lat - 21°26'54.43"N Long - 96°17'12.94"E	from Myo Gyi Dam Channel
<b>Waste Water Quality Monitoring Location</b>			
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

	<p>Ground Water Quality Sampling at Taungdawgwin Solar Power Project 15.06.2025 (from the project site)</p>
	<p>Surface Water Quality Sampling at Taungdawgwin Solar Power Project 15.06.2025 (from Myo Gyi Dam Channel)</p>
	<p>Waste Water Quality Sampling at Taungdawgwin Solar Power Project 15.06.2025 (from the discharge water channel of the project site)</p>

### 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 waste water

quality before the project implementation. Ground water, surface water and waste water quality were recorded by laboratory analysis at two selected locations systematically. The field surveys for environmental quality monitoring and sampling were done during 15<sup>th</sup> June 2025.

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

#### Water Quality Measurement

<b>Surveyor: Wanna Zaw</b>	<b>Date: 15.06.2025</b>
<b>Location: Surface Water (from Myo Gyi Dam Channel)</b>	<b>Time: 11:40 Am</b>
<b>Lat. &amp; Long.: 21°26'54.43"N, 96°17'12.94"E</b>	<b>Instrument: Horiba U-50</b>
<b>Temperature: 30.5°C</b>	

#### 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	7.63	0.304	0.197	0.1	18.72	39.8	-

#### Water Quality Measurement

<b>Surveyor: Khin Zaw Min</b>	<b>Date: 15.06.2025</b>
<b>Location: Ground Water (from the project site)</b>	<b>Time: 12:00 Pm</b>
<b>Lat. &amp; Long.: 21°26'34.49"N, 96°16'55.23"E</b>	<b>Instrument: Horiba U-50</b>
<b>Temperature: 32.4°C</b>	

#### 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	7.09	1	0.641	0.5	15.75	0.0	-

Table 2. 16 Comparison of Surface Water Quality, Ground Water Quality and Waste Water Quality with Guidelines (6<sup>th</sup> 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	-	-	-	-	-
pH		7.69	7.04	7.79	-	-					-
<b>Water Quality Result of Previous Monitoring (4<sup>th</sup> Time)</b>											
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	13.96	11.34	-	-	-	-	-	6	-	>2
Oil and Grease	mg/l	1	Nil	3	<5	<5	-	-	Substantially absent	10	-
Total Coliform	MPN/ml	-	< 0.3	9.3	6	-	-	-	5	400	-

Total Dissolved Solids	mg/l	182	538	-	-	-	-	No guideline	-	-	-
Turbidity	NTU	0.0	0.0	-	-	-	-	Not mentioned	<10	-	-
Biochemical Oxygen Demand (BOD)	mg/l	0.64	0.52	3.09	2	2	-	-	-	30	30
Chemical Oxygen Demand (COD)	mg/l	1.12	1.00	10.4	32	32	-	-	-	125	100
Total Nitrogen	mg/l	1.26	2.52	1.82	1.12	1.12	-	-	-	10	-
Total Phosphorus	mg/l	0.0246	0.01014	0.14219	< 0.01	< 0.01	-	-	-	2	-
Total Suspended Solids	mg/l	1	2	18	19	8	-	-	10	50	150
Potassium	mg/l	2.13	1.06	-	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 (3<sup>rd</sup> February 2025 – 3<sup>rd</sup> August 2025)

#### 3.1 Monitoring Records for Safety Plan (3<sup>rd</sup> February 2025 – 3<sup>rd</sup> August 2025)

##### Monitoring Records for Safety Plan

Monthly Record					
Date	Place	Activity	Organization	Number of Attendees	Remarks
February, 2025	Working Area	Aware Training About PPE	Taungdawgwin Solar Power Plant	12	
March, 2025	Power Station	Fire Safety Training	Taungdawgwin Solar Power Plant	40	
April, 2025	Working Area	Electrical Safety Training	Taungdawgwin Solar Power Plant	14	
May, 2025	Power Station	Provide PPE Safety Equipment	Taungdawgwin Solar Power Plant	15	
June, 2025	Briefing Hall	Fire Safety Training	Taungdawgwin Solar Power Plant	20	
July, 2025	Working Area	Provide PPE Safety Equipment	Taungdawgwin Solar Power Plant	15	

##### Monitoring Record for Occupational Safety Equipment

Date	Place	Type	Quantity	Inspected By	Supervisor	Remark
15-Jun-25	Store	Safety Shoe	25	Daw Aye Thida Soe	U Kyaw Zin Htet	
15-Jun-25	Store	Safety Gloves	25	Daw Aye Thida Soe	U Kyaw Zin Htet	
15-Jun-25	Store	Safety Helmet	25	Daw Aye Thida Soe	U Kyaw Zin Htet	
15-Jun-25	Store	Safety Belt	25	Daw Aye Thida Soe	U Kyaw Zin Htet	

Records Photo of Health and Safety Plan Activities





## 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	ဦးစိရန်ထွန်း	ကြီးကြပ်ရေးမှူး	09-796887554
၅	ဦးစိုးမင်းဟိန်း	ရှေးဦးသူနာပြု	09-689279663
၆	ဦးဇင်ကိုကိုဝင်း	အရေးပေါ်အခြေအနေထိန်းချုပ်ရေးမှူး	09-692986121

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	



## Green Power Energy Company Limited

### Fire Extinguisher Check List

No	Date	Description	Location	Number	Unit	Remarks
1	20/06/2025	Fire Extinguisher (50Kg)	Power Station	2	Nos	
2	20/06/2025	Fire Extinguisher (10Kg)	Power Station	2	Nos	
3	20/06/2025	Fire Extinguisher (10Kg)	Briefing Hall	2	Nos	
4	20/06/2025	Fire Extinguisher (10Kg)	Office	2	Nos	
5	20/06/2025	Fire Extinguisher (5Kg)	6Unit (1)	2	Nos	
6	20/06/2025	Fire Extinguisher (5Kg)	6Unit (2)	2	Nos	
7	20/06/2025	Fire Extinguisher (5Kg)	6Unit (3)	2	Nos	
8	20/06/2025	Fire Extinguisher (5Kg)	6Unit (4)	2	Nos	
9	20/06/2025	Fire Extinguisher (5Kg)	Staff Housing	2	Nos	
10	20/06/2025	Fire Extinguisher (5Kg)	Store	2	Nos	
11	20/06/2025	Fire Extinguisher (5Kg)	Messing	2	Nos	
12	20/06/2025	Fire Extinguisher (10Kg)	Kitchen Room	2	Nos	
13	20/06/2025	Fire Extinguisher (5Kg)	Main Gate	1	Nos	
14	20/06/2025	Fire Extinguisher (5Kg)	Gate (1)	1	Nos	
15	20/06/2025	Fire Extinguisher (5Kg)	Gate (2)	1	Nos	
16	20/06/2025	Fire Extinguisher (5Kg)	On Hill Gate	1	Nos	
17	20/06/2025	Fire Extinguisher (5Kg)	Tower	1	Nos	
18	20/06/2025	Fire Extinguisher (10Kg)	Box X'mer (1)	3	Nos	
19	20/06/2025	Fire Extinguisher (10Kg)	Box X'mer (2)	3	Nos	
20	20/06/2025	Fire Extinguisher (10Kg)	Box X'mer (3)	3	Nos	
21	20/06/2025	Fire Extinguisher (10Kg)	Box X'mer (4)	3	Nos	
		<b>Total</b>		<b>45</b>	<b>Nos</b>	

#### 4. Environmental Monitoring Record for Reforestation (Plantation) (3<sup>rd</sup> February 2025 – 3<sup>rd</sup> August 2025)








No	Description	Quantity
1	စက္ကူပန်းပင်	2767
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	မယ်ဇေလီပင်	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	ငွေချိုးပင်	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	သင်္ဘောပင်	20
15	ငရုတ်ပင်	50
16	တိုင်ထောင်ပဲသီး	100
17	ရုံးပတီသီး	200
18	ချည်ပေါင်ပင်	500

**Photo Records of Reforestation (Plantation)**



**5. Records for CSR activities (3<sup>rd</sup> February 2025 – 3<sup>rd</sup> August 2025)**

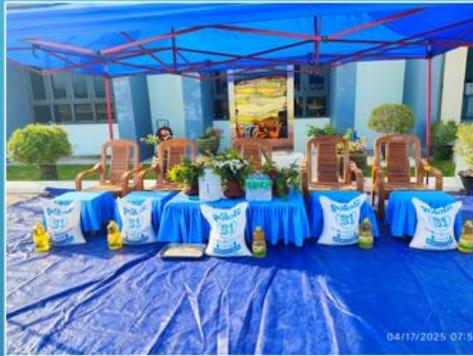
**Records for CSR Activities**

Date	Place	Type	Amount (MMK) / Activities	Received by
April, 2025	GPE Solar Power Plant	မြန်မာနှစ်သစ်ပရိတ်တရားနာယူခြင်းနှင့် ဆန်၊ဆီ ဝတ္ထုငွေလှူဒါန်းခြင်း		အမှတ် (၄) ကြာပန်း တောင် ကျောင်းတိုက်
June, 2025	ကျောက်ဆည်	Modular House	12,500,000	မြို့နယ်ဘာဝဘေးအန္တရာယ်ဆိုင်ရာစီမံ ခန့်ခွဲမှု (ကျောက်ဆည်)
June, 2025	အမှတ် (၃) ကျေးရွာ	အမှတ် (၃) ကျေးရွာ လမ်းပြုပြင်ခြင်း	300,000	အမှတ် (၃) ကျေးရွာ
July, 2025	ကျောက်ဆည်	EPSON Printer လှူဒါန်းခြင်း		အထွေထွေအုပ်ချုပ်ရေးရုံး (ကျောက်ဆည်)

Photo Record for CSR Activities



Green Power Energy Company Limited



CSR Activities

**6. Records for GRM (3<sup>rd</sup> February 2025 – 3<sup>rd</sup> August 2025)**

**Monitoring Records for GRM**

<b>Monthly Record</b>					
<b>Date</b>	<b>Place</b>	<b>Activity</b>	<b>Organization or Individual</b>	<b>Action Plan</b>	<b>Recorded by</b>
February ,2025	Green Power Energy Plant	-	-	-	U Kyaw Zin Htet
March, 2025	Green Power Energy Plant	-	-	-	U Kyaw Zin Htet
April, 2025	Green Power Energy Plant	-	-	-	U Kyaw Zin Htet
May, 2025	Green Power Energy Plant	-	-	-	U Kyaw Zin Htet
June, 2025	Green Power Energy Plant	-	-	-	U Kyaw Zin Htet
July, 2025	Green Power Energy Plant	-	-	-	U Kyaw Zin Htet

GRM Organization of Taungdawgwin Solar Power Project



**Green Power Energy Company Limited**

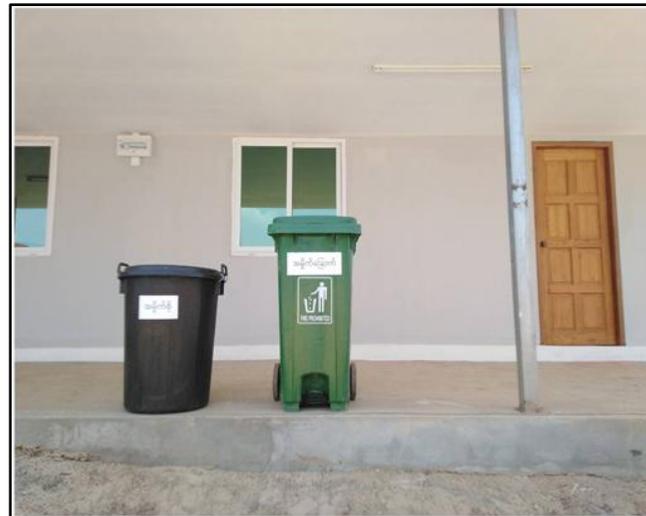
မကျေလည်မှုများ ဖြေရှင်းရေး ကော်မတီ			
စဉ်	အမည်	တာဝန်	ဌာန
၁	ဦးအောင်ဆန်းဝင်း	မန်နေဂျာ	GPE Co., Ltd
၂	ဦးသိန်းစိုးမင်း	အတွင်းရေးမှူး	GPE Co., Ltd
၃	ဦးဇော်ဝင်း ( Agriculture)		GPE Co., Ltd
၄	ဦးခင်မောင်ဌေး		မြစ်သားမြို့နယ်၊ လွန်ကျော်ကျေးရွာ။
၅	ဦးရွှေမန်း ( အမှတ် ၃, ဥက္ကဋ္ဌ)		မြစ်သားမြို့နယ်၊ အမှတ် (၃)ကျေးရွာ။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

**7. Records for Waste Disposal (3<sup>rd</sup> February 2025 – 3<sup>rd</sup> August 2025)**

**Records for Waste Disposal**

Date	Place	Type	Amount	Inspected By
15-February, 2025	ဝန်ထမ်းလိုင်းများ / ရုံး	အမှိုက်စို / အမှိုက်ခြောက်	52 Kg	U Phyo Thura Kyaw
27-February, 2025	ဝန်ထမ်းလိုင်းများ /ရုံး	အမှိုက်စို / အမှိုက်ခြောက်	50 Kg	U Phyo Thura Kyaw
15-March, 2025	ဝန်ထမ်းလိုင်းများ / ရုံး	အမှိုက်စို/အမှိုက်ခြောက်	40 Kg	U Phyo Thura Kyaw
31-March, 2025	ဝန်ထမ်းလိုင်းများ /ရုံး	အမှိုက်စို/အမှိုက်ခြောက်	50 Kg	U Phyo Thura Kyaw
15-April, 2025	ဝန်ထမ်းလိုင်းများ / ရုံး	အမှိုက်စို/အမှိုက်ခြောက်	45 Kg	U Phyo Thura Kyaw
30-April, 2025	ဝန်ထမ်းလိုင်းများ /ရုံး	အမှိုက်စို/အမှိုက်ခြောက်	39 Kg	U Phyo Thura Kyaw
15-May, 2025	ဝန်ထမ်းလိုင်းများ / ရုံး	အမှိုက်စို/အမှိုက်ခြောက်	48 Kg	U Phyo Thura Kyaw
31-May, 2025	ဝန်ထမ်းလိုင်းများ /ရုံး	အမှိုက်စို/အမှိုက်ခြောက်	39 Kg	U Phyo Thura Kyaw
15-June, 2025	ဝန်ထမ်းလိုင်းများ / ရုံး	အမှိုက်စို/အမှိုက်ခြောက်	52 Kg	U Phyo Thura Kyaw
30-June, 2025	ဝန်ထမ်းလိုင်းများ /ရုံး	အမှိုက်စို/အမှိုက်ခြောက်	40 Kg	U Phyo Thura Kyaw
15-July,2025	ဝန်ထမ်းလိုင်းများ / ရုံး	အမှိုက်စို/အမှိုက်ခြောက်	56 Kg	U Phyo Thura Kyaw
31-July,2025	ဝန်ထမ်းလိုင်းများ /ရုံး	အမှိုက်စို/အမှိုက်ခြောက်	62 Kg	U Phyo Thura Kyaw

### Records Photo for Waste Disposal



## Appendix 1 (Water Results) (3<sup>rd</sup> February 2025 – 3<sup>rd</sup> August 2025)



**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 : Taungdawgwin Solar Power Project
- 2 Location : Myithar Township
- 3 Type of Sample : Ground Water
- 4 Sample No. : 00766/2025
- 5 Contact Person : Eguard Environmental Services
- 6 Phone No. : 09-797005212
- 7 Date Received : 16.06.2025
- 8 Date of Test Performed : 16.06.2025
- 9 Date of Issued : 24.06.2025
- 10 Result :

No.	Parameter	Result	Unit	WHO STD 2018	Method
1	Oil and Grease	9	mg/L	-	<sup>(A)</sup> 5520D, Soxhlet Extraction Method
2	Total Coliform	< 0.3	MPN/ml	-	FDA-BAM: MPN Method

**Remark:**

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

<sup>(A)</sup> 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 : THEMAR WINT

Position : Laboratory Manager

Signature : ..........



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/0374/2025  
Date: 2-7-2025

ANALYTICAL TEST REPORT

Project Name: **Taungdawgwin Solar Power Project**  
Customer Address: **Ko Aung Moe Oo**

Assignment number	2025-84-1	Sampling Location	မြစ်သား
Sample name	GW	Sampling Date	
Sample type	<b>Ground Water</b>	Sample received date	16-6-2025
Comments			

Parameter	Result	Unit	Method reference	Instruments
Biological Oxygen Demand	0.32	mg/L	Potentiometric	YSI Pro DO Tester
Chemical Oxygen Demand	6	mg/L	Titrimetric	Titration
pH	7.04	-	Potentiometric	HACH HQ40d Multiparameter Field Case
Potassium	5.47	mg/l	ISO 14911: 1998	Ion Chromatography (Thermo Scientific, DIONEX AQUION)
Total Phosphorus	29.15	µg /L	NS 4725	SFA(SKALAR SAN plus Analyzer)SA 3000/5000,SA 1100
Total Nitrogen	1.82	mg/L	Kjeldahl	Kjeldahl Digestion & Distillation Unit
Total Suspended Solid	2	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

**LABORATORY ANALYSIS REPORT**

- 1 Client Name : Taungdawgwin Solar Power Project
- 2 Location : Myithar Township
- 3 Type of Sample : Surface Water
- 4 Sample No. : 00765/2025
- 5 Contact Person : Eguard Environmental Services
- 6 Phone No. : 09-797005212
- 7 Date Received : 16.06.2025
- 8 Date of Test Performed : 16.06.2025
- 9 Date of Issued : 24.06.2025
- 10 Result :

No.	Parameter	Result	Unit	WHO STD 2018	Method
1	Oil and Grease	9	mg/L	-	<sup>(a)</sup> 5520D, Soxhlet Extraction Method

**Remark:**

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

<sup>(a)</sup> 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 : THEMAR WINT  
Position : Laboratory Manager  
Signature : 





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/0376/2025  
Date: 2-7-2025

ANALYTICAL TEST REPORT

Project Name: **Taungdawgwin Solar Power Project**  
Customer Address: **Ko Aung Moe Oo**

Assignment number	2025-84-3	Sampling Location	မြစ်သား
Sample name	SW	Sampling Date	
Sample type	<b>Surface Water</b>	Sample received date	16-6-2025
Comments			

Parameter	Result	Unit	Method reference	Instruments
Biological Oxygen Demand	0.42	mg/L	Potentiometric	YSI Pro DO Tester
Chemical Oxygen Demand	7.2	mg/L	Titrimetric	Titration
pH	7.69	-	Potentiometric	HACH HQ40d Multiparameter Field Case
Potassium	2.35	mg/l	ISO 14911: 1998	Ion Chromatography (Thermo Scientific, DIONEX AQUION)
Total Phosphorus	19.28	µg /L	NS 4725	SFA(SKALAR SAN plus Analyzer)SA 3000/5000,SA 1100
Total Nitrogen	0.84	mg/L	Kjeldahl	Kjeldahl Digestion & Distillation Unit
Total Suspended Solid	18	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

**LABORATORY ANALYSIS REPORT**

- 1 Client Name : Taungdawgwin Solar Power Project
- 2 Location : Myithar Township
- 3 Type of Sample : Waste Water
- 4 Sample No. : 00767/2025
- 5 Contact Person : Eguard Environmental Services
- 6 Phone No. : 09-797005212
- 7 Date Received : 16.06.2025
- 8 Date of Test Performed : 16.06.2025
- 9 Date of Issued : 24.06.2025
- 10 Result :

No.	Parameter	Result	Unit	WHO STD 2018	Method
1	Oil and Grease	8	mg/L	-	<sup>(a)</sup> 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.**

<sup>(a)</sup> 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 : THEMAR WINT

Position : Laboratory Manager

Signature : .....





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/0375/2025  
Date: 2-7-2025

ANALYTICAL TEST REPORT

Project Name: **Taungdawgwin Solar Power Project**  
Customer Address: **Ko Aung Moe Oo**

Assignment number	2025-84-2	Sampling Location	မြစ်သား
Sample name	WW	Sampling Date	
Sample type	<b>Waste Water</b>	Sample received date	16-6-2025
Comments			

Parameter	Result	Unit	Method reference	Instruments
Biological Oxygen Demand	0.67	mg/L	Potentiometric	YSI Pro DO Tester
Chemical Oxygen Demand	8	mg/L	Titrimetric	Titration
pH	7.79	-	Potentiometric	HACH HQ40d Multiparameter Field Case
Total Phosphorus	20.39	µg /L	NS 4725	SFA(SKALAR SAN plus Analyzer)SA 3000/5000,SA 1100
Total Nitrogen	1.40	mg/L	Kjeldahl	Kjeldahl Digestion & Distillation Unit
Total Suspended Solid	19	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