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International Finance Corporation, Asian Development Bank, Asian Infrastructure Investment Bank and Multilateral Investment Guarantee Agency

Date

July 2022

Project Number

335000346

MYINGYAN CCPP

SEVENTH ENVIRONMENTAL AND SOCIAL MONITORING REPORT

RAMBOLL Bright ideas. Sustainable change.

MYINGYAN CCPP
SEVENTH ENVIRONMENTAL AND SOCIAL MONITORING REPORT

Project No.	**335000346**
Issue No.	**3**
Date	**21 July 2022**
Made by	**S Maharg and C Quinn**
Checked by	**J Ding**
Approved by	**J Ding**

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GLOSSARY OF TERMS/ACRONYMS

Acronym	Abbreviation
ADB	Asian Development Bank
ADB-ES	Asian Development Bank – Environmental Safeguards
ADB-IPS	Asian Development Bank – Indigenous Peoples Safeguards
ADB-IRS	Asian Development Bank – Involuntary Resettlement Safeguards
AIIB	Asian Infrastructure Investment Bank
AoI	Area of Influence
BOT	Build, Operate and Transfer
BCP	Business Continuity Plan
CCGT	Combined Cycle Gas Turbine
CCPP	Combined Cycle Power Project
CDP	Community Development Plan
CEMS	Continuous Emissions Monitoring System
CGM	Community Grievance Mechanism
CHMP	Community Health Management Plan
COD	Commercial Operation Date
CP	Community Person
CPP	China Petroleum Pipeline Bureau
CRO	Community Relations Officer
CSR	Corporate Social Responsibility
DAI	Direct Area of Influence
ECC	Environmental Compliance Certificate
ECD	Environmental Conservation Department
E&S	Environmental and Social
ESAP	Environmental and Social Action Plan
EHS	Environmental, Health and Safety
ENVIRON	Environ Myanmar Co Ltd
EPC	Engineering, Procurement and Construction
EPGE	Electric Power Generation Enterprise
EPR	Emergency Preparedness & Response
EMS	Environmental Management System
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System
ESAP	Environmental and Social Action Plan
GIIP	Good International Industry Practice
GOM	Government of Myanmar
GT	Gas Turbine
HRSG	Heat Recovery System Generator
HSE	Health, Safety and Environment
HSE-MS	Health, Safety and Environment Management System
HSSE	Health, Safety, Security and Environment
IECC	Installation, Erection, Construction and Commissioning
IESC	Independent Environmental and Social Consultant
IFC	International Finance Corporation
ILO	International Labour Organization
IMS	Integrated Management System
IPP	Independent Power Producer
JEM	Jurong Engineering (Myanmar) Ltd
LOTO	Lock Out Tag Out

Acronym	Abbreviation
LRPMP	Local Recruitment and Procurement Management Plan
LTI	Lost Time Injury
MDC	Min Dharma Co Ltd
MEPE	Myanmar Electric Power Enterprise
MIGA	Multilateral Investment Guarantee Agency
MOC	Management of Change
MOE	Ministry of Environment
MOEP	Ministry of Electric Power
MOGE	Myanmar Oil & Gas Enterprise
MOI	Ministry of Industry
MONREC	Ministry of Natural Resources and Environmental Conservation
MTKK	MTKK Electrical Services Company Limited
O&M	Operations and Maintenance
OHS	Occupational Health and Safety
PAP	Project-Affected Person
PCo	Project Company
PIIM	Project Induced In-Migration
PPA	Power Purchase Agreement
PPE	Personal Protective Equipment
PS	Performance Standard
Ramboll Environ	Ramboll Environ Singapore Pte Ltd
ROSPA	Royal Society for the Prevention of Accidents
ROW	Right of Way
RWI	River Water Intake
SBS	ADB's Safeguard Policy Statement
SDCI	Sembcorp Design and Construction International
Sembcorp	Sembcorp Utilities Pte Ltd.
SEP	Stakeholder Engagement Plan
SIMOPS	Simultaneous Operations
SMPC	Sembcorp Myingyan Power Company Limited
SOP	Standard Operation Procedure
TSS	Total Suspended Solids
WAMP	Workers Accommodation Management Plan
WBG	World Bank Group

EXECUTIVE SUMMARY

Ramboll Environ Singapore Pte Ltd (Ramboll Environ), acting in the role of Independent Environmental and Social Consultant (IESC)[1], monitored the environmental and social performance of the Sembcorp Myingyan Power Company Limited (SMPC or Project Company or PCo) Combined Cycle Power Plant (CCPP) project in Myingyan, Myanmar (the "Project") in January 2022.

The Seventh Environmental and Social Monitoring Round was the third annual IESC monitoring activity scheduled to occur during the Project's operational phase; four IESC monitoring activities previously occurred at six-monthly intervals during the Project's construction phase. A two-person team assessed the Project's management of environment and social matters, with a particular emphasis on the implementation of the Project's Environmental and Social Action Plan (ESAP); the adequacy of the Health, Safety, and Environment Management System; and the implementation of a suite of environmental and social management plans intended to address applicable Project standards, notably the IFC Performance Standards and ADB Safeguard Policy Statement.

This Seventh Environmental and Social Monitoring Round Report presents the findings of the Project monitoring for the period January 2021 to December 2021. The monitoring round was carried out virtually.

A brief synopsis of the situation in Myanmar at the time of the monitoring round[2] is provided as follows. The Covid-19 (coronavirus disease 2019) pandemic is a global event which unfolded in 2020 and continued to affect countries during 2021. Myanmar has been affected by the Covid-19 pandemic during 2020 – 2021, with restrictions on movement in particular. The Myanmar military assumed power on February 1, 2021, declaring a one-year State of Emergency. In August 2021, the State of Emergency was extended until August 2023. The combined effects of the February 2021 military coup and of COVID-19 has impacted on the Company's ability to deliver on its CSR programs, conduct stakeholder engagement/consultation and implement various requirements of the ESMP in 2021. This situation may continue into 2023. As a result, Environmental and Social activities and monitoring in accordance with the Project Commitments have been affected during 2020-2021. Throughout the monitoring round, SMPC cooperated fully and responded to all Ramboll Environ's requests.

Ramboll Environ reviewed the Project's Covid-19 Business Continuity Plan Implementation (**Appendix 11**), limitations in 2021 on the implementation of the Stakeholder Engagement Plan and Community Development Plan and modifications to Human Resources procedures that were put in place to limit any potential impacts from the Covid-19 pandemic on the Project's workforce and local communities.

SMPC conducted an Annual Public Stakeholder Engagement Meeting during the previous monitoring round (December 2020); 13 meetings took place, one in each of the villages, with an average of ten villagers attending each meeting. Summaries of these meetings are included in **Appendices 7** and **8**. In view of the current situation in Myanmar, an Annual Public Stakeholder Engagement Meeting did not take place during 2021.

[1] The responsibility for serving as the Project's IESC was transferred from Environ Myanmar Co Ltd (ENVIRON) to Ramboll Environ, both wholly owned subsidiaries of Ramboll Group, in 2020.

[2] https://www.worldbank.org/en/country/myanmar/overview#1
https://www.mfa.gov.sg/Countries-Regions/M/Myanmar/Travel-Page

Ramboll Environ reviewed the Project's Stakeholder Engagement Database (**Appendix 6**) of actions taken and results achieved under the Stakeholder Engagement Plan (SEP). SEP Key Performance Indicators (KPIs) for 2021 were provided to Ramboll Environ. The Project was able to conduct 654 stakeholder engagements in 2021, mainly by making periodic telephone calls with stakeholders. However, SMPC was limited in its ability to meet the other SEP KPIs for 2021. The Project received no grievances in 2021.

The Project is generally compliant with the requirements of the ESAP, however, the monitoring identified five ESAP items that are work in progress. In addition, a number of opportunities for improvement in the Project's environmental and social performance have been identified.

A positive community service initiative undertaken by SMPC included the installation of a medical waste incinerator at the Myingyan Hospital, as reported in the January 2018 monitoring report. This incinerator provides a safe means for the disposal of clinical and medical wastes which previously were burnt at the unlined municipal landfill. Other positive community service initiatives undertaken by SMPC in 2018-2019 included the construction in each of the thirteen villages within the Project's area of influence of water treatment facilities to provide potable water and 500-gallon underground water storage tanks for fire protection. These projects improved the health and safety of residents of the thirteen local communities. From August 2018 - November 2019, a total of 21 community development (referred to by SMPC as corporate social responsibility or CSR) projects were completed in the thirteen villages. In 2020, there were 13 ongoing CSR projects, (one per village), all with estimated completion dates of mid-January 2021. There were an additional 18 CSR activities planned for 2021 (for details, refer to **Appendices 5 A, B and C**), however, only 6 Community Health related projects were able to be accomplished in 2021.

There are no high or moderately significant environmental findings. There are some minor environmental or social findings related to the implementation of the operational phase management plans that need to be addressed; minor gaps were also noted in the overall management of environmental monitoring data. In particular, SMPC is to provide details of an annual pollutant release inventory to monitor GHG emissions and report on GHG generation in an appropriate unit such as CO_2 equivalent.

There are no high or moderately significant social findings. A minor gap identified during the Fifth Monitoring Round was that KPIs were not established for the Operations Phase Labor Recruitment and Procurement Management Plan (LRPMP). Ramboll Environ has since been advised that LRPMP KPIs will not be established due to the specialized nature of the operations and SMPC will hire from the national workforce including from the local community where feasible. However, Ramboll Environ still recommends that KPIs be established for the Operations Phase LRPMP so that goals can be established and tracked for local recruitment and procurement of goods and services. As of December 2021, the Project's total national workforce, including the Yangon workforce, security team and EPGE was 129, representing 99.23% of the total workforce; foreign skilled workers (1) made up only 0.77% of the total Project workforce. At the time of the December 2019 site visit at least 2 personnel working as security guards were from the local community. In terms of land acquisition and compensation, the Government of Myanmar (GOM) compensated farmers for the temporary disruption to their livelihood where they farm on privately-owned land along the river water pipeline route, adopting national requirements. The resettlement framework required SMPC to bridge the gaps in compensation between the national requirements and ADB's SPS/IFC PS requirements; and SMPC complied with these requirements. A section of the river water supply pipeline was buried and the section closest to the river was elevated; and the land uses (mostly agriculture; and also some cattle grazing) are continuing undisrupted post laying of the pipelines. Similarly, for the transmission lines and towers, there was no permanent land acquisition, and

rights of use of the footprints required for the transmission towers and electric poles were obtained after negotiations with the landowners and payment of compensation for the loss of yields (see Updated Final Third Environmental and Social Monitoring Report (July 2018), Section 5.23.3. Land & Crop Compensation).

There are no permanent livelihood impacts due to the Project. The temporary impacts have been addressed at full replacement costs, and the permanent impacts associated with the footprints of the transmission towers and electric poles as well have been compensated at full replacement cost. The gap in compensation standards for the electric poles has been met through additional non-cash compensation (in the form of fertilizer bags, one each per power pole). Livelihoods of project affected persons were not adversely impacted by the Project as full replacement costs for loss of land, temporary and permanent, were made.

As of 12 April 2017, all PAPs were compensated (at full replacement cost) for land and crop loss, with the exception of the 8 PAPs impacted by the elevated section of the river water supply pipeline towards the river, described below, who were compensated between 27- 30 August 2018.

SMPC provided the following confirmation of the land procurement process for the elevated section of the pipeline towards the river: The compensation process for individuals affected by the elevated section of the pipeline was the responsibility of Electric Power Generation Enterprise (EPGE), in collaboration with the relevant Government Administrative Divisions (GAD), acting on behalf of the Government of Myanmar. EPGE identified 8 PAPs in the area and drew up a methodology whereby each individual was compensated MMK 10,000 for each pier on the bridge on their land. The PCo then topped-up the payments for the subsequent 20 years.

Ramboll Environ was informed that PCo began the compensation process after receiving a formal letter from EPGE dated 13 July 2018, and that the compensation process was completed before COD 2 (from 27-30 August 2018).

According to SMPC, the elevated link bridge design was changed from the original plan, whereby the pipeline was to be buried underground. Before SMPC started the construction of the elevated link bridge, SMPC liaised with EPGE to confirm the changing of design. They also worked with the Myingyan local authorities (GAD & LRD) to confirm the owners of the land who would be affected (permanently) by the elevated link bridge. The land measuring process was a very time-consuming and laborious exercise. The alteration of the original design, identification of PAPs and calculation of necessary compensation was the reason why the compensation process for the 8 PAP's affected by the elevated link bridge was done after its construction.

Ramboll Environ confirmed in the Fourth Monitoring Report that the compensation payments to these 8 PAPs were made between 27- 30 August 2018, and that it had received details on the compensation paid to each of the 8 PAPs. Ramboll Environ's review of the compensation documentation and one-on-one interviews with 4 of the 8 PAPs to assess the compensation process, the adequacy of consultation and the compensation amount and their level of satisfaction is discussed in **Section 5.23.4**.

Summaries of Ramboll Environ's meetings with 3 of the 8 PAPs were included the Fifth Monitoring Report. Covid-19 restrictions limited the number of meetings with PAPs that could take place in December 2020 during the Sixth Monitoring Round. A summary of the December 2020 meeting with a 4th PAP is included in the Sixth Monitoring Report and **Section 5.14.2** of this report; Ramboll Environ confirmed during the Sixth Monitoring Round that the 4 PAPs consulted were satisfied with their compensation and their livelihoods were restored. Meetings with the 4

remaining PAPs could not take place in 2021; and meetings with the remaining 4 PAPs are recommended to take place during future monitoring rounds to close out this issue.

Based on the updated SMPC organisation chart provided (dated March 2022), there have been various changes in senior management positions, namely Managing Director, Plant Manager, HSSE Manager and Commercial Manager.

The IESC recommends that the newly appointed personnel are supported during the transition to their new roles, including support from Sembcorp where necessary, to ensure that their responsibilities for compliance with the environmental and social requirements of the Lenders, including implementation of the ESMPs, continues smoothly.

The findings presented in this report should be incorporated within SMPC's safeguards compliance and corrective action tracking system. The IESC will assess evidence of close-out of each issue in the next monitoring round, which is anticipated to be in January 2023.

1. INTRODUCTION

Sembcorp Utilities Pte Ltd (the "Sponsor") was selected by the Ministry of Electric Power (MOEP) of the Government of Myanmar (GOM) as a private sector Independent Power Producer (IPP) to develop a 225 MW Combined Cycle Gas Turbine (CCGT) Power Plant (the "Project") on a Build, Operate and Transfer (BOT) basis in Myingyan Township, in the Mandalay region of Union Republic of Myanmar. A special purpose company, Sembcorp Myingyan Power Company Limited, ("SMPC", "Project Company" or "PCo") was established in Myanmar and is beneficially owned by the Sponsor for the sole purpose of developing and operating the Project.

The Commercial Operation Date (COD) of Open Cycle Mode (Simple Cycle) was in May 2018 (delayed from the original target date of 21 December 2017) and the COD of Combined Cycle Mode was in November 2018.

A Power Purchase Agreement (PPA) was signed for 22 years from COD with the Myanmar Electric Power Enterprise (MEPE), which is a government-owned utility enterprise responsible for power generation, transmission and system operations throughout Myanmar.

Environ Myanmar Co Ltd, (ENVIRON), which was a wholly owned subsidiary of Ramboll Group, was commissioned in 2016 by Sembcorp Myingyan Power Company Limited to act as the Lenders' Independent Environmental and Social Consultant (IESC) on the Project. The responsibility for serving as the Project's IESC was transferred from ENVIRON to Ramboll Environ Singapore Pte Ltd (Ramboll Environ), a wholly owned subsidiary of Ramboll Group, in 2020.

In fulfilling the role of Lenders' IESC, Ramboll Environ has a duty of care to a consortium of lenders (the "Lenders") to the Project, including the International Finance Corporation (IFC), Asian Development Bank (ADB), Asian Infrastructure Investment Bank (AIIB), and the Multilateral Investment Guarantee Agency[3] (MIGA) which is a member of the World Bank Group (WBG).

This Seventh Environmental and Social Monitoring Report covers the period from January 2021 to December 2021 and provides our findings following a January 2022 virtual monitoring visit to the Project and includes an assessment against Applicable Standards, specifically, the IFC Performance Standards (2012), applicable WBG Environmental, Health and Safety (EHS) Guidelines, and the ADB Safeguard Policy Statement 2009 and related ADB safeguard policies including ADB Social Protection Strategy, 2001, thereby identifying any environmental and social risks associated with the Project's development to completion.

The Covid-19 (coronavirus disease 2019) pandemic is a global event which unfolded in 2020 and continued to affect countries during 2021. Myanmar has been affected by the Covid-19 pandemic during 2020 – 2021. The Myanmar military assumed power on February 1, 2021, declaring a State of Emergency and the takeover of all branches of government. In August 2021, the military leadership announced an extension of the State of Emergency until August 2023. The combined effects of the February 2021 military coup and of COVID-19 has impacted on the Company's ability to deliver on its CSR programs, conduct stakeholder engagement/consultation and implement various requirements of the ESMP in 2021. This situation may continue into 2023.

Ramboll Environ reviewed the Project's Covid-19 Business Continuity Plan (BCP) Implementation (**Appendix 11**), limitations in 2021 on the implementation of the Stakeholder Engagement Plan and Community Development Plan and modifications to Human Resources procedures that were

[3] Insurer for the lenders to Sembcorp Myingyan Power Company Limited.

put in place to limit any potential impacts from the Covid-19 pandemic on the Project's workforce and local communities.

2. SCOPE AND STRUCTURE OF THE REPORT

2.1 Scope and Methodology

This Seventh Environmental and Social Monitoring Report details the Project's compliance with the Applicable Standards listed in **Section 2.2**, and in doing so, presents the environmental and social risks associated with the Project. It has been prepared for the attention of Sembcorp, IFC, ADB, AIIB, MIGA, and other entities defined as relying parties[4]. It addresses the various components of the Project (as defined in Section 3, Project Description).

The report presents the findings of the Seventh Monitoring Round based on information gained through the following activities:

- A review of updated Project documentation.
- A review of ESAP observations and implementation.
- A review of Health, Safety, Environment Management System (HSE-MS) documentation.
- A virtual site visit undertaken from January 18-25, 2022, by Juliana Ding, Sharon Maharg and Cara Quinn, on behalf of Ramboll Environ, which included the following activities:
    - Interviews held with senior management representatives, HSE, Community Relations/Development and Human Resources management within SMPC.
    - Visual observations (viewing of live video footage, recorded video footage and photographs provided by SMPC in **Appendix 1A**) made during the audit.
    - The Monitoring Plan presented in **Appendix 2** of this report details the scope and objectives of the monitoring round, specifies the activities planned and presents the proposed work schedule for the virtual site visit. Some of the activities planned did not take place due to the Covid-19 restrictions that were in place at the time of the visit (i.e., consultations with the 4 remaining PAPs, meeting with the hospital director, and visit to the hospital's medical waste incinerator). The activities that could not take place during this monitoring visit should be included in future monitoring rounds' agendas.

A full list of Project documentation reviewed during preparation of this Seventh Environmental and Social Monitoring Report is included in **Appendix 12.**

2.2 Applicable Standards

In accordance with Ramboll Environ's Terms of Reference, the Project was assessed against the following standards, guidelines, and project-specific legal requirements (the Applicable Standards):

- Applicable laws and regulations of Myanmar, including specific environmental license conditions (if any);
- International Law including conventions and treaties adopted by Myanmar and applicable to the Project;
- IFC Environmental and Social Performance Standards (1st January 2012) applicable to the Project, including:
    - PS1: Assessment & Management of Environmental & Social Risks & Impacts;
    - PS2: Labor and Working Conditions;

[4] Relying parties include other lenders.

- PS3: Resource Efficiency and Pollution Prevention;
- PS4: Community Health, Safety, and Security;
- PS5: Land Acquisition and Involuntary Resettlement;

- WBG Environmental, Health and Safety (EHS) Guidelines in force at the time of this agreement applicable to the Project, including General EHS Guidelines (2007), Thermal Power EHS Guidelines (2008), and Electricity Transmission and Distribution EHS Guidelines (2007); and
- ADB Safeguard Policy Statement 2009 and related ADB safeguard policies including ADB Social Protection Strategy, 2001.

IFC PS7 (Indigenous Peoples) was excluded from the scope of the monitoring assignment on the basis that the Environmental and Social Impact Assessment (ESIA) performed prior to financial close concluded that no Indigenous Peoples are affected by the Project.

A construction phase Biodiversity Management Plan was prepared. However, it was later determined that IFC PS6 (Biodiversity Conservation and Sustainable Management of Living Natural Resources) would not be applicable to the Project.

In addition, **Section 5.21** references the construction phase Cultural Heritage Management Plan that was prepared for the Project. At a later date, it was determined that PS8 (Cultural Heritage) would not be applicable to the Project.

The Project was also assessed against the requirements of the Environmental and Social Action Plan (ESAP) agreed between IFC and the Project Company (IFC Project # 36627).

2.3 Status of Environmental Licenses and Permits

The Project has not yet been issued an Environmental Compliance Certificate (ECC) by the Ministry of Natural Resources and Environmental Conservation (MONREC), but approval to commence construction was issued by the Ministry of Electric Power (MOEP). This situation is common in Myanmar due to a longer timeframe for ESIA approval by MONREC since the introduction of a new national ESIA standard in 2015. There has been no change to this status since the IESC's visit in December 2019. It is recommended that SMPC follows up with MONREC regarding the matter of the ECC for the Project.

A letter from the Ministry of Natural Resource and Environmental Conservation's Environmental Conservation Department (ECD), dated 17 March 2017, acknowledged that the Project ESIA report meets the requirements of the Myanmar Environmental Impact Procedure of 29 December 2015. It also highlighted many commitments given in the ESIA report, which the ECD expects to be met.

2.4 Project Categorization

The Lenders have determined that the Project is a Category A project under the IFC PSs and the following categorizations under the ADB Safeguard Policy Statement (2009):

- Environmental: Category A;
- Involuntary Resettlement: Category B; and
- Indigenous Peoples: Category C; and Ramboll Environ concurs with these assessments.

In accordance with IFC's and ADB's categorization requirements, the Project undertook a full ESIA, with public disclosure and a public consultation process. The initial ESIA was developed in September 2015 and two revisions were subsequently issued (November 2015 and August 2016).

2.5 Structure of the Report

Section 3 provides a description of the Project facilities, activities and timelines. **Section 4** describes how different levels of significance are attributed to issues highlighted in the report, and **Section 5** presents the findings of this environmental and social monitoring exercise. To avoid unnecessary repetition when commenting on compliance with IFC and ADB standards our findings have been structured around the Project's operation phase Environmental and Social Management Plan (ESMP), and additional topics not covered by the ESMP (i.e., Land Acquisition & Resettlement and certain topics under Labor & Working Conditions). The key issues identified against each topic are summarized in 'significance tables' for each Plan. **Section 6** provides a commentary on the status of ESAP issues and **Section 7** presents a summary of our key findings.

Within the report we have endeavoured to provide a balanced opinion, providing examples of good practice and identifying improvements made in closing gaps that were noted in the Sixth Environmental and Social Monitoring Report. However, due to the nature of a monitoring report, and the broad range of aspects covered, it does focus on the remaining gaps in compliance with the Applicable Standards and recommended actions to close these gaps.

2.6 Limitations

The IESC only considered activities relevant for the current monitoring period (January 2021 to December 2021), and ongoing Project activities.

All data received during the monitoring assignment was provided by SMPC. Through the interview process, the IESC discussed and reviewed the data provided together with SMPC and Sembcorp.

The combined effects of the State of Emergency in Myanmar and COVID-19 has impacted on the Company's ability to deliver on its CSR programs, conduct stakeholder engagement/consultation and implement various requirements of the ESMP in 2021. This situation may continue into 2023. As a result, Environmental and Social activities and monitoring in accordance with the Project Commitments have been affected during 2020-2021. Documents were reviewed related to the impact of the ongoing Covid-19 situation on the environmental and social operations, as follows:

- SMPC Covid-19 Business Continuity Plan (BCP) implementation presentation (2020, **Appendix 11**) which included a reduction in workforce size and schedule changes for the workforce at the plant (for further details see **Section 5.24.1**).
- Letter from Golden Dowa Eco-System Myanmar Co Ltd (water quality vendor) dated October 27, 2020, to state that water sampling services is on hold from September 2020 due to Covid-19 and the lock down announcement by MOHS Order No 107/2020;
- Letter from E-Guard Environmental Services Myanmar Co Ltd (air and noise monitoring vendor) dated October 7, 2020, to state that environmental quality monitoring cannot be conducted due to Covid-19 and the lock down announcement by MOHS Order No 107/2020;
- Information provided by SMPC on the following limitations from March 2020 – December 2021, which caused SMPC to not be able to fully meet the commitments under the Stakeholder Engagement Plan and Community Development Plan:
    - Government imposed restrictions on crowd size at the Annual Public Stakeholder Engagement Meeting in December 2020 (a maximum 15 people per village);
    - Restrictions on entering the villages which caused the CRO and Development Manager to not be able to engage face-to-face with the PAPs, CPs and other

stakeholders from March 2020 - December 2021;

- Restrictions on meeting with the police and the hospital personnel as part of stakeholder engagement;
- Slowdown in completion of the 19 CSR activities (investment projects) planned for 2021;
- Cancellations for March 2020 – December 2021 of the Medical Officer providing health awareness clinics for members of the 13 villages; and
- Cancellations for March 2020 – December 2021 of skills training (English language courses) being provided to members of the 13 villages.

The IESC Monitoring Team was unable to physically travel to Myanmar to conduct the Sixth (2020) or Seventh (2021) Monitoring Rounds. Virtual monitoring rounds have been conducted, comprising of Microsoft Teams videoconference calls, review of 'real time' video footage taken by SMPC as well as documentation, video recordings and photographs. The IESC recognises the importance of physical site visits to the Project Site and surroundings by the monitoring team and recommends that physical site visits be re-established in the future, where practicable.

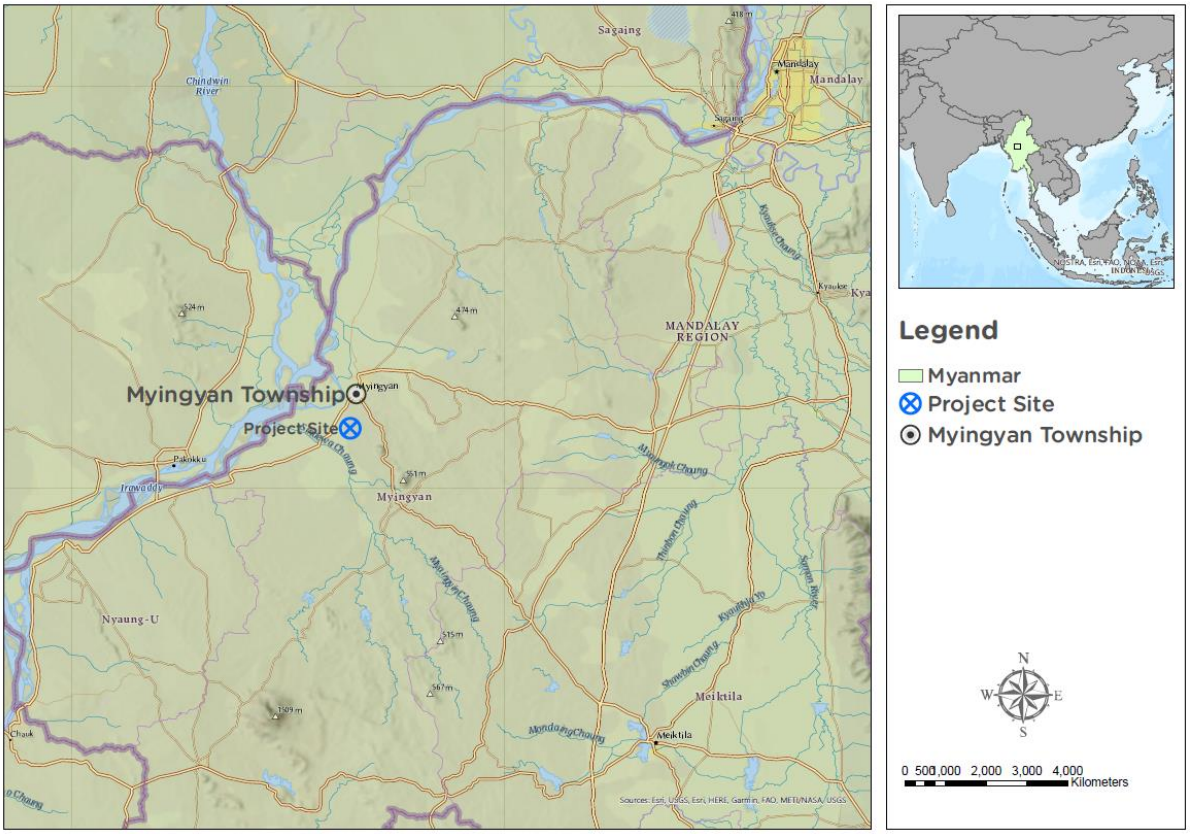
1. PROJECT DESCRIPTION

This section is intended to provide a brief description of the Project activities and current status. It provides a high-level summary of the Project based on the description in the Project's Final ESIA report and associated documentation, with emphasis on those elements of the Project that could give rise to environmental, social and health impacts.

1.1 Project Location

The Project is located approximately 8 km south of the Myingyan Township, which is around 500 km north of Yangon and 90 km south-west of Mandalay, Myanmar.

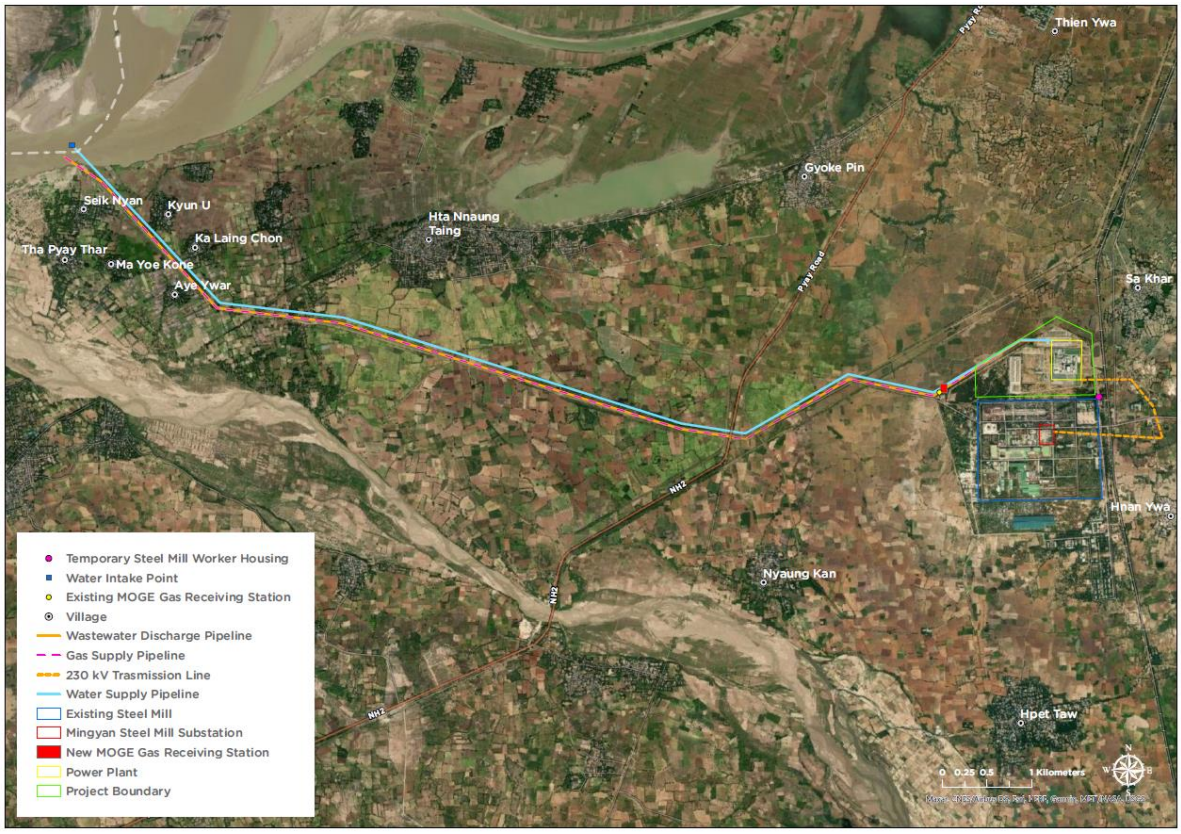
Figure 1: Project Location



The 11.6 hectares Project Site is immediately north of an existing steel mill (Myingyan Steel Mill No. 1) owned by the Ministry of Industry (MOI), occupying a total area of 280 hectares.

1.2 Project Description

Figure 2: Project Site Layout



The Project, Sembcorp Myingyan Independent Power Plant (IPP), is a 225-megawatt combined-cycle, gas-fired power plant project This project was developed under a build-operate-transfer agreement between Sembcorp Myingyan Power Company Limited and the Ministry of Electricity and Energy (MOEE) of Myanmar signed in January 2017. Under the agreement, SMPC will build and operate the power plant for 22 years, after which the facility will be transferred to the government[5].

Project facilities, now completed, include:

- A 225 MW CCGT power plant comprising two sets of Gas Turbines (GT) units, two sets of Heat Recovery System Generators (HRSG), one steam turbine generating unit with associated auxiliary equipment, switchyard area, cooling water system, demineralized water system, and a wastewater treatment facility;
- A 1.2 km 10" gas supply pipeline from a new gas receiving station installed by Myanmar Oil & Gas Enterprise (MOGE) to supply gas to the Project Site, the steel mill and a temporary Aggreko gas-fired power plant;
- A 2.5 km 230 kV overhead transmission line (with eight towers – four in the steel mill site and four in Sa Khar village) between the power plant and a substation in the adjacent steel mill (connection beyond the steel mill is GOM's responsibility);
- A buried 14 km 12" diameter river water supply pipeline linked to a water intake pumping station on the Ayeyarwady River, to the west;
- An overhead line adjacent to the river water supply pipeline supplies power to the pumping station; and
- A buried 14 km 12" diameter wastewater discharge pipeline parallel to the river water supply pipeline, discharging around 75 – 100 m downstream of the water intake pipeline.

[5] Refer to Sembcorp website for further details. https://www.sembcorpmyingyanipp.com/index.html

Figure 3: Project Aerial (Photo from Sembcorp)

The river water supply and wastewater pipelines are both buried 2 m below the ground surface in a right of way (RoW) 2 m wide, and mostly aligned next to an existing irrigation canal. The RoW was physically reinstated. Land users (farmers) were allowed to reinstate crops beginning in July 2017, but large trees were not permitted in order to avoid damage to the pipelines.

1.3 Associated Facilities

The Project's Associated Facility, as defined by IFC PS1 and ADB's SPS, is limited to the new gas receiving station that was installed by MOGE.

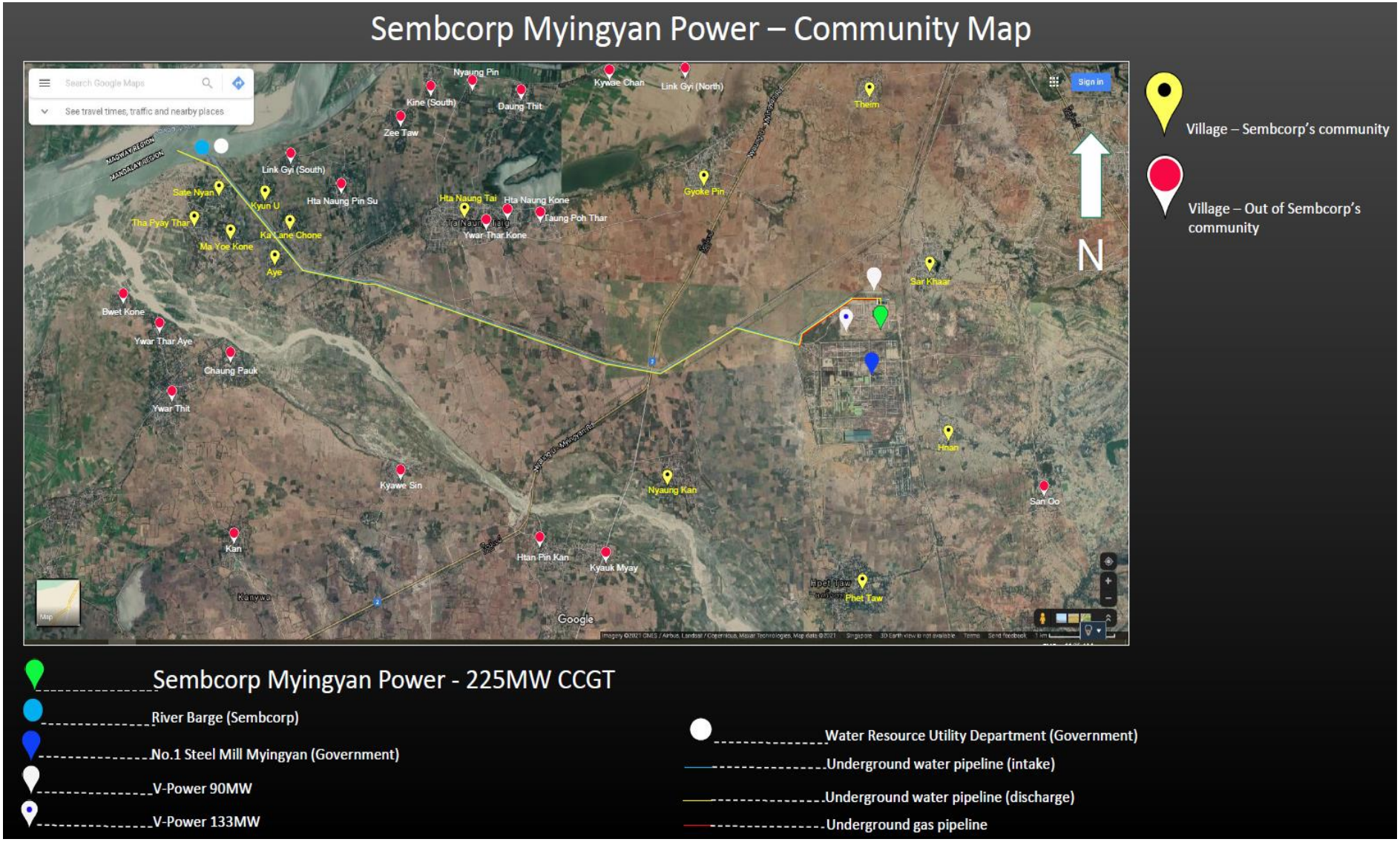
1.4 Socio-Economic Context

As indicated in the ESIA (Revision no. 2, August 2016), the Stakeholder Engagement Plan (SEP), (see also **Figure 4**, there are 13 villages located within the Project's area of influence (AoI). These are:

- Sa Khar village;
- Hnan Ywa village;
- Hpet Taw village;
- Nyaung Kan village;
- Gyoke Pin village;
- Thien Ywa village;
- Tha Pyay Thar village;
- Kyun U village;
- Ka Laing Chon village;
- Aye village;
- Seik Nyan village;

- Ma Yoe Kone village; and
- Hta Hnaung Taing.

Figure 4: Community Map (Provided by SMPC)



1.5 Status of the Project at Time of the Seventh Monitoring Assignment

The Project is currently in the operations phase. Open cycle (Simple Cycle) power generation commenced in May 2018, and combined cycle operation started in November 2018. At the time of the Seventh Monitoring Round, engineering, procurement and construction were 100% complete.

In December 2021, 130 people were working at the Project (see **Table 22** for details on the project workforce), which includes SMPC plus external parties (i.e., external security team and EPGE). For the operations phase, during the pandemic, there are two 12-hour shifts (see **Section 5.24.1**).

There is no longer the need for any construction workers' accommodation camps; the two remaining construction workers' accommodation camps were closed prior to ENVIRON's August 2018 site visit. For the operations phase, workers from outside the area stayed in rental houses or hotels. In view of the ongoing Covid-19 pandemic, SMPC workers and their families can stay at accommodation near to the plant.

2. SIGNIFICANCE ASSESSMENT

2.1 Review Findings

A summary of the review findings is presented in a significance table at the end of each sub- section in **Section 5** of this report. For each item, we present:

- The topic/aspect;
- A description of the issue, for example deficiencies or omissions;
- The phase(s) to which an issue relates;
- Identification of the standard(s) against which the issue has been identified;
- Ramboll Environ's recommendation, where applicable, to resolve/manage the deficiency;
- Where applicable, updated status based on the December 2020 virtual monitoring visit; and
- The significance on a three-point scale (based on the current status, using the criteria below).

2.2 Assessment of Significance

A ranking system has been used to indicate the relative significance of an issue identified during the monitoring visit. As well as highlighting the most important areas requiring attention, it can also be used to aid the tracking and rectification of specific items requiring improvement.

Identified issues have been placed into one of the four categories in **Table 1** below:

Table 1: Significance Ranking

Minor:	Minor non-compliance, risk or minor technical breach of Applicable Standards and commitments with no material, actual or likely potential: environmental or social consequences; or significant human injury or harm.
Moderate:	Moderate non-compliance or risk with actual or likely potential: localised and short-term environmental or social consequences; minor human injury or harm; or material short-term breach of Applicable Standards and commitments.
High:	Major non-compliance or risk with actual or likely potential: spatially extensive and/or long-term environmental or social consequences; serious human injury/death or harm; or material and extensive breach of Applicable Standards and commitments.
Issue Closed:	An issue that was raised in a previous monitoring visit, which has now been addressed to the satisfaction of the IESC.
Ongoing Activity:	An issue that was raised in a previous monitoring visit, which the Project is actively addressing to close a gap and meet the Applicable Standards.

Where time-critical recommendations for specific actions are made a timeframe linked to Construction/Operational phase milestones is indicated in the IESC recommendation column. Time critical issues can lead to a higher classification of significance.

Table 2: Example of the Summary Table Format

ID	Aspect	Issue Description	Phase[6]	Standard	IESC Recommendations	December 2019 Update	Significance
00	Storm water runoff monitoring	The ESAP requires Company X monitors the quality of surface water run-off from facilities. To date the Company has been unable to procure monitoring equipment – no monitoring has been undertaken.	Ops	WBG EHS Guidelines ADB ES Framework	Company X shall expedite procurement of monitoring equipment with the support of senior management.		**Moderate**

[6] Phases can include: construction; operations; decommissioning or any combination of these phases.

3. ASSESSMENT OF ENVIRONMENTAL AND SOCIAL CONFORMANCE WITH PROJECT COMMITMENTS

3.1 Introduction

The results of the environmental and social monitoring are presented in **Section 5** of this report, structured around the 7 operation-phase environmental and social management plans (ESMPs), plus two additional sub-sections covering Land Acquisition & Resettlement and certain additional topics under Labor & Working Conditions. The operation-phase management plans were developed by SMPC to implement the mitigation and monitoring measures recommended in the Project's ESIA and to meet Applicable Standards and all 7 management plans are directly managed by SMPC. After the overview of the Project's Environmental and Social Management System (ESMS) in **Section 5.2**, the following sub-sections confirm compliance with and highlight any gaps identified against the management plans and against the Applicable Standards.

3.2 Environmental and Social Management System

5.2.1 Construction Phase Environmental and Social Management System

The construction phase ESMP was implemented via the Project's HSE Management System (HSE-MS), which was based on Sembcorp's corporate HSSE-MS. The management system is described in the Project's Occupational Health and Safety Management Plan and in the Project HSE Plan (Rev 1, 1 April 2016). No major deficiencies or concerns were identified in the construction phase HSE-MS. Implementation of the Project's ESMP, which formed the main operational control element of the management system was reviewed during the July 2017, January 2018 and August 2018 IESC monitoring visits. Since the issuance of the Second Environmental and Social Monitoring Report (August 2017), numerous improvements were made to environmental plans covering air quality and dust management, plant and vehicle management and maintenance, traffic management, surface water management, soil and groundwater management, waste management, and oil and chemical spill contingencies; and to social plans covering stakeholder engagement, community development, community health management, and local recruitment and procurement. The site has since transitioned to the operations phase and the details of the Project's Operations Phase HSE Management System (HSE-MS) are detailed in **Section 5.2.2**.

5.2.2 Operations Phase Environmental and Social Management System

SMPC prepared a series of plans that together form the operations phase ESMP. The operations phase ESMP was implemented via the Project's HSE Management System (HSE-MS), which was based on Sembcorp's Corporate HSSE-MS. The management system is described in the Project's Occupational Safety and Health Management Plan (Document No. 3.02.01.010 dated October 2, 2018). The seven (7) operations phase plans are:

- Environmental Management Plan which combines the following topics into one consolidated plan:
    - Air Quality Management
    - Noise and Vibration Management
    - Surface Water Quality Management
    - Waste Management
- Occupational Health and Safety Management Plan
- Plant Emergency Preparedness and Response Plan
- Security Management Plan

- Community Development Plan which includes Community Health Management
- Stakeholder Engagement Plan
- Local Recruitment and Procurement Management Plan

The plans were developed based on similar documents used in Sembcorp operations in Singapore and the Sembcorp Salalah Power and Water Company in Oman. Ramboll Environ understands that around 200 technical operations phase procedures have already been developed.

In August 2018, ENVIRON reviewed the job description for the operations phase HSSE Manager's role and concluded that it was comprehensive and fit-for-purpose. The Operations and Maintenance (O&M) team received one-month of training by the construction team staff on technical and HSE issues. In addition, O&M representatives visited the Sembcorp power plant in Jurong Island (Singapore). During the December 2019 site visit, the IESC visited the operations phase control room and was satisfied that operators have access to adequate information to manage HSE issues (e.g. process safety parameters, emissions data from the CEMS system, and wastewater treatment plant data). The control room was also viewed during the virtual plant walkthrough during the Sixth and Seventh Monitoring Rounds. No issues were identified.

During 2021, key roles such as the Managing Director, the Plant Manager and the Financial Controller were filled by Singapore secondees, and the HSSE Manager was filled by an External Contractor who was based outside of Myanmar. The 2021 and updated 2022 SMPC organization charts were made available (**Figures 5a and 5b**). Based on the updated organisation chart provided (dated March 2022), there have been various changes in senior management positions, namely Managing Director, Plant Manager, HSSE Manager and Commercial Manager.

The HSSE Manager role which had previously been held by an External Contractor up to and including the time of the Seventh Monitoring Round interviews in January 2022 has been replaced by a Senior Executive, Mr Zaw Moe Aung. An updated job description for the HSSE Manager's role was reviewed and it was concluded that it was comprehensive and fit-for-purpose. Key responsibilities include overall responsibility for Plant HSSE matters, overseeing compliance with company standard and regulatory requirements; and providing leadership to drive continuous improvements in Plant HSSE culture. Whilst it is commendable that SMPC has filled this key HSSE role with an SMPC employee based locally, the Senior Executive may require additional training and support to fulfil the HSSE Manager position.

The updated organisation chart showed that Mr Yassar Mo Thein had been promoted from Plant Manager to Managing Director, while Mr Fahd Adventure Solares had been promoted to the role of Plant Manager; and the Development Department had been split into two departments, i.e., Governmental Affairs with Aung Lwin Oo, Manager and CSR with Hein Min Oo, Executive and Lead.

Recommendation:

The IESC recommends that the newly appointed personnel are supported during the transition to their new roles, including support from Sembcorp where necessary to ensure that their responsibilities for the environmental and social requirements of the Lenders, including implementation of the ESMPs, continues smoothly.

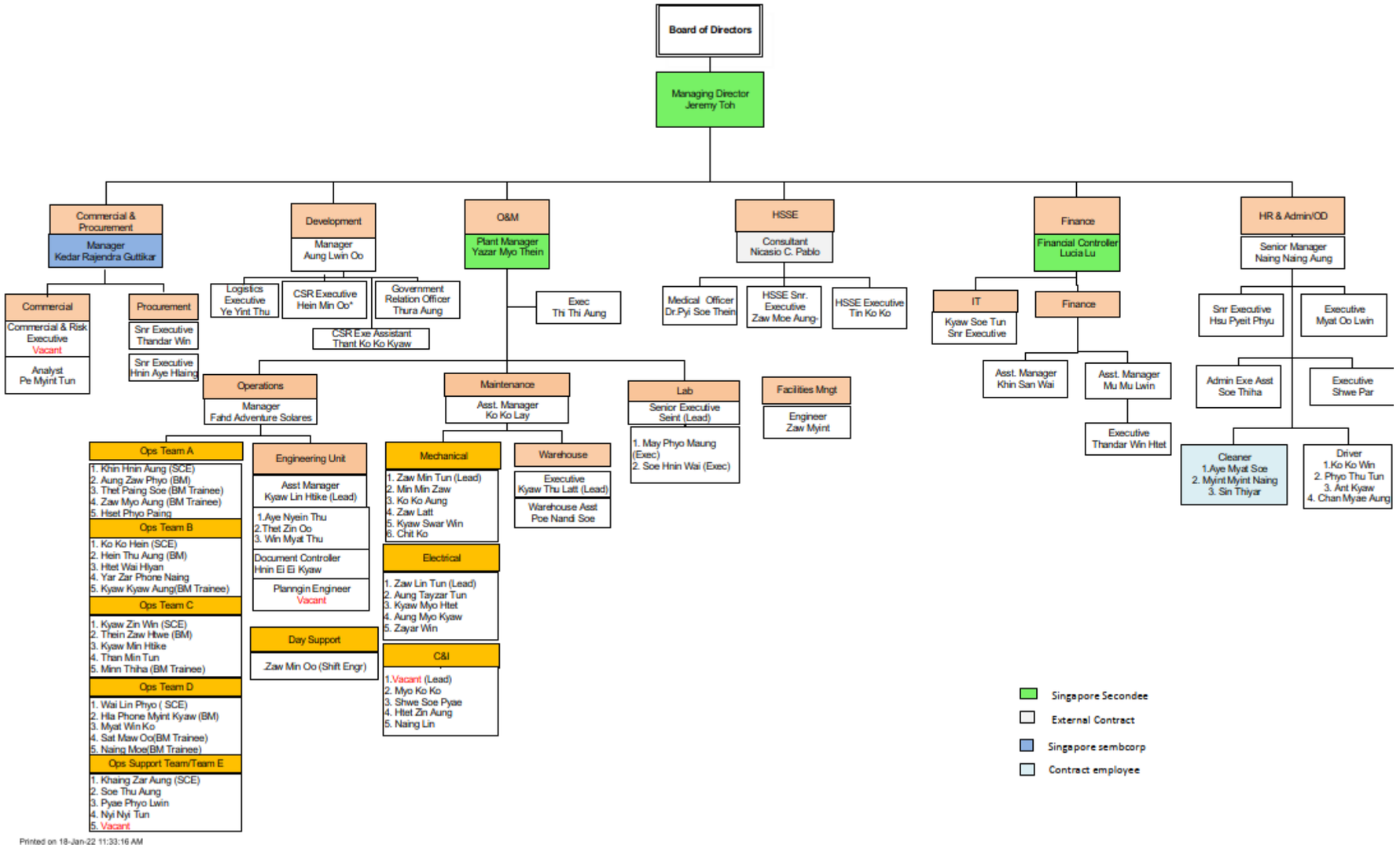


Figure 5a: Project Operational Phase Environmental and Social Organisation Chart (Dated 31 Dec 2021)

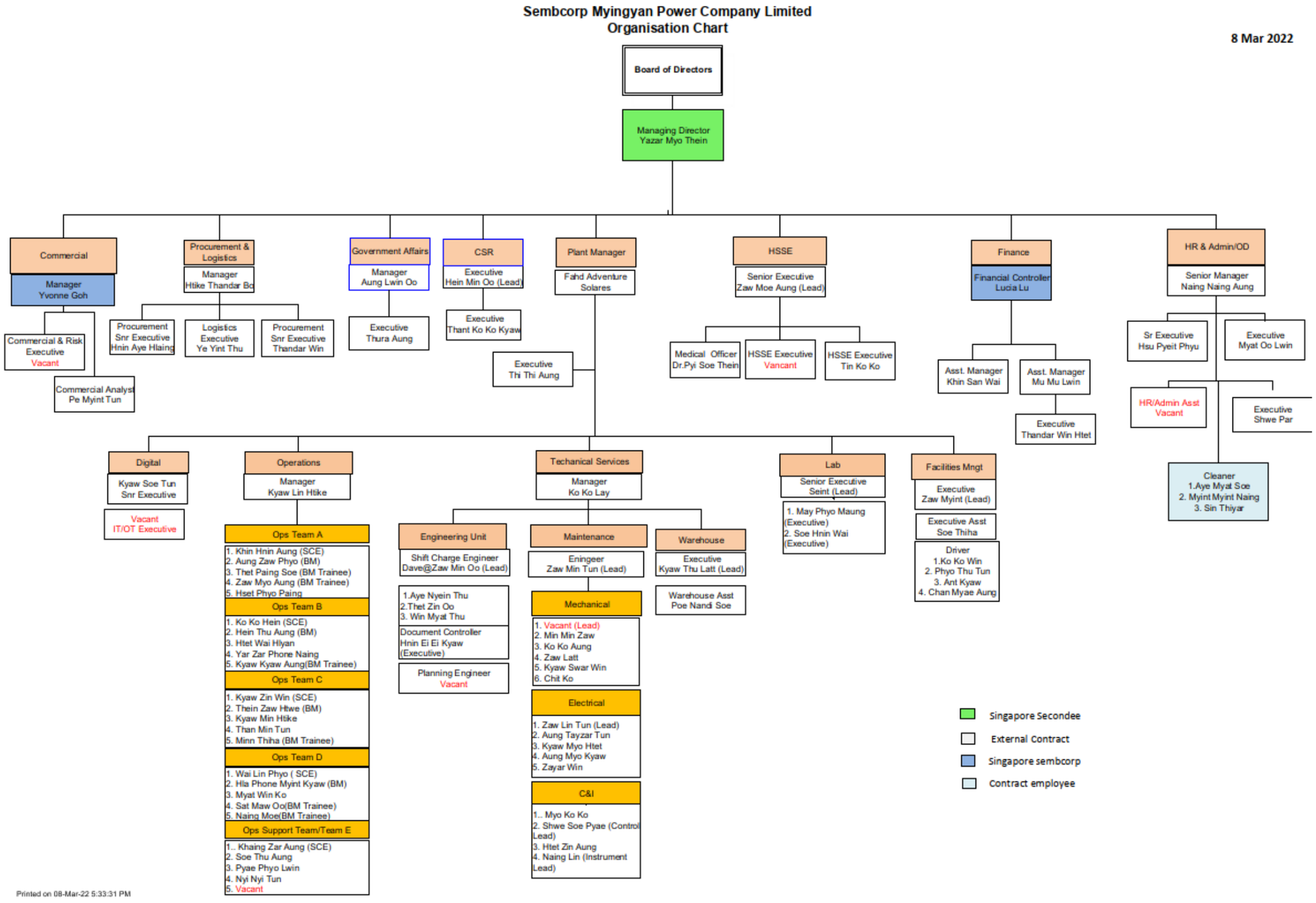


Figure 5b: Project Operational Phase Environmental and Social Organisation Chart (Dated 8 March 2022)

Table 3: Summary of Findings - Environmental and Social Management System

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Seventh Monitoring Round Update	Significance
001	Operations phase ESMS	The operations phase ESMP was implemented via the Project's HSE Management System (HSE-MS), which was based on Sembcorp's corporate HSSE-MS. Seven (7) operational phase plans have been developed. However, not all of the recommendations for improvements provided by the Lenders and IESC have been incorporated into the plans.	Operations	• IFC PS1 • ADB-ES Principle 4	An operations phase ESMS should be developed for the project prior to commencement of operations. The ESMS should include an ESMP, which could include several individual plans if necessary. Lessons learned from the construction phase ESMP should be applied.	Seven operations phase plans were developed, as listed in Section 5.2.2. These plans were reviewed by the Lenders and IESC prior to Project COD and recommendations for improvement were submitted on February 12, 2019. Revised versions of some of these plans were issued in 2020, namely the Environmental Management Plan, the Plant Emergency Preparedness and Response Plan, the Occupational Health and Safety Management Plan and the Security Operations Plan The Stakeholder Engagement Plan and the Community Development Plan (new versions) were made effective as of January 2021. Based on our review of the final operations phase plans, most of the IESC recommendations have been incorporated into the latest versions of the plans. However, there are some gaps remaining and these are discussed under specific topics in subsequent sections of the report.	**Minor**

5.3 Air Quality and Dust

Requirements for air quality and dust management are included in the Plant's Environmental Management Plan (EMP) Rev 02 dated 7 July 2020. The key emission source associated with the operation of the Plant is the stack emissions from the combustion of natural gas during combined cycle and simple cycle operations i.e., the main and by-pass stacks of 40 m and 30 m height, respectively.

5.3.1 Combustion Gases

All vehicles and equipment use premium diesel, which is the highest quality diesel available in Myanmar, to reduce sulphur emissions. For the operations phase, issues related to fugitive emissions of volatile substances are considered minimal. The details of the operations phase emissions monitoring from the main and by-pass stacks are discussed in **Section 5.3.3** below.

5.3.2 Dust

The construction phase is complete, and the site has been completely laid with asphalt, gravel, or grass cover. All issues raised in the previous monitoring visits have now been closed or are considered not relevant for the operations phase of the project. Dust is no longer considered a material topic.

5.3.3 Emissions Monitoring

The Project consists of two sets of gas turbine generating unit, two sets of heat recovery steam generator (HRSG) and one steam turbine generating unit with associated auxiliary equipment. The Project is designed to operate continuously throughout the year in either simple cycle or combine cycle mode. Each gas turbine is equipped with one bypass stack for simple cycle mode and one main stack for combined cycle mode. The main stack and the bypass stack do not operate concurrently at any one time.

Key emission sources associated with the operation of the Project are stack emissions from the combustion of natural gas during combined cycle and simple cycle operation. The main air pollutant of concern for a gas-fired combined cycle power plant is nitrogen dioxide (NO_2) whilst emissions of sulphur dioxide (SO_2) and particulate matters (PM) including respirable suspended particulates (PM_{10}) and fine suspended particulates ($PM_{2.5}$) are considered minimal provided that the combustion process is efficient.

A Continuous Emissions Monitoring System (CEMS), supplied by Yokogawa, has been installed for both Gas Turbines. They provide continuous monitoring of NOx, SO_2, CO_2, CO, O_2, PM and flow. In addition to the CEMS, an annual stack emission test following USEPA method or equivalent is required by the EMP; this test should be conducted and reported to the IESC on an annual basis.

A summary of the stack emissions monitoring results was provided for review.

The available CEMS data (hourly NOx stack emissions monitored at 2 different emission units from January 1, 2021, to December 31, 2021) was reviewed by the IESC (refer to **Appendix 3**). The maximum hourly emissions are listed in **Table 4** below. For Unit 1, the maximum hourly emissions were below the Myanmar National Environmental Quality (Emission) Guidelines Values for Thermal Power with a total rated heat input capacity above 50-megawatt thermal input on high heating value basis; for Unit 2 the maximum hourly emissions exceeded the guideline value of 100 mg/Nm^3 for NOx emissions. The maximum emissions occurred during low load operations. The low load operations occurred rarely during 2021: 24 hours for Unit 1 and 36 hours for Unit 2, or 0.3% and 0.4% of total hours for Unit 1 and Unit 2, respectively.

Table 4: Maximum Monitored Stack Emissions during Low Load Operations – Hourly NOx

Emission Unit	Date, Time	Maximum Hourly Emission (ppmv)	Maximum Hourly Emission (mg/Nm^{3a} @101.325 kPa, 293.15 K ^{b}, dry)
Unit 1	31 March 2021, 21:00 – 21:59	50	96
Unit 2	14 January 2021, 22:00 – 22:59	62	118

Note:
a. To convert NOx concentration from ppmv to mg/Nm^3, molecular weight of 46.01 g/mol is used for a conservative estimate.
b. Normal Temperature & Pressure (NTP): 101.325 kPa, 293.15. The molar volume of ideal gas is about 24.04 L/mol at NTP and dry condition.

Compared with low load operations, normal operations produce less NO_2 in the emissions. The range of the stack emissions are listed month by month in **Table 5** and **Table 6** for Unit 1 and Unit 2.

Table 5: Minimum and Maximum Monitored Stack Emissions during Normal Operations for Unit 1 – Hourly NOx

Month	Min (ppmv)	Max (ppmv)	Min (mg/Nm^{3a} @101.325 kPa, 293.15 K, dry)	Max (mg/Nm^{3a} @101.325 kPa, 293.15 K, dry)
Jan	0.00	22.68	0.00	43.41
Feb	0.00	23.18	0.00	44.36
Mar	0.00	24.33	0.00	46.57
Apr	0.00	24.99	0.00	47.83
May	0.00	24.40	0.00	46.70
Jun	2.48	17.24	4.75	33.00
Jul	2.79	18.98	5.34	36.33
Aug	0.00	17.99	0.00	34.43
Sep	0.00	20.98	0.00	40.15
Oct	0.00	21.46	0.00	41.07
Nov	0.00	24.99	0.00	47.83
Dec	0.00	24.99	0.00	47.83

Table 6: Minimum and Maximum Monitored Stack Emissions during Normal Operations for Unit 2 – Hourly NOx

Month	Min (ppmv)	Max (ppmv)	Min (mg/Nm^{3a} @101.325 kPa, 293.15 K, dry)	Max (mg/Nm^{3a} @101.325 kPa, 293.15 K, dry)
Jan	0.00	22.90	0.00	43.83
Feb	0.00	17.93	0.00	34.32
Mar	0.00	15.18	0.00	29.05
Apr	0.00	19.08	0.00	36.52
May	0.00	24.74	0.00	47.35
Jun	7.87	13.60	15.06	26.03
Jul	8.98	18.17	17.19	34.78
Aug	0.00	19.83	0.00	37.95
Sep	0.00	18.18	0.00	34.79
Oct	0.00	24.96	0.00	47.77

Month	Min (ppmv)	Max (ppmv)	Min (mg/Nm^{3a} @101.325 kPa, 293.15 K, dry)	Max (mg/Nm^{3a} @101.325 kPa, 293.15 K, dry)
Nov	0.00	24.93	0.00	47.71
Dec	0.00	18.24	0.00	34.91

Detailed analysis on the monitored air impurities are available in **Appendix 3** except O_2 which is not identified as an air pollutant.

A graphical representation of the results and the laboratory reports are presented in **Appendix 3**.

5.3.3.4 Ambient Air Quality Monitoring

Ambient air quality monitoring data was last conducted in 2020, as reported in the Sixth Monitoring Report. These data are used to represent ambient air quality conditions as SMPC was unable to carry out ambient air quality monitoring in 2021. Ambient air monitoring in accordance with the EMP requirements is recommended to be re-established as soon as practicable.

In accordance with the EMP, ambient air quality monitoring was conducted in 2020 by an independent third party at four external monitoring points, located at village houses in the vicinity of the Project, as follows (refer to **Figure 6**):

- Hnan Ywa village (ASR3);
- Sa Khar village (ASR4);
- Gyoke Pin village (ASR5); and
- Nyaung Kan village (ASR14).

Figure 6: Ambient Air Quality and Noise Monitoring Locations

Monitoring data was reviewed for March 2020 (sampling period from March 16, 2019, to March 20, 2020) and July 2020 (sampling period from June 29, 2020, to July 3, 2020). Note that data from September 2020 and December 2020 were not available due to Covid-19 situation.

The parameters monitored were as follows:

- Particulate Matter (PM_{10} and $PM_{2.5}$);
- Carbon monoxide (CO);
- Carbon dioxide (CO_2);
- Sulphur dioxide (SO_2); and
- Nitrogen Dioxide (NO_2).

The monitoring results were compared against the relevant assessment criteria, as follows: the Myanmar National Environmental Quality (Emission) (NEQ) Guidelines (2015), World Health Organization (WHO) Air Quality Guidelines Global Update 2005 as well as the National Ambient Air Quality Standards (NAAQS) issued by the US Environmental Protection Agency (US EPA). The results are provided in **Table 7**.

Table 7: Ambient Air Quality Monitoring at Sensitive Receptors

Name of Sampling Locations	Approximate Distance from Site	Parameters	Units	Mar-20	Jun-20 *	Project Standard	Average Period
Sa Ka Village	630 m	CO	ppm	0	0	9	8 hrs
		CO2	ppm	447.89	427.62	5000	8 hrs
		SO2	µg/m3	0	0	20	24 hrs
		NO2	µg/m3	3.80	3.76	200	1 hr
		PM10	µg/m3	22.67	4.37	50	24 hrs
		PM2.5	µg/m3	13.74	2.09	25	24 hrs
Hnan Ywa Village	1,560 m	CO	ppm	0	0	9	8 hrs
		CO2	ppm	450.01	417.89	5000	8 hrs
		SO2	µg/m3	0	0	20	24 hrs
		NO2	µg/m3	3.76	3.76	200	1 hr
		PM10	µg/m3	23.61	3.23	50	24 hrs
		PM2.5	µg/m3	14.18	1.47	25	24 hrs
Gyoke Pin Village	2,720 m	CO	ppm	0	0	9	8 hrs
		CO2	ppm	529.58	431.19	5000	8 hrs
		SO2	µg/m3	0	0	20	24 hrs
		NO2	µg/m3	30.51	8.46	200	1 hr
		PM10	µg/m3	19.66	2.56	50	24 hrs
		PM2.5	µg/m3	11.04	1.20	25	24 hrs
Nyaung Kan Village	2,760 m	CO	ppm	0	0	9	8 hrs
		CO2	ppm	500.75	431.88	5000	8 hrs
		SO2	µg/m3	0	0	20	24 hrs
		NO2	µg/m3	28.71	6.26	200	1 hr
		PM10	µg/m3	28.43	2.86	50	24 hrs
		PM2.5	µg/m3	17.45	1.51	25	24 hrs

The parameters monitored were compliant against the stipulated criteria at all four monitoring locations. A graphical representation of the results and the laboratory reports are provided in **Appendix 3**.

5.3.3.5 Greenhouse Gas Emissions

As reported in Section 8.3 of the EMP, during the operations phase, an estimated as 2,003.03 tonnes CO2e/day (731,106.32 tonnes CO2e/year) of greenhouse gas (GHG) emissions would be generated from the Project, mainly from the gas turbine generators in the CCGT Power Plant. The estimated GHG emission exceeds the threshold that defines significant emitters of GHGs by the ADB SPS and EP III (100,000 tonnes CO2e/year) and IFC PS3 (25,000 tonnes CO2e/year).

The EMP requires reporting of GHG generation on an annual basis during the operations phase. Measurements to be made as listed in the EMP include natural gas consumption. The EMP proposes the preparation of an annual pollutant release inventory to monitor GHG emissions from the Plant with GHG emission reported as a CO2e unit, and emissions off-sets, where feasible.

The IESC recommends that, in accordance with the EMP, SMPC report an annual pollutant release inventory to monitor GHG emissions from the Plant, with GHG emission reported as a CO2e unit (e.g., tonnes of CO2e per year). The GHG emission reported in a CO2e unit should be provided for the IESC to review on an annual basis as part of the operations phase E&S monitoring.

Table 8: Summary of Findings - Air Quality and Dust

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Seventh Monitoring Round Update	Significance
001	Operations phase air emissions	The particulate matter sensors were not functioning during the site visit. Portable monitoring devices were being used to monitor particulate matter.	Operations	• Management Plan • IFC PS3 • General EHS Guidelines • ADB-ES Principle 9	Data from the CEMS for continuous monitoring of NOx, SO_2, CO_2, CO, PM and O_2 is available.	In addition to the CEMS data, an annual stack emission test following USEPA method or equivalent is required by the EMP; this test should be conducted and reported to the IESC on an annual basis.	**Minor**
002	Greenhouse Gas (GHG) emissions	According to the EMP, an estimated 2,003.03 tCO2e/ day (731,106.32 t CO2e/year) of GHG emissions were estimated to be generated from the Project during the operations phase. The estimated GHG emission exceeds the threshold that defines significant emitters of GHGs by the ADB SPS and EP III (100,000 tonnes CO2e/year) and IFC PS3 (25,000 tonnes CO2e/year).	Operations	• Management Plan	The EMP requires reporting of GHG generation on an annual basis during the operations phase, reported as a CO2e unit, and emissions off-sets, where feasible. The IESC recommends that, in accordance with the EMP, SMPC reports an annual pollutant release inventory to monitor GHG emissions from the Plant, with GHG emission reported as a CO_2e unit (e.g. tonnes of CO_2e per year). The GHG emission reported in a CO_2e unit should be provided for the IESC to review on an annual basis as part of the operations phase E&S monitoring.	As was recommended under the Sixth Monitoring Round, the IESC recommends that, in accordance with the EMP, SMPC reports an annual pollutant release inventory to monitor GHG emissions from the Plant, with GHG emission reported as a CO_2e unit (e.g. tonnes of CO_2e per year). The GHG emission reported in a CO_2e unit should be provided for the IESC to review on an annual basis as part of the operations phase E&S monitoring.	**Minor**

5.4 Plant and Vehicle Management and Maintenance

Plant and vehicle management and maintenance requirements have been incorporated into the operations phase Occupational Safety and Health (OSH) Management Plan (PPMS Document Reference: 3.02.01.010, First Issue, 2nd October 2018). The OSH plan describes the Project's operational phase occupational health and safety requirements and includes some elements related to plant vehicle management and maintenance in Section 17.2 of the OSH plan.

No significant issues were identified related to the condition of the plant or equipment for the Project during the IESC fifth monitoring visit in December 2019. Operators complete a daily checklist before operating equipment and send the completed forms to their supervisors. Should any maintenance issues be identified, the maintenance department is immediately notified.

5.5 Traffic Management

5.5.1 General Traffic Management

The operations phase Occupational Safety and Health (OSH) Management Plan (PPMS Document Reference: 3.02.01.010, First Issue, 2nd October 2018) describes the Project's operational phase occupational health and safety requirements and includes some elements related to traffic safety in Section 17.2 of the plan. The OSH Management plan specifies speed limits, requirement to wear seat belts and vehicle maintenance requirements.

5.5.2 On-site Traffic Management

Figure 7 shows the internal traffic layout within the site. The Fifth Monitoring Round noted that there were several signs clearly displaying the speed limit of 15 km/hour at various locations within the site, and that there were three (3) security gates and security personnel at the entrance check that all vehicle occupants are wearing a seat belt before vehicles are allowed to enter.

It is recommended that on-site traffic management be reviewed again during the next IESC site visit.

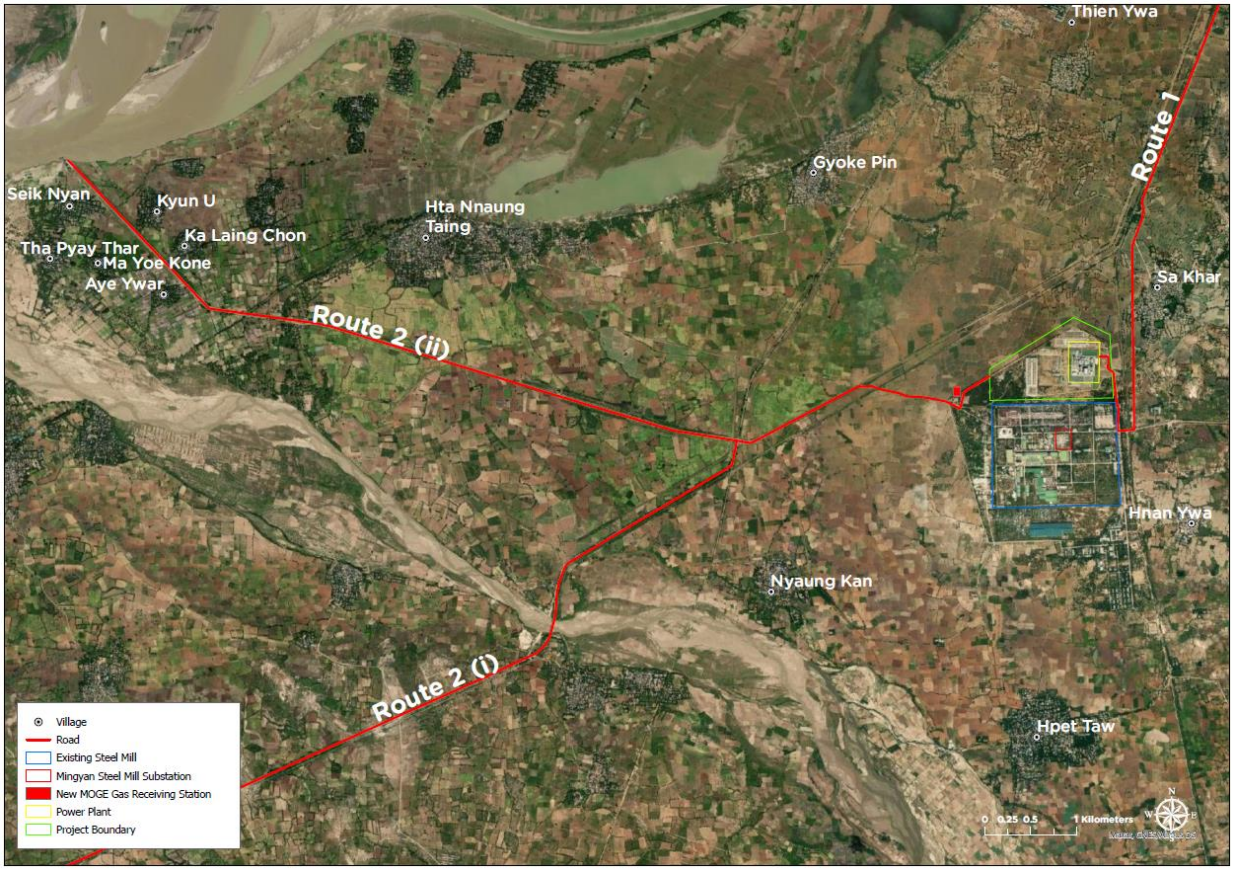
Figure 7: Site Traffic Flow for Operations Phase

5.5.3 Off-site Traffic Management

The approved access routes to the Project Site during the construction phase (refer to **Figure 8**) remain the main access routes to the facility during the operations phase.

Construction phase heavy vehicle movements have now ceased and traffic movements to the Project now, during the operations phase, is no longer considered a significant issue. However, it is recommended that off-site traffic management be reviewed again during the next IESC site visit to assess operations phase impact, if any, on nearby communities such as the small informal settlement near the main site entrance (Route 2 (ii)).

Figure 8: Approved Site Access Routes



5.5.4 Deficiencies Against Applicable Standards

All issues raised in the past monitoring visits have been closed, largely via modifying the requirements of the construction phase Traffic Management Plan.

Requirements related to traffic for the operational phase have been incorporated into the Occupational Safety and Health (OSH) Management Plan (PPMS Document Reference: 3.02.01.010, First Issue, 2nd October 2018).

Table 9: Summary of Findings – Traffic Management

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Seventh Monitoring Round Update	Significance
001	Management Plan	Requirements related to traffic for the operational phase have been incorporated into the Occupational Safety and Health (OSH) Management Plan (PPMS Document Reference: 3.02.01.010, First Issue, 2nd October 2018). However, the OSH Management Plan refers to a Site Traffic Plan in Section 17.2. which is a document that does not exist for the operational phase as the traffic requirements have already been incorporated into the OSH plan itself.	Operations	• Management Plan	References to a Site Traffic Plan in the OSH Management Plan remains despite there being no such standalone document. The OSH Management Plan shall be reviewed and updated to ensure that information that is no longer relevant for the operations phase is removed.	OSH Management Plan has been revised and updated.	**Closed**

5.6 Noise and Vibration

5.6.1 Introduction

Noise and vibration management for the operations phase has been included in the site's Environmental Management Plan (EMP), Rev02, dated 7 July 2020.

5.6.1 Ambient Noise Monitoring

Noise monitoring data collected in 2021 by SMPC within the Project Site are used to represent ambient noise conditions as SMPC was unable to carry out ambient noise monitoring at the community monitoring points. Noise monitoring in accordance with the EMP requirements is recommended to be re-established as soon as practicable.

Noise monitoring was conducted by SMPC using a hand-held noise meter at four (4) locations at the Project Site boundary in 2021. One (1) of the monitoring points was located at EPGE Guard House and the other three (3) were located at Security Gates.

The handheld noise meter, TSI Incorporated Model SE-401 Class 1, had been certified as calibrated on February 26, 2020. No further certificates of calibration were available from SMPC. The IESC recommends that the noise meter is recalibrated in accordance with the manufacturer's recommendations (i.e., annually).

The monitoring data for ambient noise levels of the four (4) locations were compared against the Myanmar National Environmental Quality (Emission) (NEQ) Guidelines (2015) for industrial and commercial receptors. The guidelines specify that daytime and night-time noise levels should not exceed 70 dBA at industrial areas, and 55 dBA (daytime) and 45 dBA (night-time) at residential areas.

The average ambient noise levels recorded are as follows in **Table 10** below:

Table 10: Average Ambient Noise Levels for the Operations Phase

Name of Sampling Location	Noise monitoring time	Day/Night	Noise Level (Leq)	Project Standard
SMPC Internal Security Gate #2	24 Mar 2021, 11:35	Day	53.9	70
SMPC Internal Security Gate #3	24 Jun 2021, 11:55	Day	68.8	70
EPGE Guard House	24 Sep 2021, 12:10	Day	66.4	70
SMPC Internal Security Gate #1	24 Dec 2021, 12:30	Day	68.2	70

The ambient noise levels for the site were well below the stipulated limits of 70 dBA at the monitoring points which were identified as industrial areas.

The environmental and social impact assessment (ESIA) baseline noise measurements conducted in 2015 at each noise receptors (NR) provided measured background noise levels which were in the range of 50 – 69 dB(A) during the daytime and 44 – 67 dB(A) during the night-time. The average background noise level at each NR was obtained by averaging the noise levels measured over an eight (8) months period.

It is noted that the initial baseline noise monitoring in 2015 indicated daytime averaged background noise levels at Sa Khar Village had exceeded the Myanmar NEQ / IFC Guidelines on some of the months. Night-time averaged background noise levels at all the NRs (including Sa Khar Village) had also exceeded the Myanmar NEQ / IFC guideline values.

5.7 Water Resources

5.7.1 Introduction

For the operations phase, surface water management has been included in the site's Environmental Management Plan (EMP) Rev02 dated 7 July 2020.

The Surface Water Management Plan for the construction phase requires six-monthly monitoring of surface water quality at two locations on the Ayeyarwady River (upstream and downstream of the jetty) and monthly monitoring of water quality at the jetty for the duration of its use by the Project. Water quality monitoring in accordance with the EMP requirements is recommended to be re-established as soon as practicable.

The IESC inspected the jetty area in July 2017 and no visible evidence of soil or water contamination was found at the time. As the jetty has not been used since 2017, no further action is required for the operational phase.

5.7.2 Water Use

During the operational phase, 340 m^3/hour of water is abstracted from the Ayeyarwady River, via two pumps on a floating river water intake (RWI) barge at Seik Yan, and pumped to a 20,000 m^3 capacity river water reservoir on site (**Appendix 1B, Photo 6**). Over 9,000 m^3 per day of water from the reservoir is treated on-site to provide water for cooling tower, service water and a potable supply. The process includes the following main steps:

- Dosing with sodium hypochlorite, iron (III) chloride, sodium hydroxide and polymer before clarification;
- Clarified water passes through a sand filter, a multimedia filter, then a carbon filter;
- Water destined for the cooling tower also passes through a reverse osmosis process and a mixed bed exchanger;
- Sludge from the clarifier is dewatered in a sludge thickener and a filter press, which produces over 1,000 L/day of sludge. The sludge is transferred from hoppers to trucks for transfer to an off-site sludge storage area.

The IESC noted during the Fifth Monitoring Round in December 2019 that, in general, adequate secondary containment was provided for chemical storage tanks that are used for water treatment chemicals. However, further improvements could be made to the containment area underneath the sludge hoppers. The containment at the sludge hoppers should be reviewed again during the next site visit.

The off-site sludge storage facility was visited by the IESC during the Fifth Monitoring Round in December 2019. The facility is surrounded by a one (1) metre concrete wall and the area is not under roof cover. In the event of heavy rains, there is a potential for the sludge to flow out of the demarcated area into the surrounding land. Based on discussion with the facility personnel and review of photos during the Seventh Monitoring Round, no improvements to containment at the facility have been made. A photo provided to the IESC for review as part of the Seventh Monitoring Round (refer to Appendix 1A, Photo 19) appeared to show an increased volume of sludge being stored, at risk of overtopping the storage facility walls. This remains an open item.

5.7.2 Sanitary Wastewater Management

The main sources of sanitary wastewater generated during the Project's operations phase are:

- Sewage and wash water effluent from administration/office block; and
- Sewage and wash water effluent from canteen.

Sewage

In April 2018, the construction of the sanitary wastewater treatment plant was completed. Therefore, all sanitary wastewater from the administration/ office block is routed to the on-site sanitary wastewater treatment plant from April 2018 onwards. Untreated sanitary wastewater from the site is no longer disposed off-site.

During the December 2019 visit, the IESC was informed that the wash water effluent from the canteen is passed through a grease trap and the water is used for gardening. The sanitary wastewater from the canteen toilet is collected in a cess pit and will be removed by the Myingyan Municipality, using vacuum tankers periodically.

The contents of the cess pit are taken to a municipal wastewater disposal site adjacent to the Myingyan cemetery and graveyard, approximately 7 km south of the centre of Myingyan (**Figure 9**). Once collected by the Municipal Council, it will be pumped into an unlined soil pit, measuring around 5 m x 4 m (**Figure 10**).

During the Fifth, Sixth and Seventh Monitoring Rounds, the IESC was informed that there has been no collection by the municipal council for this cess pit as yet due to the very small quantities of domestic wastewater being generated from the canteen toilet.

Figure 9: Location of Sanitary Wastewater Disposal Site and Landfill Site

The Fifth Monitoring Round noted that no sensitive receptors were identified around the wastewater disposal site; the nearest building is the town's crematorium, 110 m to the south while the nearest residential dwelling appeared to be around 600 m to the north-east. The site was otherwise surrounded by agricultural land, and a wooded area immediately to the west, between the pit and the graveyard. This information will be reconfirmed during the IESC's next physical site visit to Myingyan. A review of Google Earth imagery showed no discernible change (to February 2022).

Figure 10: Sanitary Wastewater Disposal Site

It is recommended that the wastewater disposal site is revisited during the next monitoring round to determine whether the Project's waste is disposed of appropriately.

5.7.3 Surface Water Runoff

The Fifth Monitoring Round, conducted during a period of dry weather, did not observe any surface water runoff. The IESC noted that a concrete hard standing car park area was located outside the Administration Building, and that run-off, potentially contaminated with oil or fuel from vehicles, could contaminate surface water drainage. It was recommended that SMPC consider installing an oil interceptor on the drainage system serving this car parking area. The oil interceptor is understood not to be installed, and thus this recommendation for an installation of an oil inceptor remains.

5.7.4 Wastewater Streams and Treatment

The main process wastewater streams during the operational phase are as follows:

- 80 m^3/hour from cooling tower blowdown;
- 35 m^3/hour from the oil water interceptor (intermittent source i.e., only when raining);
- 20 m^3/hour from the neutralising pit (as part of the raw water treatment process), after treatment; and

- 0.1 m^3/hour from the sewage treatment plant after treatment. Sewage is treated using methanol (for denitrification), sodium hydroxide (for pH control), ferric sulphate (a coagulant) and chlorine (for disinfection).

Each of these wastewater streams is channelled to the 500 m^3 capacity Central Monitoring Basin (CMB).

The wastewater stream from the oil water interceptor comprises the following streams:

- Potentially contaminated run-off from all equipment containment drainage, spills,
- Floor wash downs; and
- Fire protection discharges

The CMB wastewater is monitored by SPMC to ensure compliance to wastewater effluent quality before discharge. On average, approximately 85.39 m^3/hour (ranging from 80 to 115 m^3/hour) of treated wastewater is monitored and then discharged from the CMB to the Ayeyarwady River, via a pipe 1 m above the riverbed, and 80 m downstream of the RWI pump barge.

Sampling was carried out on June 28, 2021, September 27, 2021, and December 30, 2021. The following parameters are monitored at CMB:

- pH;
- Total Suspended Solids (TSS)
- COD;
- Oil and Grease;
- Mercury, Zinc, Arsenic, Chromium, Cadmium, Copper, Lead, and Iron;
- Total Chlorine;
- Total Nitrogen;
- Total Phosphorous.

The monitoring results are presented in **Table 11**:

Table 11: CMB Wastewater Monitoring Results

Parameters	Units	Discharge Limits	Jun-21	Sep-21	Dec-21
pH	-	6-9*	7.27	7.43	7.48
Total Suspended Solids (TSS)	mg/L	50*	14	18	22
Chemical Oxygen Demand (COD)	mg/L	125**	5.7	12.6	7.2
Total Nitrogen	mg/L	10**	1	2.2	<0.5
Total Phosphorus	mg/L	2**	0.84	1.29	1.01
Oil and Grease	mg/L	10*	< 3.1	< 3.1	< 3.1
Mercury	mg/L	0.005	≤ 0.002	≤ 0.002	≤ 0.002
Zinc	mg/L	1.0*	0.05	0.582	0.432
Arsenic	mg/L	0.5*	≤ 0.01	≤ 0.01	≤ 0.01
Chromium	mg/L	0.5*	≤ 0.002	≤ 0.002	≤ 0.002
Cadmium	mg/L	0.1*	≤ 0.002	≤ 0.002	≤ 0.002
Copper	mg/L	0.5*	≤ 0.002	≤ 0.002	≤ 0.002
Lead	mg/L	0.5*	≤ 0.002	≤ 0.002	≤ 0.002

Parameters	Units	Discharge Limits	Jun-21	Sep-21	Dec-21
Iron	mg/L	1.0*	0.902	0.904	0.526
Total Chlorine	mg/L	0.2*	< 0.1	< 0.1	< 0.1

* Myanmar NEQ Guidelines – Effluent Standards for Thermal Power (2015) / IFC EHS Guidelines Thermal Power Plants (2008).
** Myanmar NEQ Guidelines – Site Runoff and Wastewater Discharges 2015 / IFC General EHS Guideline: Environmental Wastewater and Ambient Water Quality (2007).

From January 2021 to December 2021, SMPC conducted continuous monitoring at CMB for chlorine, pH, and temperature increase. **Table 12** presents the monitoring results for chlorine and pH.

Table 12: CMB Wastewater Monitoring - Minimum and Maximum Monitored pH and Total Chlorine

Month	Total Chlorine (ppm)		pH	
	Min	Max	Min	Max
Jan	0.08	0.09	7.57	8.48
Feb	0.08	0.09	7.59	8.54
Mar	0.07	0.09	7.75	8.65
Apr	0.07	0.08	7.5	8.76
May	0.06	0.08	7.59	8.96
Jun	0.07	0.08	7.02	8.98
Jul	0.07	0.08	7.49	8.94
Aug	0.07	0.08	7.57	8.97
Sep	0.07	0.09	7.64	8.62
Oct	0.06	0.08	7.39	8.94
Nov	0.06	0.09	7.23	8.64
Dec	0.05	0.07	6.83	8.46

As illustrated in **Table 11** and **Table 12**, the CMB wastewater is compliance with wastewater effluent quality limits before discharge.

5.7.5 Water Quality Monitoring

Surface water quality is monitored by SMPC.

Monitoring is carried out at the following locations:

- Discharge pipeline sampling point (shown in **Appendix 1B - Photo 3**).

The following parameters are monitored at the discharge point:

- pH;
- COD;
- Turbidity;
- Conductivity;
- Iron;
- Total Chlorine;
- Total Nitrogen;
- Total Phosphorous.

The monitoring results are summarised in **Table 13**. The surface water monitoring results were compared to the relevant discharge limits, which are based on the WBG EHS Guidelines for Thermal

Power Plants (2008) and the IFC General EHS Guideline: Environmental Wastewater and Ambient Water Quality (2007). The results were in compliance to the stipulated limits.

A graphical representation of the results and the laboratory reports are presented in **Appendix 4**.

Table 13: Wastewater Discharge Monitoring Results

Parameters	Units	IFC Standard	Jun-21
pH	-	6~9	7.72
Conductivity	µs/cm	<1200	657
Turbidity	NTU	<50	7.97
Iron	mg/l	1	0.75
Total Chlorine	mg/l	<0.2	0
COD	mg/l	125	31
Total Nitrogen	mg/l	10	0
Total Phosphorus	mg/l	2	0

5.7.6 Other Observations

The IESC previously recommended that the pH meter be replaced, and properly set for both high and low pH level alerts. Effluent discharge is now controlled automatically, as an additional pH analyser was installed at the pump discharge line. The discharge and recirculation manual valves were also replaced with Air Operated Valves, as the effluent parameters are interlocked with these valves. These items were completed end of 2020

Table 14: Summary of Findings – Surface Water

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Seventh Monitoring Round Update	Significance
001	Wastewater discharge for operations phase	Some wastewater quality parameters were not meeting the discharge standards.	Operations	• IFC PS3 • WBG EHS Guidelines • ADB-ES Principle 9	The IESC recommends that site continues to monitor upstream and downstream of the discharge monitoring location periodically for better comparison of results and analysis of trends. Where possible, the monitoring reports should be clearer in attributing the cause of the recorded exceedances and in demonstrating and documenting the corrective measures that have been undertaken.	Effluent discharge is now controlled automatically, as an additional pH analyser was installed at the pump discharge line. The discharge and recirculation manual valves were also replaced with Air Operated Valves, as the effluent parameters are interlocked with these valves. These items were completed end of 2020. Ensure that the monitoring data from is compiled, reviewed for potential exceedances and documented.	**Minor**
002	Car park runoff	A concrete hard standing area has been constructed outside the Administration Building, which serves as the car park during the operations phase. Runoff, which could potentially be contaminated with oil or fuel from vehicles could contaminate surface water drainage.	Operations	• IFC PS3 • WBG EHS Guidelines • ADB-ES Principle 9	It is recommended that SMPC consider installing an oil interceptor on the drainage system serving this area.	An oil interceptor has not yet been installed.	**Minor**

5.8 Soil and Groundwater

The Environmental Management Plan (EMP), Rev02, dated 7 July 2020, Section 7.7, and the Plant Emergency Preparedness and Response Plan, describe spill response and management protocols.

The Monitoring Round did not identify any new issues related to the storage of chemicals and oils in drums. The previous IESC recommendation regarding the location of the spill kits be clearly indicated in a site layout and included in the operational phase Plant Emergency Preparedness and Response Plan has been actioned.

During the Monitoring Round, the IESC was informed that SMPC has ongoing discussions with a chemical supplier to potentially located a warehouse in Myingyan for chemical storage, thereby reducing the quantity of chemicals stored on-site. Discussions with this supplier is also being held to accept used empty chemical and oil containers/drums for recycling/reuse. The used waste oil containers and drums are currently being stored and reused on-site pending confirmation of acceptance by the chemical supplier. This issue is discussed in further detail in **Section 5.10** of the report.

Soil monitoring is included in the EMP (**Section 10.3**) in order to assess potential soil and sediment contamination. Sediment samples were collected by Sembcorp from the filter press on June 28, 2021, and December 30, 2021. The laboratory analysis was conducted by an external vendor, Golden Dowa Eco-System Myanmar Co. Ltd. The following parameters were analysed: cadmium, arsenic, lead, mercury, selenium, chromium (hexavalent) and pH. Oil and grease, one of the parameters listed in the EMP and a potential pollutant from general industrial activities, was not analysed. All heavy metals parameters were below the limit of reporting with the exception of lead and chromium. Lead was detected at a concentration of 42.84 mg/kg which was well below the Dutch Intervention Standard of 530 mg/kg; chromium was detected at concentration of 259.08 mg/kg which was below the Dutch Intervention Standard of 380 mg/kg.

As stated in the Sixth Monitoring Report, the IESC recommends that SMPC analyses also for oil and grease.

Table 15: Summary of Findings – Soil and Groundwater

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Seventh Monitoring Round Update	Significance
001	Soil sampling	Sediment samples were collected by Sembcorp for subsequent analysis by a third party laboratory however oil and grease, a potential contaminant of concern, was not analysed.	Operations	• Management Plan • IFC PS3 • WBG EHS Guidelines • ADB-ES Principle 9	In accordance with the EMP, it is required that oil and grease be included in the list of analytical parameters.	In accordance with the EMP, it is required that oil and grease be included in the list of analytical parameters.	**Minor**

5.9 Biodiversity

The IESC has not identified any issues relating to biodiversity for the operations phase.

5.10 Waste Management

5.10.1 Waste Generation and Handling

Waste management is included in the site's Environmental Management Plan (EMP), Rev02, dated 7 July 2020 and the Waste (Hazardous & Non-Hazardous) Management Procedure, Rev01, dated 20 August 2020.

During the Fifth Monitoring Round, the IESC noted that clearly labelled and colour-coded bins were observed on site, facilitating collection of recyclable materials. Waste storage areas were generally of an adequate standard. During the Seventh Monitoring Round, facility personnel reported continued waste segregation at the site.

The IESC noted during the Fifth Monitoring Round that general waste disposal quantities had significantly reduced mainly due to the reduction of the workforce from 1,139 people (January 2018) to 119 people (December 2019). The IESC was informed that approximately 1.5 metric tons (MT) per month of domestic waste was generated monthly during the operations phase. During the Sixth Monitoring Round, facility personnel informed the IESC that an estimated 0.5 MT per month of general waste was generated in 2020. This was a reduction over previous years. Waste generation data was not available for review for 2021.

During the Sixth Monitoring Round, facility personnel reported that they are in continued discussion with a chemical supplier to have a chemical warehouse located in Myingyan for chemical storage to reduce the quantity of chemicals stored on-site and potentially, to accept used empty chemical and oil containers/drums for recycling/reuse. The IESC noted that progress on the discussion in 2020 and 2021 was limited.

Photos were provided of the waste drum temporary storage area, and it was observed that empty plastic drums are still being stored at the site. The exact numbers being stored could not be verified from the 2021 photos, however based on the 2020 photos, one area was observed to store over 120 drums. Facility personnel reported that the drums have not been disposed of off-site during 2021, thus they are assumed to continue to be to accumulated at the site. The drums were not labelled, and the facility personnel did not provide a record for review of their former contents, or the total number of drums stored at the site.

During the Sixth Monitoring Round Report, a concern was raised regarding the donation of washed, used chemical drums to the local community. During the Seventh Monitoring Round, facility personnel reported that no donations of empty plastic chemical drums to the local community occurred during 2021 As discussed in the Sixth Monitoring Round Report, In the absence of the implementation of a robust drum cleaning process including testing, maintenance of records and assurance by the HSE team of the suitability of the cleaned out drums for community use, the IESC recommends that the drum donation practice remains discontinued until such time as measures can be in place to ensure the safety of the containers for use in the community.

5.10.2 Off-site Waste Disposal

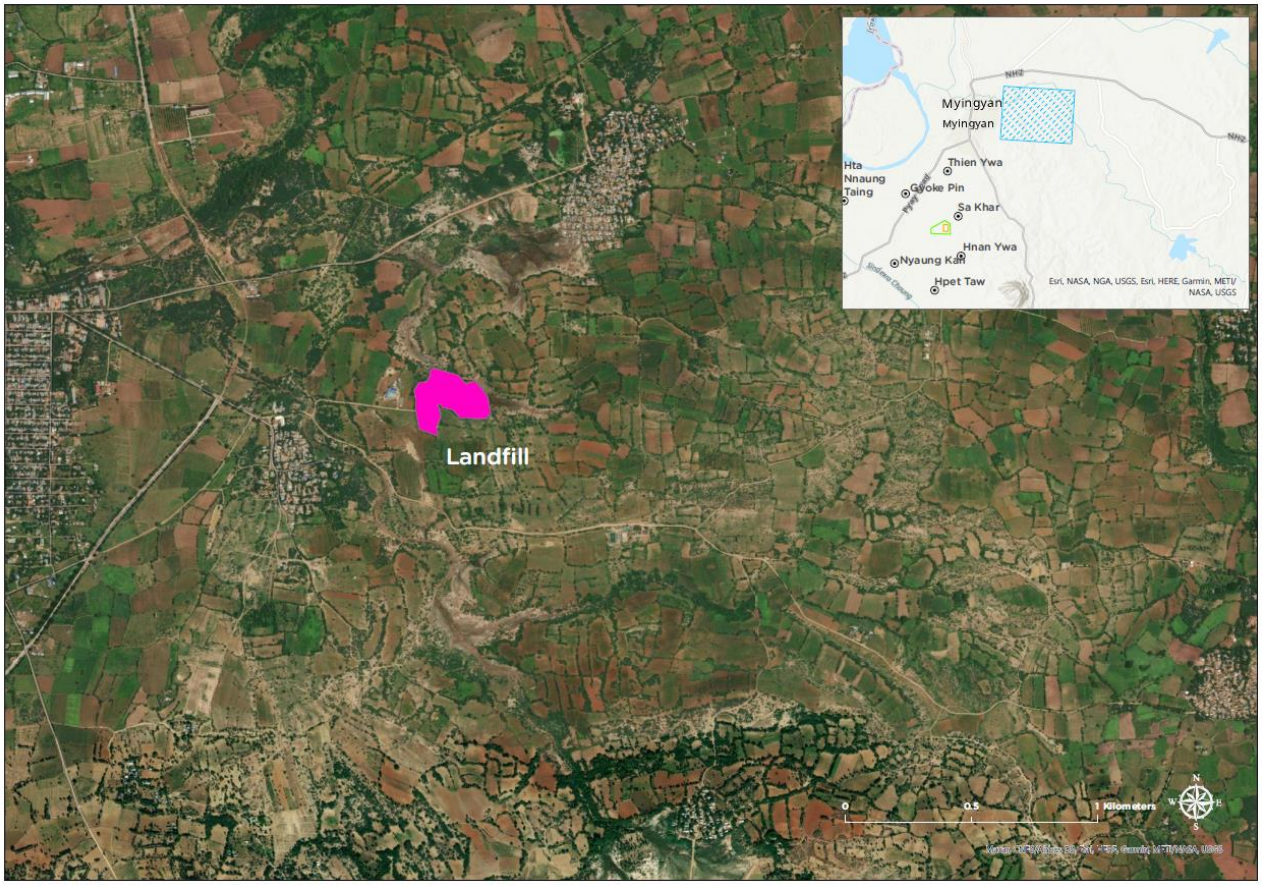
General Waste

General waste, with the exception of materials sent for off-site recycling, is collected by OK Company, a local licensed waste contractor, and transported to a designated municipal waste landfill site in Myingyan.

Facility personnel reported that OK Service is the only waste management company in the Myingyan region that has been approved by the regulatory agencies, and that the company disposes of all municipal waste collected in Myingyan.

OK transports and disposes of the general waste to a landfill site operated by the Myingyan Municipality, located around 4 km east of the centre of Myingyan (**Figure 11**). This facility, which was opened in approximately 2016, is not an engineered landfill. During the IESC's Fourth Monitoring Round (August 2018 visit), the facility was observed to be a poorly controlled and unlined waste dump. It was noted that the waste across much of the site was smoldering / burning and can cause nuisance in Myingyan, with scavengers combing through the waste. Whilst it is understood that the Project's waste stream is small compared to the town as a whole and the SMPC no longer maintains a specially demarcated area at the disposal site specifically for its waste, it is recommended that the landfill is revisited during the next physical monitoring round to determine whether the Project's waste is disposed of appropriately at the landfill.

Figure 11: Municipal Waste Landfill Site



Wastewater Treatment Plant Sludge

During the Fifth Monitoring Round, the IESC was informed that the site generated approximately 10 MT of sludge per month from the water treatment plant. Facility personnel reported that the site had assessed options for sludge treatment and the IESC was informed that an off-site sludge storage location has been identified for the sludge to be dried and potentially used for land farming/ fertilizer. The facility was constructed by OK Services (also operating as Shwe Phyo Yan Co Ltd). The IESC visited the facility and noted that the bunding at this area could be improved. The IESC recommended that the sludge storage area be roofed to prevent rainwater infiltration and run-off controlled.

During the Sixth Monitoring Round, facility personnel reported that the site generated approximately 9 - 15 MT of sludge per month (or approximately 6 collections per month). The quantity is variable due to differences between the dry and rainy season, with higher turbidity and larger sludge volume compared to other seasons. The sludge storage facility was reviewed to determine whether the recommendations for roofing and control of run-off had been implemented. A schematic engineering drawing (**Appendix 11**) was provided for review. The IESC found that the facility is not fully contained, as the facility's road access area (labelled 'road into the water tank' in the engineering drawing) lacks a perimeter wall or bunding. The recommended shelter had also not been constructed. In the event of heavy monsoon rainfall, there is a potential for the sludge or sludge leachate to flow outside of the containment area. It is recommended that the facility be provided with full containment and shelter (roof).

The sludge is listed in the Waste (Hazardous & Non-Hazardous) Management Procedure as a hazardous waste, which is disposed of by an authorised disposal contractor. Should the sludge be used for land farming or other purposes, the characteristics such as ignitability, corrosivity, reactivity and toxicity should be tested and confirmed to be acceptable prior to use. It is recommended that the Waste Management Procedure describes the process for assessment of sludge suitability for use.

A photo (Photo 19, Appendix 1A) of the sludge storage facility, taken by SMPC in January 2022 for the purposes of the Audit, were provided for review during the Seventh Monitoring Round. Sludge volumes were observed to have increased over previous photos provided to the IESC, and the sludge appeared at risk of overtopping the rear wall of the facility. Facility personnel reported during the Audit that no progress had been made on actioning the Sixth Monitoring Round's recommendation regarding the provision of shelter and full containment for the facility. These recommendations therefore remain open and of greater importance given the increased sludge volumes being stored. As an interim measure, SMPC is advised to store the sludge in such a manner that it is not at risk of overtopping the rear wall.

Medical Waste

SMPC constructed the medical waste incinerator at the Myingyan Hospital, which has been used to dispose of medical waste produced at the hospital and from the Project Site since September 2017. Medical waste produced at the SMPC doctor's office is collected and disposed of to the Myingyan Hospital's medical waste incinerator. During the Covid-19 period, facility personnel reported that the medical waste volumes had decreased (exact quantities were not recorded). Medical waste produced at the SMPC doctor's office is collected every two weeks and taken to the SMPC plant and onward to the hospital's medical waste incinerator. However, Covid-19 related waste is being generated, namely used face masks, gloves, test kits, etc. This waste is collected by the waste collector, SPY, and is disposed of to a designated zone at the municipal landfill.

Recyclables

Some waste streams are segregated on site for off-site recycling, most notably wood, scrap metal, waste oil and plastics. No data were available on the amount of waste recycled nor the contractors engaged for recycling of each type of material.

Chemical Drums

During the Sixth Monitoring Round, the facility personnel reported that a donation of cleaned drums to the community was carried out in 2020. The drum cleaning procedure was reviewed but gaps were noted such as lack of approach for assessing when a drum is deemed to be clean and suitable for re-use. During the Seventh Monitoring Round, SMPC stated that the practice of donating drums has ceased. Refer to **Section 5.10.1** for further details.

Table 16: Summary of Findings – Waste Management

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Seventh Monitoring Round Update	Significance
001	Waste management	Information in the Environmental Management Plan (EMP) dated May 30, 2018 is lacking some details related to off-site waste disposal routes for each waste stream, information on expected quantities and on-site storage arrangements for each type of waste.	Operations	• IFC PS1 • WBG EHS Guidelines • ADB-ES Principle 4	Waste management has been included in the site's Environmental Management Plan (EMP) dated Jul 7, 2020. The revised Waste Procedure tabulates the waste types, the estimated kilograms per year, the storage method and the authorized disposal contractor (refer to Appendix A of the procedure). With regards to the sludge, the disposal route following storage at the sludge storage facility, and the process for assessment of suitability for use in land farming should be clearly described in the procedure. With regards to the drums, the disposal route and the process for assessment of suitability for re-use, if any, should be clearly described in the procedure.	The recommendations remain. With regards to the sludge, the disposal route following storage at the sludge storage facility, and the process for assessment of suitability for use in land farming should be clearly described in the procedure. With regards to the drums, the disposal route and the process for assessment of suitability for re-use, if any, should be clearly described in the procedure. The sludge storage facility is not fully contained, as the facility's road access area (labelled 'road into the water tank' in the engineering drawing) lacks a perimeter wall or bunding. In the event of heavy monsoon rainfall, there is a potential for the sludge or sludge leachate to flow outside of the containment area. It is recommended that the facility be provided with full containment and shelter (roof).	**Minor**
002	Waste management monitoring and targeting	Waste minimisation targets have not been established and waste records do not meet the requirements of the management plan which requires chain-of custody documentation.	Operations	• Management plan • IFC PS3 • WBG EHS Guidelines • ADB-ES Principle 9	Evaluate opportunities to avoid or minimise waste, set reduction targets and maintain records as prescribed in the management plan, which as a minimum include the amount of each waste stream sent to off-site disposal and recycling each month. This should include hazardous and non- hazardous wastes. Progress of discussions with suppliers to potentially return used empty chemical drums and containers is not clear. No specific waste reduction targets have been set. The IESC recommends that the drum cleaning process for community reuse	The recommendations remain. Quantities of waste generated are understood to remain relatively low. However, opportunities to avoid or minimize waste have not progressed. Waste streams such as the empty drums and hazardous waste are largely stored at the site. Discussions with suppliers have not significantly progressed. Empty drums are no longer provided to the local community through a CSR initiative.	**Minor**

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Seventh Monitoring Round Update	Significance
					is conducted under the close supervision of the HSE team and batch testing of pH is conducted at regular intervals for these drums. The test results for each batch shall be recorded and maintained by the site. In the absence of a robust drum cleaning process including testing, maintenance of records and assurance by the HSE team of the suitability of the cleaned-out drum for community use, the IESC recommends that the drum distribution discontinued until such time as measures can be in place to ensure the safety of the containers for use in the community.		
003	Off-site waste disposal	The municipal waste disposal site operates at a level well below what is considered Good International Industry Practice (GIIP).	Operations	• IFC PS3 • WBG EHS Guidelines • ADB-ES Principle 9	Work with OK Service and the municipality to improve conditions at the waste disposal site. In particular, effort should focus on improving containment of waste. The quantity of municipal waste generated during the operations phase has been drastically reduced compared to the construction phase due to a reduction in workforce. Therefore, this issue is considered to be minor for the operations phase.	Quantities of waste generated remain relatively low. However, it is recommended that the IESC re-visits the landfill to ensure proper disposal of SMPC waste, including pandemic-related waste, during the next physical site visit.	**Minor**

5.11 Hazardous Substances Spill Contingency

Contingency measures in the event of a hazardous substances spill (previously referred to as Oil and Chemical Spill Contingency) have been incorporated into the site's Plant Emergency Preparedness & Response Management Plan, Rev03, dated 7 July 2020. **Section 6.3** of the Plant Emergency Preparedness & Response Management Plan details the approach taken by the site for the management of oil and chemical spills. Measures have been taken to prevent spills and leaks (e.g., use of secondary containment around bulk storage containers and the main drum storage areas).

Based on the 2019 site visit, the IESC noted that there were spill kits available near the chemical storage areas and in maintenance areas where oil and waste oil is stored in drums. However, the IESC recommended that the location of the spill kits be clearly indicated in a site layout and included in the operational phase emergency response plan. The location of spill kits are indicated in the current version of the plan (Annex C Plant Emergency Evacuation Layout with EAA, AED, Clinic and Chemical & Oil spill kits Locations) and so this recommendation is now closed.

Based on photos provided for review, spill kits are present at the Chemical Store near the lube oil shelter and at the Chemical Store near the WTP. It is recommended that the location, contents and conditions of all four spill kits required by Annex C 'Plant Emergency Evacuation Layout with EAA, AED, Clinic and Chemical & Oil spill kits Locations' are verified during the next physical site visit to the Plant.

There has been no change to the site's Plant Emergency Preparedness & Response Management Plan, Rev03, dated 7 July 2020. Thus, two noteworthy issues remain for the operations phase:

- There is no information on unloading and loading protocols in the plan. No such procedures have been written, but it is understood that all deliveries of hazardous substances are supervised.
- Section 13 of the plan (Plant Evacuation Flowchart for Fire Incident and Other Emergency), previously Section 12, lacks detail. For example, it is not clear how recommendations from an incident investigation will be implemented after submission of the incident report to the SMPC Managing Director.

Table 17: Summary of Findings – Oil and Chemical Spill Contingency

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Seventh Monitoring Round Update	Significance
001	Revisions to operations management plans	Section 7.7 of the operations phase EMP contains a list of hazardous materials stored on-site. However, information is lacking on loading and unloading protocols for hazardous substances. Additionally, it is not clear how recommendations from an incident investigation will be implemented after submission of an incident report.	Operations	• IFC PS 1&3 • WBG EHS Guidelines • ADB-ES Principle 9	Review and revise the operation phase management plans to ensure it has a comprehensive list of materials stored, develop written procedures for deliveries and dispatch of hazardous liquids, and add written instructions for responding to spills at all relevant locations within the site. There is no information on unloading and loading protocols for hazardous substances. The IESC recommends that loading and unloading protocols be included in the Occupational Safety and Health Management Plan under Section 19 'Control of Hazardous Materials'. Additionally, section 12 of the plan (Emergency response flowchart for Fire Outbreak, Hazardous Substances Spillage and Gas Pipe Leak) provides a basis for spill response, but it lacks detail. For example, it is not clear how recommendations from an incident investigation will be implemented after submission of the incident report.	The recommendations remain. There is no information on unloading and loading protocols for hazardous substances. The IESC recommends that loading and unloading protocols be included in the Occupational Safety and Health Management Plan under Section 19 'Control of Hazardous Materials'. Additionally, section 12 of the plan (Emergency response flowchart for Fire Outbreak, Hazardous Substances Spillage and Gas Pipe Leak) provides a basis for spill response, but it lacks detail. For example, it is not clear how recommendations from an incident investigation will be implemented after submission of the incident report.	**Minor**

5.12 Emergency Preparedness and Response

The Plant Emergency Preparedness & Response Management Plan (including Community Emergency Response, the ERP), Rev03 dated 7 July 2020, provides a comprehensive description of the likely emergency situations, actions to be followed in the event of an emergency, and emergency response drills. It includes a wide range of potential incidents, including fire, collapse of equipment / structures, chemical spillage, worker injuries, water or gas pipeline leakage, electrical power supply cable damage, civil disturbance & bomb threat, and natural disasters.

The IESC was informed that to date the Project has not had any major environmental incidents. The only recorded incidents relate to minor injuries (cuts and bruises) and equipment-related issues.

Records provided showed that, by October 2020, 11 out of the total of 12 planned monthly emergency drill exercises had been conducted by the site's emergency response team. Two plant wide emergency drills were conducted in 2020 at the Project Site (an Emergency Response exercise for fire scenario at the WWTP in August 2020, and an Emergency Response exercise for in case of Chemical Spillage in September 2020. Photographic evidence of the exercises was reviewed by the IESC however reports were not provided for review.

Based on the IESC's review of the operations phase ERP, there were a number of opportunities for further improvement as follows:

- It is understood that a specialist contractor will be engaged to provide training on the EPR plan. However, there is no information on whether this has been completed.
- Section 11 (page 23 & 24) provides an overview of the Community Emergency Response Plan. The IESC notes that prior to the Covid-19 pandemic, the Project's Community Relations staff regularly met with the local police, hospital staff and government agencies as part of community engagement. However, it is not evident whether the Project has contacted local hospitals or government agencies involved in emergency response to understand their capacity to help in the event of an emergency.
- The Annual Public Stakeholder Engagement Presentation December 2020, presented at the Annual Public Stakeholder Engagement Meeting in December 2020 to a limited number of residents of the 13 villages (on average, ten per village), due to Covid-19 restrictions, included a high-level overview of the EPR plan, including Designated Emergency Assembly Areas, Preparedness for Fire Emergency, Emergency Response Drills, and the BCP for Covid-19. However, it is not evident whether SMPC has shared details of its EPR plan with the potentially Affected Community (i.e., the three closest communities, Sa Khar, Hnan Ywa and Hpet Taw) and relevant government agencies and conducted the necessary training with the Affected Community, as mentioned in the ERP's Community Emergency Response Plan.

No other noteworthy deficiencies have been identified in the Project's Emergency Preparedness and Response Plan.

<u>Recommendations</u>:

SMPC to provide a copy of an updated ERP which includes any needed changes, including contact information (names and phone numbers), which resulted from the changes in project management (i.e., General Manager, HSSE Manager).

SMPC to provide information on (i) any outreach to local hospitals or government agencies involved in emergency response and (ii) the sharing of the ERP and training provided to the three closest communities (i.e., Sa Khar, Hnan Ywa and Hpet Taw).

5.13 Occupational Health and Safety

The operations phase Occupational Safety and Health Management Plan (PPMS Document Reference: 3.02.01.010, Rev02, 7 July 2020) describes the Project's operational phase HSE-MS, and is based on Sembcorp's corporate HSE-MS.

No significant issues were identified in the Project's occupational health and safety (OHS) performance during the Seventh Monitoring Round and the IESC noted that the standards for OHS are very high. Examples of good practice include:

- Implementation of Covid-19 measures such as regular swab tests, temperature taking and use of PPE;
- Two medical officers to take care of staff and contractors health;
- 'On the spot' safety recognition award is implemented to recognise good practices. Emergency preparedness training and drill were performed, with rescue and medivac team refresher training lead by the Plant Doctor and rescue team activated and firefighting team deployed during the practical drill.

The SMPC 7th E&S Monitoring presentation dated January 2022 reported that the Project had achieved a total of more than 2.3 million man-hours since the last lost time injury (LTI).

Based on the IESC's review of the Occupational Safety and Health Management Plan, there were a few opportunities for further improvement as follows:

- Section 1 (Purpose) provides a generic statement that the HSSE requirements are based on local HSSE regulation and local and international standards and code of practice. However, it is recommended that reference be made to specific relevant regulations and a description of applicability and of the key requirements of each item;
- Section 10 (Safety Training) mentions safety training requirements with a HSSE training matrix provided in Appendix B of the OSH Management Plan. However, no reference has been made to a comprehensive operational phase HSSE Training Plan which includes not just occupational health and safety training requirements but also environmental and social topics. The plan should explicitly state the training requirements for personnel with direct responsibility for the project's environmental and social performance will have the knowledge, skills and experience necessary to perform their work, including current knowledge of Myanmar's regulatory requirements and the applicable requirements of IFC Performance Standards 1 through 8.

It was noted that the Project uses Sembcorp's corporate Management of Change (MOC) procedure rather than a project-specific document. The IESC was informed that to date there have been no significant HSSE issues related to MOC.

5.14 Stakeholder Engagement

5.14.1 Stakeholder Engagement

Sembcorp/SMPC has a Stakeholder and Community Engagement Policy and a new Stakeholder Engagement Plan (SEP) for the Project's Operations Phase (PPMS Document Reference 1.01.04.001), which became effective in January 2021 and will be reviewed in January 2023. The 2021 SEP supersedes the 2018 SEP (SCI- HSSEC-SMP-001, Rev No.1.3, dated 23 August 2018). The 2021 SEP included a change in management and a new hire to the CSR team, new organizational chart, updated roles and responsibilities. The 2021 SEP is well written with objectives, key standards and legislation, stakeholder identification and mapping, planned stakeholder activities, monitoring, KPIs and reporting. It also includes the Project's community grievance mechanism (CGM, described in **Section 5.14.4**). However, the thirteen village grievance committees are not included in the 2021 SEP's CGM. For further details on the CGM, see **Section 5.14.5**.The SEP was originally prepared in July 2016, updated in January 2018, was further updated on 23 August 2018 to adjust the plan for the operations phase, and is now superseded by the 2021 SEP. The SEP is in place for the life of the concession (22 years), and SMPC has committed to ongoing stakeholder engagement with the local communities and Project-Affected Persons (PAPs). As noted in the ESIA, PCo/SMPC has engaged with multiple stakeholders including national and local governmental agencies and the local communities since 2015.

Recommendation:

An Updated SEP should be prepared and include an updated organization chart to reflect that the Development Department had been split in January 2022 into two departments, i.e., Governmental Affairs with Aung Lwin Oo, as Manager and CSR with Hein Min Oo, as Executive and Lead. The updated SEP should be submitted, along with updated job descriptions for the Governmental Affairs and CSR department managers during the Eighth Monitoring Round.

Prior to 2019, the Community Relations/Development Manager had contact at least once per month with MOEE, MONREC and EPGE, and he shared information with them on the local villages. Since 2019, SMPC is in contact with the relevant Government Agencies as and when necessary, and SMPC staff deliver the required reports (i.e., report on compliance with the Environmental Management Plan and the Greenhouse Gas Report) on a semi-annual basis to MONREC and EPGE, as per MONREC policy and instruction.

The SEP requires monthly dissemination of Project information to the 13 village leaders and quarterly face-to-face meetings. However, the face-to-face meetings are currently on hold during 2021; and communication during 2021 was by phone, where feasible. As was confirmed by PCo/SMPC during all of ENVIRON's site visits (July 2017, January and August 2018, and December 2019), PCo/SMPC had ongoing open communication with the village leaders through which project information was channeled to the village residents. During each site visit, Ramboll Environ, while visiting local communities with SMPC's Community Relations Officer (CRO), had the opportunity to participate in some scheduled and random/unscheduled meetings with local villagers. All villagers consulted exhibited a friendly and relaxed manner towards the CRO and Ramboll Environ.

The following Annual Public Stakeholder Engagement Meetings have taken place:

- The First Public Stakeholder Engagement Meeting took place in September 2015.
- The Second Public Stakeholder Engagement Meeting took place in June 2016.
- The Third Public Stakeholder Engagement Meeting was held in November 2017, before COD (i.e., before 20 December 2017).
- The Fourth Public Stakeholder Engagement Meeting took place in November 2018; and

information was presented in the local language at meetings held in eleven villages. Residents of all 13 local villages were invited and attended. Representatives of IFC, ADB and AIIB also attended the meetings. ENVIRON received and reviewed copies of the meeting presentation and the Stakeholder Engagement November 2018 Report prepared by Sembcorp/PCo after the meetings took place. The Stakeholder Engagement November 2018 Report provided the meeting schedules, locations, number of people who attended, summary of villager feedback/expectations and photos of each meeting.

- The Fifth Public Stakeholder Engagement Meeting took place in November 2019. The Stakeholder Engagement November 2019 Report provides the meeting schedules, locations, number of people who attended, summary of villager feedback/expectations and photos of each meeting.
- The Sixth Public Stakeholder Engagement Meeting took place in December 2020. The Annual Public Stakeholder Engagement Report December 2020 (**Appendix 8**) provides the meeting schedules, locations, number of people who attended, summary of villager feedback/expectations and photos of each meeting. The Annual Public Stakeholder Engagement Presentation December 2020 (**Appendix 9**) provides the meeting topics discussed, which includes an introduction to Sembcorp and a plant overview, job opportunities, results of the monitoring of the Environmental Management Plan (air, noise monitoring, waste management wastewater management), Emergency Response Plan overview, Corporate Social Responsibility and Grievance Mechanism. A copy of the 41-page hand-out of the meeting presentation in the local language was provided to each meeting attendee.

Ramboll Environ received a copy of the Stakeholder Engagement Database Year 2021 which included details on the 654 meetings (conducted mainly by telephone) held with stakeholders in 2021 (**Appendix 6**)**.** In addition, as mentioned above, Ramboll Environ received copies of the Annual Public Stakeholder Engagement Report December 2020 and the Annual Public Stakeholder Engagement Presentation December 2020 which serves as meeting minutes for the most recent public annual meeting with village stakeholders. No Annual Public Stakeholder Engagement Meetings took place in 2021.

For each of the Annual Public Stakeholder Engagement Meetings prior to 2020, Sembcorp representatives disseminated the agenda and meeting details to key stakeholders in the villages before the Public Stakeholder Engagement Meetings took place. All villagers were invited to attend the meetings: and they had adequate time to consider the agenda of the meeting and come up with meaningful questions for the Sembcorp representatives to address during the two-way dialogue meeting.

For the 2020 Annual Public Stakeholder Engagement Meeting, the following procedure was followed due to Covid-19 restrictions:

- SMPC prepared the agenda and PowerPoint presentation, informed municipal and village authorities; and communicated with village heads one week in advance of meetings; and
- Village Heads selected the max. 15 villagers to attend the meetings; and were free to create their own restrictions above those imposed by the Government.

Topics that are of interest to the stakeholders are addressed during the meetings and can include:

- Employment opportunities: Impact & Mitigation;
- Procuring and recruiting from the local community;
- Air Quality: Impact & Mitigation;

- Wastewater Discharge: Impact & Mitigation;
- Soil and groundwater quality;
- Community health and safety;
- Noise and vibration management & dust control;
- Activities and traffic safety management;
- Biodiversity Management Plan;
- CSR initiatives for the local community; and
- Engagement and Grievance Management.

5.14.2 Stakeholder Activities during the December 2020 Virtual Site Visit

Brief summaries are provided below of stakeholder meetings that took place during the December 2020 Virtual Site Visit.

December 10, 2020: Meeting with The Village Head of Nyaung Kan Village

The Village Head provided a brief demographic profile of the village: The village comprises 285 households with a total population of 1217 persons. There is one (01) primary school in the village. There are no medical clinics/hospitals present in the village. If the villagers need medical care, they go to Myingyan District Hospital. Livelihood: 90% agriculture (90% onions and 10% beans) and 10% carpenters, contractors, drivers.

The status of Community Development Programs undertaken in the village was provided. The programs are listed below:

1. Construction of Water Treatment Plant.
2. Construction of Fire Fighting Water Tank.
3. Construction of 217 ft. Fencing with a brick wall being constructed in 2020 for a School Boundary

Brief Discussions were undertaken on the major projects implemented in the village.

On providing feedback on the SMPC project, the Village Head stated that he and the village community members were happy with the Project as it has undertaken numerous community development activities such as construction of the WTP and Fire Fighting Water Tank as well as fencing of the school boundary. Further, he requested if SMPC could assist in a) upgrading the present village road to a bitumen road and b) fencing of the western side of the school boundary.

December 10, 2020: Meeting with a PAP; Hta Naung Pin Su Village

The PAP is a landowner who sold land to SMPC for the Project. He mentioned that it was a small piece of land that he had sold to SMPC but was not aware of the exact area of the land acquired by SMPC. 80% of his land had been acquired by the Government of Myanmar (GoM) for the construction of the canal. However, it has not resulted in landlessness and he is still in possession of some land. The presently owned land area falls in the Link-bridge area. He confirmed that the area faces seasonal flooding problems; and flooding of crops (beans). Previously, he used to practice agriculture on the land wherein the major crop was the plantation of beans.

He stated that he is satisfied with the compensation he received from SMPC, as for the land acquired by the GoM, he did not receive any compensation. From the compensation he received from SMPC, he made a donation to the local monastery and used the remaining funds for living expenses.

December 11, 2020: Meeting with a PAP; Gyoke Pin Village

The PAP is a landowner who sold 0.8 acres of land to SMPC for the Project. The said land was acquired to construct the River Water Intake (RWI) pipeline for the Project. At the time of procurement, there were standing crops on the 0.8 acres of land (yellow beans) and he stated that he was compensated by SMPC for both the crops as well as the land area. He presently has five (05) acres of land on which he practices rice paddy cultivation; and he is presently growing yellow beans in the 0.8 acre of land area. He used his cash compensation to pay for investments in the paddy field and for living expenses.

When asked whether he has been compensated for the loss of productivity of his land, he confirmed that he has been compensated for two (02) years of loss of productivity. Furthermore, he stated that there is no difference in the crop yield, he does not face any problem in the productivity of the land and that there has been no impact on his livelihood. Furthermore, the PAPs were informed prior to procurement of land and hence did not face any restriction on planting/harvesting on the submerged pipeline.

December 11, 2020: Meeting with a fisherman; Tha Pyay Thar Village

The fisherman provided a brief profile of his village wherein there are around 250 Households with approximately 1200 people. The village's livelihood activities are as follows; 50 percent of the population is engaged in fishing, 30 percent in agriculture and the remaining 20 percent in other skilled occupations. The number of people engaged in fishing is declining. However, there was not much difference in the fishing activities in the village. The fisherman was of the view that the fish stock had declined over the past year. He attributed the decline to the practice of the electrical shock method used by illegal fishermen who practice fishing in the village. When asked whether they have reported it to the local authorities/ government, he said that they have brought it to the attention of the local authorities.

The Lenders inquired on the role of the villagers in the participatory monitoring of the water discharge from the pipeline. The fisherman stated that the community members are informed about monitoring through the village head. SMPC along with the villagers do check the water temperature and collect the water sample from the discharge.

Regarding the Annual Stakeholder Meetings, he was of the view that they were sufficient and transparent. These meetings provided adequate information about the Project and were valuable. He was aware of the Community Social Responsibility (CSR) activities undertaken in the village, the WTP, Fire Fighting Water Tank and school buildings improvement. Programs related to Fishing activities are yet to be undertaken in the area.

December 11, 2020: Meeting with The Village Head of Tha Pyay Thar Village

The Village Head mentioned that the Annual Stakeholder Meeting was held on December 3, 2020. In light of the Covid-19 protocols, there were a limited number of people present at the meeting. He provided a brief profile of the village which has around 250 households and a total population of 1,150. Most of the population are engaged in agricultural activities and the rest in skilled and semi-skilled work including carpenters and general workers. Teachers at the school commute from other villages.

The village has seasonal flooding each year and SMPC provides rescues of villagers and food and drinks during the floods. Furthermore, he elaborated on the number of Community Development Programs (CDP) implemented in the village by SMPC. Some of the programs implemented in the village were construction of a WTP, a two-story school building and two (02) sanitation facilities in the school, a Fire

Fighting Water Tank, and for 2020, indoor teacher resting areas. He believes that the community development programs were beneficial for the village.December 11, 2020: The Village Head of Aye Village

The Village Head provided a brief profile of the village with around 281 households with a total population of 390. The agricultural crops grown in the area are corn, onions, yellow beans, red chilies and betel leaf. A primary school is located in the village. SMPC purchased land from community members of this village to build the RWI pipeline for the Project.

The Village Head seemed satisfied with the presence of SMPC's community projects in the village and stated that SMPC honored their commitments made to the community members and well compensated the PAPs for their land. Prior to the pandemic, SMPC's CRO visited his village around 3-4 times in a month (once a week). The Village Head has also visited the SMPC Plant. He stated that there are no grievances from community members on the presence of the Project or the Project-related activities. Lastly, he requested SMPC to upgrade the canal road in his village.

5.14.3 Public Disclosure

As described above, prior to 2021, Sembcorp organized Public Stakeholder Engagement Meetings on an annual basis in the local language and all stakeholders including PAPs and other members of the 13 local villages were invited to attend. During these meetings, Sembcorp and SMPC publicly disclosed updated Project information including the topics listed above in **Section 5.14.1**.

In addition, ADB requires public disclosure of all findings including the monitoring results at all phases of the Project. Going forward, Sembcorp and SMPC have agreed to include monitoring results in their presentations to be provided at the annual Public Stakeholder Engagement Meetings.

Project monitoring results were included in the presentation given at the Sixth Public Stakeholder Engagement Meetings that took place in December 2020; and were included in the related Stakeholder Engagement Meeting Report prepared by Sembcorp/SMPC after the meetings took place (**Appendices 7 and 8**).

Recommendations:

The Annual Public Stakeholder Engagement Meetings are recommended to resume as soon as practicable.

Participatory monitoring of water temperatures should be continued after the Covid-19 restrictions are lifted, and results should be included in the Annual Public Stakeholder Engagement Meeting presentations. As Ramboll Environ was informed, Sembcorp and SMPC have agreed to resume participatory monitoring of water temperatures as soon as practicable, and results will be included in the Annual Public Stakeholder Engagement Meeting presentations.

5.14.4 Community Relations

No in-person meetings by SMPC and Ramboll Environ with villagers were conducted during the January 2022 virtual site visit. Ramboll Environ met with the SMPC Community Relations and Development team over Microsoft Teams for a discussion and update.

During the December 2020 virtual site visit, the Community Relations and Development team organized meetings and participated with Ramboll Environ in the virtual site visits to five communities near the elevated river water supply pipeline (i.e., Nyaung Kan, Hta Naung Pin Su, Gyoke Pin, Tha Pyay Thar and Aye Villages). Due to the local governmental restrictions imposed by Covid-19, only the Project's CRO was permitted to enter the villages and he, along with the village heads and other stakeholders, participated in our meetings over Microsoft Teams. The CRO being given permission to enter the villages during the lockdown to conduct the meetings with Ramboll Environ, the Lenders and villagers was an exception to the restrictions in place at the time, which permitted the Project's CRO to only engage with the village heads and other stakeholders by phone.

The CRO also supports the Community Relations/ Development Manager in the planning and implementation of community investment projects under the Community Development Plan (CDP).

In early 2020 SMPC hired an additional CRO. In Ramboll Environ's opinion, the Community Relations/Development team of three is adequately staffed for the work required and its community relations activities, including frequent contacts with affected villages, are adequate.

Ramboll Environ reviewed the Project's Stakeholder Engagement Database **(Appendix 6)** and SEP Key Performance Indicators (KPIs) for 2021 of actions taken and results achieved under the SEP thru December 2021. The Project was able to conduct 654 stakeholder engagements in 2021, mainly by having periodic telephone calls with stakeholders. However, SMPC had the following limitations on meeting the SEP KPIs for 2021:

- The annual public stakeholder engagement activity was not able to be conducted;
- 100% stakeholder engagement was only able to be conducted in January 2021;
- After January 2021, the CSR team was not able to engage physically with stakeholders and only telecommunication was available;
- Some village authorities were not able to be contacted, as scheduled;
- Suggestion boxes were not able to be checked, as scheduled; and
- 32% PAP's existing contact numbers were not working and as a result the CSR team was not able to contact them.

The Project received no grievances in 2021 (see **Section 5.14.5** below).

5.14.5 Community Grievance Mechanism

Sembcorp's Community Grievance Mechanism (CGM) is incorporated into the Project's 2021 SEP and includes detailed procedures for the Project CGM; however, procedures are not included for the thirteen village grievance committees and how, together with the Project CGM, grievances are managed and would be resolved.

Sembcorp has a Community Grievance Management Policy, which provides guidance for the implementation of the Project's CGM procedures. In addition, a framework for a grievance mechanism for PAPs is included in the Resettlement Framework (see section on Land Acquisition & Resettlement). The Project's CGM is managed by SMPC and is supported by Sembcorp's Group Community Relations Department, and since 2017 has included an external grievance committee component. SMPC's external grievance committees, established in November 2017, involve the leaders of all 13 villages. There are, in essence, thirteen separate community grievance committees, one for each village, and the village heads are members for their respective villages, along with a representative of EPGE and SMPC's CRO, Community Development, HR, HSSE Managers and GAD Officer (optional). These thirteen community grievance committees and their members should all be included in the Project's Grievance Committee.

According to the 2021 SEP, time for SMPC's acknowledgement of receipt of a grievance has reverted back to 14 days, likely due to the current situation. This issue will be monitored closely again in the Eighth Monitoring Round.

- As Ramboll Environ was informed during the Sixth Monitoring Round, Sembcorp and SMPC had agreed that the Grievance Committee Organization Chart included in the 2020 SEP's Grievance Committee Procedures would be revised to include the Grievance Committees for the 13 Villages as members of the Project's Grievance Committee and then the updated procedures would be incorporated into the 2021 SEP and would be submitted for the Seventh Monitoring Round. However, the Grievance Committee Organization Chart included in Section 9.3.2 of the Project's Grievance Committee Procedures in the 2021 SEP provided to Ramboll Environ for its review does not include the Grievance Committees for the 13 Villages.

It is recommended that, in the future, when it is practicable, the same variety of methods through which stakeholders could lodge grievances that were available during the construction phase are re-established in the Project's operations phase, and they include:

- Face-to-face meetings with the relevant Project representatives;
- Written communication (e.g. email, letter) directed to relevant Project representative or left in suggestion boxes, which enable anonymous submission of grievances, and can be found in the villages and at the plant site office. Villagers may choose to speak to their village tract leader or relevant village representative to help facilitate a written complaint;
- Telephone call placed to a relevant Project representative; and
- Input written grievances in the suggestion box placed in or near their village vicinity.

All grievances are recorded in the stakeholder database. This includes a summary of the grievance, the resolution or agreement on proposed actions (between the Project and the complainant), and monitoring actions taken in response to the grievance. The grievance log and grievance close-out form are stored in the stakeholder database.

Upon review of the most recent Community Grievance Mechanism Database 2021 (**Appendix 10**), Ramboll Environ noted no grievances were posted during this monitoring period; and the database includes the history of grievances received and resolved since 2017 and separate worksheets for recording details of each grievance submitted. While reviewing the recent Community Grievance

Database, we did not see mention of the Village Head being involved in grievance resolution; and we also did not see the role of the external Village Grievance Committees.

Recommendations:

- The Grievance Committee Organization Chart included in Section 9.3.2 of the 2021 SEP's Grievance Committee Procedures should be revised to include the Grievance Committees for 13 Villages as members of the Project's Grievance Committee; and then the updated procedures and organization chart should be incorporated into an updated 2021 SEP for the Eighth Monitoring Round.

In addition, Ramboll Environ recommends, if Village Heads and/or the external Grievance Committees are involved in grievance resolution, they should be mentioned in the Outcome section for the grievances included in the Community Grievance Database.

Table 18: Summary of Findings – Stakeholder Engagement

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Seventh Monitoring Round Update	Significance
001	Management Plan	SEP to be updated.	Construction/ Operations Ongoing	• Management Plan • IFC PS1 • ADB ES Principle 4	The SEP should be updated to include (i) a revised organization chart that includes the Community Relations/Development Department and its reporting lines; and (ii) revised roles and responsibilities, to reflect the division of responsibilities between the Community Relations/Development Manager and the recently hired CRO.	As of January 2018, the SEP was updated to include a revised organization chart that includes the Community Relations/ Development Department and its reporting lines. As per the updated SEP, all responsibilities fall under the Community Relations/ Development Manager. As of August 2018, the SEP was updated for the Operations Phase and included a new requirement for monitoring Key Performance Indicators (KPIs). The actions taken and results achieved against the KPIs for 2019 were provided to ENVIRON for our review. As of January 2021, the actions taken and results achieved against the KPIs for 2020 were provided to Ramboll Environ for our review and were in compliance. As of January 2022, the actions taken and results achieved against the KPIs through December 2021 were provided to Ramboll Environ for our review. The Project was able to conduct 654 stakeholder engagements in 2021, mainly by having periodic telephone calls with stakeholders. However, due to the current situation, SMPC had limitations on meeting the other SEP KPIs for 2021 (e.g., annual public stakeholder engagement activity, use of suggestion boxes) An Updated SEP to be prepared and include an updated organization chart to	**Re-opened**

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Seventh Monitoring Round Update	Significance
						reflect that the Development Department had been split in January 2022 into two departments, i.e., Governmental Affairs and CSR. The updated SEP to be submitted, along with updated job descriptions for the Governmental Affairs and CSR department managers during the Eighth Monitoring Round.	
002	Stakeholder engagement	Stakeholder engagement with the 13 village leaders and PAPs.	Construction/ Operations Ongoing	• Management Plan • IFC PS1 • ADB-SPS Paragraph No.54	PCo should continue to engage in frequent and open communication with the village leaders and in face-to-face communication with the individual PAPs; and the PCo should keep detailed records of these meetings, including meeting minutes.	The Stakeholder Engagement November 2017 Report evidences the amount of detail that is now documented for the Public Stakeholder Engagement Database, providing details on the Stakeholder Engagement Meetings. ENVIRON reviewed the further updated Stakeholder Engagement Database during our Fifth Monitoring Assignment (2019); and can confirm that it includes sufficient detail. Ramboll ENVIRON reviewed the Stakeholder Engagement Database during our Seventh Monitoring Assignment (January – December 2021); and can confirm that it continues to include sufficient detail.	**Closed**
003	Public Disclosure	During the ESIA process in Myanmar, the project owner's obligation to produce copies of the findings, as well as recommendations in the local language, and distribute them.	Pre- Construction	• ADB-ES Principle 6 • IFC PS1	Sembcorp to advise ENVIRON and the Lenders if copies of its Project presentation were distributed in the 13 local villages	Copies of the Project presentation were distributed during the public meetings that took place to develop the ESIA.	**Closed**
004	Public Disclosure	ADB requires public disclosure of	Construction/ Operations Ongoing	• ADB-ES Principle 7	SMPC to provide details on how they share Project monitoring results with	While it does not appear that Project monitoring results were shared with stakeholders during the November 2018	**Closed**

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Seventh Monitoring Round Update	Significance
		all findings, including the monitoring results at all phases of the project.		• IFC PS1	stakeholders.	Public Stakeholder Engagement Meeting, monitoring results were included in the November 2019 meeting presentation. SMPC conducted river water sampling on January 28, 2020 with the participation of local villages (refer to Appendix 5C of the Fifth Monitoring Report for the participation records). SMPC again conducted river water sampling on June 16, 2020, however, due to Covid-19 restrictions, there was no participation of the local villages. It is recommended that participation of the local villages in the sampling activity be repeated in future years.	
005	Community Grievance Mechanism	While the community grievance mechanism is well structured and detailed, most timeframes for actions are too long.	Construction/ Operations Ongoing	• Management Plan • IFC PS1 • ADB-SPS Paragraph 59	The time frames for all actions should be reviewed. The acknowledgement of receipt of a grievance and also responses on Level 1 and 2 grievances to the claimant should be shortened from 10-14 days to one week.	As of January 2018, PCo had reduced its time for acknowledgement of receipt of a grievance from 10- 14 days to one week. According to the 2021 SEP, time for SMPC's acknowledgement of receipt of a grievance has reverted back to 14 days, likely due to the current situation. This issue will be monitored closely again in the Eighth Monitoring Round.	**Closed**
006	Community Grievance Mechanism	The Project's community grievance mechanism is part of the SEP. Since the PCo personnel process the grievances, this does not fully meet the criteria set in the ADB 2009 SPS Paragraph 59.	Construction/Operations Ongoing	• Management Plan • ADB-SPS Paragraph 59	PCo to ensure that its new external grievance committee, to be established within two months (August 2018), involves all 13 village leaders, is managed by an individual from outside of PCo/Sembcorp and that its procedures are in compliance with the ADB 2009 SPS Paragraph 59 requirement for managing complaints from the local communities.	As of January 2018, the detailed Grievance Committee procedures did not include roles and responsibilities for the 13 external grievance committees and explain how they will interact with Sembcorp/PCo's grievance committee to resolve grievances. The Grievance Committee Procedures included in Appendix E to the Stakeholder Engagement Plan for the Operation Phase (August 2018) have been updated and include the roles and responsibilities of both the internal and external Grievance Committee members. However, the Grievance Committee Organization Chart included in Section 9.5.2 of the Grievance Committee Procedures does not include the	**Minor**

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Seventh Monitoring Round Update	Significance
						Grievance Committees for 13 Villages as members of the Project's Grievance Committee. As of January 2021, the Grievance Committee Organization Chart included in the Grievance Committee Procedures should have been revised to include the Grievance Committees for 13 Villages as members of the Project's Grievance Committee. As of January 2022, the Grievance Committee Organization Chart included in the Grievance Committee Procedures (Section 9.3.2 of the 2021 SEP) was still not revised to include the Grievance Committees for 13 Villages as members of the Project's Grievance Committee. An updated Grievance Committee Organization Chart to include the Grievance Committees for 13 Villages to be prepared and included in the Project's Grievance Committee Procedures; and to be included in an updated SEP for the Eighth Monitoring Round. Records of grievance resolution in the Community Grievance Database should include mention of the Village Heads and members of the Grievance Committees for the Villages, when they are involved in the decision.	

5.15 Community Development

Sembcorp/SMPC has a new Community Development Plan for the Project's Operations Phase (the 2021 CDP, PPMS Document Ref. 1.01.04.002), which became effective in January 2021 and will be reviewed in January 2023. The 2021 CDP supersedes the Updated Community Development Plan (2018 CDP, SCI- HSSEC-SMP-002, Revision No. 1.3, dated 23 August 2018), for the Operations Phase. The 2021 CDP included a change in management, new organizational chart, updated roles and responsibilities and other details. The CDP, which is included in the Project's Operations Phase ESMP, is intended to be a living document, to be updated periodically when CDP projects are selected and approved throughout the life of the Project. The Operations Phase CDP was initially prepared in February 2018, updated in August 2018, and is superseded by the 2021 CDP.

The 2021 CDP, like the 2018 CDP, is based on the results of a needs assessment of the 13 villages and aims to develop projects in the 13 villages within the Project's area of influence with the goal of improving the quality of life in the villages. The CDP is well written and includes a plan scope and objectives; applicable standards including the ADB Safeguard Policy Statements (2009), the IFC Performance Standards (PS1, 2012), and Sembcorp's corporate policies, including its Corporate Social Responsibility Policy and Framework; community baseline assessments; a CDP Plan in Table 2.4 (i.e., table of project types); implementation of the CDP; an organization chart; roles and responsibilities; monitoring, evaluation and reporting; and plan appendices: Appendix A with village baseline data as of 2020 including village water sources, healthcare facilities, educational facilities and energy sources; Appendix B Summary of Stakeholder Feedback and Expectations; and Appendix C List of Key Performance Indicators (KPIs). . While the Operation Phase 2021 CDP was not updated with the Community Health baseline studies on all 13 villages that were included in the Construction Phase CHMP (**Tables 1 and 2**), it does include updated community baseline data, as of 2020, for all 13 villages (i.e., water sources, healthcare facilities, educational facilities and energy sources).

Medical Services. Prior to the Covid-19 restrictions being put in place, the SMPC Medical Officer twice per year visited the villages and conducted health awareness camps. In 2019, he held two health awareness camps and provided free consultations in the 13 villages. In May 2019, 967 people attended the health camp that was held over a period of 13 days; and in September 2019, 1,511 people attended the health camp that was held over a period of 13 days. For 2020 - 2021, SMPC could not organize such camps due to ongoing Covid-19 restrictions.

Skills development training for local communities. Sembcorp/SMPC is partnering with a local technical school and providing skills training (i.e., English language classes) to local residents. Sembcorp/SMPC informed the community of the skills training opportunities through letters to their village heads as well as through a general announcement. All applicants who have completed high school are selected for the program. There is a cap of 100 participants for the program. This will be an ongoing program; however, the 2020 and 2021 courses were cancelled due to ongoing Covid-19 restrictions.

During the Summer 2019, there were three classes:

- Class 1: Sarkhaar with 40 students;
- Class 2: Tha Pyay Thar with 41 students; and
- Class 3: Gyoke Pin with 19 students.

Community Projects. According to SMPC's Development Manager, village heads' feedback is considered while SMPC prepares the annual CDP program. Once SMPC establishes the CDP budget, they agree with the village heads on how to spend the budget. Each of the 13 villages receives the same budget under the CDP. Also, SMPC obtains all types of feedback, including feedback for the CDP program, at the Annual Public Stakeholder Meetings in order to better understand the needs of the villagers, which helps in finalizing the CDP program for the following year. The CDP program is announced after SMPC reaches a final agreement with the contractor on the budget and estimated quotation process for villagers' requested items/program, so all village heads/school heads are aware of the planned community development projects and the project is started once final confirmation is received from the community.

The actions taken and results achieved against KPIs for 2021 were provided to ENVIRON for review. Due to the current situation, only 6 projects were completed and five provided Covid-19 support to the Myingyan District Hospital and Taung Thar Township and one provided Covid-19 food support.

Appendix 5 includes the 6 community development projects accomplished in 2021. All construction work for the projects is contracted to a local contractor who engages four local sub-contractors.

The CDP demonstrates SMPC's sincere intentions to respond to the project requests made by the local

communities and focuses on community infrastructure improvements (education and health) and not routine CSR activities. Recommendations:

An Updated CDP should be prepared and include an updated organization chart to reflect that the Development Department had been split in January 2022 into two departments, i.e., Governmental Affairs with Aung Lwin Oo, as Manager and CSR with Hein Min Oo, as Executive and Lead. The updated CDP should be submitted, along with updated job descriptions for the Governmental Affairs and CSR department managers, during the Eighth Monitoring Round.

Please clarify the status of the 13 projects that were ongoing and projected to be completed in mid-January 2021.

Table 19: Summary of Findings – Community Development

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Seventh Monitoring Round Update	Significance
001	Community Development Plan	CDP needs to be updated for the Operations Phase	Construction/ Operations Ongoing	• IFC PS1 • IFC PS4	PCo should update its CDP and add all health-related components of the Construction Phase CHMP. The Community Health baseline studies on all 13 villages that were included in the CHMP (**Tables 1 and 2**) were not included in the Operations Phase CDP and health-related programs with benefits beyond water and healthcare facilities were not included.	As of August 2018, the CDP was updated for the Operations Phase and some but not all health-related components of the Construction Phase CHMP were included. The Community Health baseline studies on all 13 villages that were included in the Construction Phase CHMP (**Tables 1 and 2**) should be included in the Operations Phase CDP. Also, the updated CDP included a new requirement for monitoring Key Performance Indicators (KPIs). The actions taken and results achieved against KPIs for 2019 and 2020 were provided to ENVIRON for review. The Community Health baseline studies on all 13 villages that were included in the Construction Phase CHMP (**Tables 1 and 2**) are still outstanding and should be included in the Operations Phase 2018 CDP. As of January 2021, the Operations Phase 2018 CDP was superseded by the 2021 CDP. The Community Health baseline studies on all 13 villages that were included in the Construction Phase CHMP (**Tables 1 and 2**) were still not included in the 2021 CDP. As of January 2022, while the Ops Phase 2021 CDP was not updated with the Community Health baseline studies on all 13 villages that were included in the Construction Phase CHMP (**Tables 1 and 2**), it did include updated community baseline data, as of 2020, for all 13 villages (i.e., water sources, healthcare facilities, educational facilities and energy sources). An Updated CDP to be prepared and include an updated organization chart to reflect that the Development Department had been split in January 2022 into two	**Minor**

						departments, i.e., Governmental Affairs with Aung Lwin Oo, as Manager and CSR with Hein Min Oo, as Executive and Lead. The updated CDP to be submitted, along with updated job descriptions for the Governmental Affairs and CSR department managers during the Eighth Monitoring Round.	

5.16 Community Health

The purpose of the Community Health Management Plan (CHMP) (SDC-HSSEC-SMP-015, Rev C, 20 July 2016) was to manage and mitigate the residual impacts to community health during the Project's construction phase, as identified in the Project's ESIA and the SDCI Health, Safety, Security and Environment Plan (HSSE Plan) (ref: SDCIM/JEM-HSSE-Myanmar-A001). The CHMP included objectives; Myanmar laws and regulations for Community Health and the IFC Performance Standards; a Community Health baseline study on the seven villages included in the initial ESIA (September 2015); health care facilities in relation to these seven villages; community health risks and receptors and stakeholders; mitigation and management measures; and monitoring and semi-annual reporting. The CHMP was updated to include a Community Health baseline study on the six additional villages that were included in the second revision to the ESIA (August 2016).

As ENVIRON learned during the July 2017 site visit, PCo had engaged an NGO to provide some training on AIDs/HIV/TB prevention.

ENVIRON had recommended in our Third Monitoring Report that the CHMP be updated to include an organisation chart, defined roles and responsibilities and an initial budget. ENVIRON then recommended that efforts be made to include this information in the operations phase CHMP, which we understood was to be included in the operations phase CDP.

During the Sixth Monitoring Round, Ramboll Environ reviewed the Operations Phase 2021 CDP and confirmed that some segments of the Construction Phase CHMP were incorporated into the CDP, including high-level community socioeconomic baseline data, and tables of village water sources and health-care facilities. However, the Community Health baseline studies on all 13 villages that were included in the CHMP (Tables 1 and 2) were not included in the Operations Phase 2018 and 2021 versions of the CDP. As mentioned in **Section 5.15**, while the Operation Phase 2021 CDP was not updated with the more detailed Community Health baseline studies on all 13 villages, studies that were included in the Construction Phase CHMP (Tables 1 and 2), the 2021 CDP does include updated community baseline data, as of 2020, for all 13 villages (i.e., water sources, healthcare facilities, educational facilities and energy sources). . .

5.17 Workers' Accommodation

The Project's Workers Accommodation Management Plan (WAMP, SDC-HSSEC-SMP-016, REV C, 20 July 2016), for the construction phase, was based on local regulations and IFC Guidelines, and was approved prior to financial close; although we were unable to find any reference to workers accommodation camps in the ILO Guide to Myanmar Labour Laws. The WAMP was prepared by SDCI's and JEM's HR and HSSE Managers, but still referred to only SDCI's commitments to comply with the plan; and it did not state that it was applicable to JEM's workers' accommodation camp or the subcontractors' camps (i.e., Bedok and Min Dhama). As stated in the WAMP, the purpose of the plan was to set out SDCI (Myanmar) Co., Ltd.'s approach to ensure that the construction workers of the Project had suitable accommodation in terms of health and safety throughout the Project's construction period and to ensure that the workers' accommodation had minimal impacts on the local communities and the neighboring environment. The WAMP is no longer in effect since all construction work has been completed and the three workers' camps have been closed, with camp details provided below:

During the January 2018 site visit, PCo confirmed to ENVIRON that Bedok, JEM and Min Dhama were made aware of the requirements included in the Workers Accommodation Management Plan, and their need to comply with this plan.

ENVIRON was informed that the three temporary workers camps were closed on the following dates:

- Bedok: 1 May 2018;
- JEM: 1 July 2018; and
- Min Dhama: 1 August 2018

After the commencement of the Project's Operations Phase, workers from outside the area were staying in rental houses, apartments and/or hotels. However, due to the Covid-19 pandemic, SMPC established its Covid-19 Business Continuity Plan (BCP) in 2020; and workers at the plant and their families now stay at accommodations in Myingyan.

5.18 Local Recruitment and Procurement

The Project's Local Recruitment and Procurement Management Plan for the construction phase (LRPMP, SDC-HSSEC-SMP- 017, REV C, 20 July 2016) addressed the hiring of labour and capacity building for the local workforce. The LRPMP included objectives; legal and regulatory requirements, Sembcorp's policies and procedures, and the applicable IFC Performance Standards (PS1 and PS2); provisions for recruitment and procurement; monitoring measures and reporting; and roles and responsibilities. The LRPMP REV C referenced above, applied to the construction phase only and to all employment, procurement, contracting and acquisition activities associated with the Project regardless of the value. However, it is recognised that there were some products, goods or services that could not be sourced locally (within local communities or even within Myanmar). In that case, this plan was not applicable.

The Project's Local Recruitment and Procurement Management Plan for the Operation Phase (LRPMP, for the Operations Phase, First Issue, 26 February 2018) was reviewed by ENVIRON.

5.18.1 Local Recruitment and Procurement for the Operations Phase

Upon our review of the Project's LRPMP for the Operations Phase, it is noted that the one regulatory provision for local content in the Myanmar legislation is the Myanmar Foreign Investment Law of 2012 (the Myanmar Regulation). One of the core objectives of the LRPMP for the Operations Phase is to meet the Project's local content obligations in respect to agreements and other legislative and regulatory requirements, which include:

a) Appoint, when appointing citizen skilled workers, technicians and staff, at least 25% of citizens within the first 2 years from the commencement date, at least 50% within second two years, and at least 75% within third 2 years, however, the time limit may be extended as deemed to be suitable by the commission; and

b) Arrange to provide training and courses for the citizen employee to be appointed under section a) for the progress of competency.

However, the Myanmar Regulation does not include minimum requirements for local hires. Sembcorp has committed to give priority to the hiring of local residents, provided all employment applicants subject themselves to typical interview and skills testing requirements. This policy does not immediately entitle local residents to employment without due assessment of their capacity to safely and effectively undertake a specific role.

Local is defined under the LRPMP for the Operations Phase as including all thirteen communities within the Project's AOI, as mentioned in the Revised ESIA (August 2016), and having been expanded from six communities during the construction phase. According to the LRPMP for the Operations Phase, inhabitants are considered local as long as they were present in the local area before the first quarter of 2016 when construction was scheduled to commence, and local businesses are those owned by local inhabitants. As Ramboll Environ was informed by SMPC's HR Manager, as of December 2021, the Project employed 24 local workers from villages within the Project's DAI (21 permanent plus 3 contract workers), which is 28.57% of the Project's total workforce.

KPIs were not established for the Operations Phase Labor Recruitment and Procurement Management Plan, due to the specialized nature of the operations, and SMPC will hire from the national workforce including from the local community where feasible since they need to hire only skilled labor for the Operations Phase. A Procurement Update as of January 2022 was provided for Ramboll Environ's review.

As of December 2021, the Project's total national workforce, including the Yangon workforce, security team and EPGE was 129, representing 99.23% of the total workforce; foreign skilled workers (1) made up only 0.77% of the total Project workforce (**Table 22**).

Recommendation:

As mentioned in ENVIRON's comments on the OESMPs (12 February 2019), SMPC should revise the LRPMP and include a plan number and Table of Contents.

KPIs should be established for the Operations Phase LRPMP so that goals can be established and tracked for local recruitment and the procurement of local goods and services.

SMPC's HR Manager confirmed that the six Sembcorp policies and procedures included in section 2.1 of the LRPMP and listed below will be in effect throughout the operation phase:

- Procedure Manual for Material Procurement. Doc. No.: SDC-QP-207. on the procurement of material;
- Staff Requisition. Doc. No.: HR_S_SR. on the management of headcount;
- Use of Employment Agencies. Doc. No. HR_S_UEA. on the use of employment agencies;
- Probation and Confirmation. Doc. No.: HR_S_PC. on probation period;
- Offer of Employment. Doc No.: HR_S_OE. on priority to existing employees for job vacancy; and
- Employment of Temporary Employee. Doc. No: HR_S_ETE. on employment of temporary employee.

5.18.2 Workers' Training and Capacity Building

Safety training is provided to each new employee; there are two training sessions per week for 1.5 hours per training, in accordance with the HSSE Training Plan. Based on the nature of a workers' job responsibilities, there is specialized safety training as well. In addition, first aid training (five-days) is provided to workers by the Red Cross.

Please refer to **Section 5.20.1** of this report for further information on HSSE training.

Refer to **Section 5.24**, Labor & Working Conditions for additional labor information, and for Ramboll Environ's observations and recommendations for closing additional gaps in the Project's compliance with PS2.

5.19 Project Influx

Project induced in-migration (PIIM) caused by an influx of in-migrants during construction was identified as a potential impact of the Project. However, the IESC has not identified any issues relating to influx management throughout the construction phase and now that the Project is in the operation phase.

The Influx Management Plan prepared for the construction phase (SDC-HSSEC-SMP- 018, REV C, 20 July 2016) presented the different measures to mitigate the adverse impact from migration of construction workers and opportunistic migrants during the construction phase. The key objectives of this Plan were to identify management strategies and actions that aim to:

- Discourage in-migration into the Project's Area of Influence (AoI) that would otherwise not occur if the Project did not exist;
- Strengthen Project security to protect the Project against negative PIIM impacts;
- Stage the in-flow of migrants and plan Project access routes, so as not to encourage the emergence of in-migrant hotspots in other parts of the Myingyan area;
- Manage, to the extent possible, the footprint of in-migrants who settle within the Project's AoI;
- Ensure delivery of Project benefits among existing residents and PAPs in a way that does not encourage in-migrants;
- Plan and communicate Project and EPC contractor management policies that mitigate PIIM; and
- Identify which strategies will be purely Project-led strategies, and those which will require collaboration with local authorities.

As ENVIRON was informed, the Project's workers were recruited through contractors and/or subcontractors and there was no influx of job seekers. No influx of camp followers was observed during any of ENVIRON's site visits to date (November 2016, July 2017, January 2018, August 2018 and December 2019).

The small informal settlement located outside the Project perimeter has been there since before construction for the Project commenced and does not appear to be increasing in size. However, in 2019, a few new houses were observed between the small informal settlement and the road leading to the highway to Myingyan.

5.20 HSSE Training

5.20.1 Construction Phase

The HSSE Training Plan (SDC-HSSEC-SMP-019, Rev D, 20th July 2016) specifies the HSSE training and competency requirements for personnel working for the two EPC contractors and their sub-contractors. Most of the document focuses on OHS issues. This HSSE Training Plan is no longer relevant for the operations plans.

5.20.2 Operations Phase

HSSE training requirements are included in the Occupational Safety and Health Management Plan (PPMS Document Reference: 3.02.01.010, First Issue, 2nd October 2018). As noted in Section 5.13 of the report, Section 10 (Safety Training) specifies safety training requirements with a HSSE training matrix provided in Appendix B of this plan.

As reported in the Fifth Monitoring Round, the Operations and Maintenance (O&M) team received one-month of training by construction team staff on technical and HSE issues. In addition, O&M representatives visited the Sembcorp power plants in Jurong Island (Singapore), and training was provided on technical issues including HV switching, PTW and fuel demand modelling.

The Training Matrix for 2021 (date of issue not stated) was provided for review. The Training Matrix categorises training into three sections: Practical Technical Training, HSSE Training and Office Management (Non-Technical) Training. Whilst Safety and Occupational Health and Safety topics are well covered, the E&S training is limited to topics such as Environmental Legal Compliance (ESMPs), WAH Awareness, Waste Management and Flu H1N1 Awareness. As recommended in the Fifth and Sixth Monitoring Round Report, the plan should explicitly state the training requirements for personnel with direct responsibility for the project's environmental and social performance; and that they will have the knowledge, skills and experience necessary to perform their work, including current knowledge of Myanmar's regulatory requirements and the applicable requirements of Performance Standards 1 through 8. This is particularly relevant in 2022 given the recent changes to management positions and as many of the operational plans are subject to revisions during 2022.

5.21 Cultural Heritage

The Cultural Heritage Management Plan prepared for the construction phase (SDC-HSSEC-SMP-020, Rev 0, 20th September 2016) described procedures to be employed in the event of a chance find of a suspected item of cultural heritage value. The Project ESIA concluded that no cultural heritage sites are located within close proximity of the Project, and it was reported that no cultural heritage materials had been found during site clearance and excavation work.

The IESC has not identified any cultural heritage related issues during the construction or operation phases.

5.22 Security

The Security Management Plan for the Operation Phase (30 May 2018, Rev.1, 7 July 2020, PPMS Document Ref: 3.02.01.008) describes the procedures to ensure that Project worksites are protected against unauthorized entry, theft and damage.

Security at the Project Site continues to be provided by a private security company, who supplies 24-hour site security using unarmed personnel. Security personnel at the gate check gate passes issued to guests prior to visits, material delivery, and all other vehicles entering and exiting. Identification cards are issued to visitors and surrendered when exiting the Project Site.

The Project maintains good communications with the Myingyan District Police. During ENVIRON's July 2017 site visit, ENVIRON and PCo met with the police chief; and he confirmed that there is a procedure in place with the police to provide additional support, if needed, but this arrangement is not covered under a written agreement.

As of the date of ENVIRON's third visit to the Myingyan District Police Station during the December 2019 site visit, the police chief again confirmed that he had no record of any incident involving Project workers or any of its contractors.

The IESC has not identified any issues relating to security management.

5.23 Land Acquisition & Resettlement

5.23.1 Resettlement Framework

PCo developed a Resettlement Framework for the Project (November 2015). The Resettlement Framework was submitted on 27th October 2016 to the Ministry of Natural Resources and Environmental Conservation of Myanmar. ENVIRON's Land Acquisition and Resettlement Plan Observer Report (the Final Observer Report (August 2017), described below, serves the purposes of a Resettlement Action Plan and was disclosed on the ADB website.

5.23.2 Land Acquisition and Resettlement Plan Observer Report

ENVIRON prepared its Final Observer Report (August 2017), based on information provided by the party/ies responsible for the land acquisition and observations made during its attendance at the following meetings to observe the land acquisition process:

Negotiation Meetings with PAPs

- 18 October 2016 Taung Thar Township;
- 19 October 2016 Hta Naung Taing Village; and
- 1 December 2016 Hta Naung Taing Village.

Compensation Ceremonies

- 23 November 2016 Hnann and Sa Khar Villages;
- 1 & 4 February 2017 Taung Thar Township;
- 2 February 2017 Myingyan Township; and
- 3 February 2017 Hta Naung Taing Village.

In addition, during meetings with stakeholders during ENVIRON's November 2016 monitoring site visit, to inform the Lenders on the land acquisition process followed by the Project, to identify gaps in compliance with Applicable Standards, and determine the actions required to bridge the gaps.

ENVIRON's findings are documented in its Final Observer Report.

5.23.3 Land and Crop Compensation

At the time of the resettlement framework preparation, GoM was to legally acquire the lands required for the transmission line towers' footprints, and to compensate farmers for the temporary disruption to their livelihood where they farm on privately-owned lands along the river water pipeline route, adopting national requirements. The resettlement framework required Sembcorp to bridge the gaps in compensation between the national requirements and SPS/IFC PS requirements.

Upon approval of the Project, there was a change in stance of the Government, and the lands required for the pipeline burial and the transmission towers and electric poles were not acquired permanently. Instead, the river water pipeline was buried under privately-owned lands and the land uses (mostly agriculture and also some cattle grazing) will continue undisrupted post laying of the pipelines. Similarly, for the transmission lines and towers, there was no permanent land acquisition.

With this approach, there is minimization of impacts on land. The permanent impacts occurred only to the footprints of the transmission towers and the footprints of the electric poles, all of which were on agricultural land. For all other sections of the river water pipeline and the route of the transmission line (stringing), the impacts were limited to the construction phase.

The compensation paid by the GoM for these temporary impacts on land have been assessed by ENVIRON and confirmed as at least equivalent to about 3 crop cycles of productivity loss, which is much higher than the actual impact of not more than 1 crop cycle of construction along any stretch of the pipeline/transmission line. The compensation is based on onions as a crop reference, which is the highest value crop, regardless if a PAP is growing a lower value crop.

The impacts on structures of the informal settlers and other private landowners have been compensated at the full replacement cost. The compensation was paid prior to the occurring of impact. In addition to consultations by the Project with the affected informal settlers/structure owners, ENVIRON has carried out consultations during the monitoring visits and confirms the payment of compensation at full replacement costs and also that there has been no permanent disruption due to the project and livelihood losses.

For the electric poles and transmission towers, based on the actual area of impacts (lands permanently lost due to the setting of towers and the erection of poles), there was an assessment of the potential productivity loss for the entire project period (22 years). The gap between the potential agricultural loss and the compensation paid by GoM was assessed, and the differential was not paid in cash, but in kind as fertilizer bags to the individual landowners, which was acceptable to the PAPs. The documentation of the distribution of fertilizer bags has been done by Sembcorp. Therefore, the compensation for the footprints of the electric poles and towers have been done satisfactorily to lender requirements.

The construction of the pipelines/transmission lines was taken up in stretches and the construction period along any particular section of the alignment was not more than a crop cycle. Replanting of the fields along the transmission line and the river water pipeline alignments was confirmed by

Sembcorp, site visits by ENVIRON and the consultations with the landowners.

In summary, there were no permanent livelihood impacts due to the Project. The temporary impacts have been addressed at full replacement costs, and the permanent impacts associated with the footprints of the transmission towers and electric poles as well have been compensated at full replacement cost. The gap in compensation standards for the electric poles have been met through additional non-cash compensation (in the form of fertilizer bags, one each per power pole).

Furthermore, a functional grievance mechanism exists on ground, in the event of any grievances from the PAPs. As of 12 April 2017, all PAPs were compensated (at full replacement cost) for land and crop loss, with the exception of 8 PAPs impacted by the elevated section of the pipeline towards the river, described below, who were compensated (at full replacement cost) for land and crop loss, from 27-30 August 2018.

Sembcorp provided the following confirmation of the land procurement process for the elevated section of the pipeline towards the river:

The compensation process for individuals affected by the elevated section of the pipeline is the responsibility of EPGE, in collaboration with the relevant Government Administrative Divisions (GAD), acting on behalf of the Government of Myanmar. EPGE identified 8 PAPs in the area and drew up a methodology whereby each individual was compensated MMK 10,000 for each pier of the bridge within their lands for the elevated section of the river water supply pipeline. The PCo then topped-up the payments for the subsequent 20 years.

ENVIRON was informed that PCo began the compensation process after receiving a formal letter from EPGE dated 13 July 2018, and that the compensation process was completed before COD 2.

According to Sembcorp, the elevated link bridge design was changed from the original plan, whereby the pipeline was to be buried underground. Before SMPC started the construction of the elevated link bridge, SMPC liaised with EPGE to confirm the changing of design. They also worked with the Myingyan local authorities (GAD & LRD) to confirm the owners of the land who would be affected (permanently) by the elevated link bridge. The land measuring process was a very time-consuming and laborious exercise. The alteration of the original design, identification of PAP’s and calculation of necessary compensation was the reason why the compensation process for the 8 PAP’s affected by the elevated link bridge was done after its construction.

Ramboll Environ confirms that the compensation payments to these 8 PAPs were made between 27- 30 August 2018, and that ENVIRON received details on the compensation paid to each of the 8 PAPs. ENVIRON reviewed all the compensation documentation provided including the notarized English translations of the 8 sets of compensation agreements and payment acknowledgements and can confirm, based on the documents reviewed, that the amount and form of compensation provided was deemed adequate for each of the 8 PAPs. Ramboll Environ’s one-on-one interviews with 4 of the 8 PAPs to assess the compensation process, the adequacy of consultation and the compensation amount and their level of satisfaction is discussed in **Section 5.23.4** below.

5.23.4 Consultations with the 8 PAPs

During its December 2019 site visit, ENVIRON met with 3 of the 8 PAPs who were compensated in August 2018 for land along the elevated river water supply pipeline and we can confirm that all 3 PAPs were satisfied with their compensation and that they had no impacts to their livelihoods. Unfortunately, we did not have time to meet with all 8 PAPs, so we planned to meet with the 5 remaining PAPS during our next site visit. However, due to Covid-19 restrictions, we were only able to meet with one more PAP during the December 2020 virtual site visit; and we confirm that the PAP was satisfied with his compensation and that he had no impacts to his livelihood. As far as Ramboll Environ is aware, there were no grievances submitted by these 4 PAPs. Ramboll Environ recommends that meetings are held with the 4 remaining PAPS during future monitoring rounds in order to close this item.

5.23.5 Update on the Informal Settlers and other PAPs

As ENVIRON observed during its December 2019 site visit, both the buried and elevated sections of the river water supply pipeline have been completed, the four T-line towers constructed, and T-line wires installed. PAPs began re-planting crops above the buried pipeline and under the T-line wires (as of the end of July 2017).

5.23.6 Previous Gaps as per the Observer Report

Gaps in compliance with the Applicable Standards, as noted in ENVIRON's Final Observer Report, were carried forward into the Second and Third Environmental and Social Monitoring Reports, and were updated in the Fourth Environmental and Social Monitoring Report, and updates include the following:

- ADB disclosed the Resettlement Framework on its website, and as noted in the ESIA, consultation meetings took place in all the villages where people lived who were going to be affected by land impacts (both temporary and permanent).
- The framework for a grievance mechanism for the PAPs is included in the Resettlement Framework, and PCo created a separate category for PAPs' grievances in the CGM database for 2017.
- Information has been provided to ENVIRON on the number of power poles for which each PAP was compensated due to being temporarily economically displaced during construction of the river water supply pipeline. As indicated in **Table 20** below, a total of 353 power poles were installed along the river water supply pipeline, and 117 PAPs received, in addition to its cash compensation, one bag of fertilizer as a form of additional compensation for each power pole that was installed essentially to bridge the gap between the national standards and the Lender requirement of each PAP receiving full replacement costs (for details per PAP, see Appendix 7 to ENVIRON's Updated Third Monitoring Report).

Table 20: Summary of Number of PAPs, Power Poles and Fertilizer Bags Received

District	PAP	Power Poles & Fertilizer Bags

Myingyan	79	225
Taung Thar	38	128
Total	**117**	**353**

Livelihood impacts are limited. The impacts on livelihood due to the laying of the pipelines were temporary and livelihoods were restored after the completion of the construction activities. ENVIRON conducted consultations along the pipeline route and in several local villages during our five monitoring site visits to date and confirms that the land uses are restored to their original use and livelihood disruption is not occurring. See photos of farmland along the pipeline route taken by ENVIRON during the December 2019 site visit (Photos 36-37 included in the Fifth Monitoring Report).

Now that construction has been completed for the buried and elevated sections of the river water supply pipeline, T-line towers and T-line wires have been installed, and PAPs have been re-planting crops; PCo has conducted face-to-face meetings with each of these PAPs to assess resettlement outcomes.

Table 21: Summary of Findings – Land Acquisition & Resettlement

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations	December 2020 Update	Significance
008	Land Compensation	Identification of all PAPs who will give up land for the elevated section of the pipeline near the river and determine compensation for each PAP. Compensation is to be completed before COD 2 and PCo is waiting to receive a formal letter from EPGE to begin the process of compensation.	Construction	• ADB-IRS Principle 6 • IFC PS5		As mentioned in the January 2018 Update, PCo was to record details on all PAPs affected by the elevated section of the pipeline near the river, ensure consultation meetings took place with each PAP, and address any grievances submitted by these PAPs, as noted in the community grievance database, prior to compensation being paid. ENVIRON received an update on progress made on the final land compensation efforts with the 8 PAPs during the August 2018 site visit; and after the site visit, received documentation to confirm that compensation was paid, and consultations took place with each PAP. ENVIRON received Notarized English translations of the compensation documentation for the remaining 8 PAPs. During the December 2019 site visit, ENVIRON met with three of the eight PAPs. During the December 2020 virtual site visit, Ramboll Environ met with one additional PAP; and can confirm that all four PAPs were satisfied with their compensation and their livelihoods were restored. Meetings with the remaining four PAPs are recommended for future monitoring rounds.	**Minor**

5.24 Labor & Working Conditions

Human Resources documentation, listed below, was reviewed by ENVIRON in February 2018:

- Sembcorp's Code of Business Conduct;
- Global Human Rights Policy;
- Human Resources procedures;
- A sample employment contract;
- Workforce statistics;
- Local Recruitment and Procurement Management Plan; and
- Workers' Grievance Mechanism

A Grievance Handling Policy was provided for Ramboll Environ's review during the Seventh Monitoring Round. The policy was established on 1 January 2017 and revised on 30 July 2020 to change the format and approval party (PPMS Document Ref 2.01.01.012). The document includes SMPC's worker grievance mechanism procedures and provides a policy to address worker grievances. This policy applies to all full-time employees, contract employees; and permanent and temporary employees working with SMPC.

5.24.1 SMPC's Covid-19 Business Continuity Plan (BCP) Implementation

During Ramboll Environ's virtual site visit meeting with SMPC's HR Manager and Development Manager in December 2020 we were informed that there were no policy changes due to Covid-19; and the same BCP was applicable in 2021. However, in 2020, there were some modifications in SMPC's labor & working conditions procedures under the Covid-19 BCP and also some Government imposed restrictions that were put in place to manage potential impacts from Covid-19 on the Project's workforce and local communities.

Information received includes the following:

- Government "stay at home" restrictions were extended on 12/13/20 until 12/31/20;
- SMPC is considered an essential service and must remain in operation 24/7;
- SMPC's Covid-19 BCP includes a change in shift hours and changes in Operation Team composition:
    - Change from 8-hour to 12-hour shift and then 2 days off, which is only for the Operation Shift Teams.
    - Change in Operations Team Composition:
        - Operation shift teams (4 shifts with 5 workers = 20 workers);
        - 2 Operation support teams (total 6 workers); and
        - 2 essential non-operation teams (maintenance).
- Workforce
    - Total workforce at the plant: 86, including 2 foreign workers (updated in 2021: Workforce reduced to 84 workers, including 1 foreign worker).
    - Shift Team Workers are staying in hotels and/or apartments, away from their families.
    - Workers who are working from home: about 30 workers
    - Foreign workers: only one who is still working at the plant;
- Workers' Survey

SMPC launched a workers' survey re: working conditions under Covid-19 in both April and July 2020, and survey questions and responses included:

- How are they feeling? Anxiety, panics, from staying in Myingyan away from their families.
- Does medical insurance cover Covid-19? Most local workers are under the Government's insurance. There is zero cost to workers if they do go into quarantine; if workers fall ill, they are paid their full salary.

5.24.2 Sembcorp's Code of Business Conduct and Global Human Rights Policy

Sembcorp's Code of Business Conduct and Global Human Rights policy prohibit any form of discrimination and emphasize equal opportunity for all. They also prohibit both child and forced labor. The Global Human Rights Policy also includes the right of freedom of association and collective bargaining. ENVIRON did not observe during any of its six monitoring site visits to date any child or forced labour or any other activities that would violate Sembcorp's Code of Business Conduct or Global Human Rights policy.

5.24.3 Human Resources Procedures

The Project has nine Human Resources (HR) operational procedures that address various HR topics: recruitment (with no discrimination); medical examination, if required for the position; performance appraisals; salary and overtime payments; and various types of paid leave (annual leave, medical leave, casual leave, maternity leave) and unpaid leave. All of the operational procedures are based on Myanmar labour laws and regulations. While the operational procedures are brief (about five pages each) they cover all the key points and are acceptable.

The Project's nine HR procedures apply to SMPC workers (full-time, part-time and temporary) and contract employees.

Sembcorp/SMPC, in order to assess the Project's compliance with ADB's Social Protection Requirements and IFC's PS2, has taken a proactive approach to engaging the communities, understanding their needs, rolling out CSR initiatives to address their health, sanitation, education as well as infrastructure needs.

5.24.4 Employment Contracts

ENVIRON, to assess the Project's compliance with ADB's Social Protection Requirements and IFC's PS2, reviewed the Project's compliance with its labour-related management plans, which were prior to financial close determined to be in compliance with national labour laws and the core labour standards. As of January 2018, construction phase employment contracts were being executed with both skilled and unskilled workers. The sample Sembcorp employment contract reviewed was in compliance with IFC PS2 requirements.

Employment contracts for workers that were engaged by subcontractors are discussed in section 5.24.7 below.

5.24.5 Project Workforce

Table 22 below includes a breakdown of the Project workforce for the operations phase, as of December 2021, (i) male vs. female workers, and (ii) the origin of the workers (i.e., local (from the 13 villages within the Project's AoI), (iii) Myanmar beyond the local area, (iv) foreigners, and (v) Yangon workforce.

Table 22: Project Workforce in December 2021

	Gender		Plant Workforce				Yangon Work-force	Security Team (External)	EPGE	Total
			Local		National	Foreign				
	Male	Female	Perm	Contract						
Head-count	110	20	21	3	48	1	11	43	3	130
%	84.62	15.38	16.15%	2.31%	36.92%	0.77%	8.46%	33.08%	2.31%	100%

5.24.6 Local Recruitment and Procurement Management Plan

For details on this plan, refer to Section 5.18.

5.24.7 Workers' Grievance Mechanism

During the Fourth Monitoring Round, ENVIRON reviewed the workers' grievance mechanism policy/procedures (Document No. HR/H15.6 Effective Date 1 January 2017), which includes the name of the new HR Manager; and the grievance mechanism database was split into two databases, one for the community grievances and one for the workers' grievances.

A suggestion box to receive anonymous grievances, inquiries and/or suggestions is located in the plant's administration building. As we understand, suggestion boxes where both workers' and communities' grievances can be submitted are now checked bi-weekly. However, as ENVIRON was informed, community members prefer to lodge complaints directly with the Project's CRO.

SMPC provided ENVIRON in 2019 with information on the Workplace Coordination Committee organization (2 representatives from SMPC management and two representatives from the workers). This Committee is structured in accordance with Myanmar's labor regulations and in our opinion is comparable to a Workers' Grievance Committee.

The Workers' Grievance Mechanism Database was not provided for Ramboll Environ's review during the Sixth or Seventh monitoring rounds. However, the Workers' Grievance Mechanism Database provided in 2019 during the Fifth Monitoring Round included two recorded grievances from 2017; and SMPC confirmed at the time that there were no workers' grievances submitted in 2018 & 2019. The SMPC Human Resources Manager confirmed to Ramboll Environ during the December 2020 virtual site visit that there were no worker grievances in 2020; and also confirmed during the January 2022 virtual site visit that there were no worker grievances in 2021.

As supporting data for zero employee grievances reported during the virtual site visit for the Seventh Monitoring Round, SMPC's HR Manager provided the summary below of staff communication sessions implemented in 2021:

In 2021, SMPC implemented a few means of communication where the employee can address their concerns and where management can share information.

- Daily Operation & Maintenance Meeting – Regular meeting
- Monthly Coordination meeting – Regular meeting
- MakeUsBetter pulse survey at Q2 2021 –Initiated by Sembcorp Group
- Staff Comms session – Ad Hoc
- Team engagement session with senior management from Group– Ad Hoc

Employees provided good feedback:

- They feel safe because of SMPC's robust BCP and appreciate the safe houses arrangement for the staff and their family members.
- Appreciate the health care provided, especially related to Covid-19 and vaccinations provided to the staff and their families.

Reponses on employee queries: HR responds to the queries at the meeting session or provides responses within one week to two weeks, if further research is required to answer their queries.

5.24.8 Workers Engaged by Third Parties

As of 1 August 2018, no workers engaged by contractors were working at the Project. All workers now are hired directly by SMPC.

5.24.9 Retrenchment

Retrenchment was not addressed in the construction phase ESMP. However, ENVIRON was informed by Sembcorp during the January 2018 site visit that, as the Project prepared to enter into the operational phase, retrenchment plans were in place to provide placement for employees who were hired during the construction phase. PCo and EPC contractors had two procedures in place:

- Communicate to the retrenched workers that they will be prioritized if there are any new projects within the country and region; and
- Place existing staff from EPCs to join the working team in the operational phase.

ENVIRON recommended in its Third Monitoring Report that the ESMP should identify potential impacts of the retrenchment phase and identify policies and procedures to minimize its impacts; and ENVIRON should be provided copies of the retrenchment plans.

As ENVIRON was informed during the August 2018 site visit, the Retrenchment Plan and Policy was included in Section 8 of the updated Local Recruitment and Procurement Management Plan. In ENVIRON's opinion, the brief text on the two procedures mentioned above, which was included in Section 8 of the updated construction phase Local Recruitment and Procurement Management Plan, does not constitute a plan or policy.

During ENVIRON's December 2019 site visit, we were informed by the HR Manager that a Retrenchment Plan was not prepared. The construction phase ended more than one year ago. Reviews of both the Community and Workers' Grievance Databases (2017-2019) indicate that no grievances were submitted concerning retrenchment. Therefore, one can assume that there were no significant impacts from retrenchment.

The following Labour & Working Conditions topics are addressed in other sections of this report:

- Occupational Health and Safety, Refer to Section 5.13;
- Workers' Accommodation Camp Management, Refer to Section 5.17;
- Local Recruitment and Procurement, Refer to Section 5.18; and
- Influx Management, Refer to Section 5.19.

Table 23: Summary of Findings – Labor & Working Conditions

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations Prior to December 2020	Seventh Monitoring Round Update	Significance
005	Retrenchment	Retrenchment is not addressed in the ESMP.	Transition from Construction to Operations	IFC PS2	PCo should identify potential impacts of the retrenchment phase and identify policies and procedures to minimize its impacts.	In August 2018, ENVIRON was informed by Sembcorp that, as the Project prepared to enter into the operational phase, retrenchment plans were in place to provide placement for employees who were hired during the construction phase. PCo and EPC contractors had two procedures in place: 1) Communicate to the retrenched workers that they will be prioritized if there are any new projects within the country and region; and 2) Place existing staff from EPCs to join the working team in the operational phase. In November 2019, ENVIRON was informed that a Retrenchment Plan was not prepared. The construction phase ended more than one year ago. Reviews of both the Community and Workers' Grievance Databases (2017-2019) indicate that no grievances were submitted concerning retrenchment. Therefore, one can assume that there were no significant impacts from retrenchment.	**Issue Closed**

4. STATUS OF ESAP

The IESC's observations on the status of the Environmental and Social Action Plan (ESAP) are presented below. Following each commentary, we have provided a status summary (Closed, Work in Progress, or Open.

Table 24: Status of ESAP

No	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report

1/PS1	Develop and implement construction phase E&S Management Program (ESMP) consistent with ESIA recommendation and IFC requirements and which includes:
	• Dust Management Plan;
	• Traffic Safety Management Plan;
	• Noise and Vibration Management Plan;
	• Surface Water Management Plan;
	• Soil and Groundwater Management Plan;
	• Waste Management Plan (Hazardous and non-Hazardous Waste);
	• Oil and Chemical Spill Contingency Management Plan;
	• Emergency Response Plan (including Community Emergency Response Plan);
	• Stakeholder Engagement Plan (including Grievance Management Plan);
	• Community Development Plan (CDP);
	• Community Health Management Plan;
	• Occupational Health and Safety Management Plan;
	• Workers' Accommodation Management Plan;
	• Local Recruitment and Procurement Plan;
	• Influx Management Plan;
	• Cultural Heritage Chance Find Procedure; Security Plan; and
	• Contractor Management Plan.
		Documented ESMPs in from and substance acceptable to IFC: by 15/05/2016 or prior to construction, whichever is earlier.
		Evidence of inclusion of plans in EPC HSE requirements: by 15/05/2016 or prior to construction, whichever is earlier.
			The construction phase ESMP consists of 20 individual management plans, covering the topics included in the ESIA. The list is slightly different to that proposed in the ESAP. The main changes are:
			• The Project has not developed a Contractor Management Plan. Instead, roles and responsibilities of contractors are defined in the project's Occupational Health and Safety Management Plan (SDC-HSSEC-SMP-012) and in the Project HSE Plan.
			• The Project has developed three plans that are not mentioned in the ESAP:
			  ○ Plant and Vehicle Management and Maintenance Plan;
			  ○ Biodiversity Management Plan; and
			  ○ HSSE Training Plan.
			The construction phase ESMP was developed prior to construction.
			IESC observations on the implementation of each plan are detailed in section 5 of this report.
			The IESC has reviewed the EPC contracts (see section 5.2 of this report) and concluded that they are not directly referenced in the contract documentation. However, annexes to the contract refer to the ESMP.
			
			15 of the 20 plans were written by the EPC Contractors, and the EPC Contractors are responsible for implementation of each of the plans except for Community Development and Stakeholder Engagement, which are the responsibility of the Project Company.
			
			Status Summary: **Closed**

No	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
	The sponsor will also complement the EPC HSE construction requirements to include the aforementioned aspects.		
2/PS1	Develop and implement Operational Phase E&S Management Program (ESMP) consistent with the outcomes of the ESIA, local legal requirements, and IFC PS requirements. The ESMP will cover applicable environmental, occupational health and safety, community health and safety, and social management aspects.	Documented Operational Phase ESMP in form and substance acceptable to IFC: 15/09/2018 or prior to commencement of operations, whichever is earlier.	During the fourth IESC monitoring visit, it was reported that the OHS Management Plan will serve as the HSE manual for the operations phase, and that life-saving rules which are commonly used in oil and gas companies, will be enforced. The Operational Phase ESMP was prepared and seven operational phase plans were developed. These seven plans were reviewed by ENVIRON and its observations were reported in a separate report (February 12, 2019). **Status Summary: Closed**
3/PS1	Assign a dedicated technically qualified construction phase ESHS management team comprised of a Head and supported by its own ESHS coordinators. Prior to the start of operations, define an ESHS organizational structure comprised of a Head of ESHS with supporting OHS and community affairs coordinators who will be fully responsible for implementation of the operational phase ESMP.	Assignment of construction ESHS team: 15/05/2016 or prior to construction, whichever is earlier.	A technically qualified ESHS management team has been appointed by the Project Sponsor as detailed in section 5.2 of this report. **Status Summary: Closed**
		Assignment of operation ESHS team: 15/09/2018 or prior to commencement of operations, whichever is earlier.	The current operations phase HSSE Manager was part of the construction phase HSSE team during the IESC visit in August 2018. He took over the role of the HSSE Operations Manager in February 2019 and he will continue to manage environmental and social issues in the operations phase of the Project, supported by a HSSE team. **Status Summary: Closed**

No	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
4/PS1	Expand scope of construction phase Emergency Preparedness & Response (EPR) plans mentioned in the EPC contract to include all emergency scenarios including but not limited to emergencies arising from occupational accidents, accidents involving the public, health related emergencies, and from natural hazards.	Evidence of construction phase EPR scope expanded in EPC contract: 15/05/2016 or prior to construction, whichever is earlier.	The Project's Emergency Preparedness & Response (EPR) Management Plan includes all foreseeable emergency response situations, including those specified in the ESAP. **Status Summary:** **Closed**
	Develop and implement an operational phase EPR Plan prior to commencing of testing and operational activities based on the outcome of the detailed quantitative risk assessment and after finalization of project design. The EPR Plan will define protocols to be followed in the event of emergencies or disasters; address both on- site and off-site emergency situations; disclose potential disasters/risks from the plant to the local community as well as the plan of action on emergency protocol in the event of any such eventuality. It will also include awareness programs for the Plant personnel, local community and local administration.	Operational phase EPR in form and substance acceptable to IFC: 15/09/2018 or prior to commencing plant testing activities whichever is earlier.	The site has completed a quantitative risk assessment and an operational phase EPR plan has been developed. The operational EPR Plan was reviewed by ENVIRON and its observations were reported in a separate report (12 February 2019). It is understood that a specialist contractor will be engaged to provide training on the EPR plan. However, there is no information on whether this has been completed. The IESC notes that prior to the restrictions imposed by Covid-19, SMPC's community relations officer regularly met with the local police, hospital staff and government agencies. However, it is not evident whether the Project has contacted local hospitals or government agencies involved in emergency response to understand their capacity to help. The Annual Public Stakeholder Engagement Presentation December 2020, presented to a limited number of residents of the 13 villages, due to Covid-19 restrictions, included a high-level overview of the EPR plan, including Designated Emergency Assembly Areas, Preparedness for Fire Emergency, Emergency Response Drills, and the BCP for Covid-19. However, it is not evident whether SMPC has shared details of its EPR plan with the potentially Affected Community (i.e., the three closest communities, Sa Khar, Hnan Ywa and Hpet Taw) and relevant government agencies and conducted the necessary training with the Affected Community, as mentioned in the ERP's Community Emergency Response Plan. During the Seventh Monitoring Round, information on whether or not a specialist contractor has been engaged to provide training on the EPR plan was not available for review. Furthermore, it is not evident whether SMPC has shared details of its EPR plan with the potentially Affected Community and relevant government agencies and conducted the necessary training with the Affected Community, as mentioned in the ERP's Community Emergency Response Plan. **Status Summary:** **Work in Progress**

No	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
5/PS1	Develop and implement a detailed, project specific monitoring and reporting program with monitoring measures applicable to each of the relevant management plans. Monitoring and reporting activities will be reviewed by an independent E&S consultant on a semi-annual basis during construction and annually thereafter for the first year of operation. A summary monitoring report will be disclosed to local communities semi-annually during construction and annually during first year of operation.	Program developed in form and substance acceptable to IFC: by 15/05/2016 or prior to construction, whichever is earlier. Independent reviews (construction): Semi-annually during construction phase (15/09/2016). Independent reviews operation): By start of operations and annually for first year of operations (15/09/2019).	Rather than develop a stand-alone environmental and social monitoring plan the Project has included a monitoring and reporting section into each management plan where appropriate. ENVIRON has been appointed as the IESC on a semi-annual basis during construction and annually thereafter for the first year of operation. No summary monitoring reports had yet been disclosed to local communities, as of August 2018, but Sembcorp/PCo agreed that monitoring information would be included in the next Public Stakeholder Engagement Meeting in November 2018. While Sembcorp and PCo agreed to include project monitoring results in their presentations to be provided at the future annual Public Stakeholder Engagement Meetings, starting with the November 2018 meeting, ENVIRON did not find monitoring results included in the Stakeholder Engagement November 2018 Report prepared by Sembcorp/PCo after the Fourth Public Stakeholder Engagement Meeting that took place in November 2018. However, ENVIRON was provided with slides that were included in the Fifth Public Stakeholder Engagement Meeting presentation that took place in November 2019, and they included detailed monitoring results. Sembcorp and PCo agreed to include project monitoring results in their presentations to be provided at future annual Public Stakeholder Engagement Meetings. **Status Summary:** **Closed**
6/PS1	Develop and implement a community development and stakeholder engagement program - to include clearly defined objectives, stakeholder identification and analysis, performance indicators, activities, resource allocation, assigned implementation personnel, grievance mechanisms for local stakeholders, and mechanisms to appropriately disclose project related information to communities on an ongoing basis. The program will be communicated to project affected local communities on an ongoing basis, so that they are well aware of its existence and can also easily access the grievance mechanisms.	Documented program in form and substance acceptable to IFC: 15/05/2016 or prior to construction, whichever is earlier.	Community Development Program As of August 2018, the CDP was updated for the Operations Phase. The updated CDP incorporated some components of the Construction Phase CHMP, however, not all health-related components of the Construction Phase CHMP were included. The Community Health baseline studies on all 13 villages that were included in the Construction Phase CHMP (**Tables 1 and 2**) should be included in the Operations Phase CDP. In addition, the updated CDP included a new requirement for monitoring Key Performance Indicators (KPIs). The actions taken and results achieved under the KPIs for 2019 were provided to ENVIRON for our review and were in compliance. As of January 2021, an updated CDP (PPMS Document Ref 1.01.04.002, the 2021 CDP) superseded the 2018 CDP. The 2021 CDP included a change in management, new organizational chart, updated roles and responsibilities, community baseline data as of 2020 for the 13 villages and other details. An Updated CDP should be prepared and include the updated organization charts to reflect that the Development Department had been split in January 2022 into two departments, i.e., Governmental Affairs with Aung Lwin Oo, as Manager and CSR with Hein Min Oo, as Executive and Lead. The updated CDP should be submitted, along with updated job descriptions for the Governmental Affairs and CSR department managers during the Eighth Monitoring Round.

No	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
			Status Summary: Re-opened: Work in Progress <u>Stakeholder Engagement Program</u> The SEP is well written with objectives, key standards and legislation, stakeholder identification and mapping, planned stakeholder activities, a Project Management Team organisation chart, roles and responsibilities, monitoring, KPIs and reporting. It also includes the Project's community grievance mechanism. However, the 2021 SEP does not include the Grievance Committees for 13 Villages as members of the Project's Grievance Committee. PCo has engaged with multiple stakeholders including national and local governmental agencies and the local communities since 2015. The SEP has been updated to include a revised organization chart that includes the Community Relations/Development Department and its reporting lines. As of August 2018, the SEP was updated for the Operations Phase and included a new requirement for monitoring Key Performance Indicators (KPIs). The actions taken and results achieved under the KPIs for 2019 were provided to ENVIRON for our review and were in compliance. As of January 2021, a new SEP was prepared that superseded the 2018 SEP (PPMS Document Ref 1.01.04.001, the 2021 SEP). The 2021 SEP included an updated organizational chart to reflect a change in management and a new hire to the CSR team. However, the 2021 SEP does not include the Grievance Committees for 13 Villages as members of the Project's Grievance Committee. Sembcorp and SMPC had agreed that the Grievance Committee Organization Chart included in the 2021 SEP's Grievance Committee Procedures would be revised to include the Grievance Committees for 13 Villages as members of the Project's Grievance Committee and that the updated procedures would be incorporated into the updated 2021 SEP for the Seventh Monitoring Round. However, an updated 2021 SEP was not provided for Ramboll Environ's review. An Updated SEP should be prepared and include the updated organization charts to reflect that the Development Department had been split in January 2022 into two departments, i.e., Governmental Affairs with Aung Lwin Oo, as Manager and CSR with Hein Min Oo, as Executive and Lead. The updated SEP should be submitted, along with updated job descriptions for the Governmental Affairs and CSR department managers during the Eighth Monitoring Round. **Status Summary: Re-opened: Work in Progress**

No	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
7/PS2	Ensure relevant parts of project HR policies and procedures cover labour practices of contractors and sub-contractors.	Documented program in form and substance acceptable to IFC: 15/05/2016 or prior to construction, whichever is earlier.	Contractors and sub-contractors are no longer engaged for work at the Project. All current workers at the Project are employed by SMPC and they are expected to follow SMPC's HR policies and procedures. **Status Summary: Closed**
8/PS2	During construction, regularly monitor the labour practices of contractors and sub- contractors (e.g. non-use of child/forced labour) against a checklist to ensure compliance with national labour laws and regulations.	Monitoring reports in form and substance acceptable to IFC: Annually following the start of construction activities (15/03/2017).	PCo through the monthly monitoring procedure does monitor contractors and subcontractors to ensure compliance with national labour laws and regulations, but additional monitoring needs to be put in place for subcontractors' engagement of unskilled workers (see section 5.24 of this report). Sembcorp completed the "mini-contract" template and provided it to subcontractors to use when engaging local unskilled and/or short-term workers. This new procedure went into effect in August 2017 and is no longer in effect since contractors and sub-contractors are no longer engaged for work at the Project. ENVIRON never received any details on how PCo monitors the subcontractors use of the mini–contracts. **Status Summary: Closed**
9/PS2	Ensure that the housing provided by contractors/subcontractors to their workers meets standards required by the company as specified in the project HSE Plan and in IFC PS2, and are also consistent with principles of non- discrimination and equal opportunity.	Working housing specifications included in EPC contract making reference to IFC standards: 15/05/2016 or prior to construction, whichever is earlier.	Workers' accommodations provided by JEM and one remaining subcontractor (Min Dhama) are still not in full compliance with IFC PS2 and the Project's Workers Accommodation Management Plan (see Section 5.17 of this report). However, all three camps were closed by 1 August 2018. **Status Summary: Closed**
10/PS3	Ensure that wastewater discharge from construction and operational activities meets applicable World Bank Group (WBG) General EHS Guideline values including those applicable to sanitary wastewater, oily runoff, and cooling water blowdown.	Results submitted in AMRs (15/03/2017).	Wastewater treatment facilities have been constructed for the operations phase and have been designed to meet the standards specified in the WBG EHS Guidelines for Thermal Power Plants. In general, the wastewater discharges meet the stipulated limits with the exception of a one-off exceedance of some parameters due to faulty equipment which was rectified by the site. However, iron had exceeded the limits on a number of occasions and the exact cause of the iron exceedances at the discharge location cannot be pinpointed. Monitoring of the downstream locations in 2019 and 2020 indicated iron levels were well below the stipulated limits. However, recorded values in 2021 were at 0.9 mg/L, close to the allowable limit of 1 mg/L. Therefore, the IESC recommends that the Project continues to monitor upstream and downstream of the discharge monitoring location for better comparison of results and analysis of trends. **Status Summary: Work in Progress**

No	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
11/PS4	Mitigate traffic related accident risks during construction through measures such as: access control, barricading, reflectors, signage, community safety awareness programs, posting of traffic marshal, equipment back up alarms, proper securing of material while moving them from one place to another, planning material movement to cause minimum disruption, speed controls; alarms; posting traffic marshals at high risk locations; undertaking appropriate measures to reduce fugitive emissions from storage and transport of construction and waste material, implementing driver safety management and training requirements for the transport of people and materials. Require the EPC contractor to prepare a detailed traffic and transport management plan including such elements as: implementation of a personnel and materials movement plan which takes daily life and traffic patterns into account; periodical monitoring of noise levels at community sensitive receptor points.	Evidence of inclusion in EPC HSE requirements: 15/05/2016 or prior to construction, whichever is earlier.	Traffic related accident risks are well managed. The Project has a comprehensive Traffic Management Plan, which has been implemented effectively through a combination of physical controls (e.g. reversing alarms, vehicle maintenance), use of clear traffic signs on site, a strictly enforced speed limit, risk assessments for unusual loads, awareness training, and use of PPE such as reflective jackets. As a result, there have been no traffic related injuries. Community impacts have been considered in the construction phase Traffic Management Plan. Designated traffic routes have been established to avoid populated areas, and the Project monitors noise at the six community sensitive receptor points identified in the ESIA report. **Status Summary: Closed**
12/PS4	Require EPC contractor to implement a management plan that will include: ensuring that appropriate medical facilities are available for all labour; a periodic health checkup program is in place; an awareness program on STI and HIV/AIDS; and measures to control disease vectors.	Evidence of inclusion in EPC HSE requirements: 15/05/2016 or prior to construction, whichever is earlier.	Immediate medical assistance is available at the Project Site, and arrangements are in place with the medical centre in Myingyan for emergency services. A periodic (annual) health check-up program is in place, along with measures to control disease vectors. An NGO was engaged to provide training for an awareness program on STI and HIV/AIDS. **Status Summary: Closed**
13/PS5	Develop a resettlement framework with a set of project-level PS5 compliant procedures on land acquisition and involuntary resettlement which will be applied to all ongoing, and future land acquisition related activities should they occur.	Procedure in form and substance acceptable to IFC: 31/05/2016 or as advised by EPGE.	PCo developed a Resettlement Framework for the Project (November 2015) which was disclosed on ADB's website. ENVIRON's Land Acquisition and Resettlement Plan Observer Report serves the purposes of a Resettlement Action Plan (see section 5.23 of this report). **Status Summary: Closed**

No	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
14/PS5	Proactively work with EPGE during the river water supply pipeline and T-line RoW land acquisition process and demonstrate that the outcome and process are consistent with PS5 requirements.	RoW land acquisition work plan in place and consistent with PS5 requirements – 31/05/2016 or as advised by EPGE RoW outcome/process report prepared by the company verifies consistency with PS5 requirements - prior to operations (15/09/2018).	PCo proactively worked with EPGE during the river water supply pipeline and T-line RoW land acquisition process. Livelihood impacts are limited. The impacts on livelihood due to the laying of the pipelines have been temporary and livelihoods were restored after the completion of the construction activities. As of 12th April 2017, all PAPs were compensated (at full replacement cost) for land and crop loss, with the exception of the 8 PAPs impacted by the elevated section of the pipeline towards the river, who received compensation (at full replacement cost) for land and crop loss, between 27 -30 August 2018 (as described below). After the construction was completed for the buried sections of the river water supply pipeline, T- line towers and T-line wires had been installed, and PAPs had been re-planting crops; PCo conducted face-to-face meetings with each of the PAPs to assess resettlement outcomes. PCo met with the 147 PAPs along the river water supply pipeline, T-line towers and where T-line wires had been installed. The land acquisition process was to be completed before COD 2; and the land acquisition and compensation paid to the 8 PAPs for the elevated section of the pipeline towards the river took place in August 2018. The compensation process for individuals affected by the elevated section of the pipeline is the responsibility of EPGE, in collaboration with the relevant Government Administrative Divisions (GAD), acting on behalf of the Government of Myanmar. ENVIRON received an update on progress made on the final land compensation efforts with the 8 PAPs during the August 2018 site visit and after the site visit, received documentation in Myanmar to confirm that compensation was paid and consultations took place with each PAP. ENVIRON has received complete English translations of the land compensation documentation for the 8 PAPs. During the December 2019 site visit, ENVIRON met with 3 of the 8 PAPs who were compensated in August 2018. During the December 2020 virtual site visit, Ramboll Environ met with 1 more of the 8 PAPs who were compensated in August 2018. Ramboll Environ confirms that the 4 PAPs were satisfied with their compensation and their livelihoods were restored. Ramboll Environ plans to consult with the remaining 4 PAPs during future monitoring rounds. We anticipate being able at that time to bring closure to the Project resettlement impacts. **Status Summary:** **Work in Progress**

5. SUMMARY

The Seventh Environmental and Social Monitoring Round has assessed the third year of operations since SMPC's Myingyan CCPP was commissioned in 2018. Under the ESAP, SMPC is required to implement the Operational Phase E&S Management Program (ESMP) consistent with the outcomes of the ESIA, local legal requirements, and IFC PS requirements. The ESMP covers applicable environmental, occupational health and safety, community health and safety, and social management aspects. The operations phase monitoring of the ESMP is to be conducted on an annual basis during the operations.

This Seventh Environmental and Social Monitoring Report reports the findings of the monitoring for the period January 2021 to December 2021.

The IESC finds the Project is generally compliant with the ESAP with the exception of five actions that are still work in progress. In addition, a number of opportunities for improvement in the Project's environmental and social performance have been identified.

There are no high or moderately significant environmental or social findings.

Minor environmental or social findings are listed in the report under the relevant topics. Suggested corrective actions are provided within the report, but these are not prescriptive: instead the Project should define appropriate corrective actions and report on the implementation of such actions to the Lenders.

Ambient air monitoring, noise monitoring and water quality monitoring programmes in accordance with the EMP requirements are recommended to be re-established. The IESC also recognises the importance of physical site visits to the Project Site and surroundings by the monitoring team as part of each monitoring round, and recommends that site visits take place for future monitoring rounds.

An Updated SEP and CDP should be prepared and include the updated organization charts to reflect that the Development Department had been split in January 2022 into two departments, i.e., Governmental Affairs with Aung Lwin Oo, as Manager and CSR with Hein Min Oo, as Executive and Lead. The updated SEP and CDP should be submitted to the IESC, along with updated job descriptions for the Governmental Affairs and CSR department managers during the Eighth Monitoring Round.

Based on the updated organisation chart provided (dated March 2022), there have been various changes in senior management positions, namely Managing Director, Plant Manager, HSSE Manager and Commercial Manager.

The IESC recommends that the newly appointed personnel are supported during the transition to their new roles, including support from Sembcorp where necessary, to ensure that their responsibilities for the environmental and social requirements of the Lenders, including implementation of the ESMPs, continues smoothly.

APPENDIX 1A
VIRTUAL SITE VISIT PHOTO LOG (2021)

Photo 1: View of the Myingyan CCGT Power Plant (Photo taken from live video during February 2022 Audit)

Photo 2: View of the Administration Building (Photo taken from live video during February 2022 Audit)

Photo 3: Plant Control Room with Continuous Operations Monitoring System within the main administration building (Photo taken from live video during February 2022 Audit)

Photo 4: View of Unit 1 plant exterior (Photo taken from live video during February 2022 Audit)

Photo 5: Display of HSSE Notice boards in canteen, office, and warehouse. Photo provided by SMPC, January 2022)

Photo 6: Chemical Store (Photo taken from live video during February 2022 Audit)

Photo 7: River water storage reservoir (Photo taken from live video during February 2022 Audit)

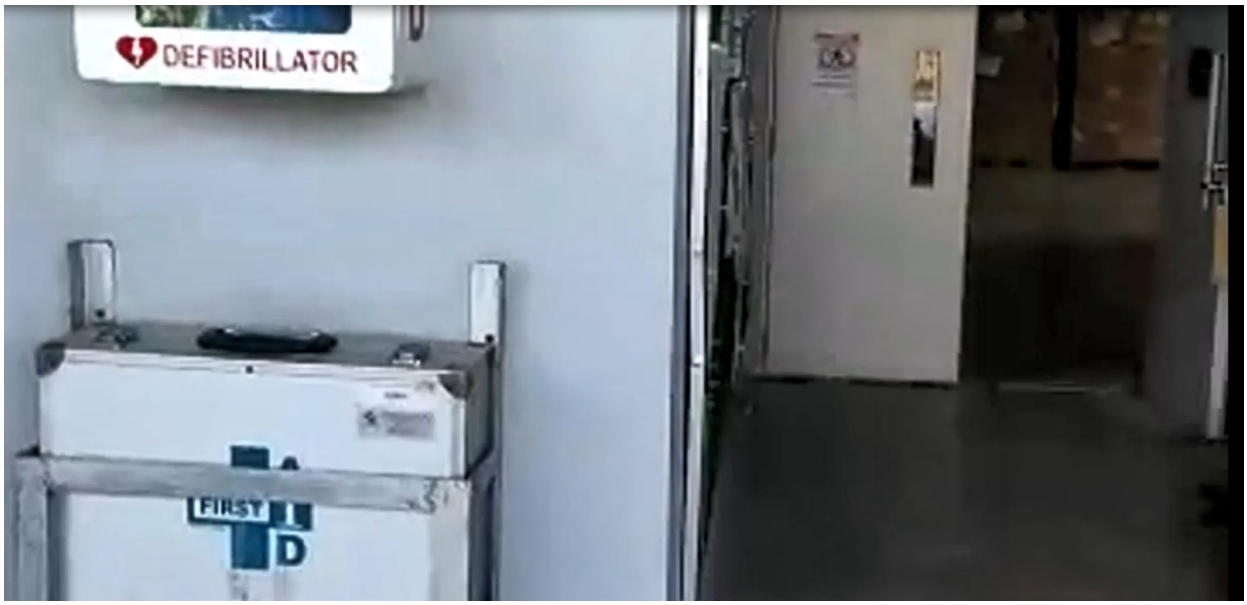


Photo 8: Entrance to the Clinic on the right with AED Defibrillator and First Aid Kit on the left (Photo taken from live video during February 2022 Audit)

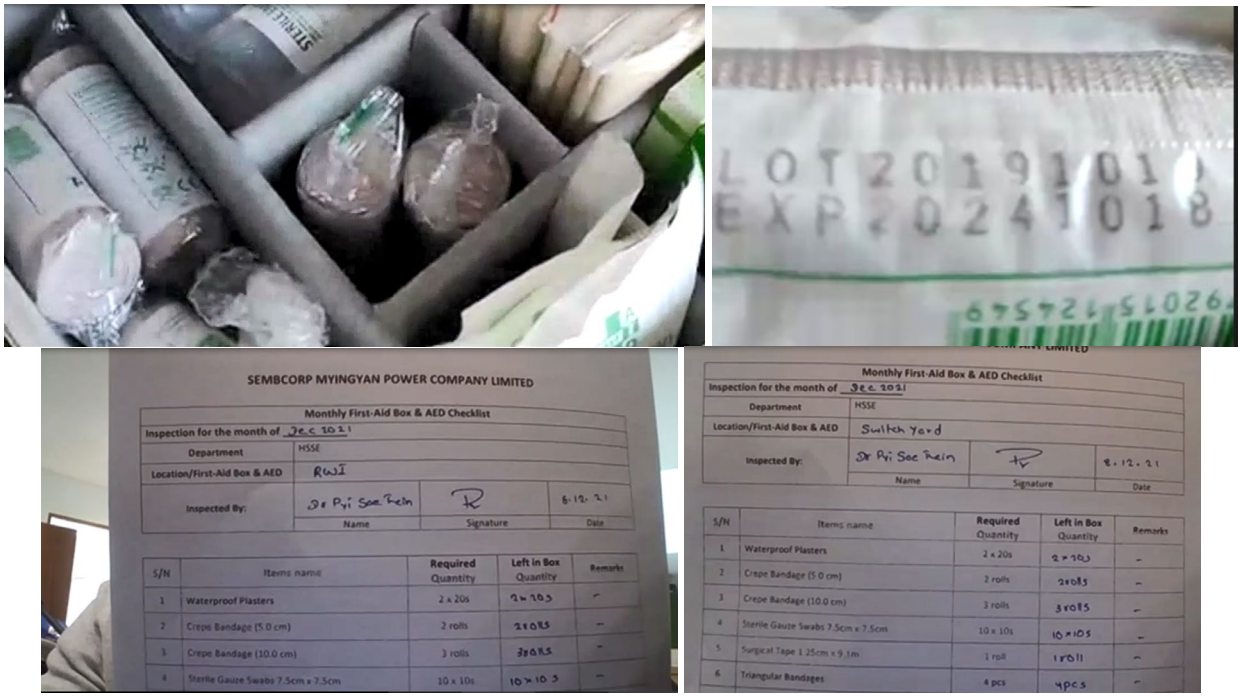


Photo 9: Contents of the First Aid Kit at the Clinic. The doctor showed the monthly first aid and AED checklist records for all areas. (Photo taken from live video during February 2022 Audit)

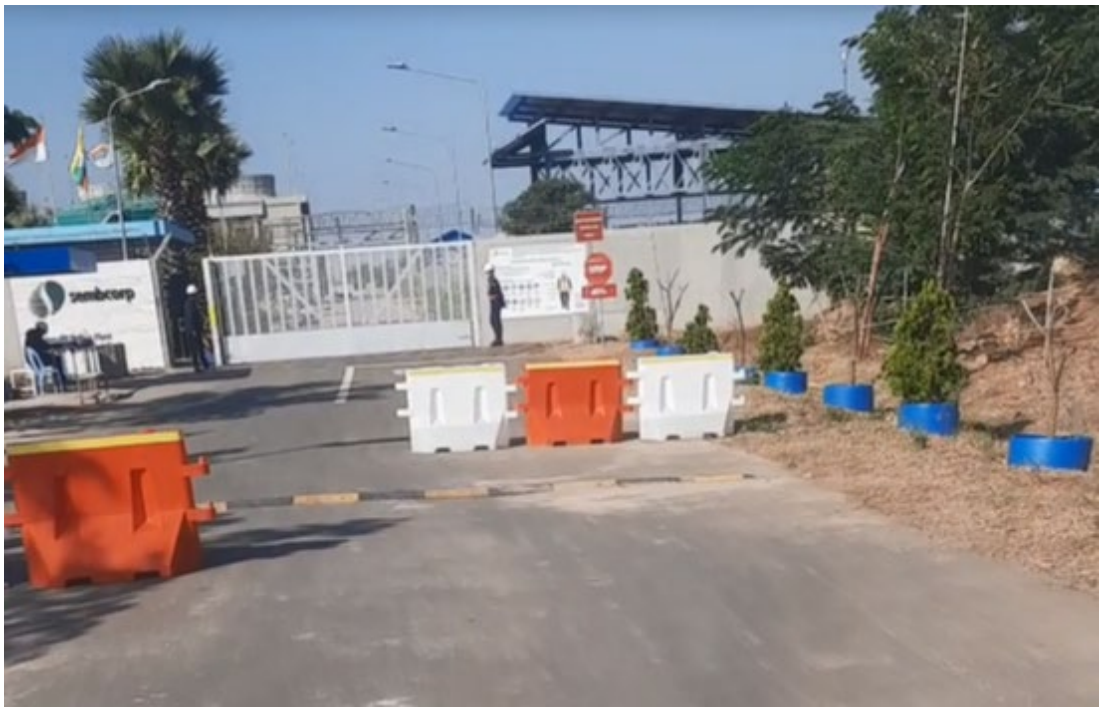


Photo 10: Main Entrance Gate to Myingyan CCGT Power Plant (Photo taken from live video during February 2022 Audit)

Photo 13: Sludge hoppers for collection of sludge from the water treatment plant (Photo provided by SMPC, January 2022)

Photo 14: Used oil stored at Lub Oil Shelter (Photo provided by SMPC, January 2021)

Photo 15: Two (2) fire water storage tanks of 1200 m^3 capacity each (Photo taken from live video during February 2022 Audit)

Photo 16: Chemical feeding area (Photo taken from video provided by SMPC, January 2022)

Photo 17: Water treatment plant (Photo provided by SMPC, January 2022)

Photo 18: MOGE gas receiving station (Photo taken from video provided by SMPC, January 2022)

Photo 19: Off-site storage area owned and operated by OK Service for sludge from the water treatment plant (Photo provided by SMPC, January 2022)

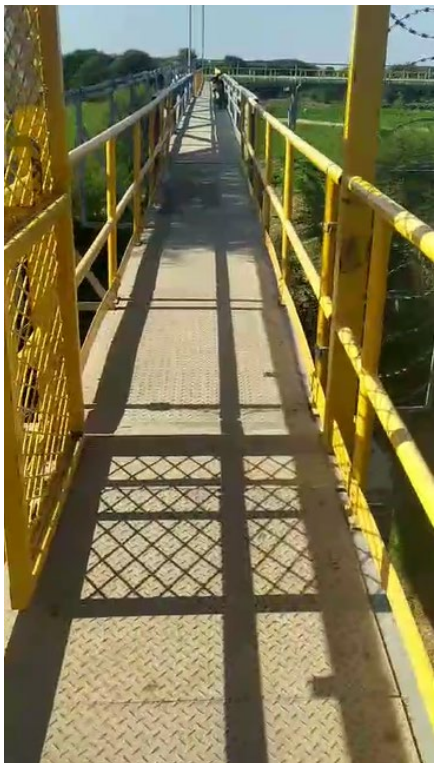


Photo 20: Entrance leading to the river water supply pumping station (Photo taken from video provided by SMPC, January 2022)

Photo 21: Bridge access and river water supply pipeline leading to pumping station (Photo taken from video provided by SMPC, January 2022)

Photo 22: Inside and outside barge (Photo provided by SMPC, January 2022)

Photo 23: Designated water sampling location from the discharge pipeline (Photo provided by SMPC, January 2022)

Photo 24: Chemical Storage Area (Photo provided by SMPC, January 2022)

Photo 25: Drum Storage Area (Photo provided by SMPC, January 2022)

APPENDIX 1B
SITE VISIT PHOTO RECORD (2019)

Photo 1: Display of HSSE Performance Data adjacent to the Plant Control Room (December 2019)

Photo 2: Sanitary wastewater treatment plant (December 2019)

Photo 3: Overview of the river water supply pipeline and pumping station (December 2019)

Photo 4: River water supply pumps (December 2019)

Photo 5: Fishing on the banks of the Ayeyarwady River, next to the river water pumping station (Dec 2019)

APPENDIX 2
MONITORING PLAN

Myingyan Natural Gas Power Project
Lenders' Environmental and Social Consultant (LESC) 7th Monitoring Round
Draft Monitoring Plan

Monitoring Visit Date:	January 18, 2022 - January 25, 2022	**Site Location:**	Sembcorp Myingyan Power Company Ltd, Myingyan, Myanmar
Monitoring Team:	The monitoring team will comprise: • Ms Sharon Maharg, Ramboll – Social Specialist Mobile: +1 917 326 9330, E-mail: smaharg@ramboll.com • Ms. Cara Quinn, Ramboll – Environmental Specialist Mobile: +65 97867491, E-mail: cquinn@ramboll.com		
Principal Client Representatives:	• Ms. Yvonne Goh – Sembcorp, Commercial Manager E-mail: Yvonne.Goh@sembcorp.com • Mr. Pe Myint Tun – SMPC, Engineering and Commercial Tel: +95 9 972530839, E-mail: PeMyint.Tun@sembcorp.com • Mr. Aung Lwin Oo – SMPC Development Manager Tel: +95 9 9726 08080, E-mail: aung.lwinoo@sembcorp.com • Mr. Hein Min Oo @ Koyin – SMPC, CSR Executive Tel: +95 9 43164626, E-mail: Hein.MinOo@sembcorp.com • Mr Nicasio Pablo – SMPC Consultant, HSSE Department Tel: +63 915809 7998, E-mail: nicasio.pablo2@sembcorp.com • Mr Tin Aung Swe – SMPC Senior Manager, HSSE Tel: +65 9856 0340, E-mail: tin.aungswe@sembcorp.com • Ms. Naing Naing Aung – SMPC Human Resources Manager Tel: +65 8249 0796, E-mail: naing.naingaung@sembcorp.com		
Lender Team	• Beatrice Gomez, ADB Tel: +632 632 4444, E-mail: bgomez@adb.org • Indira Simbolon, ADB Tel: +632 632 4444, E-mail: indirasimbolon@adb.org • Wenlei Zhou, IFC • Tel: +1 202 294 9327, E-mail: wzhou1@ifc.orgSajid Imtiaz Khan, IFC E-mail: skhan36@ifc.org • Saadia Hassan, IFC E-mail: shassan7@ifc.org • Georgi Dzhartov, AIIB E-mail: georgi.dzhartov@aiib.org • Joana Nicolau, MIGA		

	E-mail: jnicolau@worldbank.org
Persons to be Notified of Monitoring Visit:	In addition to those listed above: • Benjamin Man Ling Li, IFC E-mail: bli1@ifc.org • Rubens Hideo Noguchi, AIIB E-mail: rubens.noguchi@aiib.org • Che Yu Kok, DZ Bank E-mail: cheyu.kok@dzbank.de
Scope of Monitoring:	The 7th Environmental and Social (E&S) monitoring round will cover the CCGT and its associated facilities, within the boundary of the SMPC site. It will also include an assessment of SMPC's Covid-19 Business Continuity Plan implementation, review of the current Human Resources plans and procedures and project workforce, the management of the workers' accommodations and daily transportation to the site; and other social issues, including the implementation in 2021 of the Stakeholder Engagement Plan, Community Grievance Mechanism and Community Development Plan, given the ongoing Covid-19 and security risks. Ramboll will review the management of operations phase E&S risks and impacts, as defined in the operations phase E&S Management Plans (OESMPs), which are designed to ensure that the project complies with Applicable E&S Standards and with commitments made in the project ESIA. Ramboll will also assess the status of gaps identified during the previous monitoring round (December 2020) and of items noted in the environmental and social action plan (ESAP). Due to Covid-19 and security considerations, this monitoring round will be carried out by remote audit means, comprising Microsoft Teams teleconference calls and review of photographic / video records within the boundary of the SMPC site.
Objectives:	The primary objectives of the monitoring visit, as defined in the scope of work, are to: a) Verify that the Project complies with the Applicable Standards in relation to the environment, local communities, health and safety; b) Identify any E&S, labour, and Health and Safety (H&S) related impacts, risks or liabilities which have not been properly mitigated or controlled in the Project; c) Assess the technical adequacy and the implementation status of the Project's environmental, safety and social management systems, its management plans and other related documents; and d) Recommend any necessary additional preventive and corrective actions to address any ESHS related impacts, risks or liabilities identified to achieve compliance to the Lenders safeguard policy requirements.
Components of Monitoring Plan:	The monitoring round will include: a) Open cycle power plant, including: b) General site inspection c) Hazardous materials storage – onsite and offsite storage locations (if any) d) Waste storage onsite and offsite storage locations

	e) Process wastewater treatment and disposal f) Domestic sewage treatment and disposal g) Stormwater drainage h) Water treatment plant (demineralised water) i) Inspection of raw water intake station, process water discharge point, pipeline right of way, transmission towers, and gas receiving station. j) No external social-related activities (e.g., interviews with stakeholders outside the project site, visits to villages, etc) will be conducted due to Covid-19 and security considerations. Ramboll will plan to consult with Village Heads, the District Hospital Administrator and District Police Chief, the remaining 4 PAPs and other landowners, if possible, during next year's monitoring site visit. However, a discussion will take place among Ramboll, SMBC and the Lenders on the social-related activities SMPC was able to do over the past year with the key stakeholders and local communities. k) Discussions with SMPC and Sembcorp Senior Management Representatives on: i. Overview of the project, including key environmental and social challenges ii. Overview of any ongoing E&S issues with the affected local communities, including an update on issues raised by the NGOs and agreed actions to address NGO / community concerns (e.g., upstream and downstream ambient water quality monitoring, development of a participatory monitoring program, updated strategy for better information dissemination). iii. Status of issues raised in our last monitoring report iv. Legal compliance status l) Project HSE Manager i. Roles and responsibilities of the HSSE staff for operations phase ii. Site specific HSSE procedures for operations phase iii. Management of change iv. Review internal audit and inspection programme and reports v. Environmental monitoring data from January 2020 to current monitoring reports (including CEMS, ambient air quality and boundary noise) vi. Non-conformities and corrective actions vii. External reporting of environmental and social issues (e.g., reporting to government agencies and lenders) viii. Status of ESAP issues m) Human Resources Manager i. Update on the Covid-19 Business Continuity Plan implementation ii. Workforce update (with breakdown: local vs. national workers, male and female). As we understand, there are no foreign workers currently working at the site.

	iii. Update on the worker skills training programme iv. Update on the workers using rental housing and other means of accommodation v. Update on the procedures for workers' daily transportation to the site vi. Update on OHS practices and any incidents since the last visit vii. Update on the workers' grievance mechanism, and register review n) Development and Community Relations Managers i. Update on community development and community/stakeholder engagement activities since the last visit, including status of the 2021 Annual Stakeholder Meeting. ii. Update on the Community Grievance Mechanism, external grievance committee organization, and a review of the Grievance Mechanism register o) Current workers (discussions during site inspection) i. HSSE awareness ii. Knowledge of grievance mechanism p) Assess compliance with a sample of requirements in the following environmental and social management plans that were established for the Operations Phase including review of all available environmental and H&S monitoring data. i. Environmental Management Plan which includes: ▪ Air Quality Management ▪ Noise and Vibration Management ▪ Surface Water Quality Management ▪ Waste Management ii. Security Management Plan iii. Occupational Safety and Health Management Plan iv. Emergency preparedness and response plan v. Stakeholder Engagement Plan vi. Local Recruitment and Procurement Management Plan vii. Community Development Plan (which includes community health management)
Monitoring Schedule: **Yangon Time**	**Tuesday, January 18, 2022:** • 08:45 - 09:00 Join the teleconference call • 09:00 – 10:00 Opening meeting (Sharon Maharg, Cara Quinn and Lenders) ○ Introductions ○ Company overview of the project, including key environmental and social challenges, including an update on the current Covid-19 situation in the Myingyan area and at the SMPC site ○ Company presentation on the Annual Stakeholder Meeting, if one took place

- Discussion during the meeting with Sembcorp and SMPC on the issues raised by the NGOs in 2020, including any NGO comments received after the posting of Ramboll's 6th report on ADB's website in 2021, and any recent criticisms that Ramboll may not be aware of, and to receive an update on how they are addressing these criticisms

- 10:00 – 12:30 Company Presentation and Overview (Sharon Maharg, Cara Quinn and Lenders) *Short breaks as required*
  - Company presentation on HSSE management, including project status, overview of operations phase ESMP, HSSE performance, review of any incidents since the last monitoring visit, trends from recent audits and inspections, status of issues raised in the last monitoring report, issues raised in recent monthly reports, etc.

Wednesday, January 19, 2022:

- 9:00 – 12:30 Social Interviews with Naing Naing Aung, SMPC Human Resources Manager (Sharon Maharg, Wenlei Zhou (IFC) and Indira Simbolon (ADB)) regarding:
  - Handling of Covid-19 related issues for workers and affected communities, including % of workers who are vaccinated;
  - An update on implementation of the Local Recruitment and Procurement Management Plan and any limitations on recruitment/procurement during the current Covid/security environment
  - An update on implementation of the Human Resources procedures; current Project workforce numbers; and workers' skills training program;
  - Update on the Workers' Grievance Mechanism and database;
  - Update on the workers using rental housing and other means of accommodation,
  - Procedures for workers' daily transportation to the SMPC site; and
  - Discussion on gender, diversity and inclusion.

- 09:00 – 12:00 Virtual Walk Through the Plant (Cara Quinn and Lenders)
  - Virtual site inspection of the operational plant areas (all operational areas including Control Room, water treatment plant, lube oil storage shelter, warehouses, chemical storage areas, waste storage areas, onsite accommodation/sleeping areas, rest areas etc)
  - View up to date (2021) photographs of the gas receiving station, raw water intake station, process water discharge point, the municipal waste disposal site, offsite sludge storage area (if available), offsite warehouse for chemical storage (if available).

	Tuesday, January 25, 2022:
	• 09:00 – 11:00 Social Management Plans Review (Sharon Maharg, Wenlei Zhou (IFC) and Indira Simbolon (ADB))
	  ○ Interview with SMPC Social Team regarding:
	  ○ Status of implementation of the Community Development Plan, including the CSR Register, and Stakeholder Engagement Plan, procedures and KPIs; and impact of Covid-19 situation on stakeholder engagement and CDP activities;
	  ○ Results of Public Stakeholder Engagement Meetings, a further discussion, if needed; and
	  ○ Update on the Community Grievance Mechanism and database.
	• 09:00 – 11:00 Environmental Performance (Cara Quinn and Lenders)
	  ○ Interview with HSE Manager on environmental aspects and impact of Covid-19 situation on environmental monitoring.
	  ○ Review environmental monitoring records for waste, air, noise, process water discharge.
	  ○ Interview with Project HSE Manager and HSE Team regarding:
	  ▪ Review of Roles and responsibilities of the HSSE staff for operations phase
	  ▪ Site specific HSSE procedures for operations phase
	  ▪ Review internal audit and inspection programme and reports for operations phase
	  ▪ Environmental monitoring data from January-December 2020 (including CEMS, ambient air quality and boundary noise)
	  ▪ Non-conformities and corrective actions
	  ▪ External reporting of environmental and social issues (e.g. reporting to government agencies and lenders)
	  ▪ Status of ESAP issues
	• 11:00 – 12:00 Closing Meeting (SMPC, Sembcorp, Ramboll and All Lenders)
	  ○ Closing Meeting

Reporting:	A draft report will be available six weeks after the monitoring round interviews are completed.
Monitoring Round Arrangements:	MS Teams conference calls to be utilised. Ramboll will facilitate the set up of the calls.
Health & Safety Considerations:	• Practice Covid-19 safe management measures e.g. virtual meetings where possible, minimise group size, practice social distancing in meeting rooms • Ensure H&S precautions during virtual plant walk (e.g. mindful of slip, trip and fall hazards)

APPENDIX 3
ENVIRONMENTAL MONITORING RESULTS – AIR AND NOISE

Ambient Air Quality Monitoring

The 2020 monitoring are still used to represent the ambient air quality condition as it is unable to carry out ambient air quality monitoring due to COVID-19 situation and the difficult military situation in Myanmar.

The monitoring results were compared against the Myanmar National Environmental Quality (Emission) (NEQ) Guidelines (2015), World Health Organization (WHO) Air Quality Guidelines Global Update 2005 as well as the National Ambient Air Quality Standards (NAAQS) issued by the US Environmental Protection Agency (US EPA). The parameters monitored were compliant against the stipulated standards at all four monitoring locations.

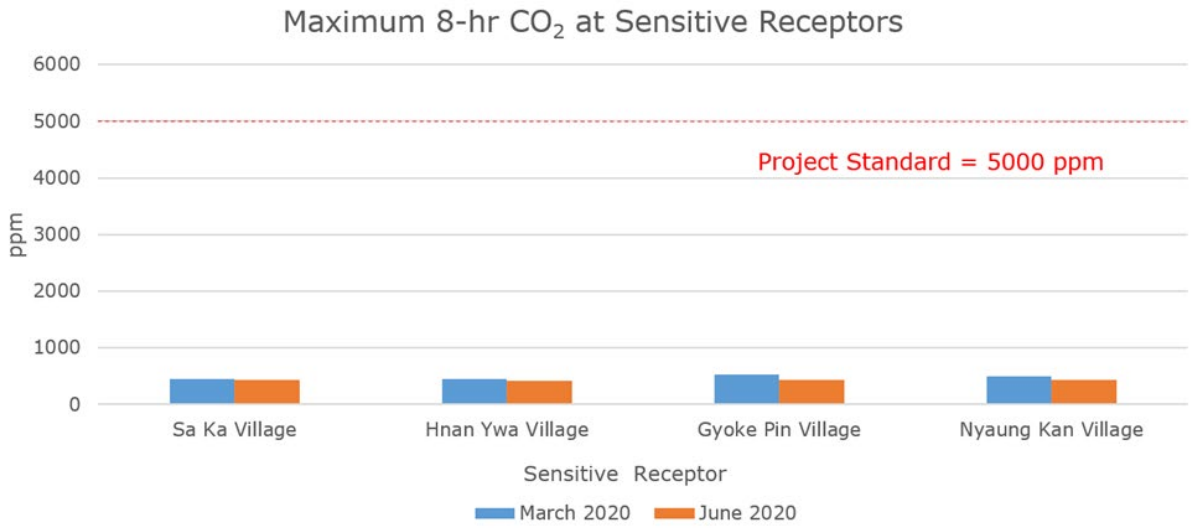
The data is reported in the following table and summarised in the subsequent charts.

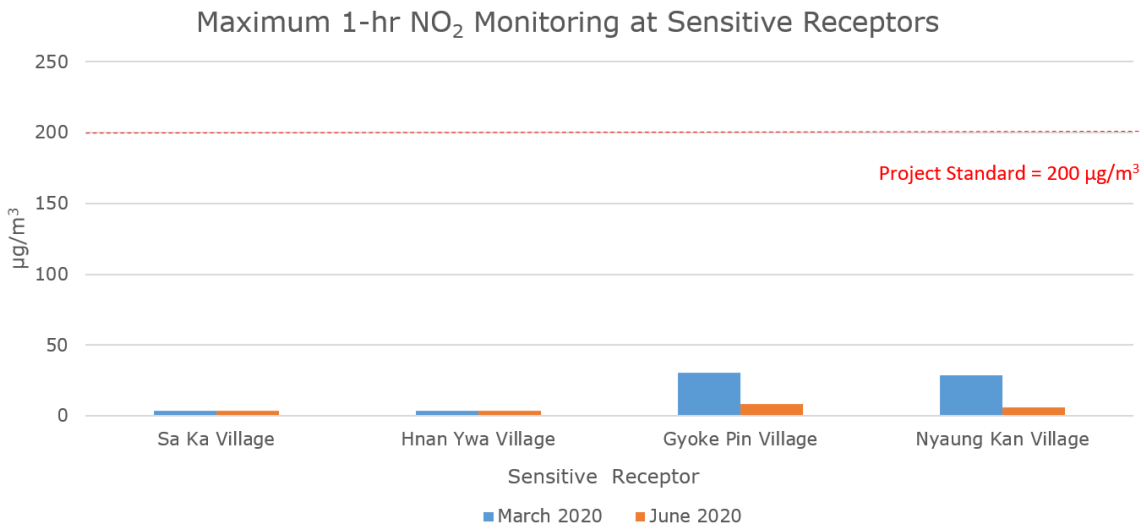
Ambient Air Quality Monitoring at Sensitive Receptor *

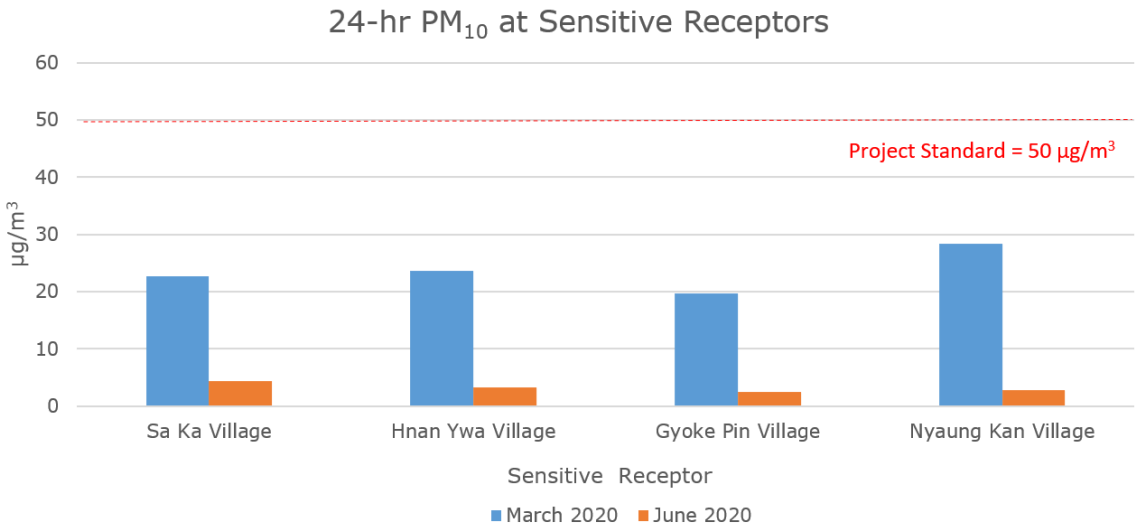
Name of sampling locations	Approximate Distance from Site	Parameters	Units	Mar-20	Jun-20 **	Project Standard	Average Period
Sa Ka Village	630 m	CO	ppm	0	0	9	8 hrs
		CO2	ppm	447.89	427.62	5000	8 hrs
		SO2	µg/m3	0	0	20	24 hrs
		NO2	µg/m3	3.80	3.76	200	1 hr
		PM10	µg/m3	22.67	4.37	50	24 hrs
		PM2.5	µg/m3	13.74	2.09	25	24 hrs
Hnan Ywa Village	1,560 m	CO	ppm	0	0	9	8 hrs
		CO2	ppm	450.01	417.89	5000	8 hrs
		SO2	µg/m3	0	0	20	24 hrs
		NO2	µg/m3	3.76	3.76	200	1 hr
		PM10	µg/m3	23.61	3.23	50	24 hrs
		PM2.5	µg/m3	14.18	1.47	25	24 hrs
Gyoke Pin Village	2,720 m	CO	ppm	0	0	9	8 hrs
		CO2	ppm	529.58	431.19	5000	8 hrs
		SO2	µg/m3	0	0	20	24 hrs
		NO2	µg/m3	30.51	8.46	200	1 hr
		PM10	µg/m3	19.66	2.56	50	24 hrs
		PM2.5	µg/m3	11.04	1.20	25	24 hrs
Nyaung Kan Village	2,760 m	CO	ppm	0	0	9	8 hrs
		CO2	ppm	500.75	431.88	5000	8 hrs
		SO2	µg/m3	0	0	20	24 hrs
		NO2	µg/m3	28.71	6.26	200	1 hr
		PM10	µg/m3	28.43	2.86	50	24 hrs
		PM2.5	µg/m3	17.45	1.51	25	24 hrs

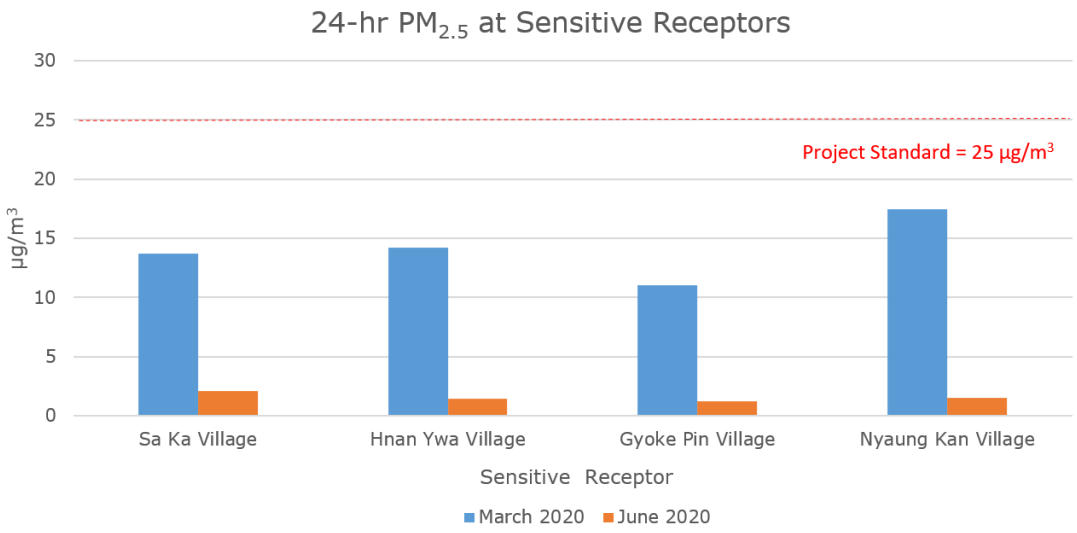
* Third party monitoring of ambient air conducted by E Guard Environmental Services;

** The monitoring period: 29 June 2020 – 03 July 2020


Maximum 8-hr CO_2 at Sensitive Receptors
6000
5000
4000
3000
2000
1000
0
ppm
Project Standard = 5000 ppm
Sa Ka Village
Hnan Ywa Village
Gyoke Pin Village
Nyaung Kan Village
Sensitive Receptor
March 2020
June 2020


Maximum 1-hr NO_2 Monitoring at Sensitive Receptors
250
200
150
100
50
0
µg/m³
Project Standard = 200 µg/m³
Sa Ka Village
Hnan Ywa Village
Gyoke Pin Village
Nyaung Kan Village
Sensitive Receptor
March 2020
June 2020


24-hr PM_{10} at Sensitive Receptors
60
50
40
30
20
10
0
µg/m³
Project Standard = 50 µg/m³
Sa Ka Village
Hnan Ywa Village
Gyoke Pin Village
Nyaung Kan Village
Sensitive Receptor
March 2020
June 2020



Ambient Noise Monitoring for Operations Phase

Noise monitoring was conducted by SMPC at four (4) locations i.e. at EPGE Guard House and three Security Gates. All of the locations were identified as industrial areas. The monitoring data for ambient noise levels of the four (4) locations were compared against the Myanmar National Environmental Quality (Emission) (NEQ) Guidelines (2015) for industrial and commercial receptors. The guidelines values for noise level are illustrated in the following table.

Myanmar National Environmental Quality (Emission) Guidelines (2015)

Receptor	One Hour LAeq (dBA) *	
	Daytime 07:00 – 22:00 (10:00 – 22:00 for Public Holidays)	Night-time 22:00 – 07:00 (22:00 – 100:00 for Public Holidays)
Residential, institutional, educational	55	45
Industrial, commercial	70	70

* Equivalent continuous sound level in decibels.

The NEQ Guidelines specify that daytime noise levels should not exceed 70 dBA in industrial areas and 55 dBA (daytime) and 45 dBA (night-time) for residential areas. The ambient noise levels for the site were well below the stipulated limits of 70 dBA in industrial areas.

The data is reported in the following table.

Average Ambient Noise Levels for the Operations Phase

Sampling Location	Noise monitoring time	Day/Night	Jun 2020 Report (Leq)	Project Standard
SMPC Internal Security Gate #2	24 Mar 2021, 11:35	Day	53.9	70
SMPC Internal Security Gate #3	24 Jun 2021, 11:55	Day	68.8	70
EPGE Guard House	24 Sep 2021, 12:10	Day	66.4	70
SMPC Internal Security Gate #1	24 Dec 2021, 12:30	Day	68.2	70

Operations Phase Emissions Monitoring

Stack emissions were monitored at 2 different emission units from January 1, 2021 to December 31, 2021 for NO_x, SO_2, PM, CO, CO_2, and O_2. The Project uses Fired Gas Turbines of ≥ 50MW for which the emission limit is only available for NO_2. The maximum hourly emissions are listed in the table below for these air impurities except O_2 which doesn't belong to air pollutant. As shown in the table, the maximum hourly NO_x is above the Myanmar National Environmental Quality (Emission) Guidelines Values for Myingyan IPP with a total rated heat input capacity above 50-megawatt thermal input on high heating value basis.

The maximum emissions occurred during low load operations. The low load operations occurred rarely, only for 24 hours for Unit 1 and 36 hours for Unit 2 throughout the year of 2021. Compared with low load operations, normal operations produce less NO_x emissions.

The data is reported in the following table and summarised in the subsequent charts.

Maximum Monitored Stack Hourly Emissions

Emissions	Emission Unit	Date, Time	Unit	Maximum Hourly Emission	Emission Limits for Myingyan IPP
NO_x	Unit 1	31 Mar 2021, 21:00	ppmv	50	25
	Unit 2	14 Jan 2021, 22:00		62	
SO_2	Unit 1	3 Jun 2021, 12:00	ppmv	32	-
	Unit 2	4 Nov 2021, 11:00		14	
PM	Unit 1	31 Aug 2021, 23:00	mg/Nm^3	256	-
	Unit 2	6 Aug 2021, 5:00		328	
CO	Unit 1	6 Jan 2021, 1:00	% vol	328	-
	Unit 2	13 Jan 2021, 15:00		328	
CO_2	Unit 1	5 Jan 2021, 21:00	ppmv	21	-
	Unit 2	25 Feb 2021, 10:00		21	

Minimum and Maximum Monitored Stack Emissions during Normal Operations for Unit 1

Month	NO_x (ppmv)		SO_2 (ppmv)		PM (mg/Nm^3)		CO (% vol)		CO_2 (ppmv)	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Jan	0	46.75	0	3.73	0	1.5	0	327.7	0	21
Feb	0	33.13	0	3.57	0	10.7	0	327.7	0	16.3
Mar	0	50.17	0	5.31	0	1	0	327.7	0	16.3
Apr	2.19	30.28	0	0.77	0	0	0	327.7	13.2	16.3
May	0	24.4	0	9.66	0	0.5	0	184	0	18
Jun	2.48	17.24	0.03	32.19	0	0	0	14.3	8	15.4
Jul	2.79	18.98	0.03	2.78	0	0	0	14.3	7.1	15.9
Aug	0	17.99	0	1.49	0	255.8	0	14.3	0	15.7
Sep	0	35.12	0	9.11	0	0	0	327.7	0	16.5
Oct	0	21.46	0	8.55	0	0	0	325.2	0	17.8
Nov	0	25	0	6.52	0	0	0	228.4	0	17.6
Dec	0	24.99	0	3.07	0	5.8	0	228.4	0	16.1

Minimum and Maximum Monitored Stack Emissions during Normal Operations for Unit 2

Month	NO_x (ppmv)		SO_2 (ppmv)		PM (mg/Nm^3)		CO (% vol)		CO_2 (ppmv)	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Jan	0	61.85	0	4.98	3.1	32.9	0	327.7	12.6	17
Feb	0	40.7	0	6.81	0	8.1	0	327.7	0	20.9
Mar	0	44.29	0	3.9	0	8.3	0	327.7	0	16.5
Apr	2.19	33.3	0	9.93	0	166.7	0	327.7	0	20.9
May	0	24.74	0	5.17	0	54.2	0	327.7	0	16.8
Jun	2.48	13.6	0	5.51	0	44.6	0	89.4	12.5	14.6
Jul	2.79	18.17	0	4.02	0	278.1	0	14.3	0	14
Aug	0	31.93	0	4.99	0	327.7	0	327.7	0	16.3
Sep	0	18.18	0	2.36	0	295	0	327.7	0	14.8
Oct	0	24.96	0	5.26	0	27.4	0	99.5	0	15.8
Nov	0	37.28	0	14.3	0	0	0	327.7	0	17.6
Dec	0	18.24	0	5.69	0	61.7	0	228.4	0	19

APPENDIX 4
ENVIRONMENTAL MONITORING RESULTS – WATER

Wastewater discharge monitoring

Three (3) surface water monitoring events were conducted at the Central Monitoring Basin wastewater discharge point on June 28, 2021, September 27, 2021, and December 30, 2021. The monitoring events were conducted by SMPC and analysed by a third party appointed by SMPC called Golden Dowa Eco-System Myanmar Co., Ltd. (Dowa). The monitoring results were compared against the discharge limits, which are based on the WBG EHS Guidelines for Thermal Power Plants (2008) and the IFC General EHS Guideline: Environmental Wastewater and Ambient Water Quality (2007).

The results were in compliance to the stipulated limits.

The data is reported in the following table and summarised in the subsequent chart.

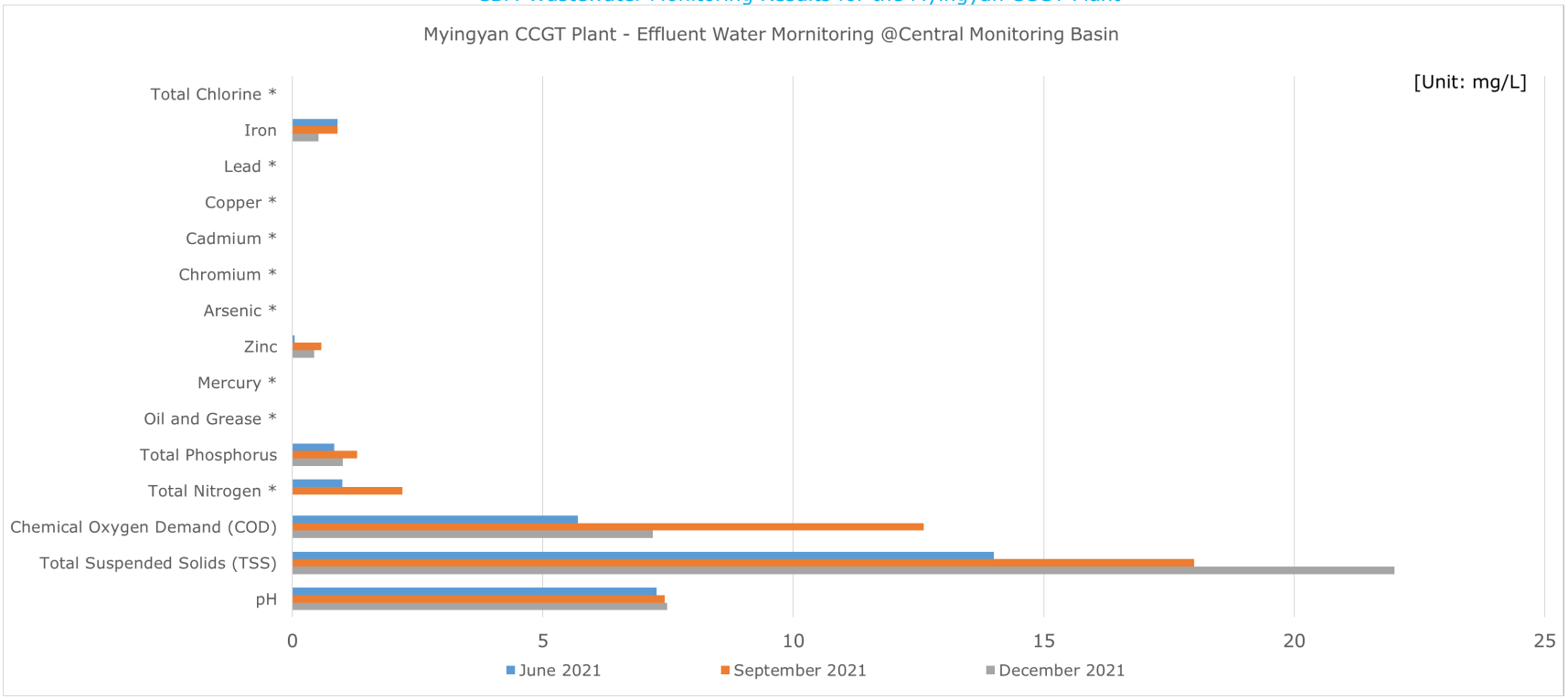
CBM Wastewater Monitoring Results for the Myingyan CCGT Plant

Parameters	Units	Discharge Limits	Jun-21	Sep-21	Dec-21
pH	-	6-9*	7.27	7.43	7.48
Total Suspended Solids (TSS)	mg/L	50*	14	18	22
Chemical Oxygen Demand (COD)	mg/L	125**	5.7	12.6	7.2
Total Nitrogen	mg/L	10**	1	2.2	<0.5
Total Phosphorus	mg/L	2**	0.84	1.29	1.01
Oil and Grease	mg/L	10*	< 3.1	< 3.1	< 3.1
Mercury	mg/L	0.005	≤ 0.002	≤ 0.002	≤ 0.002
Zinc	mg/L	1.0*	0.05	0.582	0.432
Arsenic	mg/L	0.5*	≤ 0.01	≤ 0.01	≤ 0.01
Chromium	mg/L	0.5*	≤ 0.002	≤ 0.002	≤ 0.002
Cadmium	mg/L	0.1*	≤ 0.002	≤ 0.002	≤ 0.002
Copper	mg/L	0.5*	≤ 0.002	≤ 0.002	≤ 0.002
Lead	mg/L	0.5*	≤ 0.002	≤ 0.002	≤ 0.002
Iron	mg/L	1.0*	0.902	0.904	0.526
Total Chlorine	mg/L	0.2*	< 0.1	< 0.1	< 0.1

* Myanmar NEQ Guidelines – Effluent Standards for Thermal Power (2015) / IFC EHS Guidelines Thermal Power Plants (2008).

** Myanmar NEQ Guidelines – Site Runoff and Wastewater Discharges 2015 / IFC General EHS Guideline: Environmental Wastewater and Ambient Water Quality (2007).

CBM Wastewater Monitoring Results for the Myingyan CCGT Plant



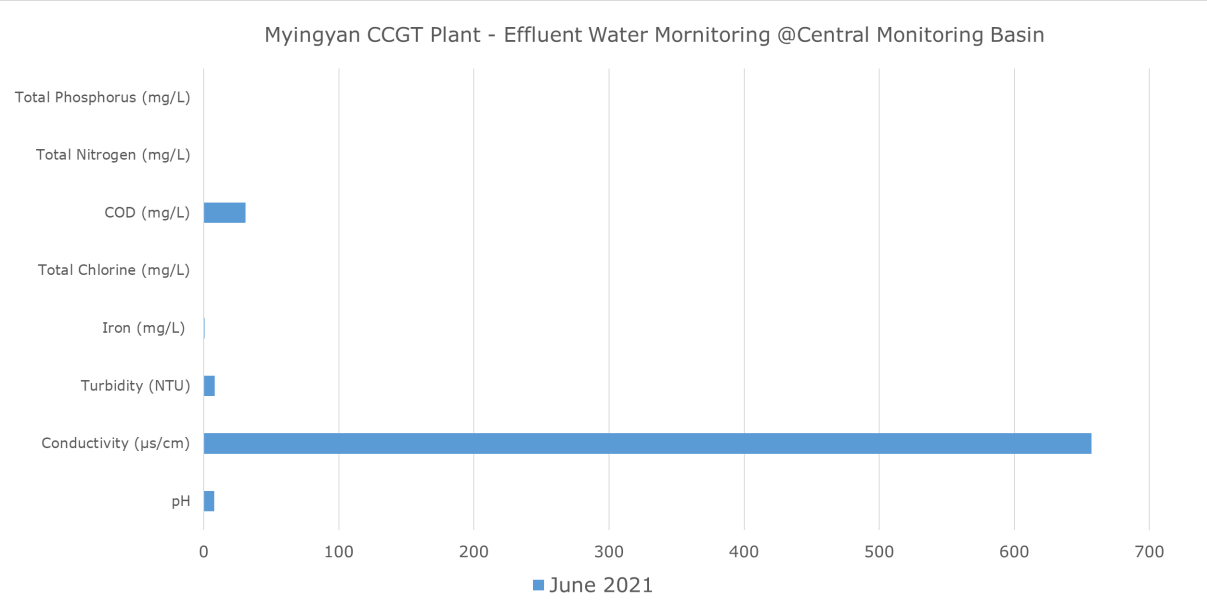
* The chemicals/compounds are not detectable because their concentrations are below the limit of quantitation (LOQ).

A separate monitoring event was conducted at the same sampling point by SMPC for pH, conductivity, turbidity, iron, total chlorine, COD, total nitrogen, and total phosphorus on in June 2021. The monitoring results were analysed by internal Lab of SMPC and are reported in the following table and chart. The results were well below the stipulated limits.

Wastewater Discharge Monitoring Results for the Myingyan CCGT Plant

Parameters	Units	IFC Standard	Jun-21
pH	-	6~9	7.72
Conductivity	µs/cm	<1200	657
Turbidity	NTU	<50	7.97
Iron	mg/l	1	0.75
Total Chlorine	mg/l	<0.2	0
COD	mg/l	125	31
Total Nitrogen	mg/l	10	0
Total Phosphorus	mg/l	2	0

Wastewater Discharge Monitoring Results for the Myingyan CCGT Plant



Continuous monitoring was conducted by SMPC for pH and total chlorine. The data is reported in the following tables.

The results were in compliance to the stipulated limits.

CMB Wastewater Monitoring - Minimum and Maximum Monitored pH and Total Chlorine for the Myingyan CCGT Plant

Month	Total Chlorine (ppm)		pH	
	Min	Max	Min	Max
Jan	0.08	0.09	7.57	8.48
Feb	0.08	0.09	7.59	8.54
Mar	0.07	0.09	7.75	8.65
Apr	0.07	0.08	7.5	8.76
May	0.06	0.08	7.59	8.96
Jun	0.07	0.08	7.02	8.98
Jul	0.07	0.08	7.49	8.94
Aug	0.07	0.08	7.57	8.97
Sep	0.07	0.09	7.64	8.62
Oct	0.06	0.08	7.39	8.94
Nov	0.06	0.09	7.23	8.64
Dec	0.05	0.07	6.83	8.46

APPENDIX 5
COMMUNITY DEVELOPMENT ACTIVITIES ACCOMPLISHED IN 2021

For guidance on the use of this sheet, please refer to the Sembcorp Data Manual (Social, Community section) page 19-31

No.	Country	Business Unit	Date (Committed) DD/ MM/ YY format	Date (Paid/Given) DD/ MM/ YY format	Name of beneficiary	Activity/event/initiative name/title	Activity/event/ initiative details/ information	Number of employee volunteers during working hours	Number of employee volunteers during non-working hours	Total number of hours spent during working hours (all employees)	Total number of hours spent during non-working hours (all employees)	Quantified data on immediate results i.e. number of beneficiaries or facilities built	Contribution motive	Subject focus	If subject focus falls under "Others", to state what the investment went towards
1	MYANMAR_	Sembcorp Myingyan Power Co.	13/8/2021	6/9/2021	•Myingyan District Hospital •Taung Thar Township COVID19 Control and Emergency Response Committee	COVID-19 Support	1) Oxygen Concentrator Set - 15 Set 2) Flowmeter Set - 30 Set	4		7		2 Hospitals	Charitable gift	Community/social welfare	
2	MYANMAR_	Sembcorp Myingyan Power Co.	7/9/2021	7/9/2021	Singapore Association of Myanmar	COVID-19 Support	COVID food support via Singapore Association of Myanmar					200 pax	Charitable gift	Community/social welfare	
3	MYANMAR_	Sembcorp Myingyan Power Co.	16/10/2021	23/10/2021	Myingyan District Hospital	COVID-19 Support	1) Oxygen Cylinder 40 liter - 100 Set 2) Flowmeter Set - 100 Set	3		3		1 Hospital	Charitable gift	Community/social welfare	
4	MYANMAR_	Sembcorp Myingyan Power Co.	16/10/2021	23/10/2021	Taung Thar Township COVID19 Control and Emergency Response Committee	COVID-19 Support	100kVA Generator (KOHLER)	2		2		1 Oxygen Plant	Charitable gift	Community/social welfare	
5	MYANMAR_	Sembcorp Myingyan Power Co.	7/11/2021	7/11/2021	General Administration Department (Myingyan District, Myingyan Township and Taung Thar Township)	General Administration Department Annual Event – 2021	182 Jacket support for GAD annual event – 2021	1		3		182 pax	Sponsorship	Social Welfare	
6	MYANMAR_	Sembcorp Myingyan Power Co.	17/12/2021	17/12/2021	Myingyan District Hospital AND Taung Thar Township Hospital	COVID-19 Support	1) Ultrasound, Colour, 15", Z-5, w/Probe - 2 Set 2) Probe, Convex, 35CEA, for DP-30/50/ 25 - 2 Set 3)ECG, 3 Channel, 5", Colour, w/AI Interpretation, BeneHeart R3 - 2 Set	3		5		2 Hospitals	Charitable gift	Community/social welfare	

APPENDIX 6
STAKEHOLDER ENGAGEMENT DATABASE YEAR 2021

S/N	Date	Timing	Location / Venue	Stakeholder Group	Specify Others Stakeholder group	Stakeholder (Attendees/Participants)	Specify OTHERS Stakeholder (Attendees/Participants)	No. of Stakeholder attended/participated (In Person) IF ANY	Contact Person (Individual name) IF ANY	Contact Details (Individual's Mobile No. / Email, Region/ District/ City/ Township/ Street/ Village)	Engagement Method (Meeting Type)	Specify OTHERS Engagement Method (Meeting Type)	Name of Key Representatives	Engagement Purpose (Subject)	Information to be disclosed	Key Issues Category	Key Issues & Responses Provided (If Any)	Key Outcomes & Actions (Actions Agreed)	Responsibility (SITE ID)	Recorder
SE202100001	5-Jan-21	8:51	Sar Khaar / U Maung Myint VH / Home	Affected Communities	NA	U Maung Myint VH, HMO	NA	2	U Maung Myint VH	09 797088670	Face to Face Individual Meeting	NA	HMO	ASE 2020 (SMPC reply answer) "SMPC announcement for job vacancy."	Replied that "Due to the Myanmar Government Labor Law, SMPC will no longer announce at the villages regard to the job vacancy and all the vacancy announcements will be informed to Myingyan Labor Department."	Community Relation	NA	U Maung Myint satisfied on the reply	HMO	TKKK
SE202100007	5-Jan-21	13:50	Sate Nyan / U Chit Win VH / Home	Affected Communities	NA	U Chit Win VH, HMO	NA	2	U Chit Win VH	09 421145941	Face to Face Individual Meeting	NA	HMO	ASE 2020 (SMPC reply answer) "SMPC to continue the cleaned chemical contribution."	Replied that "The container contribution is stopped temporarily and SMPC will reconsider as per the villagers' request. The outcome of reconsideration will be informed later."	Community Relation	NA	U Chit Win satisfied on the reply	HMO	TKKK
SE202100012	5-Jan-21	15:39	Ywar Thar Kone / U Win Kyaing VH / Home	Affected Communities	NA	U Win Kyaing VH's Group, U Aye Ko VH, HMO	NA	4	U Win Kyaing VH	09 797086227	Face to Face Individual Meeting	NA	HMO	PSE (SMPC reply answer) "1.Ywar Thar Kone village and Hta Naung Pin Su village are not in the community list to be developed even there are some PAP living in these villages. 2.SMPC to distribute the electricity to WRUD."	1.Selection of 13 villages was collectively decided by multiple parties, namely ESIA consultant, SMPC, MONREC, EPGE and lenders. Therefore, Sembcorp cannot unilaterally change the list of villages. 2.Due to Myanmar Government Law and PPA, SMPC is not authorized to distribute the electricity.	Community Relation	NA	U Win Kyaing did not satisfied on the reply for answer no. 1.	HMO	TKKK
SE202100023	14-Jan-21	11:29	Sar Khaar / U Maung Myint VH / Home	Affected Communities	NA	U Maung Myint VH, HMO, TKKK	NA	3	U Maung Myint VH	09 797088670	Face to Face Individual Meeting	NA	HMO	Letter of certificate for Chemistry Storage Lincense (For HR & Admin Department)	Letter of certificate for Chemistry Storage Lincense (For HR & Admin Department)	Others (Specify)	HR & Admin related	Letter of certificate for Chemistry Storage Lincense (For HR & Admin Department)	HMO	TKKK
[illegible]																				
SE202100144	18-Mar-21	13:04	Sarkhaar / U Mg Myint VH	Affected Communities	NA	U Maung Myint VH, HMO	NA	2	U Maung Myint VH	09 988362450	Correspondence (phone, letter,email)	NA	HMO	Information emergency situation	Information emergency situation	Community Relation	NA	Information emergency situation	HMO	TKKK
[illegible]																				
SE202100162	29-Mar-21	12:16	Theim / U San Lwin VH	Affected Communities	NA	U San Lwin VH, TKKK	NA	2	U San Lwin VH	09 787701210	Correspondence (phone, letter,email)	NA	TKKK	VH called to TKKK as he worried for TKKK when he hear about gun shot in Myingyan	VH called to TKKK as he worried for TKKK when he hear about gun shot in Myingyan	Community Relation	NA	VH called to TKKK as he worried for TKKK when he hear about gun shot in Myingyan	TKKK	TKKK
[illegible]																				
SE202100219	23-Apr-21	15:09	Aye / U Myint Swe VH	Affected Communities	NA	U Myint Swe VH, TKKK	NA	2	U Myint Swe VH	09 794897499	Correspondence (phone, letter,email)	NA	TKKK	Inquiry for situation around the village as SMPC team has to go river water barge for water sampling (HSSE)	Inquiry for situation around the village as SMPC team has to go river water barge for water sampling (HSSE)	Community Relation	NA	As per village head the situation is fine. CRO informed to HSSE	TKKK	TKKK
SE202100221	23-Apr-21	17:23	Tha Pyay Thar / U Win Shwe VH	Affected Communities	NA	U Win Shwe VH, TKKK	NA	2	U Win Shwe VH	09 780665308	Correspondence (phone, letter,email)	NA	TKKK	Inquiry for situation around the village as SMPC team has to go river water barge for water sampling (HSSE)	Inquiry for situation around the village as SMPC team has to go river water barge for water sampling (HSSE)	Community Relation	NA	As per village head the situation is fine. CRO informed to HSSE	TKKK	TKKK
SE202100222	23-Apr-21	17:29	Kyun U / U Kyaw Toe VH	Affected Communities	NA	U Kyaw Toe VH, TKKK	NA	2	U Kyaw Toe VH	09 780821310	Correspondence (phone, letter,email)	NA	TKKK	Inquiry for situation around the village as SMPC team has to go river water barge for water sampling (HSSE)	Inquiry for situation around the village as SMPC team has to go river water barge for water sampling (HSSE)	Community Relation	NA	As per village head the situation is fine. CRO informed to HSSE	TKKK	TKKK
SE202100224	23-Apr-21	17:44	Sate Nyan / U Chit Win VH	Affected Communities	NA	U Chit Win VH, TKKK	NA	2	U Chit Win VH	09 421145941	Correspondence (phone, letter,email)	NA	TKKK	Inquiry for situation around the village as SMPC team has to go river water barge for water sampling (HSSE)	Inquiry for situation around the village as SMPC team has to go river water barge for water sampling (HSSE)	Community Relation	NA	As per village head the situation is fine. CRO informed to HSSE	TKKK	TKKK
[illegible]																				
SE202100231	24-Apr-21	17:52	Aye / U Myint Swe VH	Affected Communities	NA	U Myint Swe VH, TKKK	NA	2	U Myint Swe VH	09 794897499	Correspondence (phone, letter,email)	NA	TKKK	Inquiry for situation around the village as SMPC team has to go river water barge for water sampling (HSSE)	Inquiry for situation around the village as SMPC team has to go river water barge for water sampling (HSSE)	Community Relation	NA	As per village head the situation is fine. CRO informed to HSSE	TKKK	TKKK
[illegible]																				
SE202100281	15-May-21	9:50	Hta Naung Tai / U Aye Ko VH	Affected Communities	NA	U Aye Ko VH, TKKK	NA	2	U Aye Ko VH	09 762892464	Correspondence (phone, letter,email)	NA	TKKK	Inquiry for situation around the village as SMPC team has to go river water barge for water sampling (HSSE)	Inquiry for situation around the village as SMPC team has to go river water barge for water sampling (HSSE)	HSSE	NA	As per village head the situation is fine. CRO informed to HSSE	TKKK	TKKK
[illegible]																				
SE202100284	15-May-21	18:15	Tha Pyay Thar / U Win Shwe VH	Affected Communities	NA	U Win Shwe VH, TKKK	NA	2	U Win Shwe VH	09 780665308	Correspondence (phone, letter,email)	NA	TKKK	Inquiry for situation around the village as SMPC team has to go river water barge for water sampling (HSSE)	Inquiry for situation around the village as SMPC team has to go river water barge for water sampling (HSSE)	HSSE	NA	As per village head the situation is fine. CRO informed to HSSE	TKKK	TKKK
SE202100285	15-May-21	18:00	Sate Nyan / U Chit Win VH	Affected Communities	NA	U Chit Win VH, TKKK	NA	2	U Chit Win VH	09 421145941	Correspondence (phone, letter,email)	NA	TKKK	Inquiry for situation around the village as SMPC team has to go river water barge for water sampling (HSSE)	Inquiry for situation around the village as SMPC team has to go river water barge for water sampling (HSSE)	HSSE	NA	As per village head the situation is fine. CRO informed to HSSE	TKKK	TKKK
SE202100286	15-May-21	18:02	Kyun U / U Kyaw Toe VH	Affected Communities	NA	U Kyaw Toe VH, TKKK	NA	2	U Kyaw Toe VH	09 780821310	Correspondence (phone, letter,email)	NA	TKKK	Inquiry for situation around the village as SMPC team has to go river water barge for water sampling (HSSE)	Inquiry for situation around the village as SMPC team has to go river water barge for water sampling (HSSE)	HSSE	NA	As per village head the situation is fine. CRO informed to HSSE	TKKK	TKKK
SE202100291	17-May-21	10:03	Gyoke Pin / U Win Hlaing VH / Home	Affected Communities	NA	U Win Hlaing VH, TKKK	NA	2	U Win Hlaing VH	09 402747005	Correspondence (phone, letter,email)	NA	TKKK	Inquiry about village clinic fencing (for 2021 CSR activity)	Inquiry about village clinic fencing (for 2021 CSR activity)	CSR	NA	Inquiry about village clinic fencing (for 2021 CSR activity)	TKKK	TKKK
SE202100292	17-May-21	9:53	Nyaung Kan / U Shu Maung VH	Affected Communities	NA	U Shu Maung VH, TKKK	NA	2	U Shu Maung VH	09 256594890	Correspondence (phone, letter,email)	NA	TKKK	Inquiry about school fencing (for 2021 CSR activity)	Inquiry about school fencing (for 2021 CSR activity)	CSR	NA	Inquiry about school fencing (for 2021 CSR activity)	TKKK	TKKK
SE202100293	17-May-21	9:57	Theim / U San Lwin VH	Affected Communities	NA	U San Lwin VH, TKKK	NA	2	U San Lwin VH	09 787701210	Correspondence (phone, letter,email)	NA	TKKK	Inquiry about school fencing (for 2021 CSR activity)	Inquiry about school fencing (for 2021 CSR activity)	CSR	NA	Inquiry about school fencing (for 2021 CSR activity)	TKKK	TKKK
[illegible]																				
SE202100297	20-May-21	19:18	Nyaung Kan / U Shu Maung VH	Affected Communities	NA	U Shu Maung VH, TKKK	NA	2	U Shu Maung VH	09 256594890	Correspondence (phone, letter,email)	NA	TKKK	VH asked plant Doctor's support for his couson health emergency	VH wants to take his cousin to SMPC plant or GM house to see plant doctor	Community Relation	NA	Plant doctor rejected to see the patient as he already arrived back to GM house	TKKK	TKKK
[illegible]																				
SE202100299	21-May-21	11:09	Sate Nyan / U Chit Win VH	Affected Communities	NA	U Chit Win VH, TKKK	NA	2	U Chit Win VH	09 421145941	Correspondence (phone, letter,email)	NA	TKKK	Inquiry for situation around the village as SMPC team has to go river water barge for water sampling (HSSE)	Inquiry for situation around the village as SMPC team has to go river water barge for water sampling (HSSE)	HSSE	NA	As per village head the situation is fine. CRO informed to HSSE	TKKK	TKKK
[illegible]																				
SE202100312	25-May-21	17:15	Theim / U San Lwin VH	Affected Communities	NA	U San Lwin VH, TKKK	NA	2	U San Lwin VH	09 787701210	Correspondence (phone, letter,email)	NA	TKKK	Inquiry about school fencing (for 2021 CSR activity)	Inquiry about school fencing (for 2021 CSR activity)	CSR	NA	Fencing south of the school (185ft)	TKKK	TKKK
SE202100315	27-May-21	9:38	Gyoke Pin / U Win Hlaing VH / Home	Affected Communities	NA	U Win Hlaing VH, TKKK	NA	2	U Win Hlaing VH	09 402747005	Correspondence (phone, letter,email)	NA	TKKK	Inquiry about village clinic fencing (for 2021 CSR activity)	Inquiry about village clinic fencing (for 2021 CSR activity)	CSR	NA	Village clinic fencing - East (43ft) / West (52ft) / South (68ft [illegible]	TKKK	TKKK
SE202100316	27-May-21	9:57	Nyaung Kan / U Shu Maung VH	Affected Communities	NA	U Shu Maung VH, TKKK	NA	2	U Shu Maung VH	09 256594890	Correspondence (phone, letter,email)	NA	TKKK	Inquiry about school fencing (for 2021 CSR activity)	Regular Visit	Community Relation	NA	Regular Visit	TKKK	TKKK
SE202100317	30-May-21	7:22	Aye / U Myint Swe VH	Affected Communities	NA	U Myint Swe VH, TKKK	NA	2	U Myint Swe VH	09 794897499	Correspondence (phone, letter,email)	NA	TKKK	Provides information about the Tha Pyay Thar VH U Win Shwe	Provides information about the Tha Pyay Thar VH U Win Shwe	Community Relation	NA	Provides information about the Tha Pyay Thar VH U Win Shwe	TKKK	TKKK
SE202100318	30-May-21	7:29	Kyun U / U Kyaw Toe VH	Affected Communities	NA	U Kyaw Toe VH, TKKK	NA	2	U Kyaw Toe VH	09 780821310	Correspondence (phone, letter,email)	NA	TKKK	Inquiry for the situation the Tha Pyay Thar village head	Inquiry for the situation the Tha Pyay Thar village head	Community Relation	NA	As per villager the situation is not fine, the exact situation is unclear	TKKK	TKKK
SE202100320	30-May-21	9:17	Sate Nyan / U Chit Win VH	Affected Communities	NA	U Chit Win VH, TKKK	NA	2	U Chit Win VH	09 421145941	Correspondence (phone, letter,email)	NA	TKKK	Inquiry for the situation the Tha Pyay Thar village head	Inquiry for the situation the Tha Pyay Thar village head	Community Relation	NA	As per villager the situation is not fine, the exact situation is unclear	TKKK	TKKK
SE202100322	30-May-21	9:19	Aye / U Myint Swe VH	Affected Communities	NA	U Myint Swe VH, HMO	NA	2	U Myint Swe VH	09 794897499	Correspondence (phone, letter,email)	NA	HMO	Inquiry for the situation the Tha Pyay Thar village head	Inquiry for the situation the Tha Pyay Thar village head	Community Relation	NA	As per villager the situation is not fine, the exact situation is unclear	HMO	TKKK
SE202100323	30-May-21	10:35	Kyun U / U Kyaw Toe VH	Affected Communities	NA	U Kyaw Toe VH, HMO	NA	2	U Kyaw Toe VH	09 780821310	Correspondence (phone, letter,email)	NA	HMO	Inquiry for the situation the Tha Pyay Thar village head	Inquiry for the situation the Tha Pyay Thar village head	Community Relation	NA	As per villager the situation is not fine, the exact situation is unclear	HMO	TKKK
SE202100324	30-May-21	13:15	Kyun U / U Kyaw Toe VH	Affected Communities	NA	U Kyaw Toe VH, HMO	NA	2	U Kyaw Toe VH	09 780821310	Correspondence (phone, letter,email)	NA	HMO	Inquiry for the situation the Tha Pyay Thar village head	Inquiry for the situation the Tha Pyay Thar village head	Community Relation	NA	As per villager the situation is not fine, the exact situation is unclear	HMO	TKKK
SE202100325	30-May-21	16:02	Kyun U / U Kyaw Toe VH	Affected Communities	NA	U Kyaw Toe VH, HMO	NA	2	U Kyaw Toe VH	09 780821310	Correspondence (phone, letter,email)	NA	HMO	Inquiry for the situation the Tha Pyay Thar village head	Inquiry for the situation the Tha Pyay Thar village head	Community Relation	NA	As per villager the situation is not fine, the exact situation is unclear	HMO	TKKK
SE202100326	1-Jun-21	6:46	Gyoke Pin / U Win Hlaing VH / Home	Affected Communities	NA	U Win Hlaing VH, TKKK	NA	2	U Win Hlaing VH	09 402747005	Correspondence (phone, letter,email)	NA	TKKK	VH requested plant Doctor's phone number for his father health condition	VH requested plant Doctor's phone number for his father health condition	Community Relation	NA	Sent plant doctor's phone number to VH	TKKK	TKKK
SE202100327	1-Jun-21	21:08	Kyun U / U Kyaw Toe VH	Affected Communities	NA	U Kyaw Toe VH, TKKK	NA	2	U Kyaw Toe VH	09 780821310	Correspondence (phone, letter,email)	NA	TKKK	Inform for situation around the Kyun U village	Inform for situation around the Kyun U village	Community Relation	NA	Inform for situation around the Kyun U village	TKKK	TKKK
SE202100330	2-Jun-21	12:18	Sarkhaar / U Mg Myint VH	Affected Communities	NA	U Mg Myint VH, TKKK	NA	2	U Mg Myint VH	09 797088670	Correspondence (phone, letter,email)	NA	TKKK	VH asked plant Doctor's support for his grandmother	VH requested plant Doctor's phone number	Community Relation	NA	Sent plant doctor's phone number to VH	TKKK	TKKK
[illegible]																				
SE202100462	19-Sep-21	17:10	Sarkhaar / U Mg Myint VH	Affected Communities	NA	U Mg Myint VH, HMO, TKKK	NA	3	U Mg Myint VH	09 797088670	Face to Face Individual Meeting	NA	HMO	EPGE Guest House-Guest Registration List	EPGE Guest House-Guest Registration List	HR & Admin	NA	EPGE Guest House-Guest Registration List	HMO	TKKK
[illegible]																				
SE202100476	25-Sep-21	10:28	Kyun U / U Kyaw Toe VH	Affected Communities	NA	U Kyaw Toe VH, TKKK	NA	2	U Kyaw Toe VH	09 780821310	Correspondence (phone, letter,email)	NA	TKKK	Military Commender asked U Kyaw Toe to inform SMPC that one of SMPC officer related to security to see him.	Military Commender asked U Kyaw Toe to inform SMPC that one of SMPC officer related to security to see him.	Community Relation	NA	CRO reported to Plant Manager and Plant Manager assigned Zaw Moe Aung (HSSE) to see Military Commender.	TKKK	TKKK
[illegible]																				
SE202100489	27-Sep-21	11:03	Kyun U / U Kyaw Toe VH	Affected Communities	NA	U Kyaw Toe VH, TKKK	NA	2	U Kyaw Toe VH	09 780821310	Correspondence (phone, letter,email)	NA	TKKK	Military Commender said U Kyaw Toe that no one from SMPC came to see him.	Military Commender said U Kyaw Toe that no one from SMPC came to see him.	Community Relation	NA	CRO reported to Plant Manager that no one from SMPC see military commender. Reminded again to HSSE (HSSE went down to Sate Nyan to see Commender on 20210928)	TKKK	TKKK
[illegible]																				

APPENDIX 7
ANNUAL PUBLIC STAKEHOLDER ENGAGEMENT REPORT DECEMBER 2020

Annual
Public Stakeholder Engagement Report
2020
December

Sembcorp Myingyan Power Co., Ltd

Development Department

CONTENTS

Our Community 13 Villages

Stakeholder Attendant Table

No	Date	Time	Village	No. of Attendee
1	14-12-20	10:00 - 11:00	Sarkhaar	9
2	02-12-20	10:00 - 11:00	Hnan	10
3	02-12-20	11:15 - 11:50	Phet Taw	12
4	03-12-20	16:50 - 17:40	Nyaung Kan	11
5	02-12-20	12:20 - 13:30	Theim	10
6	02-12-20	14:00 - 15:00	Gyoke Pin	11
7	03-12-20	09:00 - 10:30	Hta Naung Tai	13
8	03-12-20	10:50 - 11:55	Aye	11
9	03-12-20	13:10 - 14:00	Ma Yoe Kone	12
10	03-12-20	12:10 - 13:00	Tha Pyay Thar	13
11	03-12-20	14:40 - 15:30	Sate Nyan	10
12	03-12-20	15:40 - 16:20	Ka Lain Chone	10
13	02-12-20	15:30 - 16:30	Kyun U	10
			Total	**142**

Community Household and Population

Village	Village Head	Households	Population	Male	Female
Sarkhaar	U Maung Myint	420	1,796	812	984
Hnan	U Hein Min Lwin	120	735	300	435
Phet Taw	U Soe Htun	1,129	4,780	2,221	2,559
Nyaung Kan	U Shu Maung	285	1,289	589	700
Theim	U San Lwin	188	786	377	409
Gyoke Pin	U Win Hlaing	437	1,958	850	1,108
Hta Naung Tai	U Aye Ko	839	3,767	1,635	2,132
Aye	U Myint Swe	81	380	162	218
Ma Yoe Kone	U Win Maung	99	424	202	222
Tha Pyay Thar	U Win Shwe	249	1,188	556	632
Sate Nyan	U Chit Win	162	656	314	342
Ka Lain Chone	U Zaw Khin	149	629	286	343
Kyun U	U Kyaw Toe	97	457	197	260
	Total	**4,255**	**18,845**	**8,501**	**10,344**

Date	– 14 Dec 2020
Time	– 9:00am ~ 10:00am
Venue	– Village Head's Home, Sarkhaar Village
Household	–420
Population	–1796
Attendance	–9
Presented by	– Hein Min Oo @ Koyin
Presenting Material	– Book in Local language (41 Pages)

Highlight of Conversation

Village Administrator U Maung Myint

Can we request to provide us the sludge which you disposed to the designated place (near by the OK hotel).

.

SMPC

We are not giving/contribute for now and we just disposed/kept at the designated place which near by the OK hotel. But this will be recorded and reported to the management.

Village Administrator U Maung Myint

If there is fire emergency in our village, are we able to request SMPC for fire track and fire fighter team to fight against the fire emergency.

SMPC

Our SMPC fire fighter team must follow Myingyan District Fire Department instructions as well as SMPC Management instructions. The village need to inform to Myingyan Fire Department and SMPC will assist upon Myingyan District Fire Department instruction.

Village Administrator U Maung Myint

There are many villagers who holding Bachelor/ Master Degree of Engineering in our village. We want SMPC to consider in priority to employ our villagers. As far as I know, there is no information and announcement from SMPC about staff vacancy (except only on time announcement letter at Sarkhaar in project beginning).

SMPC

Well noted and this point will be reported to the SMPC management.

Date	– 2 December 2020
Time	– 10:00 ~ 11:00
Venue	– Village Monastery, Hnan Village
Household	–120
Population	–735
Attendance	–10
Presented by	– Hein Min Oo @ Koyin
Presenting Material	– Book in Local language (41 Pages)

Highlight of Conversation

Villager U Han Si

There is no village administration office in our village, and we like to request SMPC to consider for upcoming CSR activity.

SMPC

SMPC will come down to discuss with village head and village administration team for CSR activity. The activities are based on the budget and village required. The point will be reported to SMPC management and will discuss with the village head and village administration team at CSR time.

Date	– 2 December 2020
Time	– 11:15 - 11:50
Venue	– Village monastery, Phet Taw Village
Household	– 1129
Population	– 4780
Attendance	– 12
Presented by	– Hein Min Oo @ Koyin
Presenting Material	– Book in Local language (41 Pages)

Highlight of Conversation

Villager U Zaw Thein Htike

As far as I know, SMPC is much supporting in Education for our village. As for me, I would suggest not support for Education as it is more related to Government and SMPC should more emphasize on others social activities e.g. support a library for village. Moreover, I would like to request to support more job opportunities for our villagers, to upgrade village entrance road (making side drainage for road) and heavy equipment support for village school as there are Shrubs in the school compound.

SMPC

SMPC will come down to discuss with village head and village administration team for CSR activity. The activities are based on the budget and village required. The point will be reported to SMPC management and will discuss with the village head and village administration team at CSR time.

For job opportunity, our community (13 villages) is the priority for consideration of employment.

Village Head U Soe Htun

There is a library in our village, but it is close since long time ago as villagers are not interesting. I would like to request to support village administration office when you consider for CSR activity.

Villager U Khin Aung

would like to request to upgrade village entrance road.

SMPC

SMPC will come down to discuss with village head and village administration team for CSR activity. The activities are based on the budget and village required. The point will be reported to SMPC management and will discuss with the village head and village administration team at CSR time.

Date	– 3 December 2020
Time	– 16:50 - 17:40
Venue	– Village Head's Home, Nyaung Kan Village
Household	– 285
Population	– 1289
Attendance	– 11
Presented by	– Hein Min Oo @ Koyin
Presenting Material	– Book in Local language (41 Pages)

No Questions.

Date	– 2 December 2020
Time	– 12:20 - 13:30
Venue	– Village monastery, Theim Village
Household	– 188
Population	– 786
Attendance	– 10
Presented by	– Hein Min Oo @ Koyin
Presenting Material	– Book in Local language (41 Pages)

No Questions.

Date	– 2 December 2020
Time	– 14:00 - 15:00
Venue	– Village School, Gyoke Pin Village
Household	– 437
Population	– 1958
Attendance	– 11
Presented by	– Hein Min Oo @ Koyin
Presenting Material	– Book in Local language (41 Pages)

Highlight of Conversation

Villager U Aung Min Nyi

How can we apply for Job at SMPC? We would like to request to inform village head when SMPC has any vacancy.

SMPC

CV forms are can be submitted to SMPC via Myingyan Labor Department (Government Office). To inform village head for job vacancy, this point will be reported to SMPC management.

Villager U Kyaw

How much is the basic salary?

SMPC

For basic salary, depend on candidate's education level & experience and we are following the Government Law.

Village Head U Win Hlaing

SMPC provided a village clinic this year and it will be finished in January 2021. I would like to request SMPC to provide clinic facilities (such as bench, cab board, etc.). I would like to request SMPC to consider in priority to employ our villagers. As a conclusion, I would like to thank (on behalf of all villagers) to SMPC for engaging al through the year, annually engaging, supporting for Education (support chair & bench and fencing) and village infrastructures (water treatment plant and drainage wall).

SMPC

For clinic facilities, this point will be reported to SMPC management to consider in next CSR cycle. For job opportunity, our community (13 villages) is the priority for consideration of employment and this point will be reported to SMPC management too.

Date	– 3 December 2020
Time	– 09:00 - 10:30
Venue	– Village Administration Office, Hta Naung Tai Village
Household	– 839
Population	– 3767
Attendance	– 13
Presented by	– Hein Min Oo @ Koyin
Presenting Material	– Book in Local language (41 Pages)

Highlight of Conversation

Villager U Tin Maung Htwe

We would like to request village school elevated water tank for next CSR cycle.

SMPC

SMPC will come down to discuss with village head and village administration team for CSR activity. The activities are based on the budget and village required. The point will be reported to SMPC management and will discuss with the village head and village administration team at CSR time.

Villager U Win Kyaing & U Hlaing Min

I would like to know why Ywar Thar Kone village and Hta Naung Pin Su village are not in your community list to be developed even there are some PAP living in these villages.

Can SMPC distribute the electricity to WRUD? Sometime, WRUD has encountered no electricity from Government and farmers are not able to get the canal water for farming. If SMPC can provide electricity to WRUD, I think we (farmers) can get canal water whenever we want for farming.

SMPC

For Ywar Thar Kone and Hta Naung Pin Su, this point will be reported to SMPC management and will feedback to you once the management reply.

To supply the electricity to WRUD, I will report to SMPC management and will feedback to you once the management reply.

Date	– 3 December 2020
Time	– 10:50 - 11:55
Venue	– Village Monastery, Aye Village
Household	– 81
Population	– 380
Attendance	– 11
Presented by	– Hein Min Oo @ Koyin
Presenting Material	– Book in Local language (41 Pages)

Highlight of Conversation

Villager U Pho Htay

There is a small underground connecting drainage pipe under the village entrance road and it was damaged during WRUD's canal maintenance process. If SMPC has heavy equipment (excavator), we would like to request to fix the damage.

SMPC

SMPC has no heavy equipment since the project construction finished. We did help and support to the farmers/villagers by heavy equipment during the construction period whenever farmers/villagers requested if our equipment are near by the villages/farms.

Village Head U Myint Swe

Village entrance road underground pipe drain should be repair by WRUD as the drainage pipeline was damaged by WRUD's maintenance activity and not concern with the SMPC.

I would like to know that SMPC will continue cleaned chemical distribution. If yes, we are happy to receive and if no, we would to request SMPC to continue the drums contribution please.

Please mitigate the impact (side effect) of the plant.

SMPC

SMPC will no longer contribute the cleaned chemical anymore due to SMPC management decision. But this request will be reported to SMPC management.

To mitigate the impact (side effect) of the plant, we are following current law, guideline and standard of Myanmar Government and IFC. This point will be reported to SMPC management.

Date	– 3 December 2020
Time	– 13:00 - 14:00
Venue	– Village School, Ma Yoe Kone Village
Household	– 99
Population	– 424
Attendance	– 12
Presented by	– Hein Min Oo @ Koyin
Presenting Material	– Book in Local language (41 Pages)

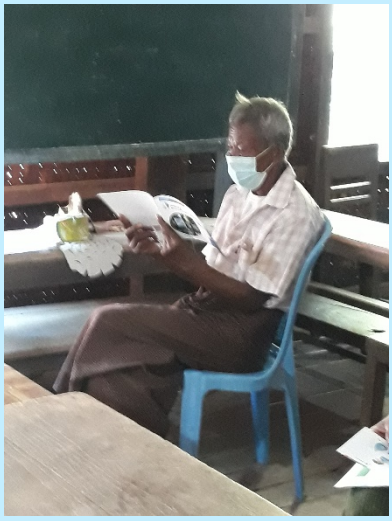
Highlight of Conversation

Villager U Khin Maung Kyi

SMPC is doing school classroom as CSR activity in our village which still under construction, I would like to suggest using a good quality of roof because the classroom will be under a tamarind tree and tamarind leave will make roof to damage easily. The underground water tank for fire emergency (which SMPC supported in year 2018) has some roof issue and water leaking issue.

SMPC

Well noted and will report to SMPC management.



Village Head U Win Maung

I would like to request for village school fence (about 1,000 feet length) when you consider for CSR activity.

SMPC

SMPC will come down to discuss with village head and village administration team for CSR activity. The activities are based on the budget and village required. The point will be reported to SMPC management and will discuss with the village head and village administration team at CSR time.

Villager Daw Tin New Oo

I would like to request for job opportunities, SMPC to consider in priority to employ our villagers.

SMPC

For job opportunity, our community (13 villages) is the priority for consideration of employment.

Date	– 3 December 2020
Time	– 12:10 - 13:00
Venue	– Village School, Tha Pyay Thar Village
Household	– 249
Population	– 1188
Attendance	– 13
Presented by	– Hein Min Oo @ Koyin
Presenting Material	– Book in Local language (41 Pages)

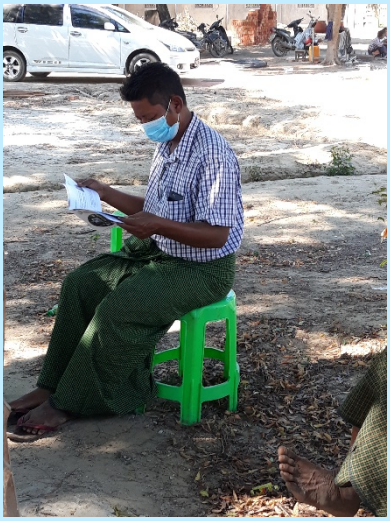
Highlight of Conversation

Villager U Kyaw Htun (Fisherman)

I would like to request SMPC to support 22hp engine for motor board which we using to fight against illegal fishing.

SMPC

Well noted and will report to SMPC management.



Villager U Khin Maung Soe

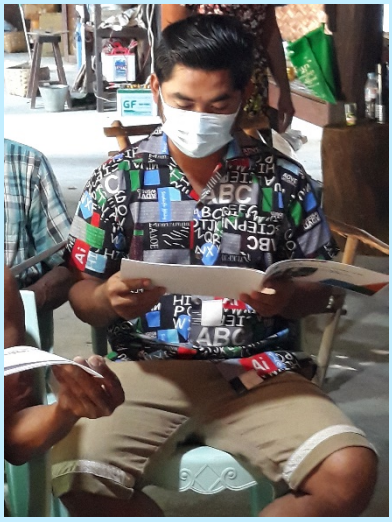
I would suggest SMPC to hang warning sign on the barge so that villagers/fisherman will not approach the barge to tie the board at barge.

SMPC

Well noted and will report to SMPC management.

Date	– 3 December 2020
Time	– 14:40 - 15:30
Venue	– Village Head's Home, Sate Nyan Village
Household	– 162
Population	– 656
Attendance	– 10
Presented by	– Hein Min Oo @ Koyin
Presenting Material	– Book in Local language (41 Pages)

Highlight of Conversation



Villager U Soe Ko Ko

I would like to request for job opportunities, SMPC to consider in priority to employ our villagers. How can we submit our CV form? Can we submit CV form via SMPC community relation team?

SMPC

For job opportunity, our community (13 villages) is the priority for consideration of employment. You can apply your CV via Myingyan Labor Office and directly submit to SMPC HR department. To submit via SMPC community relation team, yes, we can help you by taking the CV from you and submit to SMPC HR department.

Village head U Chit Win

I would like to request SMPC to continue the cleaned chemical contribution as it is much useful for us. We do not use for drinking water storage as well as food storage too. I sent two request letters via SMPC community relation team regarded to container contribution.

I would request to upgrade village entrance road when SMPC consider for CSR investment.

SMPC

That two letters have been reported to SMPC management and the management allow me to explain here that SMPC will no longer contribute the container as per SMPC management decision. I will report this to SMPC management again.

For village entrance road, this point will be reported to SMPC management.

Date	– 3 December 2020
Time	– 15:40 - 16:20
Venue	– Village School, Ka lane Chone Village
Household	– 149
Population	– 629
Attendance	– 10
Presented by	– Hein Min Oo @ Koyin
Presenting Material	– Book in Local language (41 Pages)

No Questions.

Date	– 2 December 2020
Time	– 15:30 - 16:30
Venue	– Village Administrator's Home, Kyun U Village
Household	– 97
Population	– 457
Attendance	– 10
Presented by	– Hein Min Oo @ Koyin
Presenting Material	– Book in Local language (41 Pages)

Highlight of Conversation

Villager U Min Thein Naing

I would like to request SMPC for Water Treatment Plant deep cleaning and refill the material. We received replacement filters for this year (4 set – 3month per 1 set).

SMPC

Well noted and will be reported to SMPC management.

Village administrator U Kyaw Toe

I would like to request SMPC to continue the cleaned chemical drums contribution as it is much useful for us.

SMPC

SMPC will no longer contribute the container as per SMPC management decision. I will report this to SMPC management again.

APPENDIX 8
ANNUAL PUBLIC STAKEHOLDER ENGAGEMENT PRESENTATION DECEMBER 2020

Sembcorp Myingyan Power Company Limited

Annual Public Stakeholders Engagement
December 2020

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Objective

The purpose of today is to:

- Introduction
- Operational Phase
- Environmental and Social Updates
- Corporate Social Responsibilities Updates
- Grievance Committee

- You can ask questions/ raise your concerns during this meeting or provide feedback at the end of the meeting

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Who are we? (1/2)

- Sembcorp Industries is a leading renewable, energy and water group with operations across 14 Countries in 4 continents worldwide.

1. Myanmar	2. Panama	3. Brazil	4. Chile	5. UAE
6. Oman	7. China	8. India	9. United Kingdom	10. Bangladesh
11. Philippines	12. Vietnam	13. Singapore	14. Indonesia	

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Who are we? (2/2)

- With facilities of over 12,600 megawatts of gross power capacity and over 8.6 million cubic meters of water per day in operation and under development, Sembcorp is a trusted provider of essential energy and water solutions to both industrial and municipal customers
- Myingyan IPP is the first international project financed Independent Power Producer (IPP) Project in Myanmar and is 100% owned by Sembcorp Myingyan Power Company Limited

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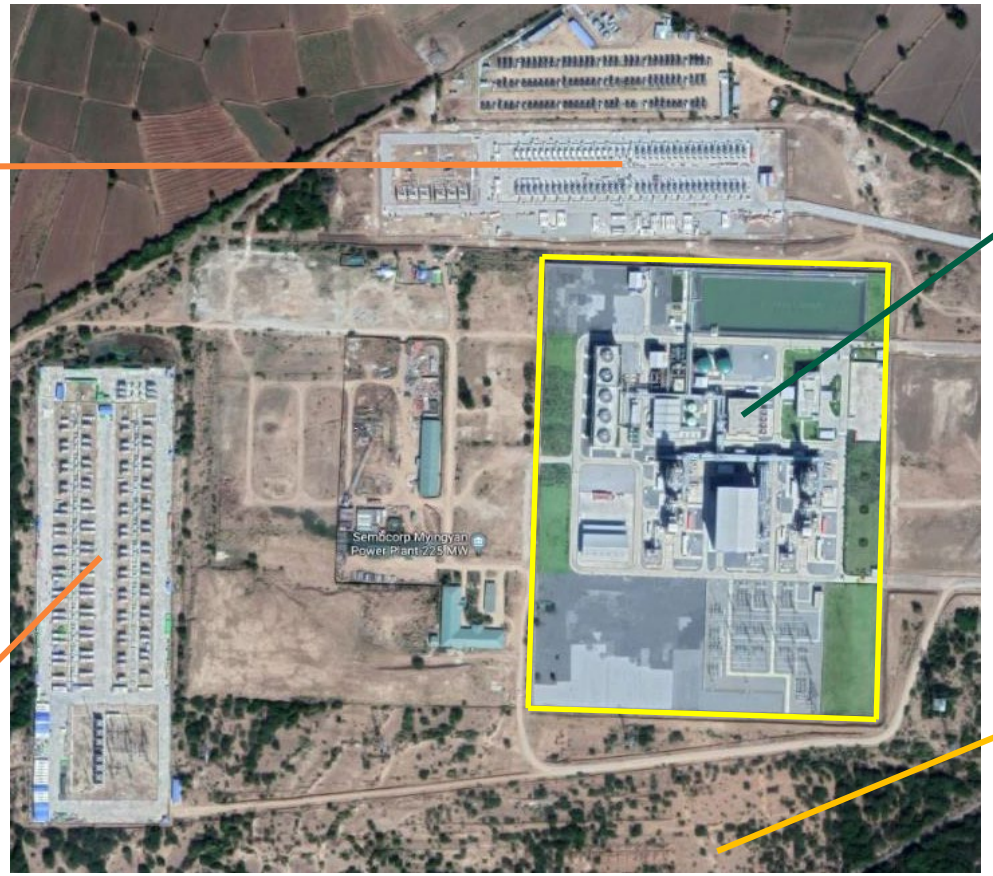
Plant Location

- V Power 90 MW

- V Power 133 MW



- **Sembcorp Myingyan IPP**

- No.1 Steel Mill, Myingyan

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Plant Overview

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Project Facilities Overview

230 kV Transmission Tower

225MW CCGT

River Barge

6.6kV Overhead Transmission Line

Water Pipeline (Intake & Discharge)

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Our role in Myanmar (1/2)

- Sembcorp Myingyan Power Company Limited has been selected by the Ministry of Electricity and Energy (MOEE) in 2015 to develop a 225MW Combined Cycle Gas Turbine (CCGT) power plant in Myingyan Township.
- The plant started Phase 1 commercial operation started on 7 May 2018 and full commercial operations started on 2 Oct 2018.

- The report on environment and social impacts has been undertaken by experts to understand potential environmental and social impacts and opportunities in accordance with national and international standards. Our ESIA has been approved by the Ministry of Natural Resources and Environmental Conservation (MONREC).

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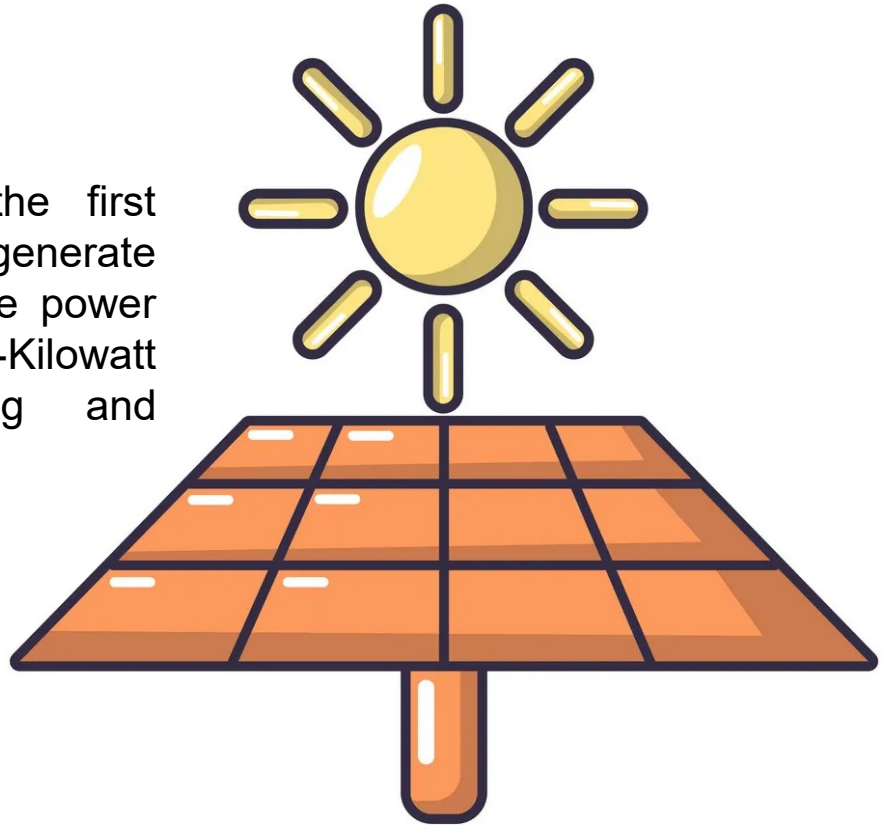
Our role in Myanmar (2/2)

- Sembcorp Myingyan IPP is a landmark Power Plant in Myanmar. Myingyan 225 MW Combine Cycle Power Plant is one of the largest and the most efficient Power Plant.

- Sembcorp Myingyan IPP is the first Power Plant in Myanmar which generate enough renewable energy to the power by Solar Panel more than 100-Kilowatt Peak entire Admin Building and Warehouse.



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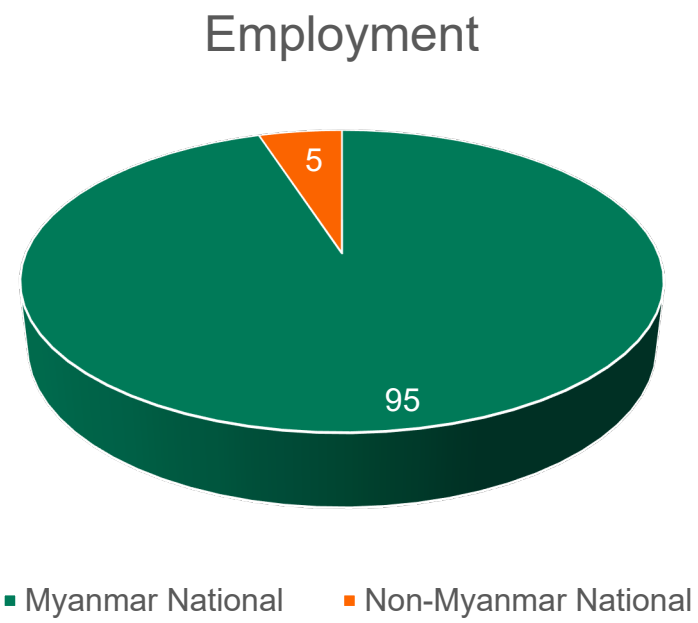
Job Opportunity (1/2)

- As of today, Sembcorp Myingyan Power Company

95 % Staffed by Myanmar National.



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Job Opportunity (2/2)

- Currently in the Operational Phase, the company will continue to uplift the livelihood of the community with training and community investments.

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Environmental Management Plan

A. Air Quality Management

B. Noise Monitoring

C. Waste Management

D. Wastewater Management

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Environmental Management Plan

(A) Air Quality Management (1/3)

The emissions by Myingyan project will be minimal. In addition, we have employed mechanisms to reduce and monitor our own emissions to ensure it is in line with the World Bank's existing requirements.

- Two air emission stacks – main and by-pass stacks of 40m and 30m height respectively were constructed to disperse air pollutants such that the ground level concentration of air pollutants do not exceed the relevant standards in the IFC EHS Guidelines for Thermal Power Plants (2008)
- Built-in dry low NOx burners reduce NOx emission at stack to below 25ppm at all times (Pic 1)
- Continuous Emission Monitoring System (CEMS) installed on BOTH GT Bypass Stack & Boiler Outlet Stack (Pic 2)
- Ambient air quality around the Plant area monitored as per the Environment Monitoring Programme formulated for the Plant (Pic 3)

Picture 1

Picture 2

Picture 3

© Sembcorp Industries 2020

Environmental Management Plan

(A) Air Quality Management (2/3)

Parameters	Values observed (third party monitoring results on Jun)	Myanmar Guideline Value	World Bank Guidelines Value	Unit	Rating
PM_{10}	**4.37**	**-**	**50**	**µg/m³**	
$PM_{2.5}$	**2.09**	**-**	**25**	**µg/m³**	
***CO**	**0.0**	**-**	**9**	**ppm**	
CO_2	**424.49**	**-**	**5000**	**ppm**	
SO_2	**0.01**	**20**	**20**	**µg/m³**	
NO_2	**3.76**	**200**	**200**	**ug/m³**	
Noise Industrial, commercial	**49.90**	**70**	**70**	**dBA**	
Wastewater Discharge (pH)	**8.04**	**6-9**	**6-9**	**S.U.[a]**	
Total Suspended Solid	**24**	**50**	**50**	mg/l	
Oil and Grease	**< 3.1**	**10**	**10**	mg/l	
Wastewater Temperature Increase	**0.4**	**< 3**	**-**	℃	

Compliance

Non-compliance

***National Environmental Quality emission guidelines 2015*

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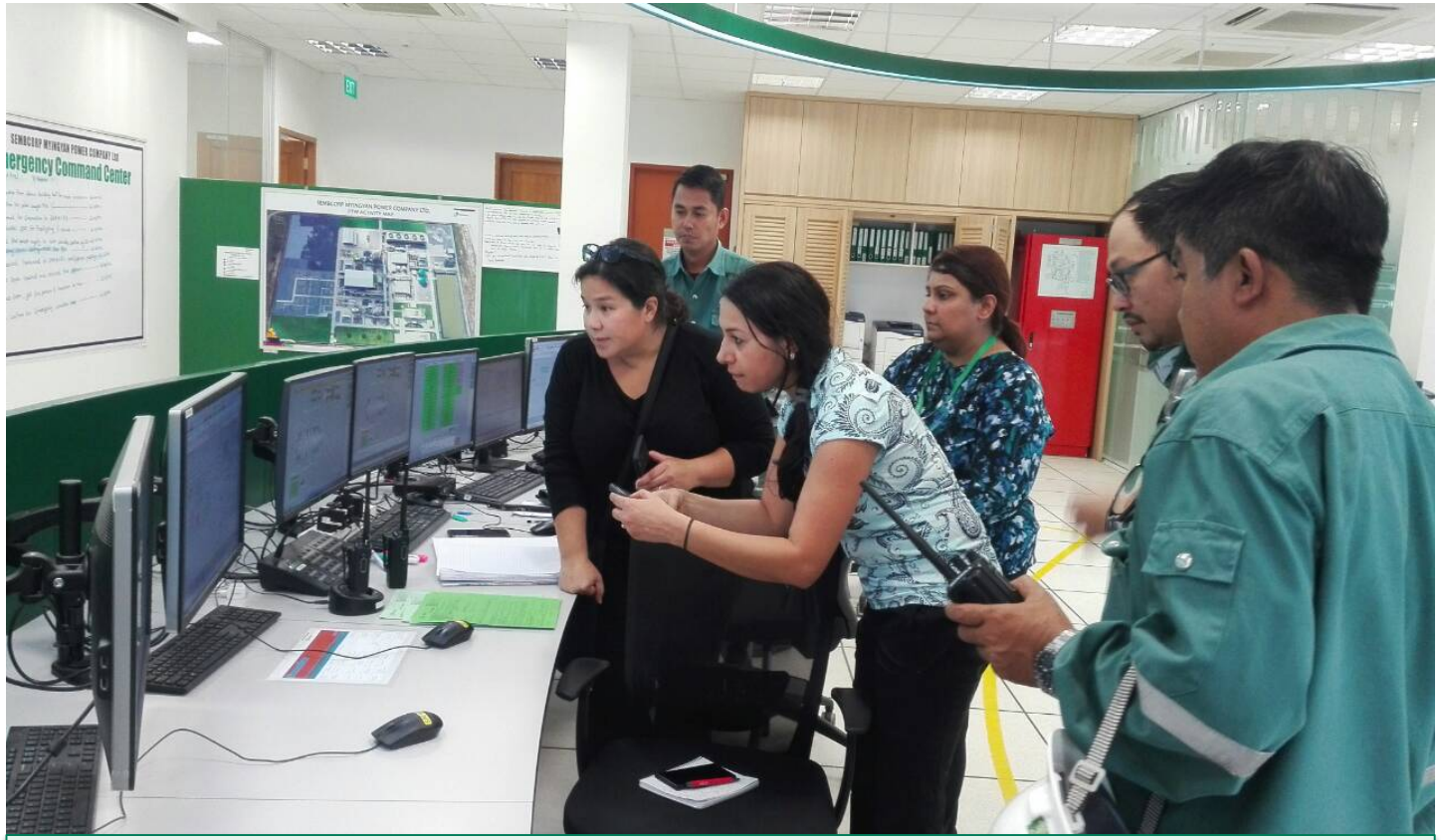
Environmental Management Plan

(A) Air Quality Management (3/3)



CEMS monitoring air quality parameter was inspected by World Bank Team during the annual audit

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Environmental Management Plan

(B) Regular Noise Monitoring (external & internal) (1/2)

- Noise quality around the Plant area monitored as per the Environment Monitoring Programme formulated for the Plant (Pic 1)
- Noise inside the plant area also monitored by HSSE Team (Pic 2 & 3)

Picture 1

Picture 2

Picture 3

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Environmental Management Plan

(B) Regular Noise Monitoring (external & internal) (2/2)

- Audio Metric Test by Ear, Nose and Throat Technician

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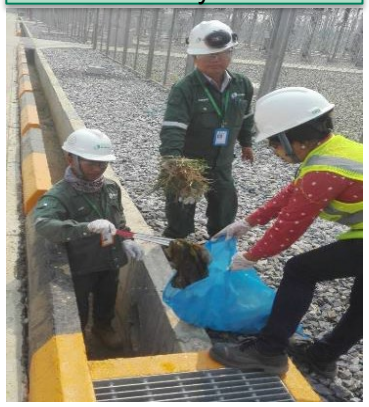
Environmental Management Plan

(C) Waste Management (1/2)

- During the Operation and Maintenance Phase, domestic waste generated by the operations workforce (including paper, plastics and putrescible wastes) as well as waste materials such as steel, excess cables etc. associated with routine and non-routine maintenance will be stored and disposed by an Authorized Collector.
- Both Hazardous and Non-hazardous waste will be collected & disposed by a Myingyan City Development Committee (MCDC)-approved contractor.
- Hazardous waste (e.g. used oil) are recycled and refined. Medical waste is incinerated in the Myingyan Hospital compound.

Weekly housekeeping carried by team



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Environmental Management Plan

(C) Waste Management (2/2)

**Sludge are disposed to the designated area which outside of Myingyan, beside of Myingyan – Nyaung U road (near by the OK hotel).

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Environmental Management Plan

(D) Wastewater Management (1/2)

- Liquid effluents arising from operations will be treated to the applicable IFC guideline prior to discharge. The sewage from the entire plant area will be collected and treated in a Sewage Treatment Plant (STP). No untreated sewage will be directly discharged into the Ayeyarwady River, or disposed of on land, for the duration of the project life cycle.
- Regular monitoring of wastewater quality will be conducted by internal & external parties. (Pic 1 & 2)
- Online sensors installed at Central Monitoring Basin for PH, Turbidity & Chlorine. (Pic 3)

Picture 1

Picture 2

Picture 3

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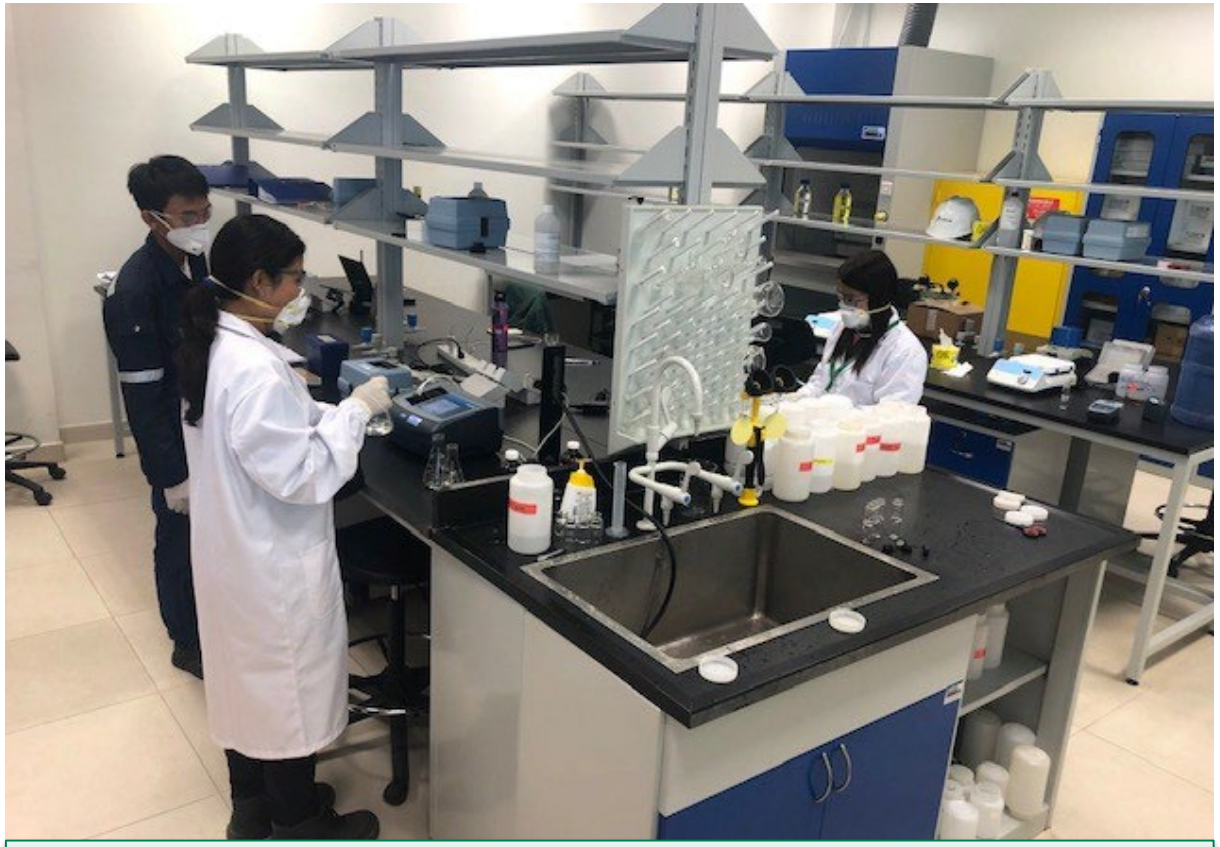
Environmental Management Plan

(D) Wastewater Management (2/2)

- Wastewater collected from canteen kitchens, including that from basins, sinks and floor drains, will be discharged into sanitary sewers via grease traps. The sanitary sewer will then be treated prior to discharge or reuse as greywater.
- Regular monitoring of wastewater quality will be conducted by internal team at lab and discharged points. (Pic 1&2)

Picture 1



Picture 2

© Sembcorp Industries 2020

Emergency Response Plan

Designated Emergency Assembly Area

Emergency Assembly Area (1)

Emergency Assembly Area (2)

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Emergency Response Plan

Preparedness for Fire Emergency

- Under the instruction of Myingyan Fire Service Department, Reserve Fire Fighting Team was formed to deal with a Water 5000 Liter and Foam 1500 Liter Capacity Fire Truck and Fire Safety Manager was trained by Government Fire Department.

Emergency Response exercise for in case of fire at Cooling tower

Fire fighting team performed fire truck inspection on weekly basic

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Emergency Response Plan

Emergency Response Drill conducted regularly

Emergency Response exercise for in case of Chemical spillage

Emergency Response exercise for in case of fire at Water Treatment Plant – Fire truck mobilization

Emergency Response exercise for in case of fire at Water Treatment Plant – PERT Team mobilization

Debriefing of emergency drill exercise with PERT Team members

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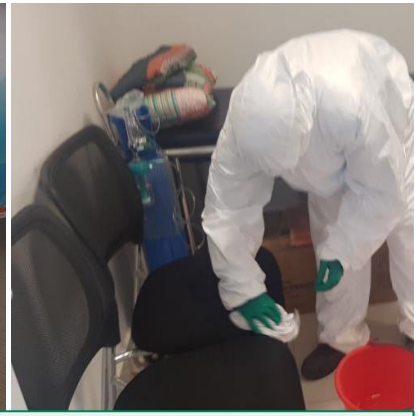
Emergency Response Plan

BCP information (1/3)

Ministry of Health, Myingyan authority inspected Covid19 preventive measure at plant. No issue was recommended.



The management team have prepared PPE and other facility for workers who involved in disinfection work.

According to Plant BCP for COVID-9, all workers are checked the body temperature at gate.

According to Plant BCP for COVID-19, all delivery drivers are checked and wear full PPE.

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Emergency Response Plan

BCP information (2/3)

- All staff disinfect hands using the provided disinfectant at the CCR entrance and permit to work counter entrance before entering the control room and permit to work counter.

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Emergency Response Plan

BCP information (3/3)

- All staff follow social distancing at all time(e.g. Central Control Room & Permit To Work Counter).

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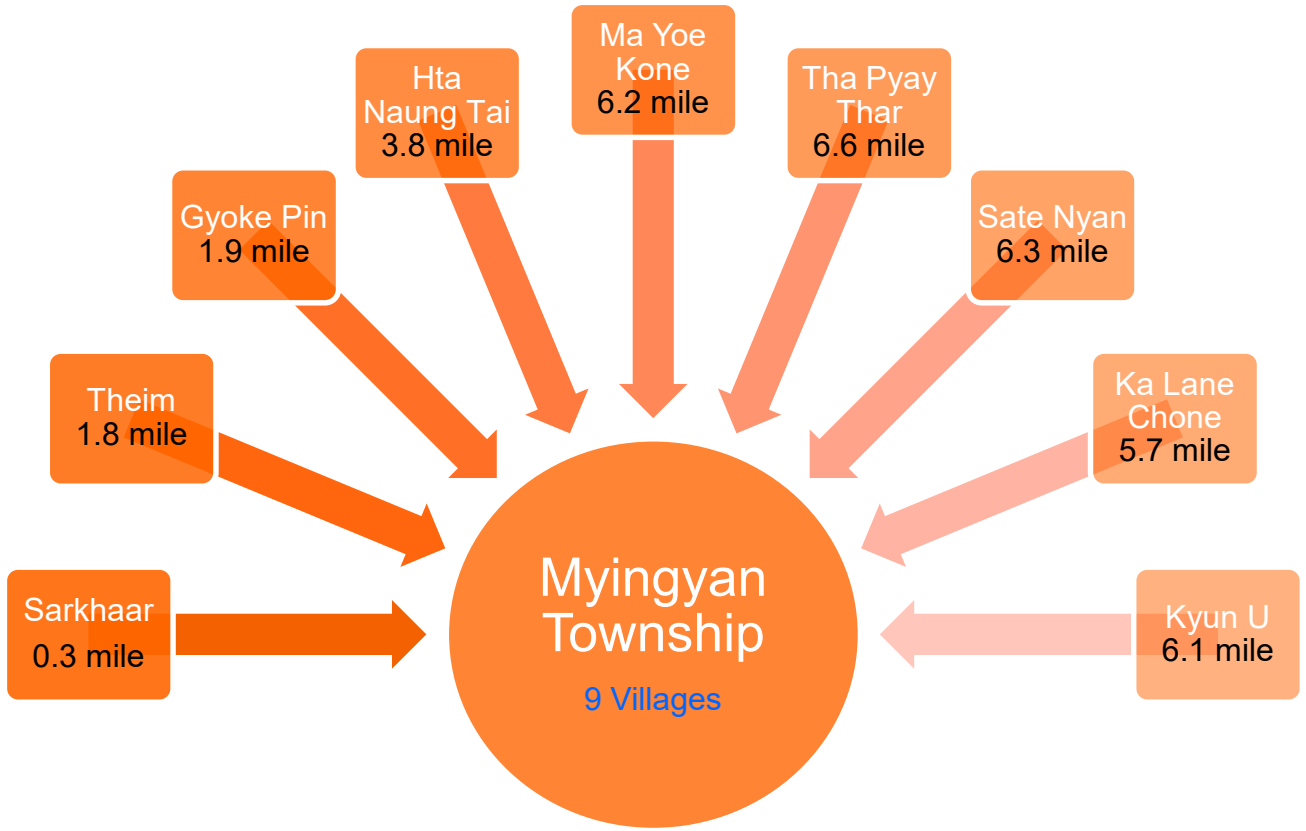
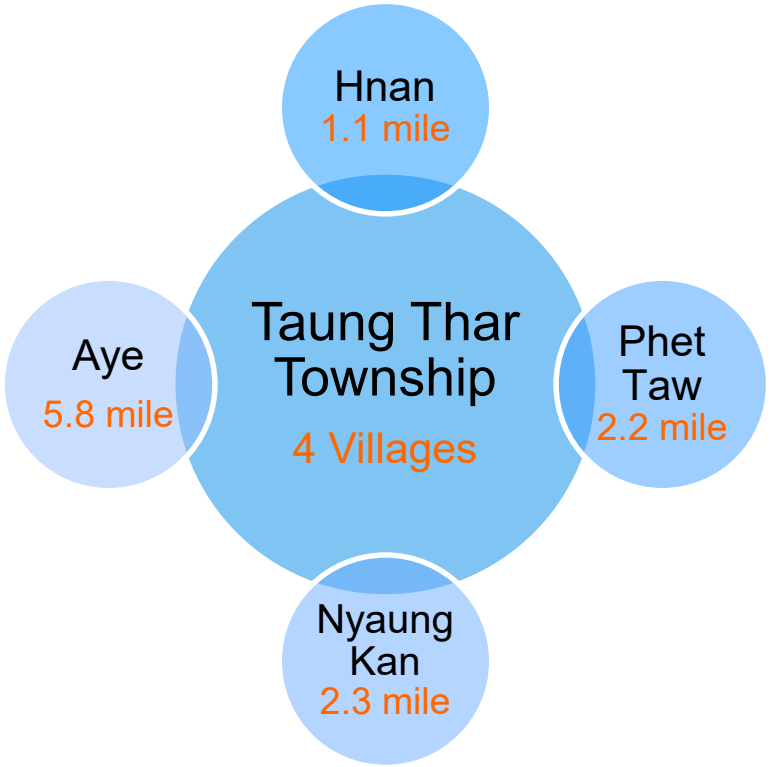
Our Community – 13 Villages





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Corporate Social Responsibility

- Educational Support
- Community Health Awareness and Health Care Facilities
- Enhance Access to Ground Water
- Improve Community Infrastructure
- Social Welfare and Youth Development
- Only based on genuine needs (e.g. flood relief, poor existing infrastructure)

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Corporate Social Responsibility

Educational Support

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Corporate Social Responsibility

Community Health Awareness and Health Care Facilities

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Corporate Social Responsibility

Enhance Access to Ground Water

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Corporate Social Responsibility

Improve Community Infrastructure

© Sembcorp Industries 2020

Corporate Social Responsibility

Social Welfare and Youth Development

© Sembcorp Industries 2020

Corporate Social Responsibility

COVID-19 Support (1/2)

STOP COVID -19

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Corporate Social Responsibility

COVID-19 Support (2/2)

Supported **30kVA** generator to Myingyan District Hospital purpose to use COVID-19 treatments as well as others medical usage in hospital

Supported **100kVA** generator to Myingyan District Hospital purpose to use COVID-19 treatments as well as others medical usage in hospital

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Corporate Social Responsibility

Ongoing Engagement (1/2)

- Public stakeholder meetings to be continued in annual basis.

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Corporate Social Responsibility

Ongoing Engagement (2/2)

- Engagement will continue throughout the entire lifecycle of the Project.

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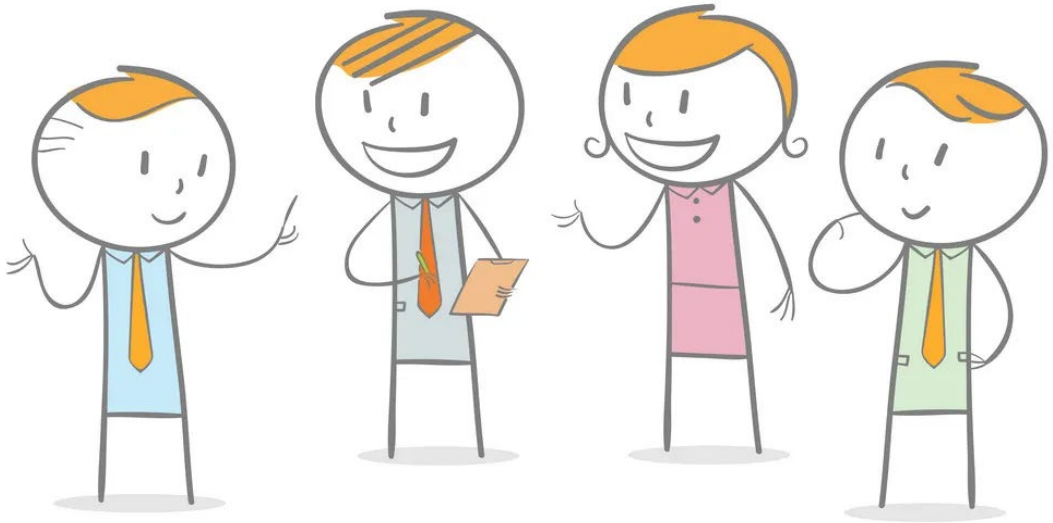
Corporate Social Responsibility

Grievance Management

A Grievance Mechanism has been established to redress claims by affected individually

- Available for anyone to report
- If you have any suggestion for improvement, issue or concerns, Sembcorp is happy to listen to them.
- Place it in suggestion boxes near your village or contact Sembcorp staff directly.
- Your village head is also part of the committee.



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Corporate Social Responsibility

Grievance Committee

1. Respective Village Head
2. U Than Htut Aung – Asst: Director (EPGE – Government)
3. U Aung Lwin Oo – Development Manager
4. Daw Naing Naing Aung – Human Resources Manager
5. U Tin Maung Thein – HSSE Manager
6. Hein Min Oo @ Koyin – CSR Executive
7. Township Officer – General Administration Department (Optional)

Village Head (13 Villages)

1.	Sarkhaar	-	U Maung Myint
2.	Hnan	-	U Hein Min Lwin
3.	Phet Taw	-	U Soe Htun
4.	Nyaung Kan	-	U Shu Maung
5.	Theim	-	U San Lwin
6.	Gyoke Pin	-	U Win Hlaing
7.	Hta Naung Tai	-	U Aye Ko
8.	Aye	-	U Myint Swe
9.	Ma Yoe Kone	-	U Win Maung
10.	Tha Pyay Thar	-	U Win Shwe
11.	Sate Nyan	-	U Chit Win
12.	Ka Lane Chone	-	U Zaw Khin
13.	Kyun U	-	U Kyaw Toe

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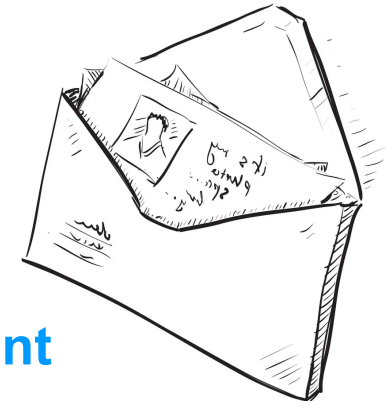
Contact Details

Comments, concerns, queries and questions are welcomed.

Sembcorp Myingyan Power Company Limited

Point of Contact	:	**Hein Min Oo @ Koyin**
Email Address	:	hein.minoo@sembcorp.com
Phone	:	+95 9 43164626
Point of Contact	:	**Thant Ko Ko Kyaw @ Ko Thant**
Email Address	:	thantkoko.kyaw@sembcorp.com
Phone	:	+95 9 798756742



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APPENDIX 9
COMMUNITY GRIEVANCE MECHANISM DATABASE, JULY 2017 – DECEMBER 2021

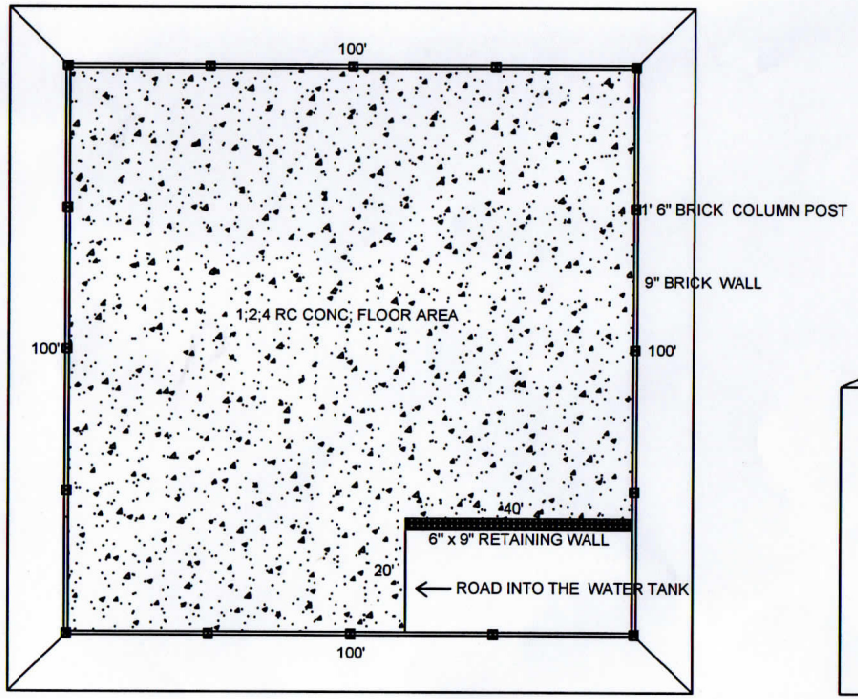
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL
ID No.	SI/ Complainant No.	Date of Grievance Recorded	Time of Grievance Recorded	Grievance Recorder	Select Occurence of incident	Explain occurrence of grievance	PAP / CP	Complainant details	Name of Complainant	Stakeholder Category	Complainant Tel No.	Address (Filled in if details are given)	Prefered Contact Method	Nature of Grievance i.e Social, Pollution, Political, Media, Legal, Land, Others	Describe Grievance	Mode of communication	Date of Grievance Occurred	Date of Acknowledgement	Mode of acknowledgement	Classification of Grievance	Estimation Time for Resolution	Brief Outline of Resolution	Actions proposed	Action Taken	Outcome	Remarks	Status Update	Mode of contact for reply to complainant	Acknowledge by	Date Closed	Third Tier CLOSED OUT Date of acknowledgement to GM	Third Tier CLOSED OUT Date of update to GM	Third Tier CLOSED OUT Closed out approval date by GM	Third Tier CLOSED OUT Other Remarks	Category of Grievance	Leter/Tele/Email/ Person/Others	Expense to solve the Grievance
1	2017MMRMM001	20170513	18:00	Hein Min Oo	One time Incident	Villager worry for water discharge to Ayawaddy River and if they can't grow plants at the land after the construction.	CP	Details Provided	-	Affected Communities	N.A.	Sate Nyan Village	-	Pollution	Villager worry for water discharge to Ayawaddy River and if they can't grow plants at the land after the construction.	Meetings	20170513	-	Meeting	Tier 1	NA	CRO to handle and talk to the person who send the letter to Grievance box	To visit Village Head (GAD) to explain	CRO Visited to GAD to find out the person who send the letter to explain him, but GAD can not find out as the letter do not mentioned name of sender. GAD recorded the case and replied to CRO that he will contact when he found the person.	GAD recorded that Sembcorp tried to explain to whom send the letter to grievance box	N.A.	Closed	Meeting	Hein Min Oo	20170523	N.A.	N.A.	N.A.	N.A.	Society Impact Grievance	Letter	MMK -
2	2017MMRMM002	20170513	18:00	Hein Min Oo	One time Incident	Villager worry for water discharge to Ayawaddy River and if they can't grow plants at the land after the construction.	CP	Details Provided	-	Affected Communities	N.A.	Sate Nyan Village	-	Pollution	Villager worry for water discharge to Ayawaddy River and if they can't grow plants at the land after the construction.	Meetings	20170513	-	Meeting	Tier 1	NA	CRO to handle and talk to the person who send the letter to Grievance box	To visit Village Head (GAD) to explain	CRO Visited to GAD to find out the person who send the letter to explain him, but GAD can not find out as the letter do not mentioned name of sender. GAD recorded the case and replied to CRO that he will contact when he found the person.	GAD recorded that Sembcorp tried to explain to whom send the letter to grievance box	N.A.	Closed	Meeting	Hein Min Oo	20170523	N.A.	N.A.	N.A.	N.A.	Society Impact Grievance	Letter	MMK -
3	2017MMRMM003	20170607	18:00	Hein Min Oo	One time Incident	Family Misunderstanding of land issues. Land Compensation by EPGE has been carried out. The old lady who reported the grievance complained on EPC touching her land. Her family members did not communicate with her that the land has been compensated by EPGE and now the land title has been under EPGE which allows Company to legally touch the land	PAP	Details Provided	Daw Khin San	Affected Communities	N.A.	Aye Village	Face to Face	Land	Notice board displayed " For this land, without any nigotiation, so stop work. If want continue the work, negotiate with Daw Khin San and submit the letter from GAD"	Verbal	20170607	20170607	Meeting	Tier 1	7 working days	EPGE to handle and talk to the old lady to explain clearly. Trip to land register office and Myingyan GAD will be necessary	To visit Land register office and Myingyan GAD and have EPGE to explain	EPGE Kyaw Min Htun and CRO met with Hta Naung Tai GAD, GAD discussed by phone to villager Daw Khin San.	After GAD explain to Daw Khin san, she understand the way to solve their family problem via by Govarnment Land department and removed the notic board at the same day.	N.A.	Closed	Meeting	Hein Min Oo	20170607	N.A.	N.A.	N.A.	N.A.	Others	Others	MMK -
4	2017MMRMM004	20170615	18:00	Hein Min Oo	One time Incident	The letter sender (Daw Gyan Tin, Sarkhaar Village) want the land compensation as the cable (tower 5 to 6) is crossing above her firm. Another issue is the worker (JEM) chopped her tree and she wants compensate for it.	CP	Details Provided	Daw Gyan Tin	Affected Communities	N.A.	Sar Khaar Village	Face to Face	Land	The letter sender (Daw Gyan Tin, Sarkhaar Village) want the land compensation as the cable (tower 5 to 6) is crossing above her firm. One of her wild tree has chopped (as the cable array can be affected by the tree) and she want the compensation for it.	Meetings	20170627	20170627	Meeting	Tier 1	NA	EPGE need to handle and Sembcorp will not intervene that case. Closed case for Sembcorp	To visit CRO, EPGE, JEM to GAD office to negotiate with the landload	CRO, Kyaw Min Tun (EPGE), Aung Myo Kyaw JEM go down to Sarkhaar village head and see Daw Gyan Tin (LL) on 20170627). EPGE said he will send the letter of this issue to Government to take necessary action and will reply when Government instruct him.	JEM has compensated MMK 100,000 for her tree. She has no issue on tree	-	Closed	Meeting	Hein Min Oo	20171115	N.A.	N.A.	N.A.	N.A.	Others	Letter	MMK -
5	2017MMRMM005	20170616	18:00	Hein Min Oo	One time Incident	The letter sender (Ko Win Kyaing, Phat Taw Village) wants to be an employee of Sembcomp	CP	Details Provided	Ko Win Kyaing	Affected Communities	09 445217920	Phat Taw Village	By telephone	Others	The letter sender (Ko Win Kyaing, Phet Taw Village) applied for security position at Sembcrp and he requested by the the letter to employ him.	Verbal	20170615	-	Verbal	Tier 1	NA	To call Villager and explain our employement procedure	To call Villager and explain our employement procedure	CRO call by phone (Number provide our staff Zin Mar who from Phet Taw village), but the villager do not pick up the call and switch off. (20170627 not pickup, 20170701 switch off, 20170703 Switch off, 20170706 switch off). CRO talked with Village Head via telephone (13/07/2017) and explained about the Sembcorp Employment procedure that if someone wants to apply for a position, he/she need to summit the CV via Labour office.	Village Head understand and accepted Sembcorp employment procedure. He said he will explain to villager if there anyone wants to apply for the job at Sembcorp.		Closed	Telephone	Hein Min Oo	20170713	N.A.	N.A.	N.A.	N.A.	Others	Letter	MMK -
6	2017MMRMM006	20170619	18:00	Hein Min Oo	One time Incident	The letter sender (Ko Nay Lin, Hnan Village) wants Sembcomp to clean his firm and expend the water pound.	PAP	Details Provided	Ko Nay Lin	Affected Communities	09 258391156	Hnan Village	Face to Face	Land	Due to tower construction and irrection, his land need to leaveling, cleaning and water pound expending. So, Ko Nay Lin wants Sembcorp to make as soon as possible.	Meetings	20170619	20170621	Meeting	Tier 1	NA	Sembcorp (SDCI) fulfill all the fact he needed. leveling, expending the water pound and strip	To see the villager and fulfill the things he need (if Sembcomp can do)	Sembcorp (SDCI) fulfill all the fact he needed. leveling, expending the water pound and strip (29-30 June 2017 2 days)	Villager happy and his land is ready to plant. The water pound is expended.	N.A.	Closed	Meeting	Hein Min Oo	20170630	N.A.	N.A.	N.A.	N.A.	Others	Letter	MMK -
7	2017MMRMM007	20170731	17:00	Hein Min Oo	One time Incident	The letter sender (Ko kyaw Min Oo JEM Staff)suggested Project Management to increase enforcement on traffic related safety such Car & Motorbike movement especially during raining season and safety behavior of individual.	CP	Details Provided	Ko Kyaw Min Oo	Contractors	-	JEM	-	Safety	The letter say that "I wish Sembcorp Myingyan Power Company and Contractors more success. I wanted to say thank you Project Management and safety team who really taking care of workers safety and protect them to out of danger. However some employees need to improve on individual safety behaviour especially driving cars and riding motorbike in our site during raining. So I would like to suggest Project Managing to increase enforcement on unsafe practice personnel. Daily toolbox meeting highlighting about safe work practices however I have seen some worker still not follow site safety rule and regulation. But I understand that the safety team can't be taking care each individual safety. So if we followed project safety rule and regulation no one get hurt & our family will be happy. I pray for the Project Company together with safety team to complete the project safely. "	Mediator	20170731	20170731	Mediator	Tier 1	NA	HSE department - Mr.Tin Aung Swe will take the action as below: - highlighted & discussed his feedback & suggestion PMT morning meeting & EPCs Progress meeting (02-08-2017) - We (PMT & EPCs) decided to conduct small campaign to promote existing traffic safety management and Behavioral base safety intervention. - MFCM slide content will be amended accordingly and - Last but not least he will be awarded for valuable feedback as recognition	- We (PMT & EPCs) decided to conduct small campaign to promote existing traffic safety management and Behavioral base safety intervention.	- We (PMT & EPCs) made small campaign to promote existing traffic safety management and Behavioral base safety intervention.	-promoted existing traffic safety management and Behavioral base safety intervention.	N.A.	Closed	Meeting	Hein Min Oo	20170801	N.A.	N.A.	N.A.	N.A.	Others	Letter	MMK -
8	2017MMRMM008	20170801	18:00	Hein Min Oo	One time Incident	Land owner U Phyu wants his firm land leveling and repair the boundary	PAP	Details Provided	U Phyu	Affected Communities	09 257969925 CO	Hnan Village	Mobile	Land	Land owner U Phyu wants his firm land leveling and repair the boundary	Meetings	20170731	20170731	On call	Tier 1	NA	To trim the firming ground and repair the boundaries according to the land owner's desire	Sembcorp asked CPP (Sub-contractor) to fulfill the land owner's wish as CPP is selected to do the piping process) the river water intake/output pipe are buried in his firm.	CPP (Sub-contractor of Ssembcorp) trimmed the firming ground and repaired the boundaries according to the land owner's desire	Firm owner U Phyu happy and his land is ready to plant and cleaned.	N.A.	Closed	Meeting	Hein Min Oo	20170801	N.A.	N.A.	N.A.	N.A.	Others	Person	MMK -
9	2017MMRMM009	20170810	18:00	Hein Min Oo	One time Incident	Land owner U Thein Htun called CRO on 09-08-2017 and asked support for his firm land leveling.	PAP	Details Provided	U Thein Htun	Affected Communities	09 971930079	Aye Village	Mobile	Land	Land owner U Thein Htun wants his firm land leveling.	Meetings	20170809	20170809	On call	Tier 1	NA	To trim the firming ground and repair the boundaries according to the land owner's desire	Sembcorp asked CPP (Sub-contractor) to fulfill the land owner's wish as CPP is selected to do the piping process) the river water intake/output pipe are buried in his firm.	CPP (Sub-contractor of Ssembcorp) trimmed the firming ground and repaired the boundaries according to the land owner's desire	Firm owner U Thein Htun happy and his land is ready to plant and cleaned.	N.A.	Closed	Meeting	Hein Min Oo	20170810	N.A.	N.A.	N.A.	N.A.	Others	Person	MMK -
10	2017MMRMM010	20170816	18:00	Hein Min Oo	One time Incident	Land owner U Aung Naing Min requested support for his firm land leveling.	PAP	Details Provided	U Aung Naing Min	Affected Communities	-	Hta Naung Tai	Mobile	Land	Land owner U Aung Naing Min wants his firm land leveling.	Meetings	20170815	20170815	On call	Tier 1	NA	To trim the firming ground and repair the boundaries according to the land owner's desire	Sembcorp asked CPP (Sub-contractor) to fulfill the land owner's wish as CPP is selected to do the piping process) the river water intake/output pipe are buried in his firm.	CPP (Sub-contractor of Ssembcorp) trimmed the firming ground and repaired the boundaries according to the land owner's desire	Firm owner U Aung naing Min happy and his land is ready to plant and cleaned.	N.A.	Closed	Meeting	Hein Min Oo	20170816	N.A.	N.A.	N.A.	N.A.	Others	Person	MMK -
11	2017MMRMM011	20170816	18:00	Hein Min Oo	One time Incident	Land owner U Aung Shwe requested support for his firm land leveling.	PAP	Details Provided	U Aung Shwe	Affected Communities	-	Hta Naung Tai	Mobile	Land	Land owner U Aung Shwe wants his firm land leveling.	Meetings	20170815	20170815	On call	Tier 1	NA	To trim the firming ground and repair the boundaries according to the land owner's desire	Sembcorp asked CPP (Sub-contractor) to fulfill the land owner's wish as CPP is selected to do the piping process) the river water intake/output pipe are buried in his firm.	CPP (Sub-contractor of Ssembcorp) trimmed the firming ground and repaired the boundaries according to the land owner's desire	Firm owner U Aung Shwe happy and his land is ready to plant and cleaned.	N.A.	Closed	Meeting	Hein Min Oo	20170816	N.A.	N.A.	N.A.	N.A.	Others	Person	MMK -
12	2017MMRMM012	20170816	18:00	Hein Min Oo	One time Incident	Myingyan GAD Officer given out the letter and pass to CRO via Sarkhaar village head and describe that, they found Sembcorp's sub-contractor's are using Sarkhaar road with over weight heavy truck for transportation and remind to Sembcorp to control the sub-contractors not to use for transportation with heavy truck.	CP	Details Provided	U Nyi Nyi Aung - Myingyan GAD Officer	Affected Communities	-	Myingyan GAD Office	NA	Others	Myingyan GAD Officer given out the letter and pass to CRO via Sarkhaar village head and describe that, they found Sembcorp's sub-contractor's are using Sarkhaar road with over weight heavy truck for transportation and remind to Sembcorp to control the sub-contractors not to use for transportation with heavy truck.	Meetings	20170814	20170815	Meeting	Tier 1	NA	PCo issued written final werning letter to EPCs stated only use designated route for material transportation. CRO met with Myingyan GAD Officer, explained and submitted ESMP (Traffice Management plan).	PCo issued written final werning letter stated only use designated route for material transportation. CRO met with Myingyan GAD Officer, explained and submitted ESMP (Traffice Management plan).	PCo issued written final werning letter stated only use designated route for material transportation. CRO met with Myingyan GAD Officer, explained and submitted ESMP (Traffice Management plan).	GAD officer accepted on Sembcorp's ESMP (Traffice Management Plan).	N.A.	Closed	Meeting	Hein Min Oo	20170816	N.A.	N.A.	N.A.	N.A.	Others	Letter	MMK -
13	2017MMRMM013	20170817	9:19	Hein Min Oo	One time Incident	Received email from Chan Thar (Engineer, SDCI) and decribed that "Land owner U Win Maung at zone-7, P-321(DT), he don't want to accept our stay footing & stay wire installation. So he come to site and barracked to install stay footing and wire of 4 nos. Please help to settle. "	PAP	Details Provided	U Win Maung	Affected Communities	-	Aye Village	Face to Face	Land	Land owenr don't wants to accept 4 stay wire in his land	Meetings	20170817	20170817	Meeting	Tier 1	NA	Met with U Win Maung to for negotiation on - 17-08-2017, 24-08-2017, 30-08-2017, 05-09-2017, 06-08-2017 Participated in descussion by Land Owner, U Than Htun Aung (EPGE), ALO, CRO, Tint Khaing (MTKK).	Met with U Win Maung to for negotiation on - 17-08-2017, 24-08-2017, 30-08-2017, 05-09-2017, 06-08-2017 Participated in descussion by Land Owner, U Than Htun Aung (EPGE), ALO, CRO, Tint Khaing (MTKK).	Met with U Win Maung to for negotiation on - 17-08-2017, 24-08-2017, 30-08-2017, 05-09-2017, 06-08-2017 Participated in descussion by Land Owner, U Than Htun Aung (EPGE), ALO, CRO, Tint Khaing (MTKK).	Land owner agreed with 4 pole stay design and compnsation MMK100,000 (settled contractor MTKK who install 6.6kV transmission line). The compensation will be made after 4 stay design installation. Compensation done on 20171121	N.A.	Closed	Meeting	Hein Min Oo	20170806	N.A.	N.A.	N.A.	N.A.	Others	Email	MMK -
14	2017MMRMM014	20171030	12:10	Hein Min Oo	One time Incident	Sub contractor worker (JEM) write a letter via Plant Office Grievance Box and the letter means as:: To – Gents and Lady from Company I wish may you have happiness in this Thidinguyt time. Thanks for giving us knowledge, money, safety and chance to enjoy the Thidingyut Festival with our family. I am very proud to see the international standard project is leading by Myanmar professional and skill personnel. And I fees satisfy of management on Sub-contractors and workers from various place/ country. I would like to thanks all personnel who created incident free environment until this stage We followed to your instruction to work safely and I would request, please continue your patiently guide, explain and teaching as before. To – U Tin Maung Thein (SDCI HSSE Manager), I would like to feedback about workers who doing hot-work (welding) by using Argon Gas. Sometime we found that welders are forgotten to close the cylinder outlet valve. I think it can be dangerous if leaking in the air. As per U Tin Maung Thein explanation to us, plant's equipment are under testing (commissioning) and it may have some malfunctioning. Please allow me to submit this suggestion letter to get your attention to avoid any injury. Regards, Min Zaw Htoo JEM General Worker Piping No.142	CP	Details Provided	Min Zaw Htoo JEM General Worker	Contractors	-	JEM Company	NA	Others	As attached / Comment box	NA	20171005	NA	NA	Tier 1	NA	To return all unuse bottle to store To explain the letter sender and all worker by briefing about the argon gas usage	To return all unuse bottle to store To explain the letter sender and all worker by briefing about the argon gas usage	Returned to store all unused bottle. Explained to the letter sender and all worker by briefing about the argon gas usage. Rewarded to the letter sender for sending suggestion letter. Action tacken lead by U Tin Aung Swe HSSE Manager	Worker safety awareness increased	N.A.	Closed	Meeting	Hein Min Oo	20171101	N.A.	N.A.	N.A.	N.A.	Others	Telephone	MMK -
15	2017MMRMM015	20171123	16:53	Hein Min Oo	One time Incident	Land Owner U Mya Thein wants some compensate for his plum trees (4 plum trees are needed to be trim) as it is very close to 6.6 kv string.	PAP	Details Provided	U Myint Thein	Affected Communities	-	Hta Naung Tai	Face to Face	Others	Land Owner U Mya Thein wants some compensate for his plum trees (4 plum trees are needed to be trim) as it is very close to 6.6 kv string.	Meetings	20171109	20171109	Meeting	Tier 1	NA	To negotiate with U Mya Thein for compensation	Need to negotiate with U Mya Thein for compensation. Negotiation leaded by EPGE	Than Htut Aung (EPGE), Chan Tha (SDCI) and CRO went down to the village and negotiate with Land Owner for compensation. Land owner U Myint Thein demend two lakh for his 4 trees cutting. The compensation done on 21-11-2017.	U Myint Thein (land owner) agreed and accepted the compensat money MMK200000. (Settled by Contractor)	N.A.	Closed	Meeting	Hein Min Oo	20171121	N.A.	N.A.	N.A.	N.A.	Others	Telephone	MMK -
16	2017MMRMM016	20171128	11:00	Hein Min Oo	One time Incident	Land owner U Phyu send a letter and it's was written that "To Sembcorp Subject: Electric poles installation Regarding to above mentioned subject, I was knew that only three electric pole will be installed in my land and received MMK30,000 and 3 packs of fertilizer bags for three electric pole. But now there are six electric pole was installed in my land and I want MMK30,000 and 3 more fertilizer bags for the additional poles. U Phyu Hnan Village 09257969925	PAP	Details Provided	U Phyu	Affected Communities	09257969925	Hnan Village	Face to Face	Land	Land owner U Phyu wants compensation money and support fertalizer bags for additional electric poles	Meetings	20171128	20171128	Meeting	Tier 1	NA	To check with EPGE that how many electric pole we compensated and why that three poles was installed as additional	(11-12-2017) Check the elcetric poles on ground with Than Htut Aung EPGE. Founded that total 6 poles was installed in U Phyu' farm. As per EPGE and UHNH data, U Phyu received MMK30,000 and 4 fertilizer bags. Need to pay MMK30,000 and 2 fertilizer bags more. MMK30,000 is ready and waiting for Fertilizer bags.	Founded that U Phyu's request is correct. Sembcorp provide MMK30,000 & 2 Fertalizer Bags	Land owner satisfied	N.A.	Closed	Meeting	Hein Min Oo	20180424	N.A.	N.A.	N.A.	N.A.	Others	Letter	MMK -
17	2017MMRMM017	20171215	10:31	Hein Min Oo	One time Incident	Head of Link Gyi Village Tract send a letter and decrived as below To Sembcorp, Subject: Recommendation for the land ownership Regarding to above mentioned subject, I am here writing the letter to recommend that the land which Sembcorp installed 3 link bridge concrete pillars is belong to U Nyunt Kyi and informing to make necessary compensation to him. Kind regards, Head of Link Gyi Village Tract 09769629487	PAP	Details Provided	U Nyunt Wai	Affected Communities	09 769720487	Link Gyi Village	Face to Face	Land	A villager (U Nyunt Wai) who said he is the land owner is asking compensation for his land as Sembcorp install 3 link bridge concrete pillars in his land he said.	Meetings	20171210	20171215	Telephone+Q18N18:T18W18R18:T18	Tier 1	NA	Company check the land ownership and number of pillars installed in his land with EPGE, Local Authorities and Land Registration Department. The actual number of installed pillar is only one and compensated/support (MMK 352,866 world bank, MMK10,000 by EPGE) on 29-08-2018.	Company check the land ownership and number of pillars installed in his land with EPGE, Local Authorities and Land Registration Department. The actual number of installed pillar is only one and compensated/support (MMK 352,866 world bank, MMK10,000 by EPGE) on 29-08-2018.	Company check the land ownership and number of pillars installed in his land with EPGE, Local Authorities and Land Registration Department. The actual number of installed pillar is only one and compensated/support (MMK 352,866 world bank, MMK10,000 by EPGE) on 29-08-2018.	Land owner satisfied	N.A.	Closed	Meeting	Hein Min Oo	20180829	N.A.	N.A.	N.A.	N.A.	Others	Letter	MMK -
18	2018MMRMM001	20180123	10:00	Hein Min Oo	One time Incident	To Sembcorp, Subject: Land Compensation I can't farm in my land since 2016 as Sembcorp install link bridges in my land and working by workers and vehicle. So, I would like to get compensate money for period of 2016 – 2018. Land Owner U Aung Khin Myint 9/MaKhaNa(N)103482	PAP	Details Provided	U Aung Khin Myint	Affected Communities	09 774025506	Kyun U Village	Face to Face	Land	To Sembcorp, Subject: Land Compensation I can't farm in my land since 2016 as Sembcorp install link bridges in my land and working by workers and vehicle. So, I would like to get compensate money for period of 2016 – 2018. Land Owner U Aung Khin Myint 9/MaKhaNa(N)103482	Meetings	20180123	20180123	Meeting	Tier 1	NA	Company compensated MMK300,000 on 30 August 2018	Company compensated MMK300,000 on 30 August 2018	Company compensated MMK300,000 on 30 August 2018	Land owner satisfied	N.A.	Closed	Meeting	Hein Min Oo	20180830	N.A.	N.A.	N.A.	N.A.	Others	Letter	MMK -
19	2018MMRMM002	20180309	13:00	Hein Min Oo	One time Incident	09-03-2018 To- Manager, Sembcorp There are 5 concrete poles in 3 places at my Farm and I got only 3 bags of fertilizer bags. Please kindly help me to get balance. U Kyone Taing Hnan Village	PAP	Details Provided	U Kyone Tine Lay	Affected Communities	NA	Hnan Village	Face to Face	Land	09-03-2018 To- Manager, Sembcorp There are 5 concrete poles in 3 places at my Farm and I got only 3 bags of fertilizer bags. Please kindly help me to get balance. U Kyone Taing Hnan Village	Meetings	20180309	20180309	Meeting	Tier 1	NA	To check with EPGE that how many electric pole we compensated and why that three poles was installed as additional	Check the elcetric poles on ground with U Kyone Tine. Founded that total 5 poles was installed in U Kyone Tine's farm. As per EPGE and UHNH data, U Kyone received 3 fertilizer bags. Need to pay 2 fertilizer bags more.	Check the elcetric poles on ground with U Kyone Tine. Founded that total 5 poles was installed in U Kyone Tine's farm. As per EPGE and UHNH data, U Kyone received 3 fertilizer bags. Need to pay 2 fertilizer bags more.	Sembcorp provide 2 Fertalizer bags	N.A.	Closed	Meeting	Hein Min Oo	20180424	N.A.	N.A.	N.A.	N.A.	Others	Letter	MMK -
20	2018MMRMM003	20180321	11:00	Hein Min Oo	One time Incident	To Sembcorp, Subject: Sending request letter to repair the firm Reference: As per the letter from Daw Mar Mar Ko with the date 2018 March 4 Regarding to the above mentioned subject, I have received a request letter from Daw Mar Mar Ko to get help from Sembcorp to repair her firm (No-138-264/A). Sembcorp Myingyan Company Limited repaired the firms already but Daw Mar Mar Ko's firm left to be repaired. Please kindly support/help to repair her firm as she requested. Nay Soe Oo Administration Officer	PAP	Details Provided	U Win Myint Htay (Uncle of Daw Mar Mar Ko)	Affected Communities	09 777464222	Hta Naung Tai	Face to Face	Land	To Sembcorp, Subject: Sending request letter to repair the firm Reference: As per the letter from Daw Mar Mar Ko with the date 2018 March 4 Regarding to the above mentioned subject, I have received a request letter from Daw Mar Mar Ko to get help from Sembcorp to repair her firm (No-138-264/A). Sembcorp Myingyan Company Limited repaired the firms already but Daw Mar Mar Ko's firm left to be repaired. Please kindly support/help to repair her firm as she requested. Nay Soe Oo Administration Officer	Meetings	20180321	20180321 (To Ko Nay Soe Oo VH) 20180326 to U Win Myint Htay	Meeting	Tier 1	NA	Land owner request the agree letter from WRUD to expend his firm as originally. When Land Owner received the approve letter from WRUD and Village Head, Sembcorp will fullfill his request to repair the firm	Sembcorp checked on ground and get the approval from village head to repair & Leveling for the farm.	After village head approved, Sembcorp repaired farmleveling as per the Farm Owner (Daw Mar Mar Ko)'s request..	Land owner send a letter again to Sembcorp and described that Sembcorp fullfill his requested.	N.A.	Closed	Meeting	Hein Min Oo	20180508	N.A.	N.A.	N.A.	N.A.	Others	Letter	MMK 136,000
21	2018MMRMM004	20181001	13:00	Hein Min Oo	One time Incident	Translated to Simple English To Sembcorp Myingyan Power Company Limited Date : 12 Sept 2018 Subject: Request help from Sembcorp to get cash support for the different pillars (Link Bridge between Irrigation canals to Sembcorp water pump barge) Regarding to the above mentioned subject, I (Daw Khin Win 9/MaKhaNa(N)103741) received cash support from World Bank, Landers and EPGE on 27 August 2018 for 7 pillars due to the on ground result of Land Registration Department. But total 11 pillars was installed in my land actually and I requested to check again to Land Registration Department and they issued official letter again with 11 pillars in my land as attached. So, please kindly help me to get cash support for the shortage of 4 pillars. Daw Khin Win Ma Yoe Kone Village	PAP	Details Provided	Daw Khin Win PAP0131	Affected Communities	-	Ma Yoe Kone	Face to Face	Land	Translated to Simple English To Sembcorp Myingyan Power Company Limited Date : 12 Sept 2018 Subject: Request help from Sembcorp to get cash support for the different pillars (Link Bridge between Irrigation canals to Sembcorp water pump barge) Regarding to the above mentioned subject, I (Daw Khin Win 9/MaKhaNa(N)103741) received cash support from World Bank, Landers and EPGE on 27 August 2018 for 7 pillars due to the on ground result of Land Registration Department. But total 11 pillars was installed in my land actually and I requested to check again to Land Registration Department and they issued official letter again with 11 pillars in my land as attached. So, please kindly help me to get cash support for the shortage of 4 pillars. Daw Khin Win Ma Yoe Kone Village	Meetings	20180912	20181001	Meeting	Tier 1	NA	After approval for the Land Ownership from Land Registeration Department (Myingyan Township) and Local Authories, Daw Khin Win was received cash supporting from Lenders.	After approval for the Land Ownership from Land Registeration Department (Myingyan Township) and Local Authories, Daw Khin Win was received cash supporting from Lenders.	After approval for the Land Ownership from Land Registeration Department (Myingyan Township) and Local Authories, Daw Khin Win was received cash supporting from Lenders.	After approval for the Land Ownership from Land Registeration Department (Myingyan Township) and Local Authories, Daw Khin Win was received cash supporting from Lenders.	N.A.	Closed	Meeting	Hein Min Oo	20181010	N.A.	N.A.	N.A.	N.A.	Others	Letter	MMK -
22	2018MMRMM005	20181124	15:00	Hein Min Oo	One time Incident	At the Public Stakeholder Engagement November 2018, the farmer said there was three electric pole (220ep, 235 DT) installed in his farm and only one fertilizer bag supported. He asked SMPC to support two more fertilizer bags.	PAP	Details Provided	U Aung Kyaw Moe (Son of U Bala) PAP0075	Affected Communities	-	Hta Naung Tai	Face to Face	Others	At the Public Stakeholder Engagement November 2018, the farmer said there was three electric pole (220ep, 235 DT) installed in his farm and only one fertilizer bag supported. He asked SMPC to support two more fertilizer bags.	Meetings	20181124	20181124	Meeting	Tier 1	NA	CSR Executive went down to his farm with him on 20181213 and checked on ground. Development Manger instructed CSR Ex to get the recommendation letter from VH to approve those Electric Poles has not paid the fertilizer bags 20181221. CSR Ex provided the VH recommendation letter to Development Manager as instructed 20181226.	To support the fertilizer bags as per the no. of poles in his farm	Provided two more fertilizer bags on 13 Feb 2019 as per his request and matched with office data.	Farmer satisfied.	N.A.	Closed	Meeting	Hein Min Oo	20190213	N.A.	N.A.	N.A.	N.A.	Others	Person	MMK -
23	2018MMRMM006	20181124	15:00	Hein Min Oo	One time Incident	At the Public Stakeholder Engagement November 2018, the farmer said there was five electric poles (EP229 – DT228 – DT227) installed in his farm and only three fertilizer bag were supported. He asked to supported 2 more fertilizer bags. Another issue is he made stone foundation (2.5' x 3.5' x 15') in his farm and that was destroyed by Sembcorp's contractors when Sembcorp pipes line burried. He wants Sembcorp to make it back.	PAP	Details Provided	U Win Sein (U Thar) Hta Naung Tai PAP0023	Affected Communities	-	Hta Naung Tai	Face to Face	Others	At the Public Stakeholder Engagement November 2018, the farmer said there was five electric poles (EP229 – DT228 – DT227) installed in his farm and only three fertilizer bag were supported. He asked to supported 2 more fertilizer bags. Another issue is he made stone foundation (2.5' x 3.5' x 15') in his farm and that was destroyed by Sembcorp's contractors when Sembcorp pipes line burried. He wants Sembcorp to make it back.	Meetings	20181124	20181124	Meeting	Tier 1	NA	CSR Executive went down to his farm with him on 20181213 and checked on ground.As per him, there five electric poles were installed and only 3 bags supported in Company Data (Data by UHNH). Informed to UALO for all there founded resulted on 20181217 by mail. 20181218 Development Manager instructed to check with local contractor (free licence mason) to rebuild the stone foundation. CSR Executive went down with mason to discuss with farmer and get the details information to rebuilt stone foundation 20181219. Development Manger instructed CSR Ex to get the recommendation letter from VH to approve those Electric Poles has not paid the fertilizer bags 20181221. CSR Ex provided the VH recommendation letter to Development Manager as instructed 20181226. CSR Ex submitted the drone photo (begore the project) with stone foundation (SF) to appove that the SF was installed in the past 20181226. Submitted the estimate cost calculated by U Kyaw Lwin 20181224.	To support the fertilizer bags as per the no. of poles in his farm. To prove the stone foundation that was built in the past and to be rebuild if it is correct.	Provided two more fertilizer bags on 13 Feb 2019 as per his request and matched with office data. Farmer satisfied. Development Manager went down to the farm and checked with farmer and Contractor to rebuilt the stone foundation. Notofication of Defect Claim, Mr.Remesh said PMT should discuss with SDCI to claim back as SDCI did not re-construct after pipe bury work. Development Manager went down to check on ground situation and discussed with farm owner on 20190221. SMPC arranged to re-construct the stone foundation as same as original. The re-construction work done on 20190311. The landowner wrote a letter to SMPC and the letter described that he was satisfied on what SMPC re-constructed stone foundation as same as original.	Farmer satisfied.	N.A.	Closed	Meeting	Hein Min Oo	20190312	N.A.	N.A.	N.A.	N.A.	Others	Person	MMK -
24	2018MMRMM007	20181213	10:00	Hein Min Oo	One time Incident	The farmer said there was six electric poles EP265-DT265-DT266-EP267 installed in his farm and only four fertilizer bag were supported. He asked to supported 2 more fertilizer bags As per him, there six electric poles were installed and only four bags supported in Company Data (Data by UHNH).	PAP	Details Provided	U Pho Ni (Son of Daw Tin Tin) PAP0034	Affected Communities	-	Hta Naung Tai	Face to Face	Others	The farmer said there was six electric poles EP265-DT265-DT266-EP267 installed in his farm and only four fertilizer bag were supported. He asked to supported 2 more fertilizer bags As per him, there six electric poles were installed and only four bags supported in Company Data (Data by UHNH).	Meetings	20181124	20181124	Meeting	Tier 1	NA	Development Manger instructed CSR Ex to get the recommendation letter from VH to approve those Electric Poles has not paid the fertilizer bags 20181221. CSR Ex provided the VH recommendation letter to Development Manager as instructed 20181226.	To support the fertilizer bags as per the no. of poles in his farm	Development Manager went down to the farm and checked with farmer and Contractor to rebuilt the stone foundation. Notofication of Defect Claim, Mr.Remesh said PMT should discuss with SDCI to claim back as SDCI did not re-construct after pipe bury work. Development Manager went down to check on ground situation and discussed with farm owner on 20190221. SMPC arranged to re-construct the stone foundation as same as original. The re-construction work done on 20190311. The landowner wrote a letter to SMPC and the letter described that he was satisfied on what SMPC re-constructed stone foundation as same as original.	Farmer satisfied.	N.A.	Closed	Meeting	Hein Min Oo	20190213	N.A.	N.A.	N.A.	N.A.	Others	Person	MMK -
25	2018MMRMM008	20181124	10:00	Hein Min Oo	One time Incident	The farm owner said via village head U Win Shwe that her land is near by the river bank and Sembcorp cover the nets on her land to prevent river bank soil dropping to the river. The covered area is estimatede (30' x 30') and she cannot grow any plant totally. She need some compensation for her land.	CP	Details Provided	Daw Than Htay (Daughter of U Bo Ni)	Affected Communities	-	Tha Pyay Thar Vilalge	Face to Face	Others	The farm owner said via village head U Win Shwe that her land is near by the river bank and Sembcorp cover the nets on her land to prevent river bank soil dropping to the river. The covered area is estimatede (30' x 30') and she cannot grow any plant totally. She need some compensation for her land.	Meetings	20181124	20181124	Meeting	Tier 1	NA	CSR Executive went down to his farm with him on 20181213 and checked on ground. DM instructed CSR Ex to follow up for document issue by LRD to confirm the firm was belong to her and check whether the firm locate in project related area. CSR Ex requested to VH U Win Shwe to provided the LRD Document as DM instructed 20181217. Gently reminded again to VH 20190122. Received Form7 from VH on 20190131 and report to DM at the same day.	To check on ground for the issue and fufill as much as possible.	Development Manager went down to check on ground situation and discussed with farm owner on 20190221. As per negotation result, SMPC support MMK 300,000 to land owner. The nylon net will not be removed as per the land owner request.	Land owner satisfied	N.A.	Closed	Meeting	Hein Min Oo	20190315	N.A.	N.A.	N.A.	N.A.	Others	Person	MMK -
26	2018MMRMM009	20181126	11:00	Hein Min Oo	One time Incident	At the Public Stakeholder Engagement November 2018, the farmer said his land was totally distroyed due to Sembcorp water pipe burring work and no one repair for the land leveling.	PAP	Details Provided	U Tun Kyi (PAP0116)	Affected Communities	-	Kyun U Village	Face to Face	Others	At the Public Stakeholder Engagement November 2018, the farmer said his land was totally distroyed due to Sembcorp water pipe burring work and no one repair for the land leveling.	Meetings	20181126	20181126	Meeting	Tier 1	NA	CSR Executive went down to his farm with him on 20181213 and checked on ground. Informed to UALO for all these information on the same day of inquiry	To check on ground for the issue and fufill as much as possible.	Development Manager went down to check on ground situation and discussed with farm owner on 20190221.As per the discussion result, Development Manager arrange to repair the drainage as same as original. The re-construction work done on 20190311. The landowner wrote a letter to SMPC and the letter described that he was satisfied on what SMPC re-constructed drainage as same as original.	Land owner satisfied	N.A.	Closed	Meeting	Hein Min Oo	20190312	N.A.	N.A.	N.A.	N.A.	Others	Person	MMK -

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL
28	27	2018MMRMM010	20181125	13:00	Hein Min Oo	One time Incident	At the Public Stakeholder Engagement November 2018, the villager U Kyaw Htay said they would like to know Government's Labor Law and how can Sembcorp help.	CP	Details Provided	U Kyaw Htay	Affected Communities	-	Phet Taw	Face to Face	Others	At the Public Stakeholder Engagement November 2018, the villager U Kyaw Htay said they would like to know Government's Labor Law and how can Sembcorp help.	Meetings	20181125	20181125	Meeting	Tier 1	NA	UALO Development Manager accept his request and arrange to fulfill. CSR Execuetive delivered one set of Government Labor Law (three books) to Village Head U Kyaw Htay Naing on 20181213 for all villagers.	UALO Development Manager accept his request and arrange to fulfill. CSR Execuetive delivered one set of Government Labor Law (three books) to Village Head U Kyaw Htay Naing on 20181213 for all villagers.	UALO Development Manager accept his request and arrange to fulfill. CSR Execuetive delivered one set of Government Labor Law (three books) to Village Head U Kyaw Htay Naing on 20181213 for all villagers.	UALO Development Manager accept his request and arrange to fulfill. CSR Execuetive delivered one set of Government Labor Law (three books) to Village Head U Kyaw Htay Naing on 20181213 for all villagers.	N.A.	Closed	Meeting	Hein Min Oo	20181213	N.A.	N.A.	N.A.	N.A.	Others	Person	MMK -
29	28	2018MMRMM011	20181123	10:00	Hein Min Oo	One time Incident	At the Public Stakeholder Engagement November 2018, the the village head said that Sate Nyan village entrance bridge was reconstructed by the Sembcorp's contractor in operation period when the discharge/intake pipes buried time, the new bridge was not good enough and now we like to request you to repair as good as old one.	CP	Details Provided	U Chit Win VH	Affected Communities	-	Sate Nyan Village	Face to Face	Others	At the Public Stakeholder Engagement November 2018, the the village head said that Sate Nyan village entrance bridge was reconstructed by the Sembcorp's contractor in operation period when the discharge/intake pipes buried time, the new bridge was not good enough and now we like to request you to repair as good as old one.	Meetings	20181123	20181123	Meeting	Tier 1	NA	20181218 Development instructed to check with local contractor (free licence mason) to repair the bridge.	20181218 Development instructed to check with local contractor (free licence mason) to repair the bridge.	CSR Execuetive sent to UALO for the befroe and after photos of Bridges. CSR Execuetive went down with mason to discuss with farmer and get the details information to repair the bridge. DM instructed to change plan with soil filling and stone boundry 20190107. Development Manager discussed with representative persons of Sate Nyan villages on 20190221. As per the negotiattion result, Development Manager arranged to to construct and upgrade the bridge for more safety. The village head wrote a letter on 20190312 and discribed they satisfied on what SMPC repaired/upgraded the bridge and the villagers can access the bridge safely.	Villagers Satisfied	N.A.	Closed	Meeting	Hein Min Oo	20190312	N.A.	N.A.	N.A.	N.A.	Others	Person	MMK -
30	29	2018MMRMM012	20181126	10:00	Hein Min Oo	One time Incident	At the Public Stakeholder Engagement November 2018, the the villager said Cable run (installed 5 EP) in my farm over 2 years and I received MMK500, 000 for 2 years only. I wants the company to remove the cable as the agreement 2 year is over.	CP	Details Provided	Ma Cho	Affected Communities	-	Sar Khaar Village	Face to Face	Others	At the Public Stakeholder Engagement November 2018, the the villager said Cable run (installed 5 EP) in my farm over 2 years and I received MMK500, 000 for 2 years only. I wants the company to remove the cable as the agreement 2 year is over.	Meetings	20181126	20181126	Meeting	Tier 1	NA	CSR Execuetive inquiried to Village Head U Maung Myint and Ma Cho on 20181218, as per Ma Cho she received MMK500,000 from JEM (SMPC's Contractor). As per the Development Manager instruction, CSR Ex conducted with Ye Lin Oo (Plant Manager JEM) and asked to follow up asap and asked him to reply with the solution (20181218). JEM Ye Linn Oo went down and negotiated on 20181218 and still under negotiation (CSR inquiried on 20190107). Farm Owner Ma Cho sent a letter and mentioned that she is satisfied as JEM discussed with her and solved the issue.	Contractor JEM has to discuss with Farm Owner and solve the issue	Ma Cho (Farm Owner) satisfied with the negotiated with JEM. Both parties ageed MMK500,000 for 2 years period to exten 5 electric pole (as existing) in her farm.	Ma Cho wrote a letter to SMPC and described that she is satisfied on the negotiation (Village Head also approve signature on the paper)	N.A.	Closed	Meeting	Hein Min Oo	20190109	N.A.	N.A.	N.A.	N.A.	Others	Person	MMK -
31	30	2018MMRMM013	20181219	10:00	Hein Min Oo	One time Incident	U Aung Kyaw Moe (U Soe Tint's brother) said one electric pole (208) installed in their farm and no fertilizer bag was supported (he received mmk10000 for that pole from U Than Htun Aung). He asked to support fertilizer bag.	PAP	Details Provided	U Aung Kyaw Moe (U Soe Tint's brother)	Affected Communities	-	Hta Naung Tai	Face to Face	Others	U Aung Kyaw Moe (U Soe Tint's brother) said one electric pole (208) installed in their farm and no fertilizer bag was supported (he received mmk10000 for that pole from U Than Htun Aung). He asked to support fertilizer bag.	Meetings	20181219	20181219	Meeting	Tier 1	NA	CSR Execuetive check on ground with farmer on 20181912.	To support the fertilizer bags as per the no. of poles in his farm	Provided one more fertilizer bags on 13 Feb 2019 as per his request and matched with office data.	Farmer satisfied.	N.A.	Closed	Meeting	Hein Min Oo	20190213	N.A.	N.A.	N.A.	N.A.	Others	Person	MMK -
32	31	2019MMRMGNGRIEVANCE001	20191108	13:00	Hein Min Oo	One time Incident	Farmers from Sarkhaar village complaint about water over flow from SMPC drainage to their farms and about 11.5 acre farms with crops ware flooded (VH Called to Koyin via telephone)	PAP	Details Provided	U Maung Myint VH + 8 Villagers	Affected Communities	-	Sarkhaar	Face to Face	Others	CRO arranged meeting on 20191108 with SMPC HSSE Tin Maung Thein with Village Head and Villagers (2 Farmers was attended). The Farmers wants compensation for the flooded crops.	Meetings	20191108	20191108	Meeting	Tier 2	NA	- Farmers wants compensation for the flooded crops	Discuss with Farmers and if the farms were flooded, take necessary action for compensation	- After the meeting with Ko TMT HSSE and VH + Villagers, SMPC had internal meeting 20191113 included MD, Plant Manager and All HODs and decided to meet with VH and Villagers by Deputy Plant Manager or Myint Soe and Development Manager. - Development team liaised with Village Head and Farmers to wait during SMPC' internal discussion to solve the Grievance - Deputy Plant Manager arranged new divert of the drainage to avoid flooding to the farms from SMPC drainage in future. - Development team liaised with Village Head and Farmers to wait during SMPC' internal discussion to solve the Grievance - Deputy Plant Manager negotiated with EPGE and V-Power to share in compensation. V-Power agreed to add MMK5,000 per acre. - CRO and Aung Myo Kyaw (O&M) met with Village and 9 Villagers (Farmland owners) and compensated for flooded framland crops on 2019 Dec 12	Farmer satisfied.	N.A.	Closed	Meeting	Hein Min Oo	20191218	N.A.	N.A.	N.A.	N.A.	Others	Person	MMK 287,500
33	32	2020MMRMGNGRIEVANCE001	20201125	13:00	Hein Min Oo	One time Incident	CSR team received a letter from U Aye Lwin PAP0076 on 25 Nov 2020.	PAP	Details Provided	U Aye Lwin	Affected Communities	-	Hta Naung Tai	Face to Face	Others	In the letter, U Than Htun Aung EE-EPGE committed (verbally twice) to make cart way over the side drain between WRUD canal and his farm which is not existing originally before our project construction time. U Aye Lwin request SMPC to fulfill what U Than Htun Aung committed him.	Meetings	20201125	20201125	Meeting	Tier 1	NA	U Aye Lwin wants SMPC to make cart way and if SMPC could not do, he wants to know the reason.	explain to U Aye Lwin that the canal side drain is belonging to the Government and SMPC has no right to repair/newly build	CSR team met with U Aye Lwin and explained that the canal side drain is belonging to the Government and SMPC has no right to repair/newly build	U Aye Lwin well understand the situation and write an acknowledgement letter to SMPC that CSR team's effort on this issue	N.A.	Closed	Meeting	Hein Min Oo	20201126	N.A.	N.A.	N.A.	N.A.	Others	Person	MMK -

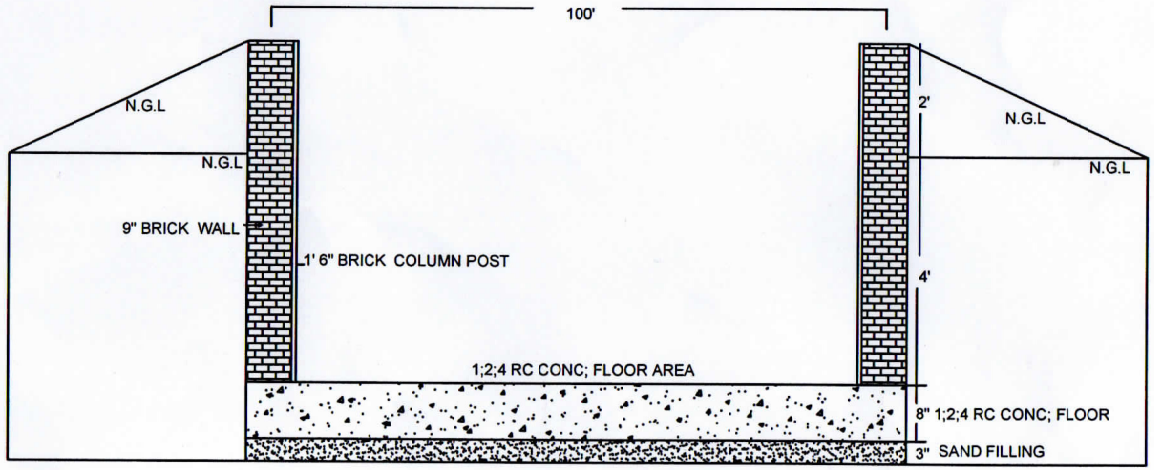
APPENDIX 10
OFF-SITE SLUDGE STORAGE AREA

SHWE PHYO YAN CO., LTD

(100' x 100' x 6') WASTE TANK



FLOOR PLAN



CROSS SECTION

APPENDIX 11
COVID-19 BUSINESS CONTINUITY PLAN (BCP) IMPLEMENTATION

Sembcorp Myingyan Covid-19 BCP Implementation

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Year 2020 Operation BCP

BCP Implementation Highlights (in alignment with government guidelines)

Description	Date
Stage 0	March 25- April 9
Stage 1	April 10 – July 5
Travelling Allow	Early Jun
Stage 0	July 6 – September 1
Stage 1	September 2 - to date
Code Red Drill for S1 to S4	September 13- September 19
100% WFH for Yangon office due to Yangon lockdown	21 September to 31 December 2020

BCP Team Composition

Teams	Remarks
S1,S2,S3, & S4	Operation shift teams on 12hrs-12hrs ; 2Days-2OFF-2Nights-2OFF cycle
OST 1 & 2	Operations support teams; immediate team coverage for S1 + S2 and S3+ S4 respectively
ENO 1 & 2	Essential non-Ops teams; composed of maintenance & warehouse staff
RNEP	Reserved /non-essential personnel (working from home)

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Year 2020 Operation BCP (Cont.)

BCP Stages

Stage	Description of Scenario
0	Medium alert raised by authorities; S1-S4 intact; Code Yellow
1	High alert by authorities; S1-S4 intact; Code Yellow
2	Suspected case in 1 shift team -> full team quarantine ->OST takeover ; Code Yellow + Black
3	Suspected case in 2 shift teams -> 2 full teams quarantine-> 2 OST takeover; Code Red + Black
4	Suspected case in 3 shift teams -> 3 full team2 quarantine -> 2 OST takeover + Reserved ; Code Red + Black
5	Suspected case in 4 shift teams -> 4 full team2 quarantine -> 2 OST takeover + Reserved ; Code Red + Black

BCP Alert codes

Code	Description
BLUE	○ Work from home at all times.
GREEN	○ Work at plant with general physical distancing ○ Zero contact with members on Code Yellow or Code Red.
YELLOW	○ Work at plant with full segregation from members of other teams. ○ Zero contact with members of other teams during and outside work.
RED	○ Work at plant with zero contact with members of other teams during and outside work. ○ Zero contact with any person other than team members, including family members.
	○ Home quarantine for all members of affected team.

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Year 2020 Operation BCP (Cont.)

Accommodation for 4 Operation Shift Team

S1

S2

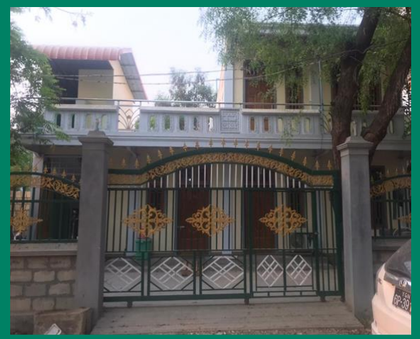
S3

S4

Accommodation for 2 Operation Support Team

OST1

OST2



Accommodation for 2 Essential Non Operation Team

ENO1

ENO2

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APPENDIX 12
PROJECT DOCUMENTATION REVIEWED FOR THE SEVENTH MONITORING ROUND

Ref no.	Document Title	Organisation	Date	Document Number
1	Environmental and Social Impact Assessment (ESIA) Report for Myingyan IPP Project – 225 MW Gas-fired Combined Cycle Power Station	ERM-Siam Co Ltd.	November 2015	Revision no. 1
2	Environmental and Social Impact Assessment (ESIA) Report for Myingyan IPP Project – 225 MW Gas-fired Combined Cycle Power Station	ERM-Siam Co Ltd.	August 2016	Revision no. 2
3	Myingyan IPP Project – 225 MW Gas-fired Combined Cycle Power Station. Project ESMP Implementation (PowerPoint).	Sembcorp	2016	-
4	Myingyan IPP Project – 225 MW Gas-fired Combined Cycle Power Station. Project HSSE Induction for Visitors (PowerPoint)	Sembcorp	April 2017	-
5	Environmental Management Plan	Sembcorp	30 May 2018; Rev02, 7 July 2020- 6 July 2022	PPMS Document Ref: 3.02.03.001
6	Security Management Plan (Operations Phase)	Sembcorp	30 May 2018; Rev01, 7 July 2020- 6 July 2022	PPMS Document Ref: 3.02.01.008
7	Plant Emergency Preparedness and Response Plan	Sembcorp	31 August 2018; Rev02, 7 July 2020- 6 July 2022	PPMS Document Ref 3.02.01.009
8	Occupational Health and Safety Management Plan	Sembcorp	1 June 2018; Rev02, 7 July 2020- 6 July 2022	PPMS Document Ref: 3.02.01.010
9	Quantitative Risk Assessment (QRA) Report	ERM (Singapore) Pte. Ltd.	2 May 2017	-
10	Plant Emergency Response Drill Report (Exercise Dragon)	Sembcorp	25 January 2019; Rev03, 7 July 2020	-
11	Monthly Management & Finance Committee Meeting (MFCM) Presentation Slides from January 2019 to December 2019 which includes a summary of the stack emissions data	Sembcorp	January 2019 – December 2019	-
12	Incident Investigation and Reporting	Sembcorp	24 October 2019	PPMS Document Ref: 3.02.01.016
13	Plant Traffic Directional Layout (Operations Phase)	Sembcorp	-	-
14	Plant Internal Drainage Layout (Operations Phase)	Sembcorp	-	-
15	Procedure for Cleaning Empty Chemical Containers	Sembcorp	5 February 2019	PPMS Document Ref: 4.02.07.294
16	Soil Analysis Laboratory Certificates	Golden Dowa Ecosystem Myanmar Co. Ltd.	June 2020	GEM-LAB-201903045 and GEM-LAB-201909025
17	Third Party Wastewater Monitoring Laboratory Analysis from November 2018 to November 2019	Golden Dowa Ecosystem Myanmar Co. Ltd.	January 2020, June 2020	GEM-LAB-201812045, 201903042, 201905239, 201909020,201911181
18	Third Party Ambient Air and Noise Emissions Monitoring Reports from December 2018 to September 2019	E-guard Environmental Services	March 2020, June 2020	-

Ref no.	Document Title	Organisation	Date	Document Number
19	Third Party Wastewater and River Water Laboratory Analysis from Discharge Pipeline, 100m Upstream, Upstream Mid-river and 100 m Downstream conducted on January 28, 2020	Golden Dowa Ecosystem Myanmar Co. Ltd	14 February 2020	GEM-LAB-202002067, 202002068, 202002069 and 202002070
20	Public Participation Attendance Record and Photolog for January 28, 2020 Monitoring Event (no event in 2021)	Sembcorp	28 January 2020	-
21	Internal river water quality data	Sembcorp	September 2020, October 2020, November 2020	-
22	Sembcorp's Particulate Matter Monitoring Results from Portable Monitoring Device	Sembcorp	-	-
23	Job Completion Report for Sewage Tank Repair	Sembcorp	7 June 2019	MYI-CS-MB-IR-M-84
24	Water Treatment Plant – Process Flow Diagram	Sembcorp	06 January 2017	PA-1612-PC-02
25	Water Treatment Plant – Water Balance Diagram	Sembcorp	06 January 2017	PA-1612-PC-01
26	Water Treatment System Design	Sembcorp	Undated	-
27	Stakeholder Engagement Plan	Sembcorp	January 2021- January 2023	PPMS Document Ref 1.01.04.001
28	Community Development Plan	Sembcorp	January 2021- January 2023	PPMS Document Ref 1.01.04.002
29	Annual Public Stakeholder Engagement Presentation – English & Myanmar	Sembcorp	December 2020	
30	Annual Stakeholder Engagement Meeting Report 2020	Sembcorp	December 2020	
31	Summary of all Meetings Held under the SEP for 2021	Sembcorp		
32	Community Grievance Mechanism Procedures, Committee Org Chart and Reporting Lines	Sembcorp	January 2021	SMPC-DEV-CSR-001
33	Grievance Committees for Affected 13 Villages	Sembcorp	2020	
34	Community Grievance Mechanism Database 2020 (no grievances submitted in 2021)	Sembcorp	2020	
35	Community Development Activities Accomplished for 2021	Sembcorp	January 2022	
36	Planned CSR Activities for 2022	Sembcorp	January 2022	

Ref no.	Document Title	Organisation	Date	Document Number
37	Community Development Plan KPIs for 2021 & Actual Achievements in 2021	Sembcorp	January 2022	
38	Local Recruitment and Procurement Management Plan	Sembcorp	26 February 2018	
39	COVID-19 Business Continuity Plan Implementation 2020-2021	Sembcorp	2020	
40	Workforce Data 31/12/2021 & 18/1/2022	Sembcorp	January 2022	
41	Community Map	Sembcorp	January 2021	
42	Procedure for Cleaning Empty Chemical Container	Sembcorp	Rev02, 7 July 2020	PPMS Document Ref: 4.02.07.294
43	Letter from Golden Dowa	Sembcorp	27 October 2020	
44	Letter from E Guard	Sembcorp	1 December 2020	
45	Grievance Log 2020	Sembcorp	2020	2020MMRMGNGRIEVANCE001
46	Grievance Management Database 2020	Sembcorp	2020	
47	Updated SMPC Organisation Charts (Operational Phase) 31/12/2021 & 18/1/2022	Sembcorp	January 2022	
48	MONREC Letter_SMPC-MM-2020-065 Submission of EMP and GHG	Sembcorp	25 February 2021	
49	Contribution Cleaned Chemical Drums to Gyoke Pin Village School	Sembcorp	2020	MMRMGNCSR2020005
50	Stakeholder Engagement Database January – December 2021	Sembcorp	January 2022	
51	Stakeholder Engagement Plan KPIs & Actual Achievements in 2021	Sembcorp	January 2022	
52	Stack Emission Data for NOx (CEMS data) for January – December 2020	Sembcorp	May 2021	
53	HSSE Training Records for April – December 2020	Sembcorp	May 2021	
54	HSSE Training Matrix for 2021	Sembcorp	January 2022	
55	Service Report on CEMS Unit 2	Sembcorp	June 2021	

Ref no.	Document Title	Organisation	Date	Document Number
56	Grievance Handling Policy R1	Sembcorp	30/7/2020- 29/7/2023	PPMS Document Reference 2.01.01.012
57	Procurement Update- 2020	Sembcorp	January 2022	
58	Job Description for HSSE Manager	Sembcorp	January 2022	
59	Near Miss Report - 20/7/2021	Sembcorp	January 2022	
60	Near Miss Report- 22/9/2021	Sembcorp	January 2022	
61	Chemical Inventory & Usage File	Sembcorp	January 2022	
62	7th E&S Monitoring Report Presentation	Sembcorp	January 2022	