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MYINGYAN CCPP EIGHTH ENVIRONMENTAL AND SOCIAL MONITORING REPORT

**MYINGYAN CCPP
EIGHTH ENVIRONMENTAL AND SOCIAL
MONITORING REPORT**

Project No. **335000346**
Issue No. **2**
Date **31 May 2023**
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
Ramboll	Ramboll 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 Pte Ltd (Ramboll), 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") for the Year 2022.

The Eighth Environmental and Social Monitoring Round was the fourth annual IESC monitoring activity 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 Eighth Environmental and Social Monitoring Round Report presents the findings of the Project monitoring for the period January 2022 to December 2022. The monitoring round was carried out virtually in January 2023.

A brief synopsis of the situation in Myanmar at the time of the monitoring round is provided as follows. The Covid-19 (coronavirus disease 2019) pandemic is a global event which unfolded in 2020 and continued to affect countries including Myanmar during 2022. The combined effects of Covid-19 and the February 2021 event² has impacted on the Company's ability to deliver on its CSR programs, conduct stakeholder engagement/consultation and implement various requirements of the Environmental and Social Management Plans (ESMPs) in 2022. 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 2020-2022. Throughout the monitoring round, SMPC cooperated fully and responded to all Ramboll's requests.

Ramboll reviewed the Project's Covid-19 Business Continuity Plan (BCP) Implementation 2020, and the Business Continuity Plan (PPMS Document Ref: 1.02.03.003, Rev.6, 28 June 2022, the Updated BCP, **Appendix 11**) where the entire BCP procedure was modified to align with the Sembcorp Group Business Continuity Management (HQ BCM) Framework (**Appendix 11**), limitations in 2022 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 Sixth 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 and 2022. However, in lieu of an annual meeting, Annual

¹ The responsibility for serving as the Project's IESC was transferred from Environ Myanmar Co Ltd (ENVIRON) to Ramboll Environ Singapore Pte Ltd in 2020, and subsequently to Ramboll Pte Ltd in 2023; all three companies are wholly owned subsidiaries of Ramboll Group.

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

Public Stakeholder Engagement (ASE) presentation slides with updated Project information were posted in noticeboards in each of the 13 villages in December 2022 (**Appendix 9**).

Ramboll 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 2022 were provided to Ramboll. The Project was able to conduct 838 stakeholder engagements in 2022, mainly by having periodic telephone calls with stakeholders. However, SMPC was limited in its ability to meet the other SEP KPIs for 2022. The Project received no grievances in 2022.

The 2021 CDP was revised on 5 February 2022 and then again in January 2023 (2021 CDP Revision 2, 16 January 2023). The January 2023 Revised CDP includes a CDP org chart that reflects that the CSR Department now directly reports to the SMPC MD; an updated Table 2.2 with Village Overviews (i.e., high-level community baseline data); and an updated list of KPIs. In addition, an updated job descriptions for the Government Affairs and CSR department managers were provided to Ramboll.

The Project is generally compliant with the requirements of the ESAP, however, the monitoring identified six 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, however, only 6 Community Health related projects were able to be accomplished in 2021 (i.e., five provided Covid-19 support to the Myingyan District Hospital and Taung Thar Township and one provided Covid-19 food support). In addition, 20 CSR activities were planned for 2022, and 19 were able to be completed in 2022 (for details, refer to **Appendix 5**),

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 (in addition to CO₂ emissions related to the gas turbines) to monitor GHG emissions across the Plant in an appropriate unit such as CO₂ 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 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 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 2022, the Project's total national workforce, including the Yangon workforce, security team and EPGE was 129, representing 99.22% of the total workforce; foreign skilled workers (1)

made up only 0.78% 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 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 PAPs affected by the elevated link bridge was done after its construction.

Ramboll 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'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's meetings with 3 of the 8 PAPs were included in 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 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 or 2022; and meetings with the remaining 4 PAPs are recommended to take place during future monitoring rounds to close out this issue.

Personnel changes during 2022 included the appointment of a new Managing Director, Plant Manager, HSSE Manager and Commercial Manager (as shown on the March 8, 2022, organisation chart). Based on the current organisation chart (December 31, 2022), there were a few additional significant changes in senior management positions related to E&S matters, with the appointment of Mr Kenneth Sen as the Commercial and Risk Manager and Lucia Lu as the Financial Controller, both Sembcorp personnel, and Win Kyaw as the Medical Officer. The updated SMPC organisation chart shows that the Development Department has been split into two departments, i.e., Governmental Affairs and Corporate Social Responsibility (CSR), each department with its own reporting lines to the SMPC Managing Director. 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 conducted in early 2024 for the year 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, and subsequently from Ramboll Environ to Ramboll Pte Ltd (Ramboll) in 2023. All references to ENVIRON and Ramboll Environ are now referred to as Ramboll.

In fulfilling the role of Lenders' IESC, Ramboll 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 Agency³ (MIGA) which is a member of the World Bank Group (WBG).

This Eighth Environmental and Social Monitoring Report covers the period from January 2022 to December 2022 and provides our findings following a January 2023 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 - 2022. Myanmar has been affected by the Covid-19 pandemic during 2020 - 2022. The combined effects of Covid-19 and the February 2021 event⁴ has impacted on the Company's ability to deliver on its CSR programs, conduct stakeholder engagement/consultation and implement various requirements of the Environmental and Social Management Plan (ESMP) in 2021 and 2022. This situation may continue into 2023.

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

⁴ <https://www.worldbank.org/en/country/myanmar/overview#1>
<https://www.mfa.gov.sg/Countries-Regions/M/Myanmar/Travel-Page>

Ramboll reviewed the Project's Covid-19 Business Continuity Plan (BCP) Implementation 2020, and the Business Continuity Plan (BCP) PPMS Document Ref: 1.02.03.003, Rev.6, 28 June 2022, (the Updated BCP, **Appendix 11**) where the entire BCP procedure was modified to align with the Sembcorp [Group Business Continuity Management](#) (referred to as HQ BCM) Framework, continued limitations in 2022 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.

2. SCOPE AND STRUCTURE OF THE REPORT

2.1 Scope and Methodology

This Eighth 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 parties⁵. It addresses the various components of the Project (as defined in Section 3, Project Description).

The report presents the findings of the Eighth 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 17-27, 2023, by Juliana Ding (opening meeting and first half day), Sharon Maharg and Cara Quinn, on behalf of Ramboll, which included the following activities:
 - Interviews held with senior management representatives, HSE, Community Relations/Government Affairs 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 Eighth Environmental and Social Monitoring Report is included in **Appendix 12**.

2.2 Applicable Standards

In accordance with Ramboll'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;

⁵ 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, see **Section 6** for the ESAP).

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, however it is understood that the responsible department at MONREC (the Environmental Conservation Department) has no practice of issuing ECC certificates and issues approval letters only. Nevertheless, 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 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 ESMPs, and additional topics not covered by the ESMPs (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 Seventh 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 2022 to December 2022), 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 ESMPs in 2021 and 2022. This situation may continue into 2024. As a result, Environmental and Social activities and monitoring in accordance with the Project Commitments have been affected during 2020-2022. Documents were reviewed related to the impact of the ongoing Covid-19 situation on the environmental and social operations, as follows:

- SMPC Business Continuity Plan (BCP) Rev.6, 2022; and the Covid-19 Business Continuity Plan Implementation presentation (2020), which included a reduction in workforce size and schedule changes for the workforce at the plant (for further details see **Section 5.24.1**).
- Information provided by SMPC on the following limitations from March 2020 – December 2022, 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 CSR Sr. Executive/Lead and Government Affairs Manager (formerly known as 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 2022;
 - 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; only 6 Community Health related projects were accomplished in 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 certain skills training (English language courses) being provided to members of the 13 villages.
- While health awareness clinics for members of the 13 villages and certain skills set training were not able to be provided from March 2020- December 2021, a new Medical Officer was hired in 2022 and he provided health awareness clinics (Round 1 in 13 villages and Round 2 in 11 villages); and a Basic Tailoring & Designer Training Class was provided in 2022 on a limited basis to 10 ladies in Sa Khar Village.

The IESC Monitoring Team was unable to physically travel to Myanmar to conduct the Sixth (2020), Seventh (2021) and Eighth (2022) Monitoring Rounds. Virtual monitoring rounds have been conducted, comprising 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.

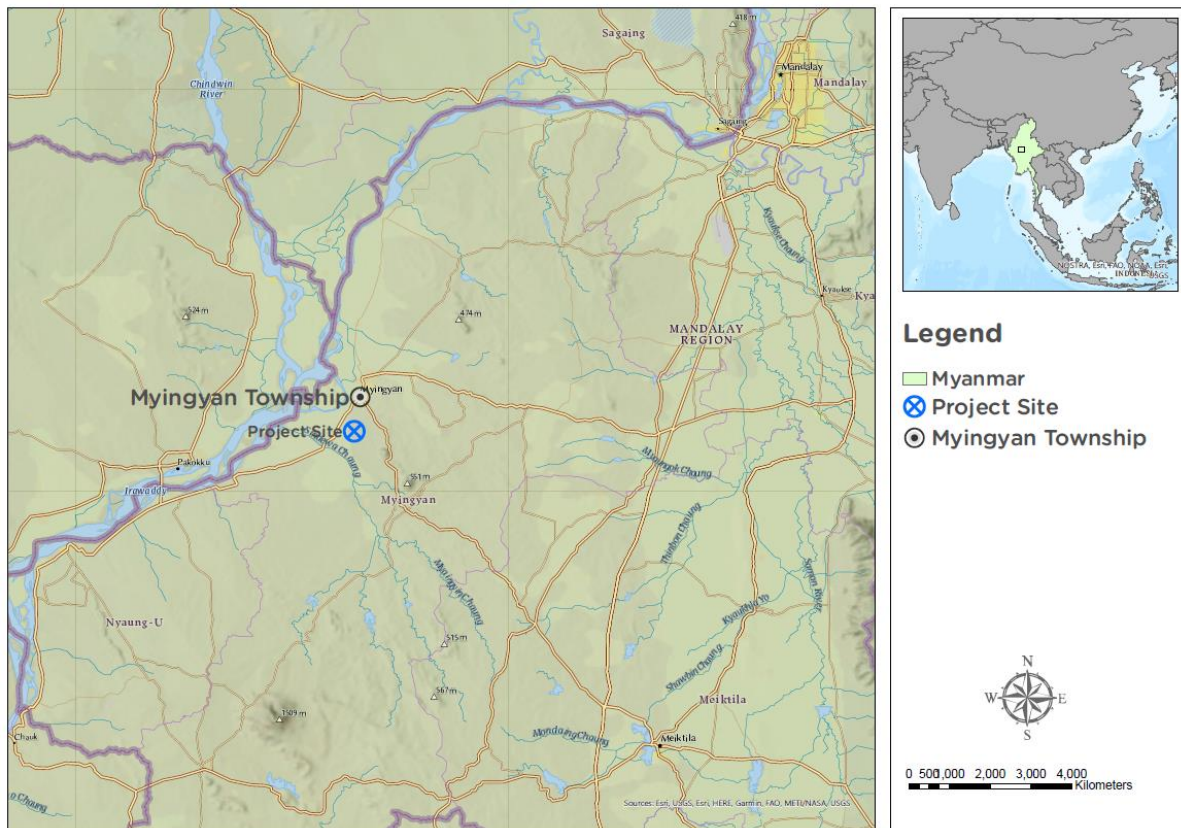
3. PROJECT DESCRIPTION

This section is intended to provide a brief description of the Project activities and current status at the time of reporting. 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.

3.1 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.

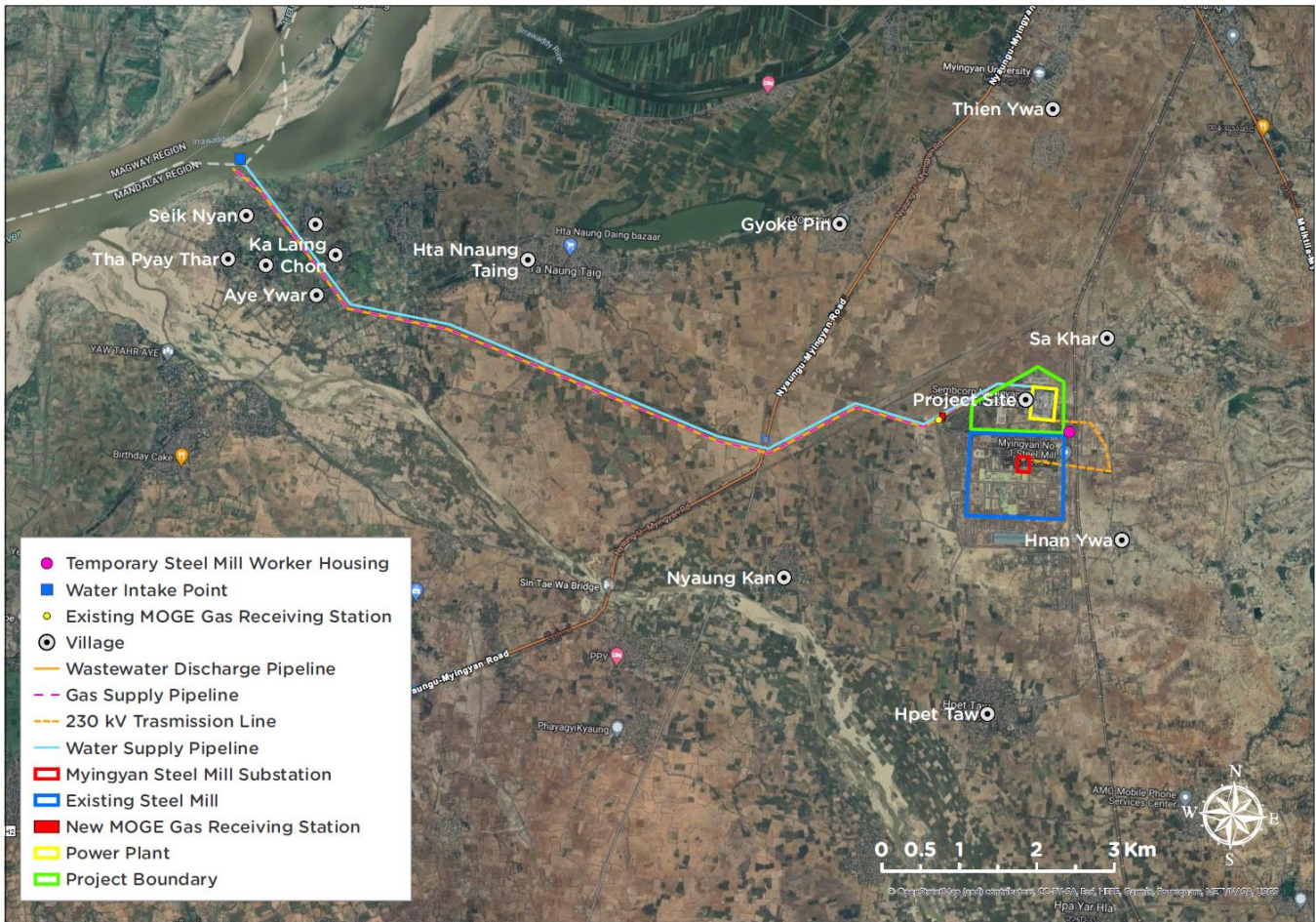
Figure 1: Project Location



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.

3.2 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 government⁶.

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;

⁶ Refer to Sembcorp website for further details. <https://www.sembcorpmyingyanipp.com/index.html>

- 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.

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.

3.3 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.

3.4 Socio-Economic Context

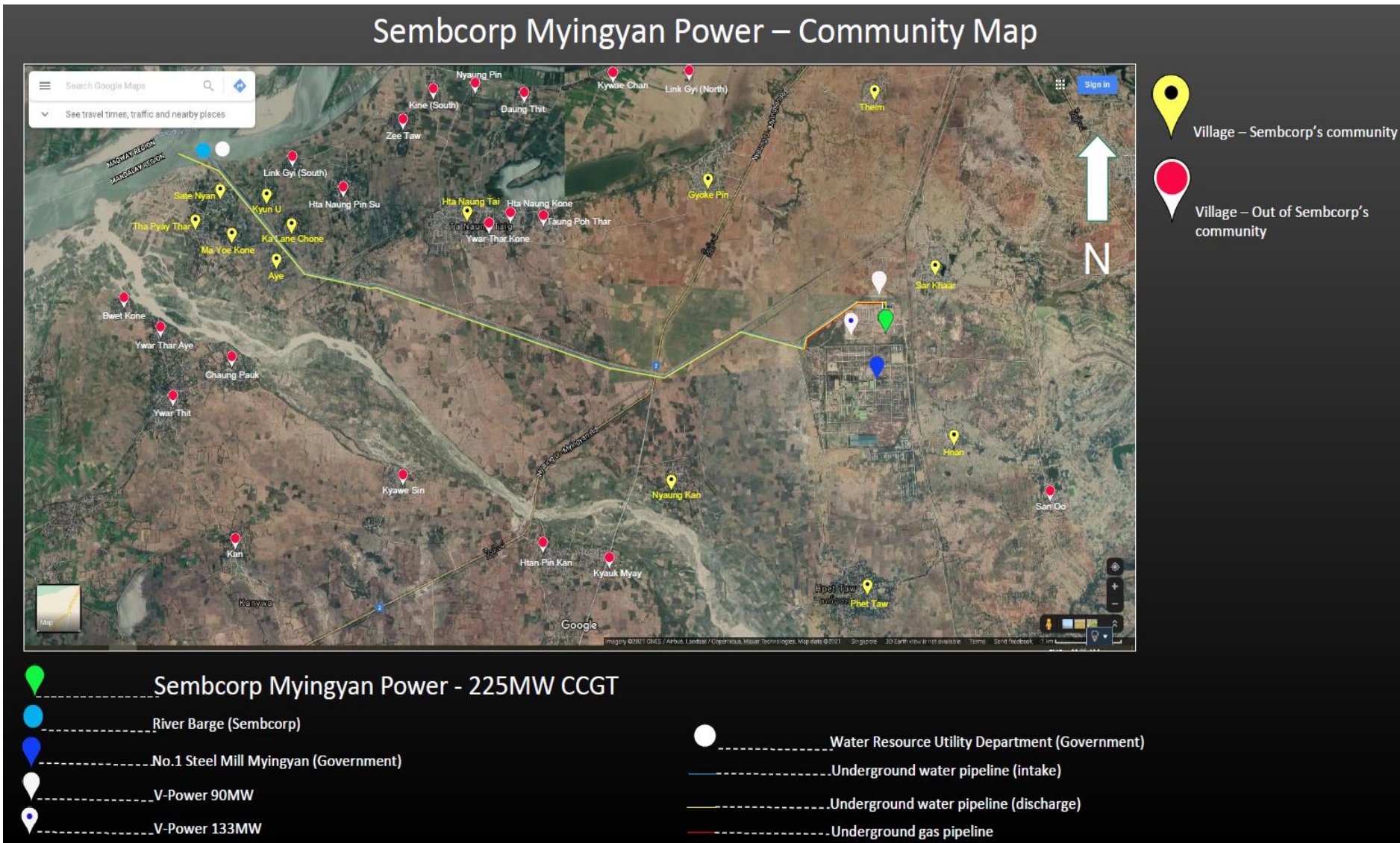
As indicated in the ESIA (Revision no. 2, August 2016), and the Stakeholder Engagement Plan (SEP), (see also **Figure 4**, there are 13 villages located within the Project's area of influence (AoI). These are:

- Sa Khar village;
- Hnan Ywa village;
- Hpet Taw village;
- Nyaung Kan village;
- Gyoke Pin village;
- Thien Ywa village;
- Tha Pyay Thar village;

Myingyan CCPP

- 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)



3.5 Status of the Project at Time of the Eighth 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 Eighth Monitoring Round, engineering, procurement, and construction were 100% complete.

In December 2022, 129 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 now stay in Myingyan, at a Staff Guest House on-site, which accommodates up to 20 workers, and/or at one of two SMPC Safe Houses for workers and their families, one adjacent to the SMPC plant, and the other located in a rental industrial park (away from residential areas, where there is a reduced risk of road blocks, 5 km from the plant) (see **Section 5.17**).

4. SIGNIFICANCE ASSESSMENT

4.1 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’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).

4.2 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 five 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 ⁷	Standard	IESC Recommendations	December 2022 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

⁷ Phases can include: construction; operations; decommissioning or any combination of these phases.

5. ASSESSMENT OF ENVIRONMENTAL AND SOCIAL CONFORMANCE WITH PROJECT COMMITMENTS

5.1 Introduction

The results of the environmental and social monitoring are presented in **Section 5** of this report, structured around the 7 operation-phase 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.

5.2 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 ESMPs, 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 ESMPs. The operations phase ESMPs 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 understands that around 200 technical operations phase procedures have already been developed.

In August 2018, Ramboll 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, Seventh and Eighth 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 role was filled by an External Contractor who was based outside of Myanmar. However, based on the updated 2022 SMPC organization chart (dated March 8, 2022, **Figure 5a**), various changes in senior management positions had been made by early 2022, namely Managing Director, Plant Manager, HSSE Manager and Commercial Manager. The organization chart provided for the Eighth Monitoring Round (dated December 31, 2022, **Figure 5b**) showed no major changes compared with March 2022, with the exception of the appointment of Mr Kenneth Sen as the Commercial and Risk Manager and Lucia Lu as the Financial Controller, both Sembcorp personnel, and Win Kyaw as the Medical Officer. The March 2022 organization 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., Government Affairs with Aung Lwin Oo, Manager and Corporate Social Responsibility (CSR) with Hein Min Oo, Executive and Lead, each department with its own reporting lines to the SMPC Managing Director. Prior to the re-organization, Aung Lwin Oo, was known as the Development Manager and Hein Min Oo, was known as the CSR Manager or Community Relations Officer (CRO). The HSSE Manager role had 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 during the Seventh Monitoring Round. 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.

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, management of greenhouse gas emissions and sustainable procurement, continues smoothly.

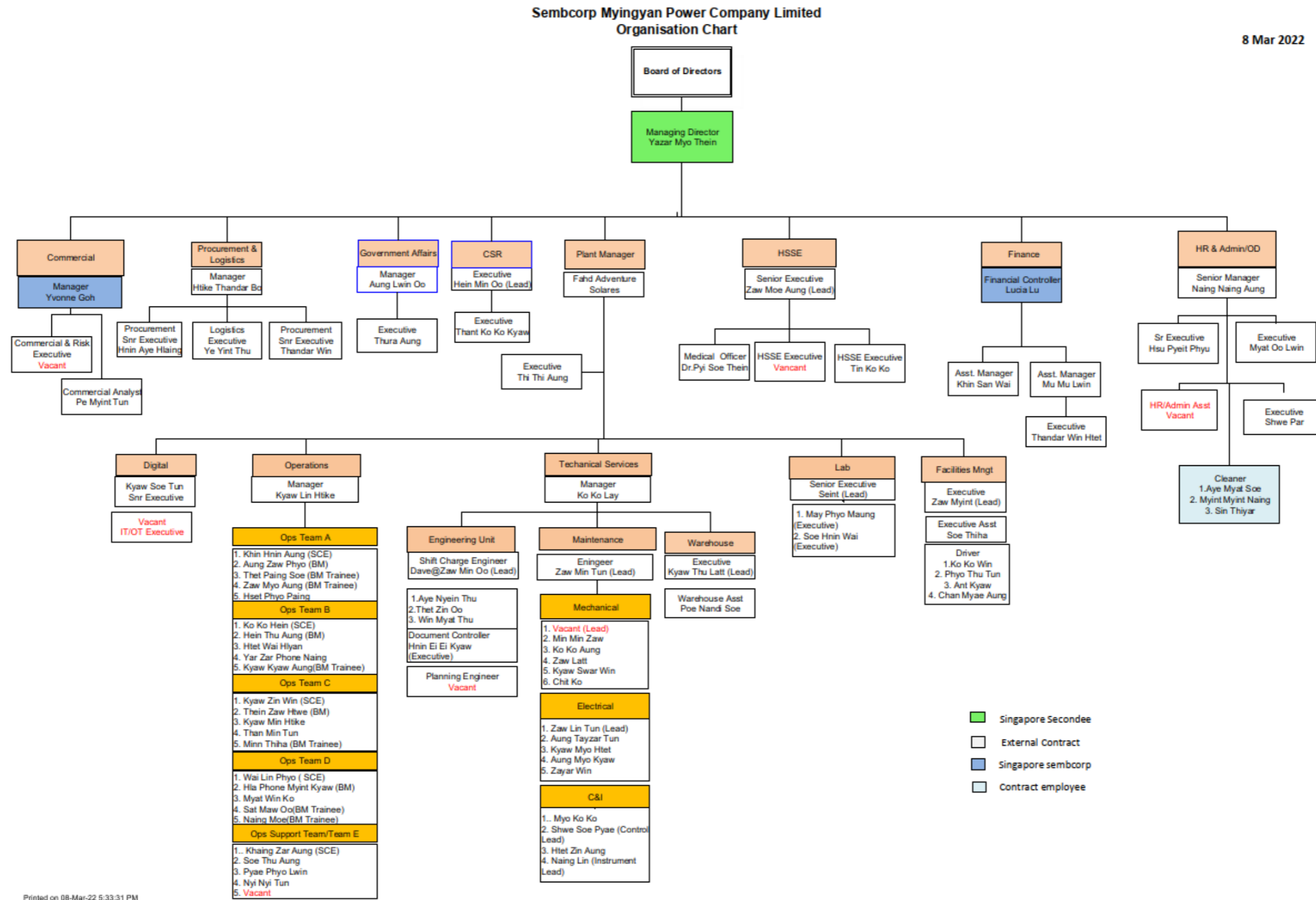


Figure 5a: Project Operational Phase Environmental and Social Organization Chart (Dated March 2022)

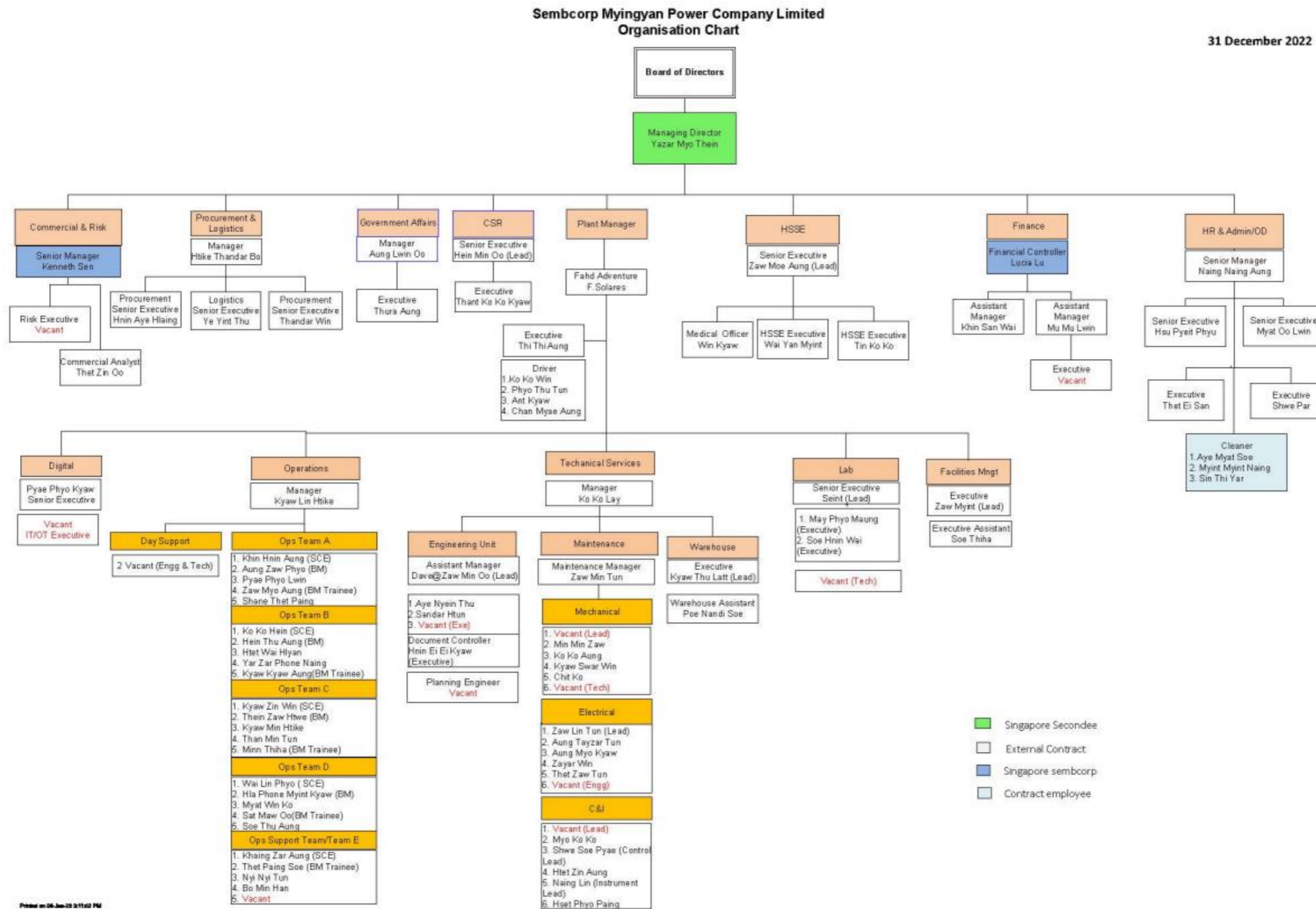


Figure 5b: Project Operational Phase Environmental and Social Organization Chart (Dated December 2022)

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

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Eighth Monitoring Round Update	Significance
001	Operations phase ESMS	<p>The operations phase ESMP was implemented via the Project's HSE Management System (HSE-MS), which was based on Sembcorp's corporate HSSE-MS.</p> <p>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.</p>	Operations	<ul style="list-style-type: none"> • IFC PS1 • ADB-ES Principle 4 	<p>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.</p>	<p>Seven operations phase plans were developed, as listed in Section 5.2.2.</p> <p>These plans were reviewed by the Lenders and IESC prior to Project COD and recommendations for improvement were submitted on February 12, 2019.</p> <p>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.</p> <p>The plans were reissued on January 31, 2022 to reflect the change of signatory for the HSSE Manager, Plant Manager and Managing Director.</p> <p>The Stakeholder Engagement Plan and the Community Development Plan (new versions) were made effective as of January 2021 and revised as of February 2022 (First Revision) and January 2023 (Second Revision).</p> <p>The Local Recruitment and Procurement Management Plan was made effective as of</p>	Minor

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Eighth Monitoring Round Update	Significance
						<p>February 2018 and revised as of January 2022 (First Revision).</p> <p>The Plant Emergency and Response Plan was also revised on January 31, 2022 to include self-contained breathing apparatus (SCBA) maintenance and inspection procedure, and again subsequently updated on April 30, 2022 to reflect an ISO Audit recommendation related to personal safety.</p> <p>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.</p>	

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 (NO₂) whilst emissions of sulphur dioxide (SO₂) and particulate matters (PM) including respirable suspended particulates (PM₁₀) 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 NO_x, SO₂, CO₂, CO, O₂, 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 NO_x stack emissions monitored at 2 different emission units from January 1, 2022, to December 31, 2022) was reviewed by the IESC (refer to **Appendix 3**). The maximum hourly emissions are listed in **Table 4** below. Exceedances of IFC EHS guideline value⁸ of 25 ppmv for Thermal Power Plant were monitored for Unit 1. The exceedances occurred during low load operations. The low load operations occurred 12 hours which represents 0.1% of total operating hours for this unit. For Unit 2, the maximum hourly emission was well below the guideline value of 25 ppmv for NO_x emissions. Unit 2 was not operated at low load conditions throughout the entire monitoring period. Generally, both units were normally operated for most of the time, at least 99.9% of total operating hours, in 2022 and exceedances of Project Standard

⁸ IFC EHS Guidelines Thermal Power Plants (2008)

of 25 ppmv for NO_x emissions were only monitored during rarely low load operations. The air quality impacts of the stack emissions from the 2 units are assessed as a minor issue.

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

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, 16:00 – 16:59	144	275
Note: a. To convert NO _x 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): 293.15K, 101.325 kPa. 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 NO₂ 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 NO_x

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	24.74	0.0	47.3
Feb	0	21.1	0.0	40.4
Mar	0	22.93	0.0	43.9
Apr	0	23.05	0.0	44.1
May	0	22.94	0.0	43.9
Jun	0	23.7	0.0	45.4
Jul	0	21.65	0.0	41.4
Aug	0	24.92	0.0	47.7
Sep	0	23.16	0.0	44.3
Oct	0	20.54	0.0	39.3
Nov	10.81	13.51	20.7	25.9
Dec	0	10.09	0.0	19.3

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

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	23.44	0.0	44.9
Feb	0	16.39	0.0	31.4
Mar	10.5	15.88	20.1	30.4
Apr	0	16.29	0.0	31.2
May	0	20.17	0.0	38.6
Jun	9.44	15.68	18.1	30.0
Jul	0	15.79	0.0	30.2
Aug	11.54	17.62	22.1	33.7
Sep	0	14.89	0.0	28.5
Oct	0	13.74	0.0	26.3
Nov	7.8	9.57	14.9	18.3

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)
Dec	0	21.01	0.0	40.2

Detailed analysis on the monitored air impurities are available in **Appendix 3** except O₂ 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

In accordance with the EMP, ambient air quality monitoring was conducted in 2022 by an independent third party, i.e., E Guard Environmental Services, 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 the listed periods:

- April 2022 (sampling period from April 01, 2022, to April 05, 2022);
- June - July 2022 (sampling period from June 28, 2022, to July 02, 2022);

- September 2022 (sampling period from September 05, 2022, to September 09, 2022);
- December 2022 (sampling period from December 12, 2022, to December 16, 2022)

The parameters monitored were as follows:

- Particulate Matter (PM₁₀ and PM_{2.5});
- Carbon monoxide (CO);
- Carbon dioxide (CO₂);
- Sulphur dioxide (SO₂); and
- Nitrogen Dioxide (NO₂).

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**.

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**.

Table 7: Ambient Air Quality Monitoring at Sensitive Receptors

Name of Sampling Locations	Approximate Distance from Site	Parameters	Units	Apr-22	(Jun – Jul)-22	Sep-22	Dec-22	Project Standard	Average Period
Sa Khar Village	630 m	CO	ppm	0	0	0	0	9	8 hrs
		CO2	ppm	410.27	417.28	509.85	473.74	5000	8 hrs
		SO2	µg/m ³	0	0	0	0	20	24 hrs
		NO2	µg/m ³	4.29	9.87	8.05	5.98	200	1 hr
		PM10	µg/m ³	5.46	3.04	4.07	4.62	50	24 hrs
		PM2.5	µg/m ³	2.91	1.62	2.23	2.58	25	24 hrs
Hnan Ywa Village	1,560 m	CO	ppm	0	0	0	0	9	8 hrs
		CO2	ppm	422.01	426.57	434.94	464.63	5000	8 hrs
		SO2	µg/m ³	0	0	0	0	20	24 hrs
		NO2	µg/m ³	4.46	22.32	16.13	6.35	200	1 hr
		PM10	µg/m ³	3.00	4.73	4.06	3.53	50	24 hrs
		PM2.5	µg/m ³	1.52	2.49	2.18	1.86	25	24 hrs
Gyoke Pin Village	2,720 m	CO	ppm	0	0	0	0	9	8 hrs
		CO2	ppm	419.41	430.96	463.53	424.91	5000	8 hrs
		SO2	µg/m ³	0	0	0	0	20	24 hrs
		NO2	µg/m ³	5.08	12.97	17.39	8.87	200	1 hr
		PM10	µg/m ³	3.00	4.11	3.93	5.09	50	24 hrs
		PM2.5	µg/m ³	1.62	2.14	2.22	2.71	25	24 hrs
Nyaung Kan Village	2,760 m	CO	ppm	0	0	0	0	9	8 hrs
		CO2	ppm	468.29	426.97	446.09	444.78	5000	8 hrs
		SO2	µg/m ³	0	0	0	0	20	24 hrs
		NO2	µg/m ³	4.51	25.42	14.38	6.20	200	1 hr
		PM10	µg/m ³	4.09	3.95	4.47	4.28	50	24 hrs
		PM2.5	µg/m ³	2.16	2.12	2.40	2.26	25	24 hrs

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 tonnes CO₂e/day (731,106 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 IV (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.

SMPC measured and reported on the CO₂ emissions from the Plant. The data was reported within the annual Stack Emission Report Continuous Emission Monitoring System for the year 2022 which was submitted to MONREC. According to the report, the CO₂ emissions for the year 2022 was 716,914 MT which is equivalent to a carbon intensity of 0.27 kg CO₂e/kWh-electricity. Based on this data, the CO₂ emission is equivalent to 716,914 reported as a CO₂e unit (e.g., tonnes of CO₂e per year).

In addition to the gas turbine GHG emissions as measured by CEMS and reported annually in the Stack Emission Report, SMPC is also required by the EMP to prepare an annual pollutant release inventory of other GHG emissions from the Plant (e.g. GHGs emissions from use of refrigerants, use of insulating gases, diesel consumption by gensets, etc) in order to monitor the total GHG emissions from the Plant. 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. In accordance with the EMP, SMPC should, where feasible, arrange emission off-sets. For example, the CO₂e related to solar PV deployment could be calculated and off-set from the total CO₂e per year.

Table 8: Summary of Findings - Air Quality and Dust

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Eighth 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	<ul style="list-style-type: none"> Management Plan IFC PS3 General EHS Guidelines ADB-ES Principle 9 	Data from the CEMS for continuous monitoring of NO _x , 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	<p>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.</p> <p>The estimated GHG emission exceeds the threshold that defines significant emitters of GHGs by the ADB SPS and EP IV (100,000 tonnes CO₂e/year) and IFC PS3 (25,000 tonnes CO₂e/year).</p>	Operations	<ul style="list-style-type: none"> Management Plan 	<p>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.</p> <p>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 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.</p>	<p>SMPC measured and reported on the CO₂ emissions from the Plant. The data was reported within the annual Stack Emission Report Continuous Emission Monitoring System for the year 2022 which was submitted to MONREC.</p> <p>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 all GHG emissions from the Plant, with GHG emission reported as a CO₂e unit (e.g. tonnes of CO₂e per year).</p> <p>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. In accordance with the EMP, SMPC should, where feasible, arrange emission off-sets. For example, the CO₂e related to solar PV deployment could be calculated and off-set from the total CO₂e per year.</p>	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	Eighth Monitoring Round Update	Significance
001	Management Plan	<p>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).</p> <p>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.</p>	Operations	<ul style="list-style-type: none"> Management Plan 	<p>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.</p>	<p>OSH Management Plan has been revised and updated.</p>	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.

5.6.2 Ambient Noise Monitoring

Noise monitoring was conducted by a third party appointed by SMPC called E Guard Environmental Services at two (2) locations i.e., at the Project site and Sa Khar Village (closest residential area) located approximately 630 m from the site. The monitoring data for ambient noise levels of the two locations for four periods:

- April 2022 (sampling period from April 01, 2022, to April 02, 2022);
- June 2022 (sampling period from June 28, 2022, to June 29, 2022);
- September 2022 (sampling period from September 08, 2022, to September 09, 2022); and
- December 2022 (sampling period from December 12, 2022, to December 14, 2022).

The monitoring data for ambient noise levels of the two (2) 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 location (time)	Apr 2022 Report (Leq)	Jun 2022 Report (Leq)	Sep 2022 Report (Leq)	Dec 2022 Report (Leq)	Project Standard
Myingyan CCPP Plant	N1 (daytime)	44.62	54.48	61.37	61.11	70
	N1 (night-time)	42.16	50.19	58.93	62.29	70
Sa Khar Village (630 m from the site)	N2 (daytime)	55.27	57.41	57.82	53.60	55
	N2 (night-time)	56.65	56.40	54.37	52.73	45

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. Exceedances of project standards for daytime and night-time were monitored at Sa Khar Village for most of the monitoring periods. The monitored exceedances are likely to be caused by the background noise levels.

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 m³/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 m³ capacity river water reservoir on site (Appendix 1B). Over 9,000 m³ 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

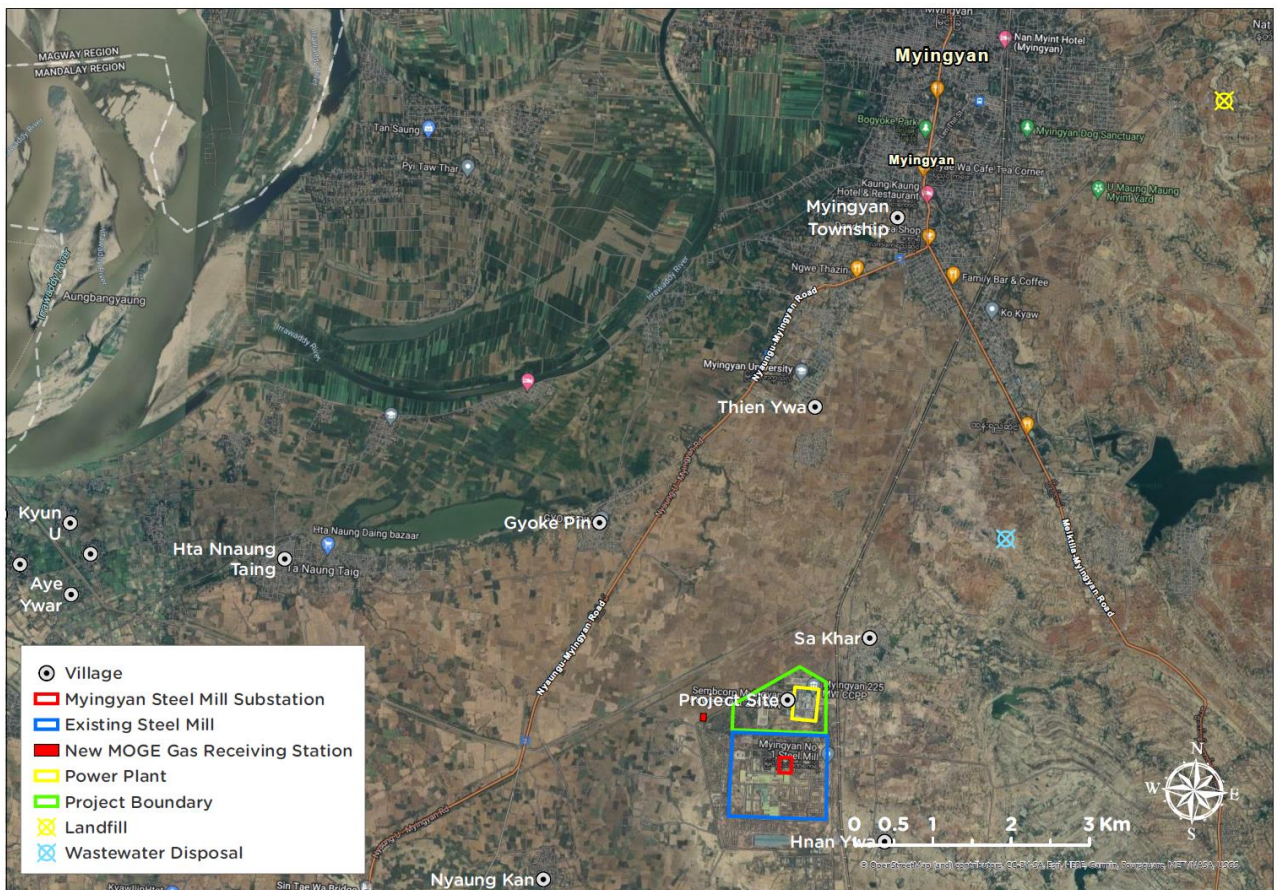
In April 2018, the construction of the sanitary wastewater treatment plant was completed. Therefore, all sanitary wastewater from the administration/ office block is routed to the on-site sanitary wastewater treatment plant from April 2018 onwards. Untreated sanitary wastewater from the site is no longer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

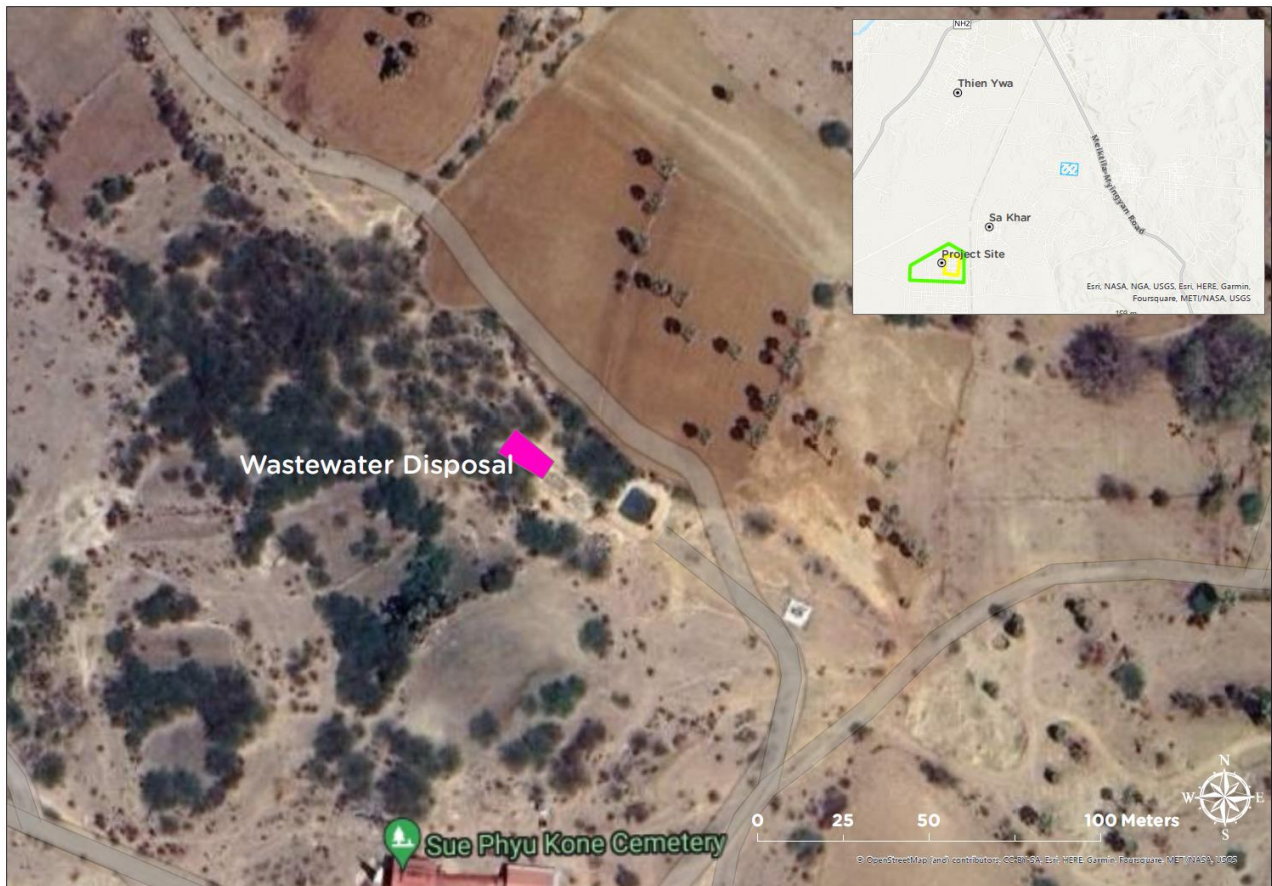
As per the Fifth to Seventh Monitoring Rounds, the IESC was informed that there has been no collection by the municipal council for this cess pit as yet, due to the small quantities of domestic wastewater being generated from the canteen toilet.

Figure 9: Sanitary Wastewater Disposal Site and Landfill Site Location



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 (imagery dated March 2022).

Figure 10: Sanitary Wastewater Disposal Site



It is recommended that the wastewater disposal site is revisited during the next physical 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 m³/hour from cooling tower blowdown;
- 35 m³/hour from the oil water interceptor (intermittent source i.e., only when raining);
- 20 m³/hour from the neutralising pit (as part of the raw water treatment process), after

treatment; and

- 0.1 m³/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 m³ 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 115.1 m³/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 March 28, 2022, July 01, 2022, September 21, 2022, and December 15, 2022. 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 Residual Chlorine;
- Total Nitrogen;
- Total Phosphorous.

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

Table 11: CMB Wastewater Monitoring Results

Parameters	Units	Discharge Limits	Mar -22	Jul-22	Sep-22	Dec-22
pH	-	6-9*	7.35	7.16	7.31	7.92
Total Suspended Solids (TSS)	mg/L	50*	10	16	20	12
Chemical Oxygen Demand (COD)	mg/L	125**	8.9	11.5	8.2	3.8
Total Nitrogen	mg/L	10**	2.1	1.1	0.5	0.6
Total Phosphorus	mg/L	2**	1.49	1.39	0.85	0.71
Oil and Grease	mg/L	10*	< 3.1	< 3.1	< 3.1	< 3.1
Mercury	mg/L	0.005	≤ 0.002	≤ 0.002	≤ 0.002	≤ 0.002
Zinc	mg/L	1.0*	0.696	0.428	0.54	0.324
Arsenic	mg/L	0.5*	≤ 0.01	≤ 0.01	≤ 0.01	≤ 0.01
Chromium	mg/L	0.5*	≤ 0.002	≤ 0.028	0.014	≤ 0.002

Parameters	Units	Discharge Limits	Mar -22	Jul-22	Sep-22	Dec-22
Cadmium	mg/L	0.1*	≤ 0.002	≤ 0.005	≤ 0.005	≤ 0.002
Copper	mg/L	0.5*	≤ 0.002	≤ 0.005	≤ 0.005	≤ 0.002
Lead	mg/L	0.5*	≤ 0.002	≤ 0.005	≤ 0.005	≤ 0.002
Iron	mg/L	1.0*	0.532	0.268	≤ 0.005	≤ 0.002
Total Residual Chlorine	mg/L	0.2*	< 0.1	< 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 2022 to December 2022, SMPC conducted continuous monitoring at CMB for pH, Conductivity, Chlorine, Free Residual Chlorine (FRC), Iron, Turbidity, Total Nitrogen, Total Phosphorus, and COD. **Table 12** presents the monitoring results for the parameters. As illustrated in **Table 11** and **Table 12**, the CMB wastewater is compliance with wastewater effluent quality limits before discharge.

Monitoring is also carried out at the following location:

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

The maximum measurements 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 12: CMB Continuous Wastewater Monitoring for the Myingyan CCGT Plant

Parameters	Units	IFC Standard	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
pH	-	6~9	8.11	8.17	8.07	8.06	7.83	7.93	8.09	8.49	8	8.09	7.81	7.63
Conductivity	µs/cm	<1200	779	700	946	897	662	676	784	590	742	880	1008	760
Chlorine	mg/l	-	58.6	58	57.9	50	15.6	79	83.1	44	126	114	63	67
FRC	mg/l	<0.2	0.0	0	0	0	0	0	0	0	0	0	0	0
Iron	mg/l	1	0.04	0.179	0.12	0.81	0.22	0.28	0.202	1.2	0.16	0.15	0.1	0.58
Turbidity	NTU	<50	7.9	15.8	15.3	24.4	18.4	11.6	12.5	15.3	14.6	8.59	10.8	19.3
Total Nitrogen	mg/l	10	1	1	2	3	0	2	2	3	1	1.8	0	0
Total Phosphorus	mg/l	2	0.2	0	0	2	0	0	0.4	0.9	0	1.2	1.1	1.1
COD	mg/l	125	23	18	0	107	44	0	0	5	46	3	14	6

Table 13: Wastewater Discharge Monitoring Results – Maximum Values

Parameters	Units	IFC Standard	Maximum for 2022
pH	-	6~9	8.49
Conductivity	µs/cm	<1200	1008
Chlorine	mg/l	-	126
FRC	mg/l	<0.2	0
Iron	mg/l	1	1.2
Turbidity	NTU	<50	24.4
Total Nitrogen	mg/l	10	3
Total Phosphorus	mg/l	2	2
COD	mg/l	125	107

5.7.6 Other Observations

The laboratory lacked a Quality Control / Quality Assurance (QA/QC) Manual or standard operating procedure. It is recommended that QA/QC measures and laboratory protocols be established, implemented and maintained.

Table 14: Summary of Findings – Surface Water

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Eighth Monitoring Round Update	Significance
001	Wastewater discharge for operations phase	Some wastewater quality parameters were not meeting the discharge standards.	Operations	<ul style="list-style-type: none"> IFC PS3 WBG EHS Guidelines ADB-ES Principle 9 	<p>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.</p> <p>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.</p>	Ensure that a Quality Control / Quality Assurance (QA/QC) Manual or standard operating is established, implemented and maintained	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	<ul style="list-style-type: none"> 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	Eighth 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	<ul style="list-style-type: none"> • 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. SMPC to include oil and grease analysis in future monitoring rounds.	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 Eighth 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 had not been disposed of off-site during 2021, thus they are assumed to continue to be 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, however, donations resumed during 2022, with CSR records provided for review recording donation of clean chemical drums to 13 villages. 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

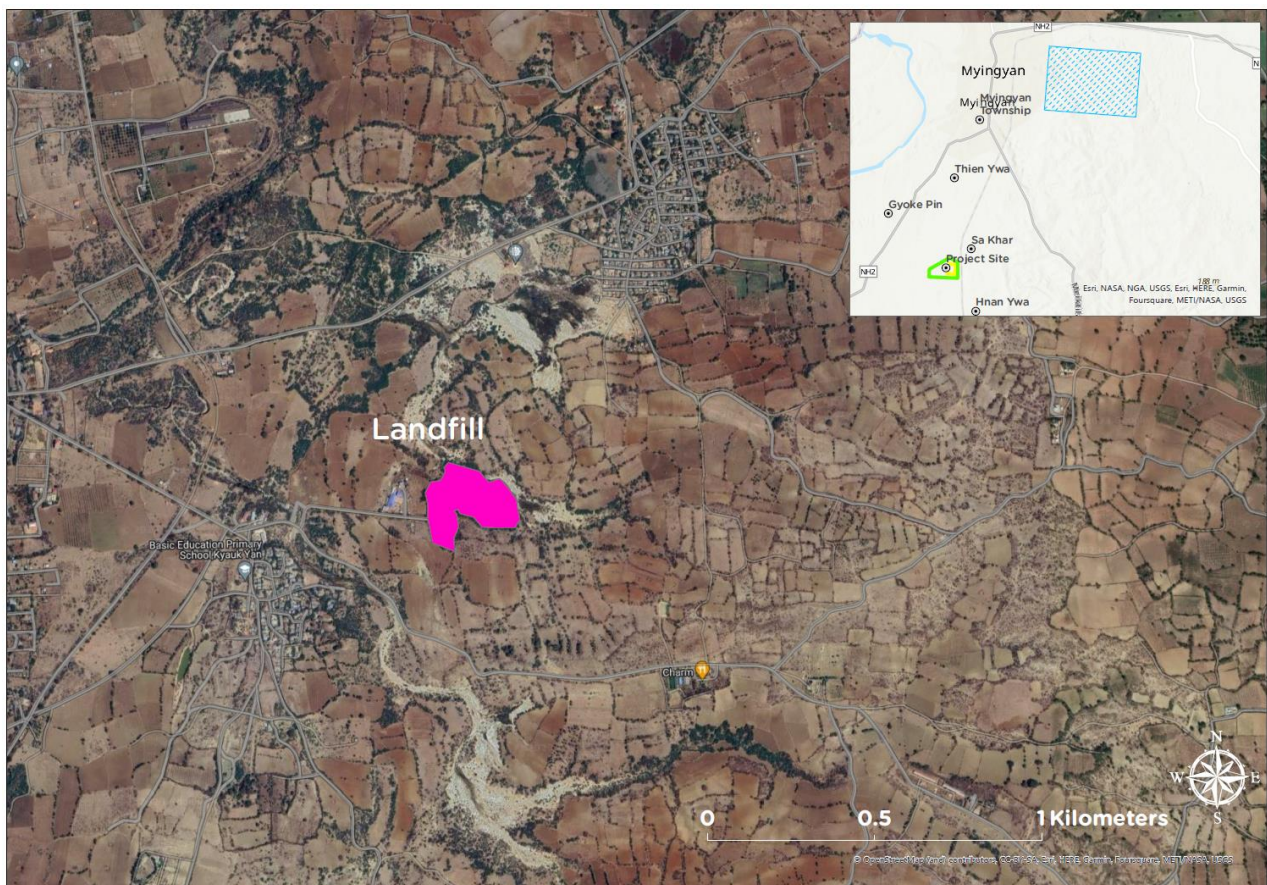
General Waste

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 (**Appendix 1A - Photo 19**) 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 had ceased, however donations resumed during 2022, with CSR records provided for review recording donation of clean chemical drums to 13 villages. 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	Eighth 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	<ul style="list-style-type: none"> IFC PS1 WBG EHS Guidelines ADB-ES Principle 4 	<p>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).</p> <p>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.</p> <p>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.</p>	<p>The recommendations remain.</p> <p>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.</p> <p>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.</p> <p>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).</p>	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	<ul style="list-style-type: none"> Management plan IFC PS3 WBG EHS Guidelines ADB-ES Principle 9 	<p>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.</p> <p>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.</p> <p>The IESC recommends that the drum cleaning process for community reuse</p>	<p>The recommendations remain.</p> <p>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.</p> <p>Empty drums are no longer provided to the local community through a CSR initiative.</p>	Minor

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Eighth Monitoring Round Update	Significance
					<p>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.</p> <p>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.</p>		
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	<ul style="list-style-type: none"> • IFC PS3 • WBG EHS Guidelines • ADB-ES Principle 9 	<p>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.</p> <p>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.</p>	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	Eighth 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	<ul style="list-style-type: none"> • IFC PS 1&3 • WBG EHS Guidelines • ADB-ES Principle 9 	<p>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.</p> <p>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'.</p> <p>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.</p>	<p>The recommendations remain.</p> <p>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'.</p> <p>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.</p>	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.

Recommendations:

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 Eighth 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 8th E&S Monitoring presentation dated January 2023 reported that the Project had achieved a total of more than 2.9 million man-hours since the last lost time injury (LTI), to October 2022. The HSSE performance statistics for 2022 (to October 2022) reported no environmental, security, asset damage, fire, first aid, medical treatment, restricted work, lost workday injuries, fatal injuries, or occupational disease cases, and only two near miss cases.

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 was revised in February 2022 (First Revision) and in January 2023 (Second Revision). 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, and 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.

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 was superseded by the 2021 SEP, which has been revised twice, as described above. 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.

The SEP also includes the Project's community grievance mechanism (CGM, described in **Section 5.14.4**). While the thirteen village grievance committees were not included in the 2021 SEP's CGM, the Relevant Village Authorities (Village Heads and Village Administrators) and others are now included in the Grievance Committee Organization in the CGM (see Section 9.3.2 of the 2021 SEP Second Revision). For further details on the CGM, see **Section 5.14.5**.

Updated job descriptions for the Government Affairs and CSR department managers were provided to Ramboll during the Eighth Monitoring Round and were reviewed and it was concluded that they were comprehensive and fit-for-purpose. However, there is an inconsistency in titles included in the 2021 SEP Second Revision for the parties involved.

Recommendation:

An Updated SEP should be prepared and include consistency in Sections 8 and 9 of the SEP on the CGM Roles & Responsibilities (i.e., current titles of parties involved). The updated SEP should be submitted, during the Ninth 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 were on hold during 2021; and most communication during 2021- 2022 was by phone, where feasible, and the face-to-face meetings resumed in 2022 on a limited basis. As was confirmed by PCo/SMPC during all of ENVIRON's site visits (November 2016, 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, 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.

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. Ramboll 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 7**) 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 8**) 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 received a copy of the Stakeholder Engagement Database Year 2022 which included details on the 838 meetings (conducted mainly by telephone) held with stakeholders in 2022 (**Appendix 6**). In addition, as mentioned above, Ramboll 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 or 2022. However, in lieu of an annual meeting, Annual Public Stakeholder Engagement (ASE) presentation slides with updated Project information were posted in noticeboards in each of the 13 villages in December 2022 (**Appendix 9**).

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 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 with villagers were conducted during the January 2023 virtual site visit. Ramboll met with the SMPC CSR and Government Affairs teams 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 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, 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 (now known as the CSR Lead Executive) also works with the Government Affairs Manager and SMPC Managing Director in the planning and implementation of community investment projects under the Community Development Plan (CDP).

Updated job descriptions for the Government Affairs and CSR department managers were provided to Ramboll during the Eighth Monitoring Round and were found to be comprehensive and fit-for-purpose.

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

Ramboll reviewed the Project's Stakeholder Engagement Database (**Appendix 6**) and SEP Key Performance Indicators (KPIs) for 2022 of actions taken and results achieved under the SEP thru December 2022. The Project was able to conduct 838 stakeholder engagements in 2022, mainly by having periodic telephone calls with stakeholders. However, SMPC had the following limitations on meeting the SEP KPIs for 2022:

- 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, and in 2022, there was limited face-to-face contact with village heads;
- Some village authorities were not able to be contacted, as scheduled;
- Suggestion boxes were not able to be checked, as scheduled; and
- Some 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 and in 2022 (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 (Second Revision) and includes detailed procedures for the Project CGM, including procedures for the thirteen village grievance committees and how, together with the Project CGM, grievances are managed and would be resolved (see CGM Org Chart in Section 9.3.2 of the 2021 SEP (Second Revision)).

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 CSR, Community Development, HR, HSSE Managers and GAD Officer (optional). These thirteen community grievance committees and their members are all now 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 Ninth Monitoring Round.

- As Ramboll 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. While 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 for its review did not include the Grievance Committees for the 13 Villages, the Relevant Village Authorities and others are now included in Section 9.3.2 of the 2021 SEP (Second Revision).

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 2022 (**Appendix 10**), Ramboll 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 Heads being involved in grievance resolution.

Recommendations:

- All Roles & Responsibilities under the CGM should be reviewed and revised, where needed, to ensure the correct names for roles are included in Section 9 of the Updated SEP and in the CGM Org Chart in Section 9.3.2. Role names mentioned in the CGM should be consistent with titles included in the current SMPC Org Chart (see **Figure 5b**). The updated procedures and organization chart should be incorporated into an updated 2023 SEP and submitted for the Ninth Monitoring Round.

In addition, Ramboll 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	Eighth Monitoring Round Update	Significance
001	Management Plan	SEP to be updated.	Construction/ Operations Ongoing	<ul style="list-style-type: none"> • 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.	<p>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.</p> <p>As per the updated SEP, all responsibilities fall under the Community Relations/ Development Manager.</p> <p>As of August 2018, the SEP was updated for the Operations Phase and included a new requirement for monitoring Key Performance Indicators (KPIs).</p> <p>The actions taken and results achieved against the KPIs for 2019 were provided to Ramboll for our review.</p> <p>As of January 2021, the actions taken and results achieved against the KPIs for 2020 were provided to Ramboll for review and were in compliance.</p> <p>As of January 2022, the actions taken and results achieved against the KPIs through December 2021 were provided to Ramboll 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)</p> <p>An Updated SEP to 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., Government Affairs and CSR. The updated</p>	Re-opened: Minor

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Eighth Monitoring Round Update	Significance
						<p>SEP to be submitted, along with updated job descriptions for the Government Affairs and CSR department managers during the Eighth Monitoring Round.</p> <p>As of January 2023, an Updated SEP was prepared and includes an updated organization chart to reflect that the Development Department had been split in March 2022 into two departments, i.e., Government Affairs and CSR. The updated SEP, along with updated job descriptions for the Government Affairs and CSR department managers, were provided to Ramboll during the Eighth Monitoring Round.</p> <p>All Roles & Responsibilities under the CGM should be reviewed and revised, where needed, to ensure the correct current names for roles are included in Section 9 of the Updated SEP and in the CGM Org Chart, Role names mentioned in the CGM should be consistent with titles included in the current SMPC Org Chart (see Figure 5b).</p>	
002	Stakeholder engagement	Stakeholder engagement with the 13 village leaders and PAPs.	Construction/ Operations Ongoing	<ul style="list-style-type: none"> • 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.	<p>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.</p> <p>Ramboll reviewed the further updated Stakeholder Engagement Database during our Fifth Monitoring Assignment (2019); and can confirm that it includes sufficient detail.</p> <p>Ramboll reviewed the Stakeholder Engagement Database during our Seventh Monitoring Assignment (January – December 2021); and can confirm that it continues to include sufficient detail.</p>	Closed

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Eighth Monitoring Round Update	Significance
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	<ul style="list-style-type: none"> ADB-ES Principle 6 IFC PS1 	Sembcorp to advise Ramboll 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 all findings, including the monitoring results at all phases of the project.	Construction/ Operations Ongoing	<ul style="list-style-type: none"> ADB-ES Principle 7 IFC PS1 	SMPC to provide details on how they share Project monitoring results with stakeholders.	<p>While it does not appear that Project monitoring results were shared with stakeholders during the November 2018 Public Stakeholder Engagement Meeting, monitoring results were included in the November 2019 meeting presentation.</p> <p>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).</p> <p>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.</p>	Closed
005	Community Grievance Mechanism	While the community grievance mechanism is well structured and detailed, most timeframes for actions are too long.	Construction/ Operations Ongoing	<ul style="list-style-type: none"> 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.	<p>As of January 2018, PCo had reduced its time for acknowledgement of receipt of a grievance from 10- 14 days to one week.</p> <p>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.</p> <p>As Ramboll was informed, no community or</p>	Closed

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Eighth Monitoring Round Update	Significance
						worker grievances were submitted during 2022.	
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	<ul style="list-style-type: none"> Management Plan ADB-SPS Paragraph 59 	<p>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</p> <p>SPS Paragraph 59 requirement for managing complaints from the local communities.</p>	<p>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.</p> <p>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 Grievance Committees for 13 Villages as members of the Project's Grievance Committee.</p> <p>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.</p> <p>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.</p> <p>The 2021 SEP (Second Revision)'s Grievance Committee Procedures included an updated Grievance Committee Organization Chart that includes the Relevant Village Authorities for the 13 Villages.</p> <p>Records of grievance resolution in the</p>	Minor

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Eighth Monitoring Round Update	Significance
						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 was reviewed and updated in February 2022 and again in January 2023 (2021 CDP Revision 2, 16 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).

The 2021 CDP Revision 2 (effective 16/1/23-15/1/24) includes a CDP org chart that reflects that the CSR Department now directly reports to the SMPC MD; an updated Table 2.2 with Village Overviews (i.e., high-level baseline data); and an updated list of KPIs. In addition, updated job descriptions for the Government Affairs and CSR department managers were provided to Ramboll.

However, the 2021 CDP should be further updated to include 2023 village baseline data, including village 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. In July 2022, a new Medical Officer joined SMPC (i.e., Dr. Win Kyaw, see Updated SMPC Org Chart in **Figure 5b**). In 2022, the Medical Officer spent 5.5 days per week at the plant and he travelled to the 13 villages with the CSR team and was able to perform two cycles of the Community Healthcare Program (Round 1 in 13 villages and Round 2 in 11 villages).

Skills development training for local communities. Sembcorp/SMPC is partnering with a local technical school and providing skills training (i.e., English language and Basic Tailoring & Designer Training 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 English language classes:

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

During 2022, there was a three-month class in Basic Tailoring & Designer Training provided on a limited basis to 10 ladies in Sa Khar Village. For 2023, there are plans to offer the Basic Tailoring & Designer Training in three additional villages.

Community Projects. According to SMPC's Government Affairs 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 obtained feedback for the CDP program's proposed year 2023 activities from village representatives during individual engagements in 2022, 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 the CDP KPIs for 2022 were provided to Ramboll for review. **Appendix 5** includes a listing of the 24 community development projects completed and this includes the 19 out of the 20 community development projects planned that were able to be accomplished in 2022 in the following categories:

- Education & Infrastructure: 13 CSR activities throughout 2022 (1 per village)
- Enhancing Water: 1 CSR activity
- Youth Development/Skills Set Training: 1 CSR activity
- Health: 4 CSR activities throughout 2022

Community Development Activity included school upgrades (teachers' lounges, fences, walls, desks and chairs); a village clinic construction; Covid-19 support; community health awareness programs (2 rounds); water treatment plant maintenance; and cleaned chemical drums being donated to the 13 villages. Planned CSR Activity for 2023 includes:

- Solar energy – 11 schools, 1 clinic and 1 hospital
- Water treatment plants' filters to be replaced – all 13 villages
- Community Healthcare Program (2 rounds) – all 13 villages; and
- Skills Set Training: Basic Tailoring & Designer Training Class – 3 villages

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:

A further Updated CDP should be prepared and include, as of 2Q 2023, community baseline data for all 13 villages (i.e., water sources, healthcare facilities, educational facilities and energy sources). The updated CDP should be provided to Ramboll during the next (Ninth) Monitoring Round.

Table 19: Summary of Findings – Community Development

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Eighth Monitoring Round Update	Significance
001	Community Development Plan	CDP needs to be updated for the Operations Phase	Construction/ Operations Ongoing	<ul style="list-style-type: none"> • IFC PS1 • IFC PS4 	<p>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.</p>	<p>As of <u>August 2018</u>, 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.</p> <p>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 Ramboll for review.</p> <p>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.</p> <p>As of <u>January 2021</u>, 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.</p> <p>As of <u>January 2022</u>, 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).</p> <p>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 departments, i.e., Government Affairs with Aung Lwin Oo, as Manager and CSR with</p>	Minor

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations prior to December 2020	Eighth Monitoring Round Update	Significance
						<p>Hein Min Oo, as Executive and Lead. The updated CDP to be submitted, along with updated job descriptions for the Government Affairs and CSR department managers during the Eighth Monitoring Round.</p> <p>As of January 2023, an Updated CDP was provided that included a CDP org chart that reflects that the CSR Department now directly reports to the SMPC MD; an updated Table 2.2 with Village Overviews; and an updated list of KPIs. In addition, updated job descriptions for the Government Affairs and CSR department managers were provided to Ramboll.</p> <p>As of 2Q 2023, a further updated CDP should be prepared and include community baseline data for all 13 villages (i.e., water sources, healthcare facilities, educational facilities, and energy sources) and provided to Ramboll during the Ninth Monitoring round.</p>	

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

Ramboll had recommended in our Third Monitoring Report that the CHMP be updated to include an organization chart, defined roles and responsibilities and an initial budget. Ramboll 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 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).

Recommendation:

Updated Community Health baseline studies, as of 2Q 2023 should be prepared for all 13 villages and results should be included in an updated CDP in the Ninth Monitoring Round.

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 Ramboll 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.

Ramboll 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 are now able to stay at accommodations in Myingyan, or at a Staff Guest House on-site with canteen, which accommodates up to 20 workers, or at either one of two SMPC Safe Houses, for workers and their families. One Safe House is located adjacent to the SMPC plant and the other is located in a rental industrial park, (away from residential areas where there is a reduced risk of road blocks, 5 km from the plant). Workers with small children (up to 3 years of age) can stay at the Safe Houses, each with a capacity for up to 30. The Safe Houses provide three meals per day seven days per week and arrange round-trip transportation from the Safe Houses to the plant. Students can come to the Safe Houses when they want to do online learning.

Recommendation:

SMPC to update Annex E to the BCP: Manpower Arrangements for Contingency to comply with the Lenders' requirements under IFC PS2 for a Workers' Accommodation Plan for the Operations Phase and include the Updated BCP in the Ninth Monitoring Round.

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.

5.18.1 Local Recruitment and Procurement for the Operations Phase

The Project's Local Recruitment and Procurement Management Plan for the Operation Phase (LRPMP, for the Operations Phase), first issued on 26 February 2018, was revised on 10 January 2022 to incorporate Sembcorp group-wide policies applicable to SMPC and the role of the Procurement Manager in the Plan. However, while policy names were provided on the Sembcorp group-wide policies applicable to SMPC, no policy details were provided. A job description for the Procurement Manager was reviewed by Ramboll and it was found to be comprehensive and fit-for-purpose.

Upon our review of the Project's LRPMP for the Operations Phase, it was 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 was informed by SMPC's HR Manager, as of December 2022, the Project employed 25 local workers from villages within the Project's DAI (22 permanent plus 3 contract workers), which is 20.75% of the Project's total workforce (excluding the Security team and EPGE).

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's review.

As of December 2022, the Project's total national workforce, including the Yangon workforce, security team and EPGE was 128, representing 99.22% of the total workforce; foreign skilled workers (1) made up only 0.78% of the total Project workforce (**Table 22**).

Recommendation:

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

SMPC should provide an updated LRPMP with details on the relevant Sembcorp group-wide policies applicable to the LRPMP in the Ninth Monitoring Round. Procurement management aspects of the plan should consider sustainable procurement / sustainable supply chain issues to incorporate sustainability considerations throughout the procurement process (e.g. human rights, fair pay, anti-child labour, sourcing of raw materials, value for money, etc).

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'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 Ramboll 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 Ramboll's in-person 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 2022 HSSE Training Plan (date of issue 2021) and the Training Matrix which records completed training per month was provided for review. The Training Plan categorises training requirements across five groups of personnel: Operations, Maintenance, EU, Lab and Other (such as Managers, HR/Admin, HSSE Officers). Training on various OHS topics such as confined space rescue, First Aid and AED appliances, OHS awareness, office environment safety, safe lifting and electrical safety was provided during the year. The Seventh Monitoring Round recommended training in additional topics, and as a result, training in fall from height rescue and flu control was conducted, whilst training in Environmental Legal Compliance (ESMPs) was planned but not conducted. It is again recommended that the training plan include a range of E&S topics relevant to the plant's operations and with adequate technical depth, such as the ESMP, Waste Management, GHG Management, Sustainable Procurement/Sustainable Supply Chain and CSR. As recommended in the Fifth through Seventh Monitoring Round Reports, the Training 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 IFC Performance Standards 1 through 8. This is particularly relevant in 2023 and for subsequent years given the recent changes to management positions and as many of the operational plans were revised 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, Ramboll 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. Ramboll'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

Ramboll 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 Ramboll'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.

Ramboll'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 Ramboll 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, Ramboll 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 Ramboll 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.

Ramboll 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 Mingyan 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 confirms that the compensation payments to these 8 PAPs were made between 27- 30 August 2018, and that Ramboll received details on the compensation paid to each of the 8 PAPs. Ramboll 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'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 the December 2019 site visit, Ramboll met with 3 of the 8 PAPs who were compensated in 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 is aware, no grievances were submitted by these 4 PAPs. Ramboll 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 Ramboll 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 Ramboll’s Final Observer Report, were carried forward into the Second and Third Monitoring Reports, and were updated in the Fourth 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 Ramboll 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 Ramboll’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. Ramboll 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 Ramboll 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; and 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 2022 Update	Significance
008	Land Compensation	<p>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.</p> <p>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.</p>	Construction	<ul style="list-style-type: none"> • ADB-IRS Principle 6 • IFC PS5 		<p>No change over previous findings.</p> <p>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.</p> <p>Ramboll 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.</p> <p>Ramboll received Notarized English translations of the compensation documentation for the remaining 8 PAPs.</p> <p>During the December 2019 site visit, Ramboll met with three of the eight PAPs.</p> <p>During the December 2020 virtual site visit, Ramboll met with one additional PAP; and can confirm that all four PAPs were satisfied with their compensation and their livelihoods were restored.</p> <p>Meetings with the remaining four PAPs are recommended for future monitoring rounds.</p>	Minor

5.24 Labor & Working Conditions

Human Resources documentation, listed below, was reviewed by Ramboll 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'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.

An updated Grievance Handling Policy was prepared in 2022 (PPMS Document Ref. 2.01.01.012) and is in effect from 4/1/22-3/31/25 and was reviewed by Ramboll during the Eighth Monitoring Round. Like the previous Grievance Handling Policy, the updated Policy includes SMPC's worker grievance mechanism procedures and provides a policy to address worker grievances and was previewed by two SMPC Senior Executives,

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

During Ramboll'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 in 2021 included 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.

In June 2022, SMPC's Covid-19 BCP was superseded by the SMPC Business Continuity Plan (PPMS Documentary Ref: 1,02.03.003, (the Updated BCP, **Appendix 11**)). The entire procedure for the BCP was reportedly modified to align with the Sembcorp Group Business Continuity Management HQ BCM Framework. The Updated BCP is effective from 28 June 2022 - 27 June 2025 and should be reviewed and updated at least once every year or whenever there is a need. The Updated BCP includes minimum business continuity objectives; an ERP & BCP activation flowchart, which illustrates the workflow and linkages between the ERP, BCP and CCP; BCP taskforce/team structure; roles and responsibilities; communication protocol; and the following annexes:

- Annex A: BCP Taskforce/Team Members;
- Annex B: Call Tree Structure;
- Annex C: Sanctions of Goods and Services;
- Annex D: Loss of Primary Cooling Water (River Water);
- Annex E: Manpower Arrangements for Contingency; and
- Annex F: Consumables and Spares.

The Updated BCP is to be reviewed in conjunction with the following plans during the Ninth Monitoring Round:

- Emergency Response Plan (ERP);
- Crisis Communication Plan (CCP); and
- Incident Reporting & Conduct of Root Cause Analysis.

However, only brief summaries of these three plans were included in the Updated BCP.

Recommendations:

- Sembcorp HQ BCM Framework to be provided to Ramboll, along with the Emergency Response Plan, Crisis Communication Plan, and the Incident Reporting and Conduct of Root Cause Analysis, for its review during the Ninth Monitoring Round.
- SMPC to update Annex E to the Updated BCP: Manpower Arrangements for Contingency to comply with the Lenders' requirements under IFC PS2 for a Workers' Accommodation Plan for the Operations Phase and include the Updated BCP in the Ninth Monitoring Round.

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. Ramboll 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

In order to assess the Project's compliance with ADB's Social Protection Requirements and IFC's PS2, Ramboll 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 2022, (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 2022

	Gender		Plant Workforce				Yangon Workforce	Security Team (External)	EPGE	Total
			Local		National	Foreign				
	Male	Female	Perm	Contract						
Head-count	108	21	22	3	47	1	10	43	3	129
%	83.72	16.28	17.05%	2.33%	36.43%	0.78%	7.75%	33.33%	2.33%	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, Ramboll 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 Ramboll was informed, community members prefer to lodge complaints directly with the Project's CSR Executive Lead.

SMPC provided Ramboll 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's review during the Sixth, Seventh or Eighth 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 during the December 2020 virtual site visit that there were no worker grievances in 2020; and also confirmed during the January 2022 and 2023 virtual site visits that there were no worker grievances in 2021 or 2022.

In 2021, 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.

As supporting data for zero employee grievances reported during the virtual site visit for the Eighth Monitoring Round, SMPC's HR Manager provided the summary below of staff communication sessions implemented in 2022:

In 2022, SMPC implemented the following communication sessions where the employee can address their concerns and where management can share information:

- Daily Operation & Maintenance Meeting – Regular meeting
- Monthly Coordination meeting – Regular meeting
- [Face to face staff communications session with HR](#)
- Team engagement session with senior management from Group
- [Group Staff communications & Global Townhall](#)
- [Singapore and Southeast Asia \(SG & SEA\) Townhall](#)

Responses 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, Ramboll 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.

Ramboll 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 Ramboll

should be provided copies of the retrenchment plans.

As Ramboll 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 Ramboll '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 Ramboll'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 two years 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	Eighth 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.	<p>In August 2018, Ramboll 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:</p> <ol style="list-style-type: none"> 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. <p>In November 2019, Ramboll 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.</p>	Issue Closed

6. 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	<p>Develop and implement construction phase E&S Management Program (ESMP) consistent with ESIA recommendation and IFC requirements and which includes:</p> <ul style="list-style-type: none"> • 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. 	<p>Documented ESMPs in form and substance acceptable to IFC: by 15/05/2016 or prior to construction, whichever is earlier.</p> <p>Evidence of inclusion of plans in EPC HSE requirements: by 15/05/2016 or prior to construction, whichever is earlier.</p>	<p>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:</p> <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> ○ Plant and Vehicle Management and Maintenance Plan; ○ Biodiversity Management Plan; and ○ HSSE Training Plan. <p>The construction phase ESMP was developed prior to construction.</p> <p>IESC observations on the implementation of each plan are detailed in section 5 of this report.</p> <p>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.</p> <p>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.</p> <p>Status Summary: Closed</p>

No	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
	<p>The sponsor will also complement the EPC HSE construction requirements to include the aforementioned aspects.</p>		
2/PS1	<p>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.</p>	<p>Documented Operational Phase ESMP in form and substance acceptable to IFC: 15/09/2018 or prior to commencement of operations, whichever is earlier.</p>	<p>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.</p> <p>The Operational Phase ESMP was prepared and seven operational phase plans were developed. These seven plans were reviewed by Ramboll and its observations were reported in a separate report (February 12, 2019).</p> <p>During 2021, SMPC prepared a Business Continuity Plan (BCP) Implementation to ensure the continuity of workers to operate the plant during the Covid-19 pandemic. However, this BCP procedure was superseded by the 2022 Updated BCP.</p> <p>The Sembcorp HQ BCM Framework should be provided to Ramboll for its review during the Ninth Monitoring Round, along with the <u>Emergency Response Plan, Crisis Communication Plan, and the Incident Reporting and Conduct of Root Cause Analysis.</u></p> <p>Annex E to the 2022 Updated BCP includes Manpower Arrangements for Contingency. This plan which serves as the Workers' Accommodation Plan for the Operations Phase should be updated to comply with Lenders' requirements under IFC PS2 and be included in the Ninth Monitoring Round.</p> <p>The Operations Phase LRPMP should be updated to include:</p> <ul style="list-style-type: none"> • Details on the relevant Sembcorp group-wide policies applicable to the LRPMP and incorporation of sustainable procurement / sustainable supply chain considerations; • KPIs that track local recruitment and procurement of goods and services; and • A plan number and Table of Contents. <p>Re-opened Work in Progress</p>

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	<p>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.</p>	<p>Evidence of construction phase EPR scope expanded in EPC contract: 15/05/2016 or prior to construction, whichever is earlier.</p>	<p>The Project's Emergency Preparedness & Response (EPR) Management Plan includes all foreseeable emergency response situations, including those specified in the ESAP.</p> <p>Status Summary: Closed</p>
	<p>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.</p> <p>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.</p> <p>It will also include awareness programs for the Plant personnel, local community and local administration.</p>	<p>Operational phase EPR in form and substance acceptable to IFC: 15/09/2018 or prior to commencing plant testing activities whichever is earlier.</p>	<p>The site has completed a quantitative risk assessment and an operational phase EPR plan has been developed. The operational EPR Plan was reviewed by Ramboll and its observations were reported in a separate report (12 February 2019).</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>Status Summary: Work in Progress</p>

No	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
5/PS1	<p>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.</p>	<p>Program developed in form and substance acceptable to IFC: by 15/05/2016 or prior to construction, whichever is earlier.</p> <p>Independent reviews (construction): Semi-annually during construction phase (15/09/2016).</p> <p>Independent reviews operation): By start of operations and annually for first year of operations (15/09/2019).</p>	<p>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.</p> <p>Ramboll 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.</p> <p>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, Ramboll 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, Ramboll 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.</p> <p>Sembcorp and PCo agreed to include project monitoring results in their presentations to be provided at future annual Public Stakeholder Engagement Meetings.</p> <p>Status Summary: Closed</p>
6/PS1	<p>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.</p>	<p>Documented program in form and substance acceptable to IFC: 15/05/2016 or prior to construction, whichever is earlier.</p>	<p><u>Community Development Program</u></p> <p>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.</p> <p>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 Ramboll for our review and were in compliance.</p> <p>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. The 2021 CDP was revised on 5 February 2022 and then again on 16 January 2023 (the 2021 CDP Revision 2). The 2021 CDP Revision 2 (effective 16/1/23-15/1/24) includes a CDP org chart that reflects that the CSR Department now directly reports to the SMPC MD; an updated Table 2.2 with Village Overviews (i.e., high-level baseline data); and an updated list of KPIs. In addition, updated job descriptions for the Government Affairs and CSR department managers were provided to Ramboll.</p> <p>An Updated CDP should be prepared and include community baseline data, as of 2Q 2023, for all 13 villages (i.e., water sources, healthcare facilities, educational facilities, and energy</p>

No	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
			<p>sources). The updated CDP should be submitted to the IESC during the Ninth Monitoring Round.</p> <p>Status Summary: Re-opened: Work in Progress</p> <p><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 organization 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.</p> <p>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.</p> <p>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 Ramboll for our review and were in compliance.</p> <p>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 did 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's review.</p> <p>As of January 2022, a new SEP was prepared that superseded the 2021 SEP (PPMS Document Ref 1.01.04.001, the 2021 SEP) and its Grievance Committee Procedures included the Grievance Committees for 13 Villages as members of the Project's Grievance Committee.</p> <p>An Updated SEP should be prepared and include an updated CGM with revised Roles & Responsibilities, where needed, to ensure the correct current names for roles are included in</p>

No	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
			<p>Section 9 of the Updated SEP and in the CGM Org Chart. Role names mentioned in the CGM should be consistent with titles included in the current SMPC Org Chart. The Relevant Village Authorities should be defined in the SEP. The updated SEP should be submitted to the IESC during the Ninth Monitoring Round.</p> <p>Status Summary: Re-opened: Work in Progress</p>
7/PS2	<p>Ensure relevant parts of project HR policies and procedures cover labour practices of contractors and sub-contractors.</p>	<p>Documented program in form and substance acceptable to IFC: 15/05/2016 or prior to construction, whichever is earlier.</p>	<p>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.</p> <p>Status Summary: Closed</p>
8/PS2	<p>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.</p>	<p>Monitoring reports in form and substance acceptable to IFC: Annually following the start of construction activities (15/03/2017).</p>	<p>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. Ramboll never received any details on how PCo monitors the subcontractors use of the mini-contracts.</p> <p>Status Summary: Closed</p>
9/PS2	<p>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.</p>	<p>Working housing specifications included in EPC contract making reference to IFC standards: 15/05/2016 or prior to construction, whichever is earlier.</p>	<p>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.</p> <p>Status Summary: Closed</p>
10/PS3	<p>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.</p>	<p>Results submitted in AMRs (15/03/2017).</p>	<p>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.</p>

No	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
			<p>Status Summary: Work in Progress</p>
11/PS4	<p>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.</p> <p>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.</p>	<p>Evidence of inclusion in EPC HSE requirements: 15/05/2016 or prior to construction, whichever is earlier.</p>	<p>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.</p> <p>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.</p> <p>Status Summary: Closed</p>
12/PS4	<p>Require EPC contractor to implement a management plan that will include: ensuring that appropriate medical facilities are available for all labour; a periodic health check-up program is in place; an awareness program on STI and HIV/AIDS; and measures to control disease vectors.</p>	<p>Evidence of inclusion in EPC HSE requirements: 15/05/2016 or prior to construction, whichever is earlier.</p>	<p>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.</p> <p>Status Summary: Closed</p>
13/PS5	<p>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.</p>	<p>Procedure in form and substance acceptable to IFC: 31/05/2016 or as advised by EPGE.</p>	<p>PCo developed a Resettlement Framework for the Project (November 2015) which was disclosed on ADB's website. Ramboll's Land Acquisition and Resettlement Plan Observer Report serves the purposes of a Resettlement Action Plan (see section 5.23 of this report).</p> <p>Status Summary: Closed</p>

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).	<p>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.</p> <p>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).</p> <p>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.</p> <p>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.</p> <p>Ramboll 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. Ramboll has received complete English translations of the land compensation documentation for the 8 PAPs.</p> <p>During the December 2019 site visit, Ramboll met with 3 of the 8 PAPs who were compensated in August 2018. During the December 2020 virtual site visit, Ramboll met with 1 more of the 8 PAPs who were compensated in August 2018. Ramboll confirms that the 4 PAPs were satisfied with their compensation and their livelihoods were restored.</p> <p>Ramboll 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.</p> <p>Status Summary: Work in Progress</p>

7. SUMMARY

The Eighth Environmental and Social Monitoring Round has assessed the fourth 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 Eighth Environmental and Social Monitoring Report reports the findings of the monitoring for the period January 2022 to December 2022.

The IESC finds the Project is generally compliant with the ESAP with the exception of six 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 were largely re-established during 2022. 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.

Various changes in senior management positions were made in early 2022, namely Managing Director, Plant Manager, HSSE Manager, and Commercial Manager. The organization chart provided for the Eighth Monitoring Round (dated December 31, 2022) showed no major changes compared with March 2022, with the exception of the appointment of the Commercial and Risk Manager and the Financial Controller, both Sembcorp personnel, and Win Kyaw, the Medical Officer. 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.

An Updated Business Continuity Plan (BCP) was prepared in 2022 and Ramboll was informed the entire BCP procedure was modified to align with the Sembcorp Group Business Continuity Management (HQ BCM) Framework. The Sembcorp HQ BCM Framework should be provided for Ramboll's review during the Ninth Monitoring Round, along with the Emergency Response Plan, Crisis Communication Plan, and the Incident Reporting and Conduct of Root Cause Analysis.

In addition, the following updated plans should be provided for Ramboll's review during the Ninth Monitoring Round:

- An Updated SEP with an updated CGM with revised Roles and Responsibilities;
- An Updated CDP with community baseline data, as of 2Q 2023, for all 13 villages (i.e., water sources, healthcare facilities, educational facilities, and energy sources); and
- An Updated LRPMP including details on the relevant Sembcorp group-wide policies applicable to the LRPMP; sustainable procurement / sustainable supply chain

considerations; KPIs that track local recruitment and procurement of goods and services; and a plan number and Table of Contents.

APPENDIX 1A VIRTUAL SITE VISIT PHOTO LOG (2022)



Photo 1: View of the Myingyan CCGT Power Plant from Administration Building rooftop (Photo taken from video provided during January 2023 audit)



Photo 2: View of the Administration Building (Photo taken from live video during January 2023 audit)

Title: Eighth Environmental and Social Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: January 2023
Project: 335000346

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Photo 3: Plant Control Room with Continuous Operations Monitoring System within the main administration building (Photo taken from live video during January 2023 audit)



Photo 4: View of Unit 1 plant exterior (Photo taken from video shared during January 2023 audit)

Title: Eighth Environmental and Social Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: January 2023
Project: 335000346





Photo 5: Display of HSSE Notice board at reception area of administration building (Photo taken from live video during January 2023 audit)



Photo 6: Two (2) fire water storage tanks of 1200 m³ capacity each (Photo taken from video provided for January 2023 audit)

Title: Eighth Environmental and Social Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: January 2023
Project: 335000346





Photo 7: View of V Power and river water storage reservoir from office in administration building (Photo taken from live video during January 2023 audit)



Photo 8: Central Monitoring Basin of water storage reservoir (Photo taken from video shared during January 2023 audit)

Title: Eighth Environmental and Social Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: January 2023
Project: 335000346





Photo 9: Raw Water Pond of water storage reservoir (Photo taken from video shared during January 2023 audit)

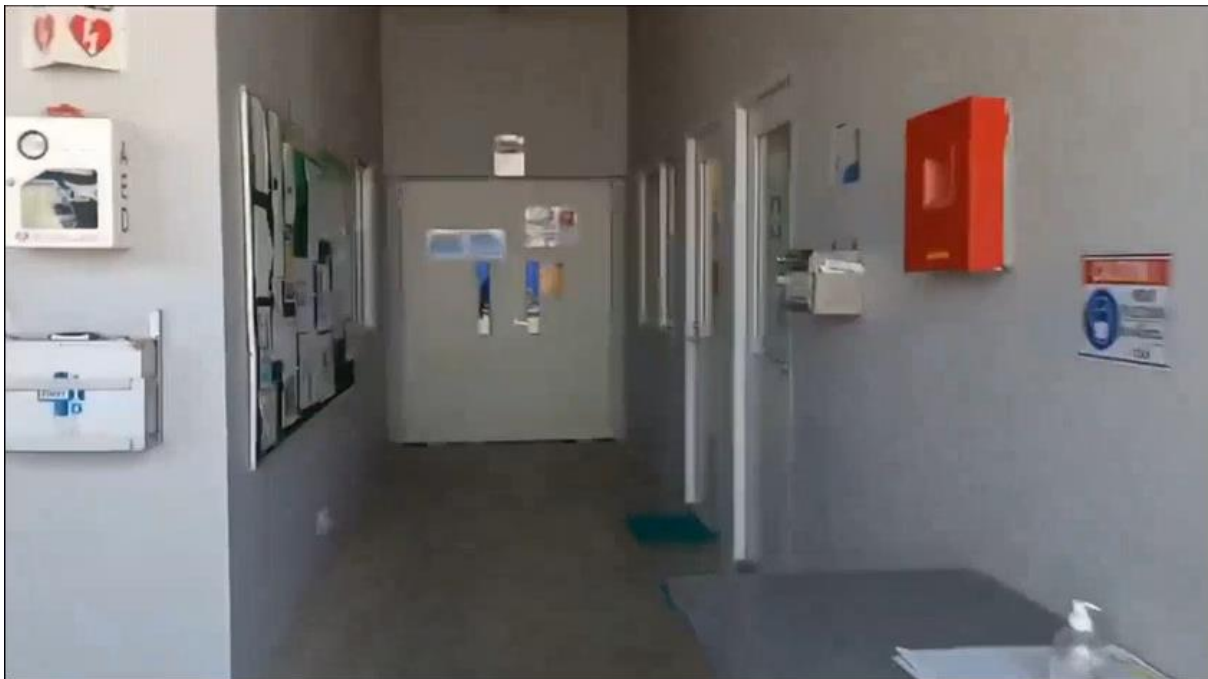


Photo 10: Entrance to the Warehouse ahead and Clinic on the right with AED Defibrillator and First Aid Kit on the left (Photo taken from video shared during January 2023 audit)

Title: Eighth Environmental and Social Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: January 2023
Project: 335000346





Photo 11: Warehouse (Photo taken from video shared during January 2023 audit)

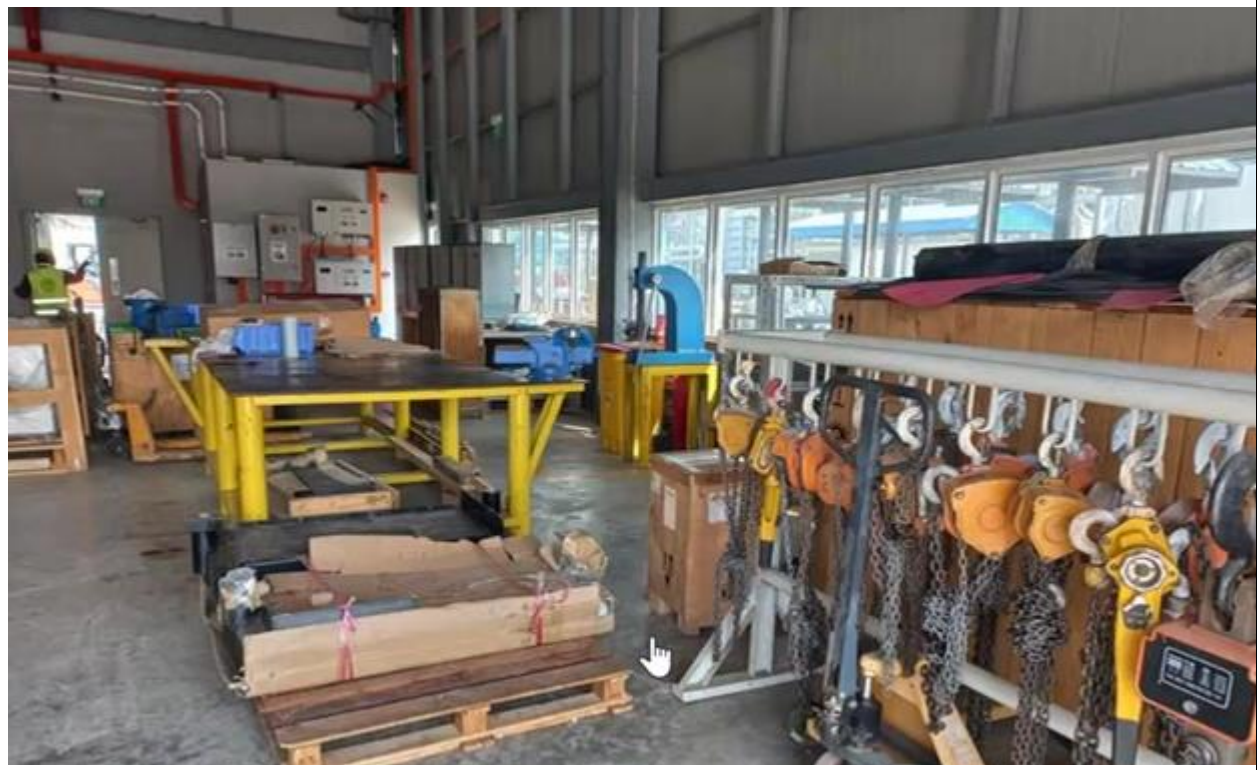


Photo 12: Workshop (Photo taken from video shared during January 2023 audit)

Title: Eighth Environmental and Social Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: January 2023
Project: 335000346





Photo 13: Sludge hoppers for collection of sludge from the water treatment plant (Photos taken from video provided for January 2023 audit)



Photo 14: Full and used oil drums stored at Lube Oil Shelter (Photo taken from video shared during January 2023 audit)

Title: Eighth Environmental and Social Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: January 2023
Project: 335000346



APPENDIX 1B SITE VISIT PHOTO RECORD

HSSE PERFORMANCE (Safety & Health) Oct 2019				
	2019 Oct	2019 YTD	Target	2018 Record
Total Man-hour without LTI	103,530	648,530		(PTD) 797,000
Days since last LTI	31	304		
Fatality	0	0	0	0
Lost Work Day Injury Cases	0	0	0	0
Occupational Disease Cases	0	0	0	0
Total Recordable Injury Rate (TRIR)	0	0	0.74	0
Lost Time Injury Rate (LTIR)	0	0	0.55	0
Accident Severity Rate (ASR)	0	0	124.67	0

Leading HSSE KPIs - Oct 2019				
Parameter	Unit	Oct 2019 Actual	YTD	Plan 2019
BBS observations	card	635	2,415	2500
HSSE training man-hours	hour	119	2,879.5	1824.5
HSSE Audit (Internal/external)	number	106	111	2
Near-miss Investigated	%	100%	100%	100%
Management walk-down	number	17	56	48

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



Photo 2: Sanitary wastewater treatment plant (December 2019)

Title: Eighth Environmental and Social Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: January 2023
Project: 335000346





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



Photo 4: River water supply pumps (December 2019)

Title: Eighth Environmental and Social Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: January 2023
Project: 335000346





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



Photo 6: Main Entrance Gate to Myingyan CCGT Power Plant (Photo taken from live video during February 2022 Audit)

Title: Eighth Environmental and Social Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: January 2023
Project: 335000346





Photo 7: Chemical feeding area (Photo taken from video provided by SMPC, January 2022)



Photo 8: Entrance leading to the river water supply pumping station (Photo taken from video provided by SMPC, January 2022)

Title: Eighth Environmental and Social Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: January 2023
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Photo 9: Bridge access and river water supply pipeline leading to pumping station (Photo taken from video provided by SMPC, January 2022)



Photo 10: Inside and outside barge (Photo provided by SMPC, January 2022)

Title: Eighth Environmental and Social Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: January 2023
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Photo 11: Designated water sampling location from the discharge pipeline (Photo provided by SMPC, January 2022)



Photo 12: View of the Administration Building (December 2019)

Title: Eighth Environmental and Social Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: January 2023
Project: 335000346





Photo 13: Sludge hoppers for collection of sludge from the water treatment plant (December 2019)



Photo 14: Lubricant (Lube) oil storage area (December 2019)

Title: Eighth Environmental and Social Monitoring Report
Site: Myingyan CCPP, Myanmar

Date: January 2023
Project: 335000346

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APPENDIX 2 MONITORING PLAN

**Myingyan Natural Gas Power Project
Lenders' Environmental and Social Consultant (LESC) 8th Monitoring Round
Draft Monitoring Plan**

Monitoring Visit Date:	January 17, 2023 - January 20, 2023	Site Location:	Sembcorp Myingyan Power Company Ltd, Myingyan, Myanmar
Monitoring Team:	<p>The monitoring team will comprise:</p> <ul style="list-style-type: none"> 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:	<ul style="list-style-type: none"> 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. Fahd Adventure Solares – SMPC, Plant Manager fahd.adventure@sembcorp.com Mr. Zaw Moe Aung, - SPMC, HSSE Lead E-mail: zaw.moeaung@sembcorp.com Ms. Naing Naing Aung – SMPC Human Resources Manager Tel: +65 8249 0796, E-mail: naing.naingaung@sembcorp.com Mr Kenneth Sen – Sembcorp Senior Manager, Commercial & Risk E-mail: kenneth.sen@sembcorp.com 		
Lender Team	<ul style="list-style-type: none"> Beatrice Gomez – ADB, Tel: +632 632 4444, E-mail: bgomez@adb.org Olga Skotareva – ADB, E-mail: oskotareva@adb.org Siela B. Teng-Almocera – ADB, E-mail: stengalmocera@adb.org Melissa Moyano Manguiat – ADB, E-mail mmanguiat@adb.org Wenlei Zhou – IFC, Tel: +1 202 294 9327, E-mail: wzhou1@ifc.org Sajid Imtiaz Khan – IFC, E-mail: skhan36@ifc.org Saadia Hassan – IFC, E-mail: shassan7@ifc.org Yang Shuai – AIIB, E-mail: yang.shuai@aiib.org Mingkai Zhang – AIIB, E-mail: mingkai.zhang@aiib.org Jackie Jing Cui – AIIB, E-mail: jcui@aiib.org Joana Nicolau – MIGA, E-mail: jnicolau@worldbank.org 		
Persons to be Notified of Monitoring Visit:	<p>In addition to those listed above:</p> <ul style="list-style-type: none"> Che Yu Kok, DZ Bank, E-mail: cheyu.kok@dzbank.de 		

<p>Scope of Monitoring:</p>	<p>The 8th Environmental and Social (E&S) monitoring round will cover the CCGT and its associated facilities, within the boundary of the SMPC site, and virtual interviews with SMPC management and tentatively including a few staff who live in the nearby villages.</p> <p>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 2022 of the Stakeholder Engagement Plan, Community Grievance Mechanism and Community Development Plan, given the ongoing Covid-19 and security risks.</p> <p>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 (January 2022) and of items noted in the environmental and social action plan (ESAP).</p> <p>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.</p>
<p>Objectives:</p>	<p>The primary objectives of the monitoring visit, as defined in the scope of work, are to:</p> <ul style="list-style-type: none"> 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.
<p>Components of Monitoring Plan:</p>	<p>The monitoring round will include:</p> <ul style="list-style-type: none"> 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) External social-related activities (e.g., interviews with stakeholders outside the project site, visits to villages, etc) will be restricted due to Covid-19 and security considerations. Ramboll will plan to consult virtually with certain Village Heads, the District Hospital Administrator and District Police Chief, the remaining 4 PAPs and other landowners; and to visit the hospital medical waste incinerator. 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, currently on hold; 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 2022 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). Also, an update on any 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 2022 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 17, 2023:

- 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 7th report on ADB's website in 2022, 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 18, 2023:

- 9:00 – 12:30 Social Interviews with Naing Naing Aung, SMPC Human Resources Manager, Aung Lwin Oo (ALO), SMPC Development Manager and Hein Min Oo (Koyin), SMPC, CSR Executive (Sharon Maharg, Wenlei Zhou (IFC), Olga Skotareva, (ADB)), Yang Shuai (AIIB) and Mingkai Zhang (AIIB) regarding:
 - Handling of Covid-19 related issues for workers and affected communities, including % of workers who are vaccinated;
 - Interview with SMPC doctor;
 - 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 Project Guest Houses, and workers using rental housing and other means of accommodation
 - Viewing of up to date (2022) photographs of the Project Guest Houses (both interior and exterior photos), room dimensions and number of staff per room;
 - Procedures for workers' daily transportation to the SMPC site;
 - Update on local communities' access to cash at ATMs and other financial resources
 - and
 - Discussion on gender, diversity and inclusion.
- 09:00 – 10:00 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, on-site accommodation/sleeping areas, rest areas, etc.)
 - View up to date (2022) photographs of the gas receiving station, raw water intake station, process water discharge point, the municipal waste disposal site, offsite sludge storage area.
- 10:00 – 12:30 Environmental Interviews with Zaw Moe Aung (SMPC HSSE Manager) (Cara Quinn, Beatrice Gomez (ADB), Jackie Jing Cui (AIIB))

Friday, January 20, 2023:

- 09:00 – 11:00 Social Management Plans Review (Sharon Maharg, Wenlei Zhou (IFC), Olga Skotareva, (ADB), Yang Shuai (AIIB) and Mingkai Zhang (AIIB))
 - 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 Management Plans Review (Cara Quinn and Lenders)
 - Interview with HSSE 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 HSSE Manager and HSSE 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 2022 (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 and collection of all necessary documents are completed.
Monitoring Round Arrangements:	MS Teams conference calls to be utilised. Ramboll will facilitate the set-up of the calls.
Health & Safety Considerations:	<ul style="list-style-type: none"> • 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 ambient air concentrations of NO_x, SO₂, CO₂, CO, O₂, PM₁₀ and PM_{2.5} were recorded by a third party, E Guard Environmental Services, appointed by SMPC, at four locations:

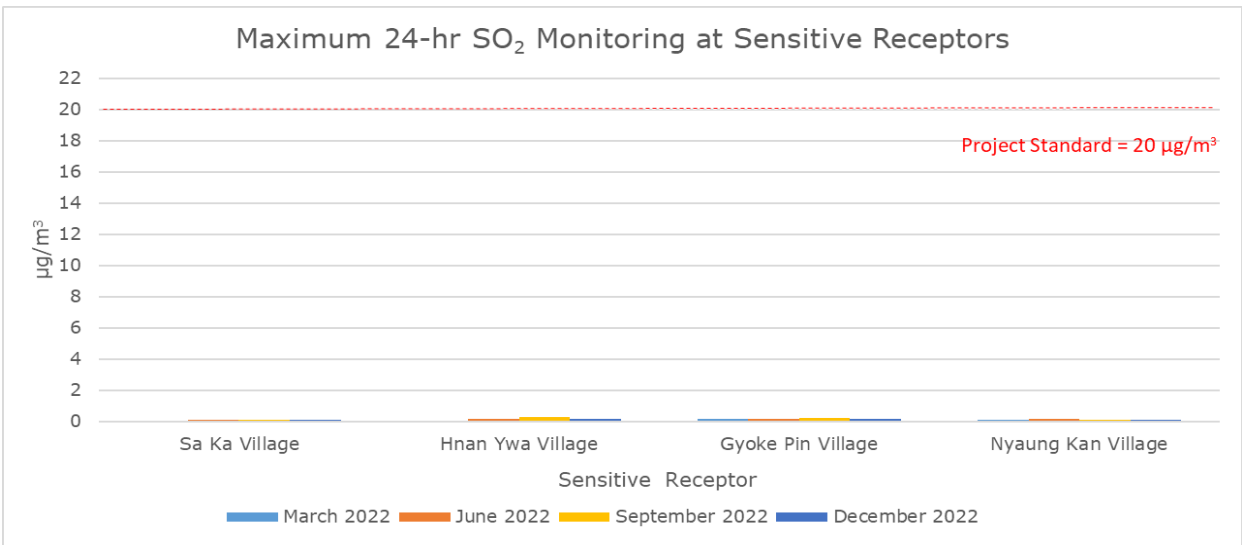
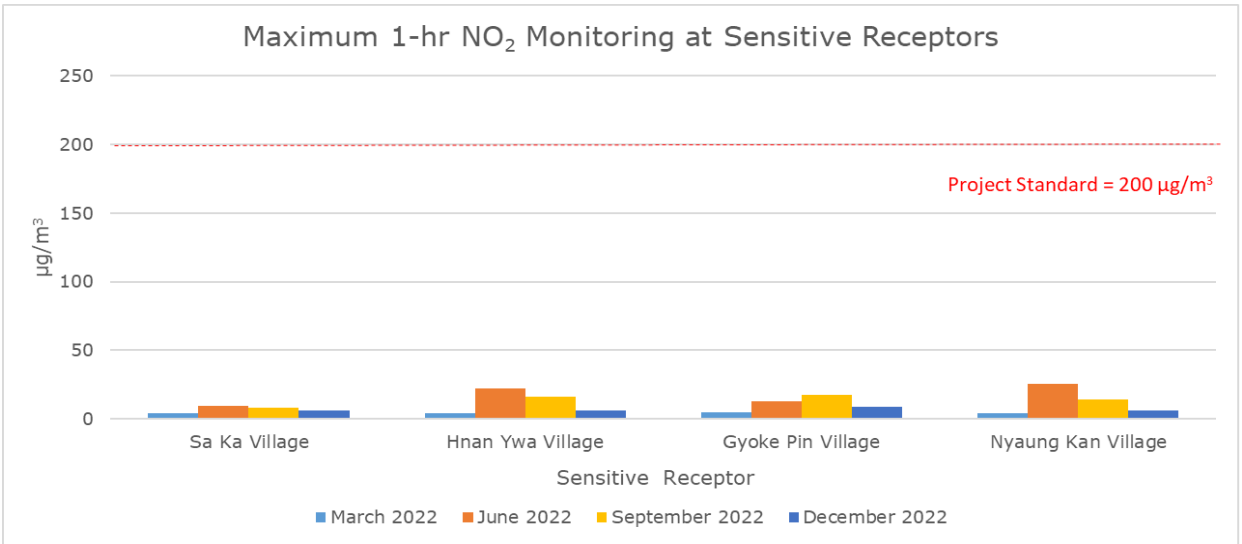
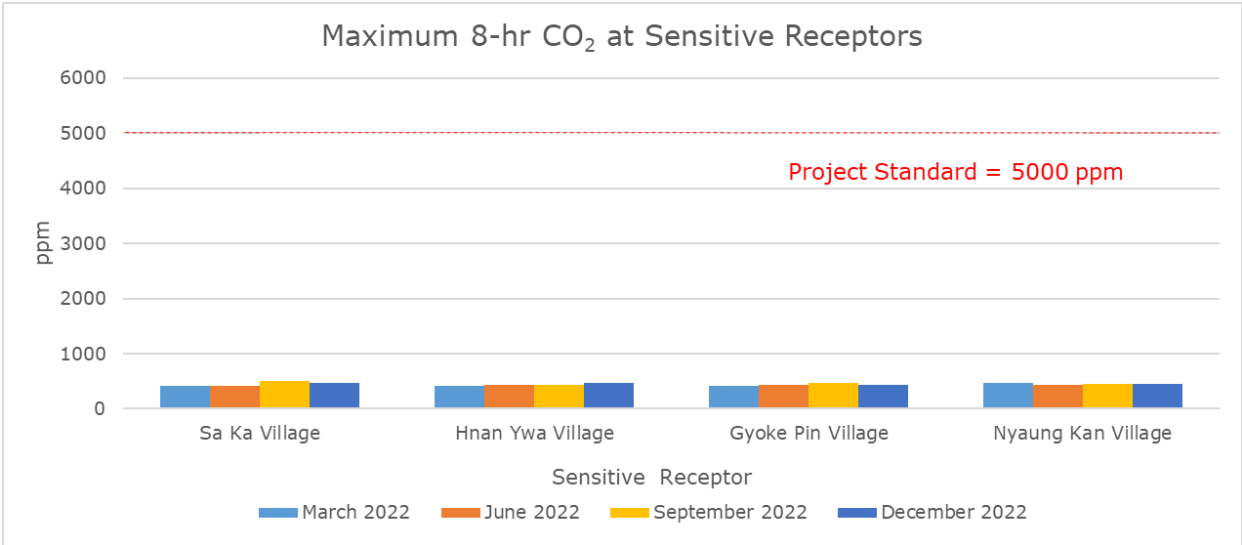
- One village house at Sa Ka Village;
- One village house at Hana Ywa Village;
- One village house at Gyoke Pin Village;
- One village house at Nyaung Village.

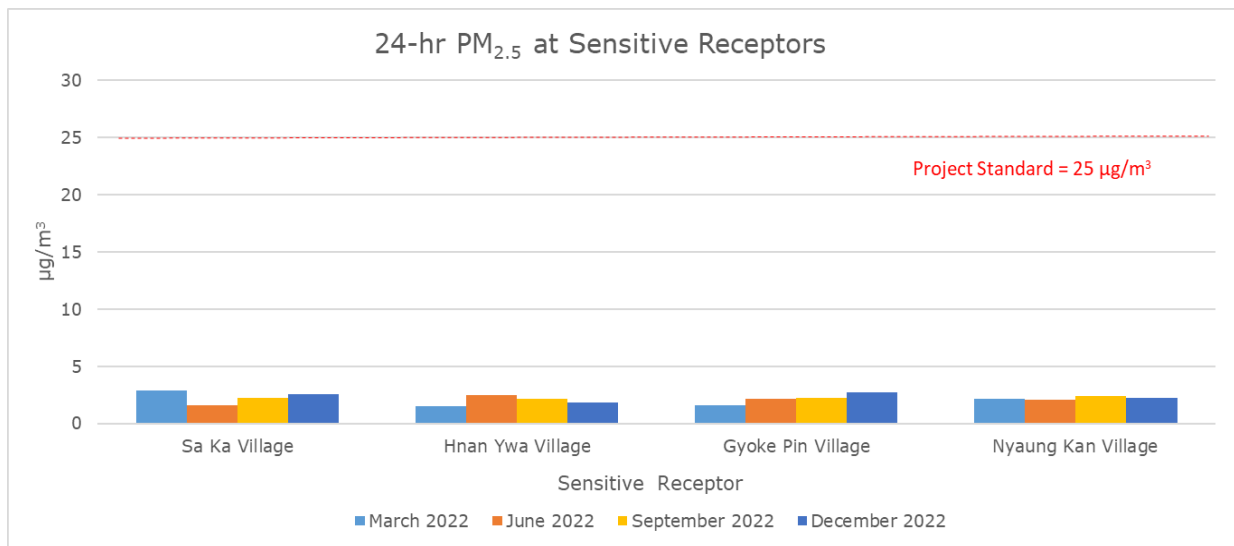
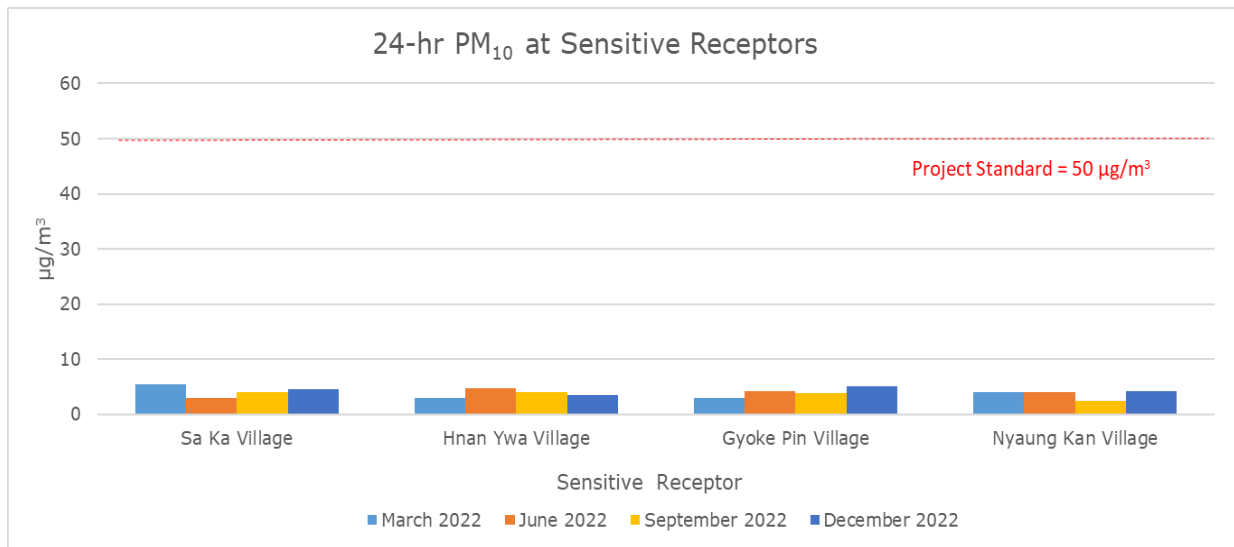
The monitoring results were compared against the Myanmar National Environmental Quality (Emission) (NEQ) Guidelines (2015), World Health Organization (WHO) Air Quality Guidelines Global Update 2005 as well as the National Ambient Air Quality Standards (NAAQS) issued by the US Environmental Protection 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 Receptors

Name of Sampling Locations	Approximate Distance from Site	Parameters	Units	Apr-22	Jun-22	Sep-22	Dec-22	Project Standard	Average Period
Sa Ka Village	630 m	CO	ppm	0	0	0	0	9	8 hrs
		CO2	ppm	410.27	417.28	509.85	473.74	5000	8 hrs
		SO2	µg/m ³	0	0	0	0	20	24 hrs
		NO2	µg/m ³	4.29	9.87	8.05	5.98	200	1 hr
		PM10	µg/m ³	5.46	3.04	4.07	4.62	50	24 hrs
		PM2.5	µg/m ³	2.91	1.62	2.23	2.58	25	24 hrs
Hnan Ywa Village	1,560 m	CO	ppm	0	0	0	0	9	8 hrs
		CO2	ppm	422.01	426.57	434.94	464.63	5000	8 hrs
		SO2	µg/m ³	0	0	0	0	20	24 hrs
		NO2	µg/m ³	4.46	22.32	16.13	6.35	200	1 hr
		PM10	µg/m ³	3.00	4.73	4.06	3.53	50	24 hrs
		PM2.5	µg/m ³	1.52	2.49	2.18	1.86	25	24 hrs
Gyoke Pin Village	2,720 m	CO	ppm	0	0	0	0	9	8 hrs
		CO2	ppm	419.41	430.96	463.53	424.91	5000	8 hrs
		SO2	µg/m ³	0	0	0	0	20	24 hrs
		NO2	µg/m ³	5.08	12.97	17.39	8.87	200	1 hr
		PM10	µg/m ³	3.00	4.11	3.93	5.09	50	24 hrs
		PM2.5	µg/m ³	1.62	2.14	2.22	2.71	25	24 hrs
Nyaung Kan Village	2,760 m	CO	ppm	0	0	0	0	9	8 hrs
		CO2	ppm	468.29	426.97	446.09	444.78	5000	8 hrs
		SO2	µg/m ³	0	0	0	0	20	24 hrs
		NO2	µg/m ³	4.51	25.42	14.38	6.20	200	1 hr
		PM10	µg/m ³	4.09	3.95	4.47	4.28	50	24 hrs
		PM2.5	µg/m ³	2.16	2.12	2.40	2.26	25	24 hrs





Ambient Noise Monitoring for Operations Phase

Noise monitoring was conducted by E Guard Environmental Services, a third party appointed by SMPC, at two (2) locations i.e. at the Project site and Sa Ka Village (closest residential area) located approximately 630 m from the site. The monitoring data for ambient noise levels of the two locations for four periods:

- April 2022 (sampling period from April 01, 2022, to April 02, 2022);
- June 2022 (sampling period from June 28, 2022, to June 29, 2022);
- September 2022 (sampling period from September 08, 2022, to September 09, 2022); and
- December 2022 (sampling period from December 12, 2022, to December 14, 2022).

The noise level measurements were averaged and compared against the Myanmar National Environmental Quality (Emission) (NEQ) Guidelines (2015).

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; while the ambient noise levels for the closest residential area (N2 – Sa Ka Village) were below the daytime limit of 55 dBA. However, exceedances of the night-time limit of 45 dBA were reported at N2 location for all two monitoring events.

The data is reported in the following table.

Average Ambient Noise Levels for the Operations Phase

Name of Sampling Location	Noise monitoring location (time)	Apr 2022 Report (Leq)	Jun 2022 Report (Leq)	Sep 2022 Report (Leq)	Dec 2022 Report (Leq)	Project Standard
Myingyan CCPP Plant	N1 (daytime)	44.62	54.48	61.37	61.11	70
	N1 (night-time)	42.16	50.19	58.93	62.29	70
Sa Ka Village (630 m from the site)	N2 (daytime)	55.27	57.41	57.82	53.60	55
	N2 (night-time)	56.65	56.40	54.37	52.73	45

Myanmar National Environmental Quality (Emission) Guidelines Values for Noise Level

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

Note:

a. Equivalent continuous sound level in decibels

Operations Phase Emissions Monitoring

Hourly NO_x stack emissions were monitored at 2 different emission units from January 1, 2020 to December 31, 2020. The maximum hourly emissions are listed in the table below: the maximum hourly emissions are 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.

The maximum emissions occurred during low load operations. The low load operations occurred rarely, only for 32 hours for Unit 1 and 26 hours for Unit 2. Compared with low load operations, normal operations produce less NO₂ emissions.

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

Maximum Monitored Stack Emissions – Hourly NO_x

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, 16:00 – 16:59	144	275
Note: <ul style="list-style-type: none"> a. To convert NO_x concentration from ppmv to mg/Nm³, 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. 			

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

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	24.74	0.0	47.3
Feb	0	21.1	0.0	40.4
Mar	0	22.93	0.0	43.9
Apr	0	23.05	0.0	44.1
May	0	22.94	0.0	43.9
Jun	0	23.7	0.0	45.4
Jul	0	21.65	0.0	41.4
Aug	0	24.92	0.0	47.7
Sep	0	23.16	0.0	44.3
Oct	0	20.54	0.0	39.3
Nov	10.81	13.51	20.7	25.9
Dec	0	10.09	0.0	19.3

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

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	23.44	0.0	44.9
Feb	0	16.39	0.0	31.4
Mar	10.5	15.88	20.1	30.4
Apr	0	16.29	0.0	31.2
May	0	20.17	0.0	38.6
Jun	9.44	15.68	18.1	30.0
Jul	0	15.79	0.0	30.2
Aug	11.54	17.62	22.1	33.7
Sep	0	14.89	0.0	28.5
Oct	0	13.74	0.0	26.3
Nov	7.8	9.57	14.9	18.3
Dec	0	21.01	0.0	40.2

IFC EHS Emission Guidelines for Combustion Turbine (applicable to non-degraded air sheds)

Combustion Technology/Fuel	Parameter/Guideline Values		
	Particulate matter (PM)	Sulfur dioxide (SO ₂)	Nitrogen oxides (NO _x)
<i>Combustion turbine</i>			
Fuels other than natural gas (unit > 50 MW)	50 mg/Nm ³	Use of ≤ 1% Sulfur fuel	74 ppm
Natural gas (all turbine types; unit > 50 MW)	-	-	25 ppm

Myanmar National Environmental Quality (Emission) Guidelines Values for Thermal Power (applicable to non-degraded air sheds)

Combustion Technology/Fuel	Parameter/Guideline Values		
	Particulate matter (PM ₁₀)	Sulfur dioxide (SO ₂)	Nitrogen oxides (NO _x)
<i>Combustion turbine</i>			
Fuels other than natural gas (unit > 50 MW)	50 mg/Nm ^{3a}	Use of ≤ 1% Sulfur fuel	310 mg/Nm ³
Natural gas (all turbine types; unit > 50 MW)	-	-	100 mg/Nm ³
Note:			
a. Milligrams per normal cubic meter at specified temperature and pressure			

APPENDIX 4 ENVIRONMENTAL MONITORING RESULTS – WATER

Wastewater Discharge Monitoring

Three (3) surface water monitoring events were conducted at the Central Monitoring Basin (CMB) wastewater discharge point on March 28, 2022, July 01, 2022, September 21 2022, and December 15, 2022. The monitoring events were conducted by SMPC and analysed by a third party, Golden Dowa Eco-System Myanmar Co., Ltd. (Dowa), appointed by SMPC. 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.

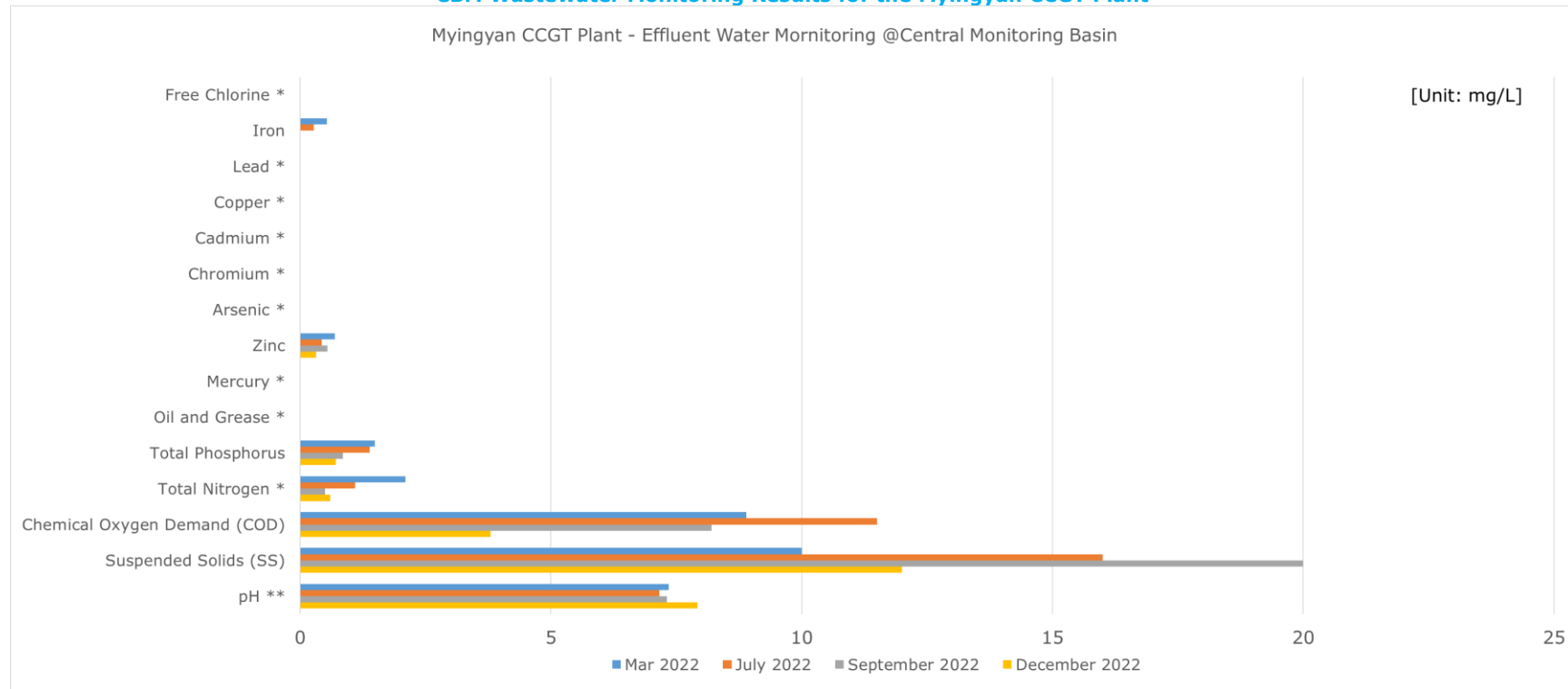
CBM Wastewater Monitoring Results for the Myingyan CCGT Plant

Parameters	Units	Discharge Limits	Mar -22	Jul-22	Sep-22	Dec-22
pH	-	6-9*	7.35	7.16	7.31	7.92
Total Suspended Solids (TSS)	mg/L	50*	10	16	20	12
Chemical Oxygen Demand (COD)	mg/L	125**	8.9	11.5	8.2	3.8
Total Nitrogen	mg/L	10**	2.1	1.1	0.5	0.6
Total Phosphorus	mg/L	2**	1.49	1.39	0.85	0.71
Oil and Grease	mg/L	10*	< 3.1	< 3.1	< 3.1	< 3.1
Mercury	mg/L	0.005	≤ 0.002	≤ 0.002	≤ 0.002	≤ 0.002
Zinc	mg/L	1.0*	0.696	0.428	0.54	0.324
Arsenic	mg/L	0.5*	≤ 0.01	≤ 0.01	≤ 0.01	≤ 0.01
Chromium	mg/L	0.5*	≤ 0.002	≤ 0.028	0.014	≤ 0.002
Cadmium	mg/L	0.1*	≤ 0.002	≤ 0.005	≤ 0.005	≤ 0.002
Copper	mg/L	0.5*	≤ 0.002	≤ 0.005	≤ 0.005	≤ 0.002
Lead	mg/L	0.5*	≤ 0.002	≤ 0.005	≤ 0.005	≤ 0.002
Iron	mg/L	1.0*	0.532	0.268	≤ 0.005	≤ 0.002
Total Chlorine	mg/L	0.2*	< 0.1	< 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);

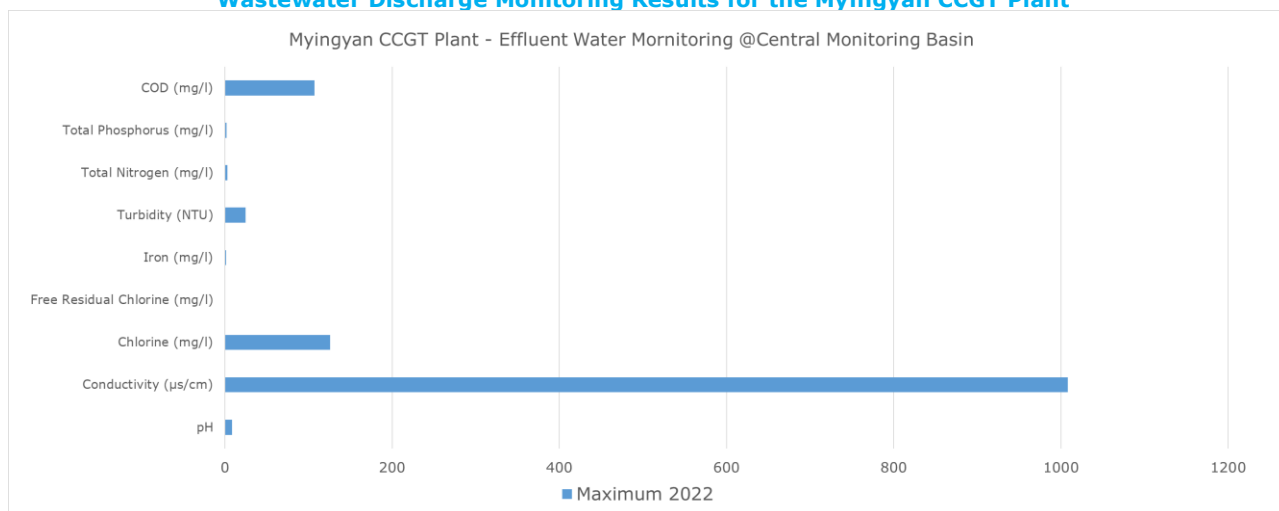
** The mg/L is not applicable for pH which is a unit of measure describes the degree of acidity or alkalinity of a solution. It is measured on a scale of 0 to 14.

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 2022. The monitoring results were analysed by internal laboratory 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 – Maximum Values

Parameters	Units	IFC Standard	Maximum for 2022
pH	-	6~9	8.49
Conductivity	µs/cm	<1200	1008
Chlorine	mg/l	-	126
FRC	mg/l	<0.2	0
Iron	mg/l	1	1.2
Turbidity	NTU	<50	24.4
Total Nitrogen	mg/l	10	3
Total Phosphorus	mg/l	2	2
COD	mg/l	125	107

Wastewater Discharge Monitoring Results for the Myingyan CCGT Plant



The results for the continuous wastewater monitoring are reported in the following table. The results were in compliance with the stipulated limits.

CMB Continuous Wastewater Monitoring for the Myingyan CCGT Plant

Parameters	Units	IFC Standard	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
pH	-	6~9	8.11	8.17	8.07	8.06	7.83	7.93	8.09	8.49	8	8.09	7.81	7.63
Conductivity	µs/cm	<1200	779	700	946	897	662	676	784	590	742	880	1008	760
Chlorine	mg/l	-	58.6	58	57.9	50	15.6	79	83.1	44	126	114	63	67
FRC	mg/l	<0.2	0.0	0	0	0	0	0	0	0	0	0	0	0
Iron	mg/l	1	0.04	0.179	0.12	0.81	0.22	0.28	0.202	1.2	0.16	0.15	0.1	0.58
Turbidity	NTU	<50	7.9	15.8	15.3	24.4	18.4	11.6	12.5	15.3	14.6	8.59	10.8	19.3
Total Nitrogen	mg/l	10	1	1	2	3	0	2	2	3	1	1.8	0	0
Total Phosphorus	mg/l	2	0.2	0	0	2	0	0	0.4	0.9	0	1.2	1.1	1.1
COD	mg/l	125	23	18	0	107	44	0	0	5	46	3	14	6

APPENDIX 5 COMMUNITY DEVELOPMENT ACTIVITIES ACCOMPLISHED IN 2022

Extract for Illustration

No.	CSR Reference	Date (Commitment) 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 activity hours	Number of employee volunteers during non-activity hours	Total number of hours spent during activity hours (all employees)	Total number of hours spent during non-activity hours (all employees)	Total number of hours all employees spent at the event	Quantified data on immediate results (i.e. number of beneficiaries or families built)	ESG ??	Contribution motive	Subject focus	If subject focus falls under "Others", to state what the investment went towards
1	MMRMGCSR2 022001	13-04-22	17-04-22	Myingyan District General Administration Department Myingyan Township General Administration Department Taung Thar Township General Administration Department	Myanmar New Year Thingyan Festival - 2022	Thingyan Festival is the biggest festival in Myanmar and GAD organize the event in both Myingyan and Taung Thar Townships to celebrate with people.	0	0	0	0	0	2 Townships (Myingyan & Taung Thar Township)	No	Community Inv	Community/social welfare	
2	MMRMGCSR2 022002	01-03-22	31-05-22	10 ladies from Sarkhaar village)	Basic Tailoring & Designer Training Class (Sarkhaar) - 2022	Basic tailoring and designer training class which organized by Sembcorp has started on 1 March 2022 with ten trainees (women) from Sarkhaar Village under Skill Set Training Title for Myingyan Community. The program will be completed on 31 May 2022 and the class period is three month. The support went a long way to help skill set developing in the local community. - 3 Months, 1st March 2022 ~ 31st May 2022 Monday ~ Friday, 7:00 a.m. ~ 11:00 a.m. (5 days per week, 4 hours per day) 66 days, 264 Hours	0	0	0	0	0	10 ladies from Sarkhaar village)	No	Community Inv	Education/youth development	
3	MMRMGCSR2 022003	24-05-22	28-05-22	Community (13 Villages)	Water Treatment Plants Maintenance – Replace Material and Deep Clearing	Conducted maintenance for 14 units of potable water treatment plants which Sembcorp installed in the local communities to enhance drinking water quality.	0	0	0	0	0	13 Villages	No	Community Inv	Community/social welfare	
4	MMRMGCSR2 022004	21-04-22	28-04-22	Ma Yoe Kone Village	Village clinic (16ft x 24ft) Village	The furnished clinic facility will be accessed by Ma Yoe Kone village and nearby villages for health. one story building (16' x 24') and Clinic Furniture Steel Table - 1 Clinic Chair - 1 Clinic Cupboard - 1 Clinic Bed - 1 Patient Bed Curtain - 1 Mobile Drip Stand - 1	0	0	0	0	0	One Village	No	Community Inv	Community/social welfare	
5	MMRMGCSR2 022005	21-04-22	28-04-22	Ka Lain Chone Village School	Village School Teacher Lounge	The teacher lounge can be accessed as meeting room, lecture preparing room, etc. one story building (16' x 32')	0	0	0	0	0	One Village	No	Community Inv	Education/youth development	
6	MMRMGCSR2 022006	21-04-22	28-04-22	Kyan U Village School	Village School Teacher Lounge	The teacher lounge can be accessed as meeting room, lecture preparing room, etc. one story building (16' x 32')	0	0	0	0	0	One Village	No	Community Inv	Education/youth development	
7	MMRMGCSR2 022007	05-07-22	07-07-22	Community (10 Villages)	Contribution Cleaned Chemical Drums to Communities	Contributed 361 units of 200Lit barrels + 1600 units of 25 kg pails	0	0	0	0	0	10 Villages	No	Community Inv	Community/social welfare	
8	MMRMGCSR2 022008	01-08-22	29-08-22	Community (13 Villages)	Community Health Awareness Program – 2022 Round 1	Medical consultation and prescribed medication was done for total of 1,558 patients as part of CSR program.	0	0	0	0	0	1,558 patient	No	Community Inv	Community/social welfare	
9	MMRMGCSR2 022009	19-09-22	25-09-22	Environment	Sembcorp Gives Back Week – 2022	No disposable plastic and meatless day for Yangon Team – 23 Sep 2022 Plastic Waste Collection Activity around the Plant - 24 Sep 2022	100	87	174	87	261	Environment	Yes	Community Inv	Environment	
10	MMRMGCSR2 022010	14-10-22	14-10-22	Myingyan District General Administration Department Myingyan Township General Administration Department Taung Thar Township General Administration Department	General Administration Department (GAD) Annual Event	GAD's annual event where they invite the community to participate in prayer donation session, and event lunch included.	0	0	0	0	0	2 Townships (Myingyan & Taung Thar Township)	No	Community Inv	Community/social welfare	
11	MMRMGCSR2 022011	28-10-22	28-10-22	Taung Thar Township COVID19 Prevention, Control and Emergency Response Committee	COVID-19 support to Taung Thar Township	Disposable Mask, box (50 mask/box) 100 boxes PPE (Sealion) 20 Pa	0	0	0	0	0	Taung Thar Town	No	Community Inv	Community/social welfare	
12	MMRMGCSR2 022012	17-08-22	01-11-22	Sarkhaar Village School	Village School Teacher Lounge	The teacher lounge can be accessed as meeting room, lecture preparing room, etc. one story building (16' x 32')	0	0	0	0	0	One Village	No	Community Inv	Education/youth development	
13	MMRMGCSR2 022013	17-08-22	01-11-22	Hinan Village School	School Fence - Brick Wall	5 ft x 368 ft - Brick Wall Fence for village school	0	0	0	0	0	One Village	No	Community Inv	Education/youth development	
14	MMRMGCSR2 022014	17-08-22	28-11-22	Phet Taw Village School	Village School Water Trestle	Water Trestle - High 23 ft and 8,000 liter capacity.	0	0	0	0	0	One Village	No	Community Inv	Education/youth development	
15	MMRMGCSR2 022015	17-08-22	01-11-22	Thelm Village School	School Fence - Brick Wall	5 ft x 185 ft - Brick Wall Fence for village school	0	0	0	0	0	One Village	No	Community Inv	Education/youth development	
16	MMRMGCSR2 022016	17-08-22	01-11-22	Gyoke Pin Village Clinic	Clinic Fence - Brick Wall	5 ft x 207 ft - Brick Wall Fence and Main Door for village clinic	0	0	0	0	0	One Village	No	Community Inv	Community/social welfare	
17	MMRMGCSR2 022017	17-08-22	04-11-22	Aye Village School	Village School Teacher Quarter	One story building (32 ft x 16 ft), can be use by two families as teacher quarter.	0	0	0	0	0	One Village	No	Community Inv	Education/youth development	
18	MMRMGCSR2 022018	17-08-22	08-11-22	Tha Pyay Thar Village School	Chair & Bench for Village School	Chair & Bench 45 Sets for Village School	0	0	0	0	0	One Village	No	Community Inv	Education/youth development	
19	MMRMGCSR2 022019	11-11-22	28-11-22	Community (11 Villages)	Community Health Awareness Program – 2022 Round 2	Medical consultation and prescribed medication was done for total of 1,212 patients as part of CSR program.	0	0	0	0	0	1,212 patient	No	Community Inv	Community/social welfare	
20	MMRMGCSR2 022020	05-07-22	07-07-22	Community (3 Villages)	Contribution Cleaned Chemical Drums to Communities	Contributed 400 units of 200Lit barrels + 1000 units of 25 kg pails	0	0	0	0	0	3 Villages	No	Community Inv	Community/social welfare	
21	MMRMGCSR2 022021	01-11-22	09-12-22	Nyaung Kan Village Clinic	School Fence - Brick Wall	5 ft x 330 ft - Brick Wall Fence for village school	0	0	0	0	0	One Village	No	Community Inv	Education/youth development	
22	MMRMGCSR2 022022	01-11-22	09-12-22	Sate Nyan Village School	School Fence - Brick Wall	5 ft x 186 ft - Brick Wall Fence for village school	0	0	0	0	0	One Village	No	Community Inv	Education/youth development	
23	MMRMGCSR2 022023	22-12-22	27-12-22	Tha Pyay Thar Village School	Chair & Bench for Village School	Chair & Bench 25 Sets for Village School	0	0	0	0	0	One Village	No	Community Inv	Education/youth development	
24	MMRMGCSR2 022024	03-11-22	28-12-22	Hta Naung Tai Village School	Village School Water Trestle	Water Trestle - High 23 ft and 8,000 liter capacity.	0	0	0	0	0	One Village	No	Community Inv	Education/youth development	

APPENDIX 6

STAKEHOLDER ENGAGEMENT DATABASE YEAR 2022

APPENDIX 7 ANNUAL PUBLIC STAKEHOLDER ENGAGEMENT REPORT DECEMBER 2020



sembcorp

Energy Services

Annual

Public Stakeholder Engagement Report

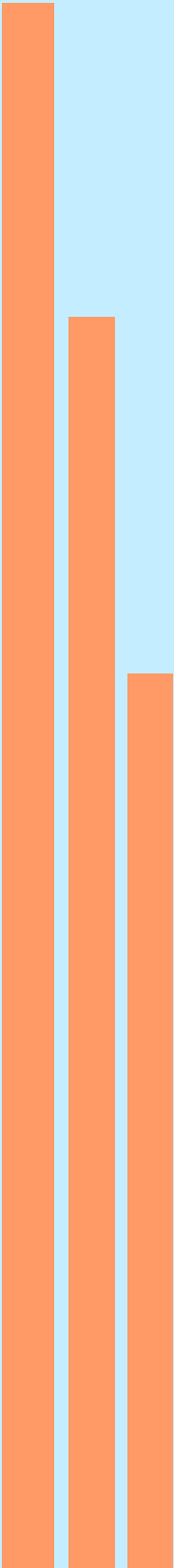
2020

December

Sembcorp Myingyan Power Co., Ltd

Development Department

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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)

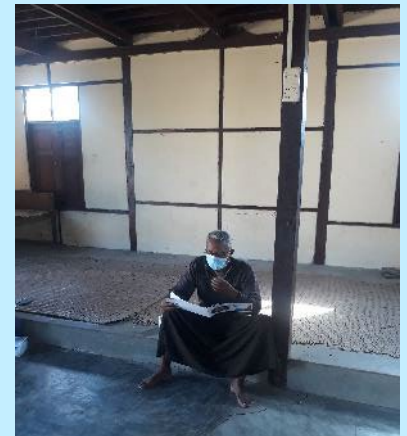
Highlight of Conversation

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, Them 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

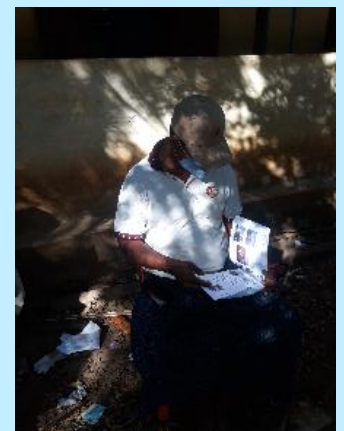
For basic salary, depend on candidate's education level & experience and we are following the Government Law.



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)

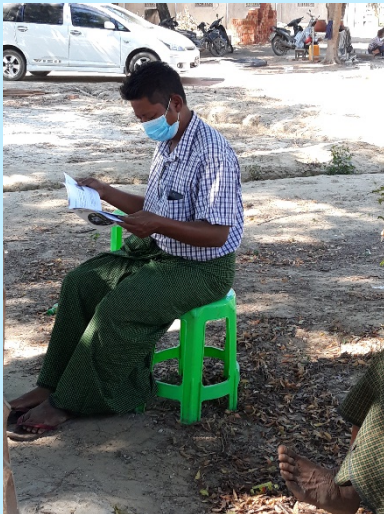
Highlight of Conversation

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

Sembcorp Myingyan Power Company Limited

**Annual Public Stakeholders Engagement
December 2020**



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

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



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



Plant Location



- V Power 90 MW



- V Power 133 MW



- Sembcorp Myingyan IPP



- No.1 Steel Mill, Myingyan

Plant Overview



Project Facilities Overview



230 kV Transmission Tower



6.6kV Overhead Transmission Line



225MW CCGT



River Barge



Water Pipeline (Intake & Discharge)

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.



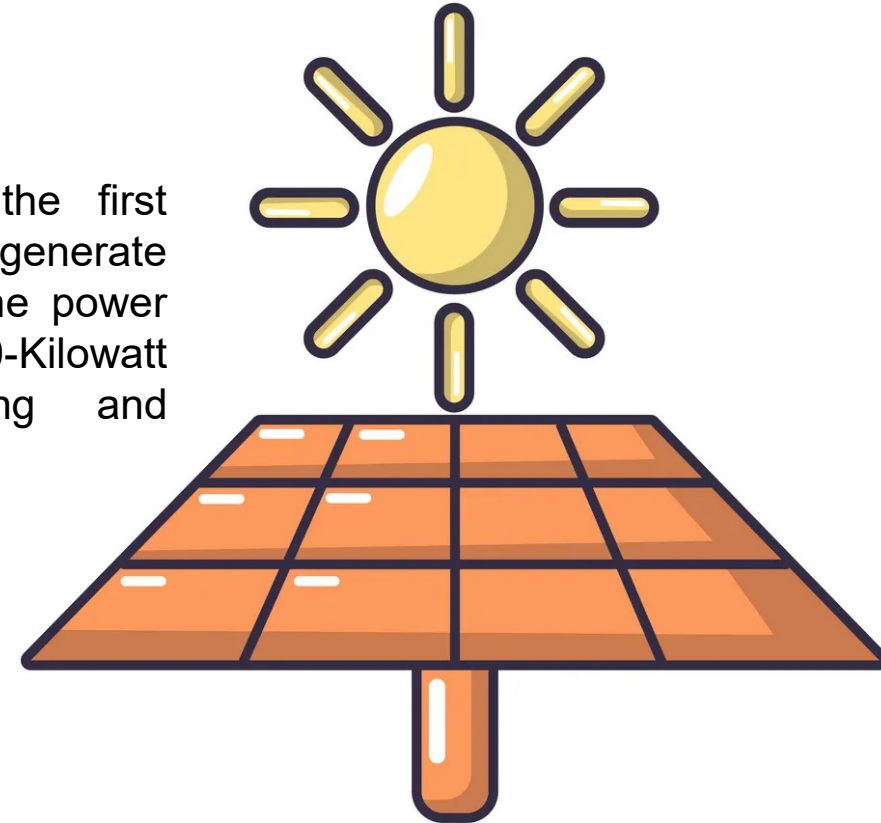
- The report on environment and social impacts has been undertaken by experts to understand potential environmental and social impacts and opportunities in accordance with national and international standards. Our ESIA has been approved by the Ministry of Natural Resources and Environmental Conservation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

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.



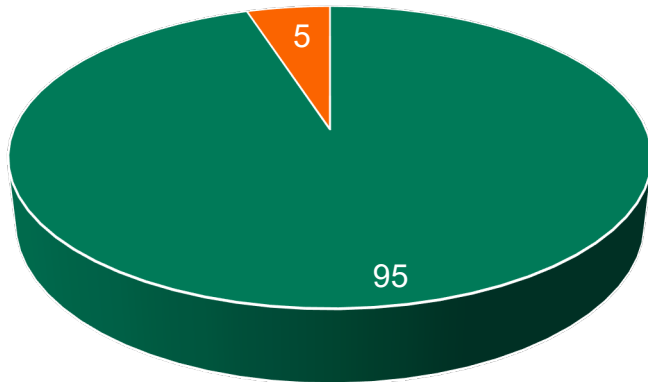
- Sembcorp Myingyan IPP is the first Power Plant in Myanmar which generate enough renewable energy to the power by Solar Panel more than 100-Kilowatt Peak entire Admin Building and Warehouse.



Job Opportunity (1/2)

- As of today, Sembcorp Myingyan Power Company
95 % Staffed by Myanmar National.

Employment



■ Myanmar National ■ Non-Myanmar National



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.



Environmental Management Plan

A. Air Quality Management



B. Noise Monitoring



C. Waste Management



D. Wastewater Management

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

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/m ³	
PM _{2.5}	2.09	-	25	µg/m ³	
*CO	0.0	-	9	ppm	
CO ₂	424.49	-	5000	ppm	
SO ₂	0.01	20	20	µg/m ³	
NO ₂	3.76	200	200	ug/m ³	
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	-	°C	

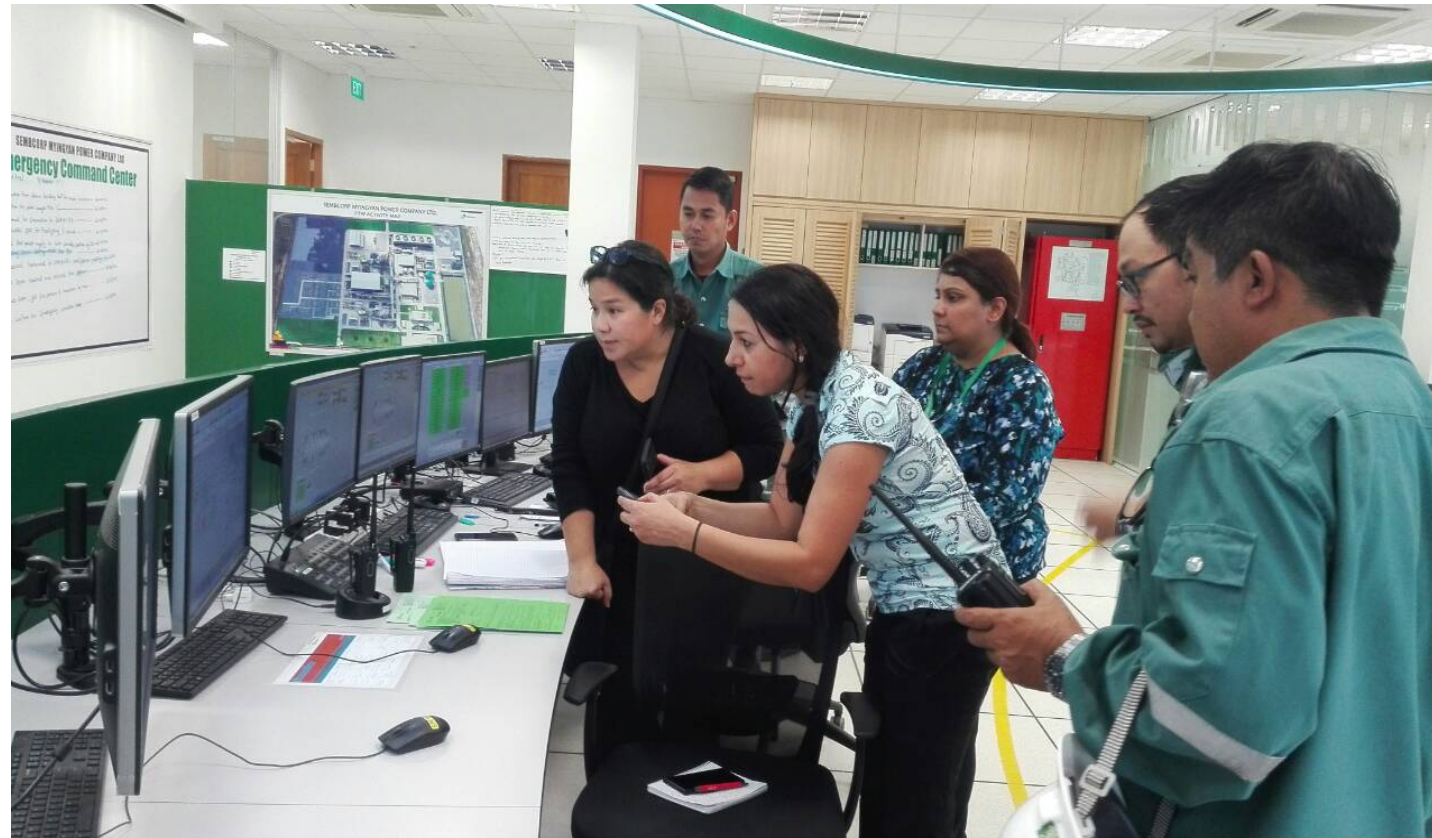
Compliance

Non-compliance

****National Environmental Quality emission guidelines 2015**

Environmental Management Plan

(A) Air Quality Management (3/3)



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

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

Environmental Management Plan

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

- ❖ Audio Metric Test by Ear, Nose and Throat Technician



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 of by an Authorized Collector.
- ❖ Both Hazardous and Non-hazardous waste will be collected & disposed of 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



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).**

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

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

Emergency Response Plan

Designated Emergency Assembly Area



**Emergency
Assembly
Area (1)**

**Emergency
Assembly
Area (2)**

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

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

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.

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.



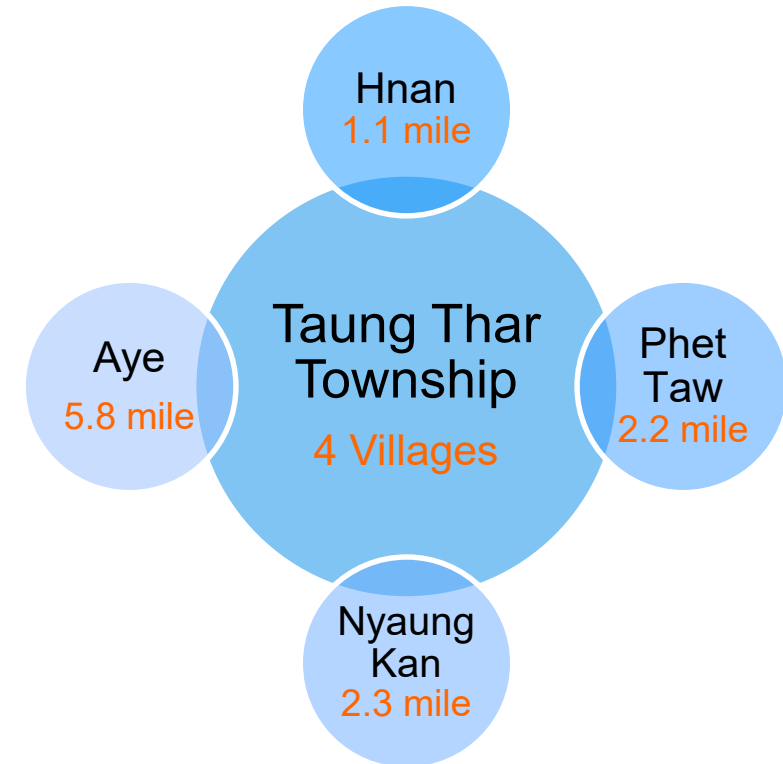
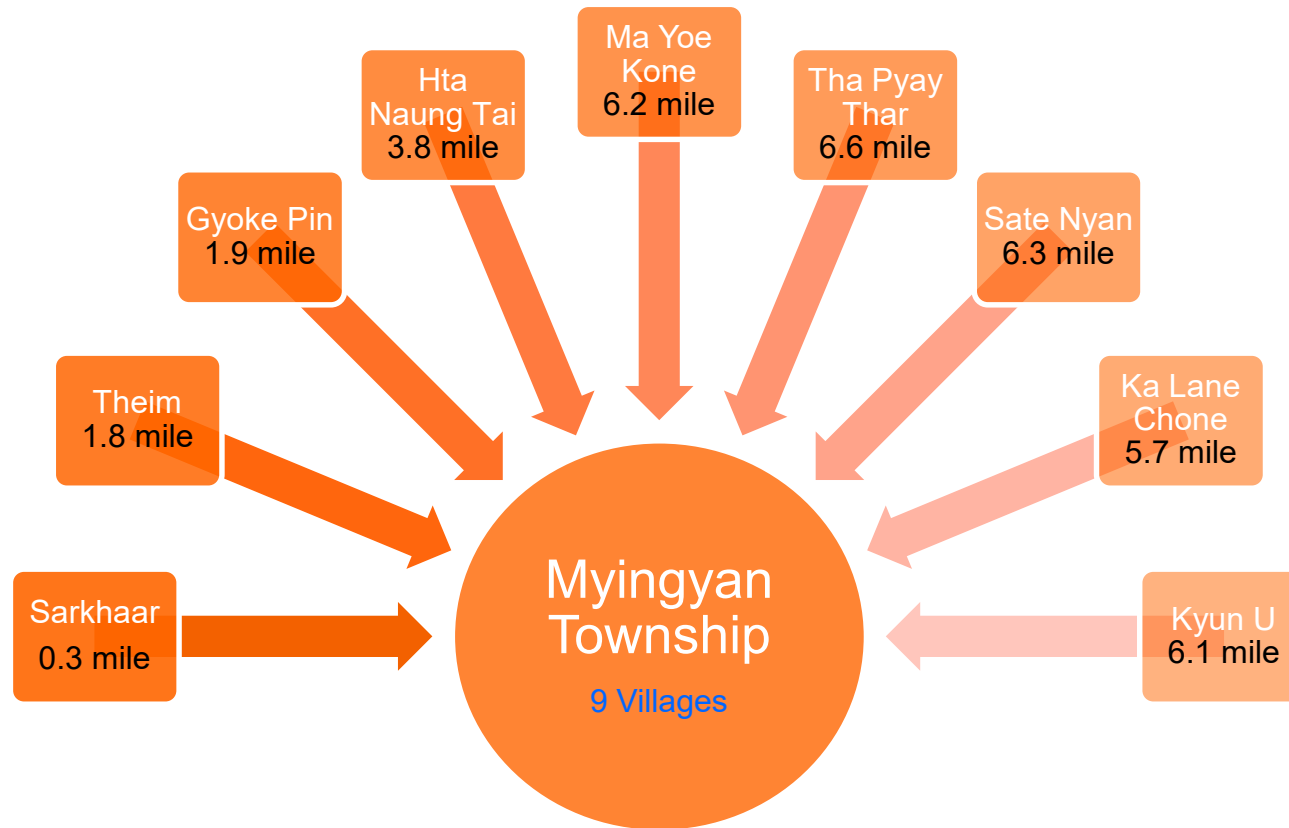
Emergency Response Plan

BCP information (3/3)

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



Our Community – 13 Villages



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)



Corporate Social Responsibility

Educational Support



Corporate Social Responsibility

Community Health Awareness and Health Care Facilities



Corporate Social Responsibility

Enhance Access to Ground Water



Corporate Social Responsibility

Improve Community Infrastructure



Corporate Social Responsibility

Social Welfare and Youth Development



Corporate Social Responsibility

COVID-19 Support (1/2)

STOP
COVID -19



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

Corporate Social Responsibility

Ongoing Engagement (1/2)

- ❖ Public stakeholder meetings to be continued in annual basis.



Corporate Social Responsibility

Ongoing Engagement (2/2)

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



Corporate Social Responsibility

Grievance Management

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

- ❖ 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.



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 |

Contact Details

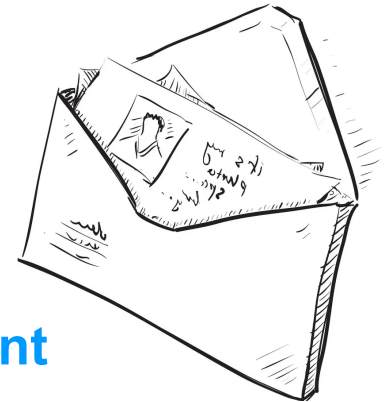
Comments, concerns, queries and questions are welcomed.

Sembcorp Myingyan Power Company Limited



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Phone : +95 9 798756742



APPENDIX 9

ASE SLIDES POSTED IN NOTICEBOARDS DECEMBER 2022

Postponed Annual Stakeholder Engagement - 2022

Presentation slides has been posted on noticeboards by 13 Dec 2022



Sarkhaar



Hnan



Phet Taw



Nyaung Kan



Theim



Gyoke Pin



Hta Naung Tai



Aye



Ma Yoe Kone



Tha Pyay Thar



Sate Nyan



Ka Lain Chone

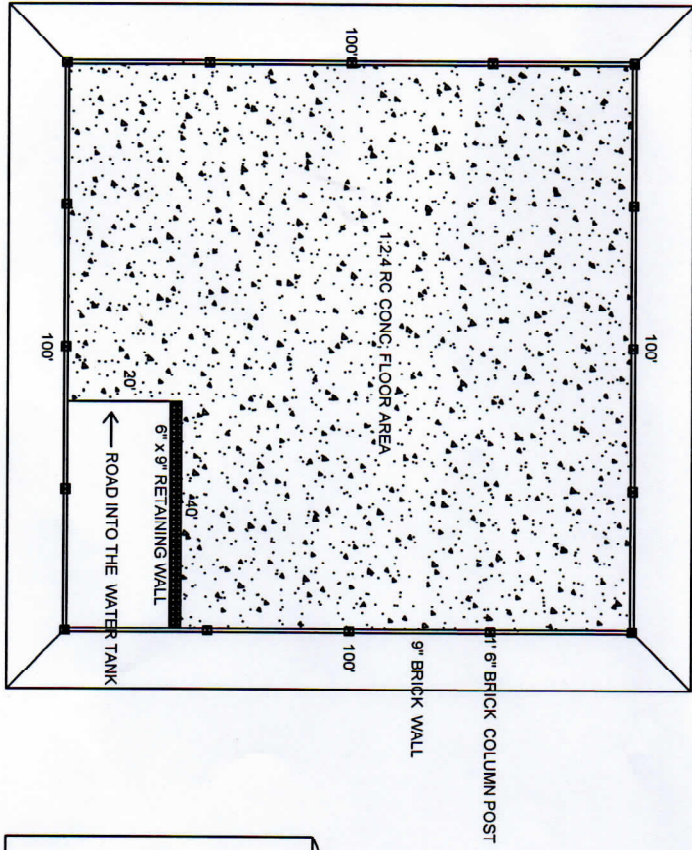


Kyun U

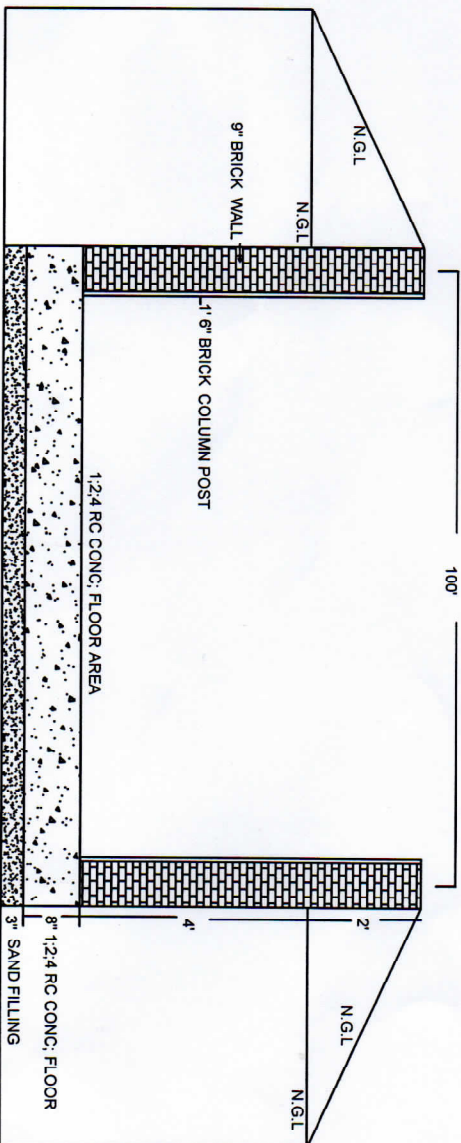
APPENDIX 10 OFF-SITE SLUDGE STORAGE AREA

SHWE PHYO YAN CO., LTD
 (100' x 100' x 6') WASTE TANK

FLOOR PLAN



CROSS SECTION



APPENDIX 11

UPDATED BUSINESS CONTINUITY PLAN (BCP) 2022

APPENDIX 12 PROJECT DOCUMENTATION REVIEWED FOR THE EIGHTH 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).	SMPC	2016	-
4	Myingyan IPP Project – 225 MW Gas-fired Combined Cycle Power Station. Project HSSE Induction for Visitors (PowerPoint)	SMPC	April 2017	-
5	Environmental Management Plan	SMPC	Rev03, 31 Jan 2022	PPMS Document Ref: 3.02.03.001
6	Security Management Plan (Operations Phase)	SMPC	Rev02, 31 Jan 2022	PPMS Document Ref: 3.02.01.008
7	Plant Emergency Preparedness and Response Plan	SMPC	Rev05, 30 Apr 2022	-
8	Occupational Health and Safety Management Plan	SMPC	Rev03, 31 Jan 2022	PPMS Document Ref: 3.02.01.010
9	Quantitative Risk Assessment (QRA) Report	ERM (Singapore) Pte. Ltd.	2 May 2017	-
10	Sembcorp Myingyan Power Company Limited Organisation Chart	SMPC	31 December 2022	-
11	Soil Analysis Laboratory Certificates	Golden Dowa Ecosystem Myanmar Co. Ltd.	June 2020	GEM-LAB-201903045 and GEM-LAB-201909025
12	Third Party Wastewater Monitoring Laboratory Analysis for 2022	Golden Dowa Ecosystem Myanmar Co. Ltd.	Q1, Q2, Q3, Q4 2022	GEM-LAB-201812045, 201903042, 201905239, 201909020, 201911181
13	Third Party Ambient Air and Noise Emissions Monitoring Reports for 2022	E-guard Environmental Services	Q1, Q2, Q3, Q4 2022	-
14	Third Party Wastewater and River Water Laboratory Analysis from Discharge Pipeline	Golden Dowa Ecosystem Myanmar Co. Ltd	Q1, Q2, Q3, Q4 2022	
15	Public Participation Attendance Record and Photolog for January 28, 2020 Monitoring Event	SMPC	28 January 2020	-
16	Internal river water quality data	SMPC	Q1, Q2, Q3, Q4 2022	-
17	Job Descriptions for CSR Officer, Government Affairs Manager, Procurement and Logistics Manager, HSSE Manager	SMPC	-	-
18	Internal Audit Procedure	SMPC	31 January 2022	3.02.01.028
19	Internal Audit Checklist and Report	SMPC	-	-
20	Workforce of SMPCL (2003) including EPGE and Security	SMPC	-	-
21	Stakeholder Engagement Plan (2 nd revision)	SMPC	January 2023	SMPC-DEV-CSR-001
22	Community Development Plan (2 nd revision)	SMPC	January 2023	SMPC-DEV-CSR-002
23	Stakeholder Engagement Database 2022	SMPC	January 2023	-
24	Annual Public Stakeholder Engagement Presentation – English & Myanmar	SMPC	December 2020	-
25	Annual Stakeholder Engagement Meeting Report 2020	SMPC	December 2020	-
26	Community Grievance Mechanism Procedures, Committee Org Chart and Reporting Lines	SMPC	January 2021	SMPC-DEV-CSR-001
27	Grievance Committees for Affected 13 Villages	SMPC	2020	-

Ref no.	Document Title	Organisation	Date	Document Number
28	Community Grievance Mechanism Database 2022	SMPC	2020	-
29	Community Development Activities Accomplished for 2022	SMPC	January 2023	-
30	Planned Community Development Activities for 2022/2023	SMPC	January 2023	-
31	Community Development Plan KPIs for 2022	SMPC	January 2023	-
32	Local Recruitment and Procurement Management Plan	SMPC	January 2022	-
33	COVID-19 Business Continuity Plan Implementation 2020-2021	SMPC	2020	-
34	Workforce Data 2022	SMPC	January 2023	-
35	Community Map	SMPC	January 2021	-
36	Procedure for Cleaning Empty Chemical Container	SMPC	Rev02, 7 July 2020	PPMS Document Ref: 4.02.07.294
37	Grievance Log 2022	SMPC	January 2023	2022MMRMGNGRIEVANCE001
38	Grievance Management Database 2022	SMPC	January 2023	-
39	SEP & CDP KPIs and Actual Achievements in 2022	SMPC	-	-
40	MONREC Letter_SMPC-MM-2023-006 Submission of EMP and GHG	SMPC	31 January 2023	-
41	MONREC Report Jan-Jun 2022	SMPC	19 August 2022	SMPC/MM/2022-055
42	Myingyan IPP – Quarterly Operations and Maintenance Report	SMPC	Q1, Q2, Q3, Q4 2022	-
43	Stakeholder Engagement Database January – December 2020	SMPC	May 2021	-
44	Stakeholder Engagement Plan KPIs	SMPC	May 2021	-
45	Stack Emission Data for NOx (CEMS data) for January – December 2022	SMPC	January 2023	-
46	HSSE Training Programs for 2022	SMPC	January 2023	-
47	HSSE Training Matrix for 2022	SMPC	January 2023	-
48	Eighth E&S Monitoring Report Presentation	SMPC	January 2023	-
49	Business Continuity Plan (BCP) PPMS Document	SMPC	Rev.6, 28 June 2022	1.02.03.003
50	Covid-19 Business Continuity Plan (BCP) Implementation 2020	SMPC	-	-