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Myingyan CCPP

Tenth Environmental and Social Monitoring Report

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Myingyan CCPP
Tenth Environmental and Social Monitoring Report

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Glossary of Terms, Abbreviations, and Acronyms

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
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
ESAP	Environmental and Social Action Plan
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System
GAD	General Administration Department
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
IED	Improvised Explosive Device
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
LRPMP	Local Recruitment and Procurement Management Plan
LTI	Lost Time Injury
MDC	Min Dharma Co Ltd
MEPE	Myanmar Electric Power Enterprise
MI	Major Inspection
MIGA	Multilateral Investment Guarantee Agency
MOC	Management of Change
MOE	Ministry of Energy
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
PEECC	Packaged Electrical and Electronic Control Center
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
ST	Steam Turbine
TSS	Total Suspended Solids
WAMP	Workers Accommodation Management Plan
WBG	World Bank Group
WHO	World Health Organisation

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 2024.

This Tenth Environmental and Social Monitoring Round Report presents the findings of the Project monitoring for the period January 2024 to December 2024. The site visit and interviews were carried out virtually in January 2025 with subsequent document review during the period starting in January and completion is anticipated in April 2025.

The Tenth Environmental and Social Monitoring Round was the sixth 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. The IESC 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. Throughout the monitoring round, SMPC cooperated fully and responded to all Ramboll's requests.

SMPC was awarded an Environmental Compliance Certificate (ECC) in August 2023 for the period 09 March 2017 to 08 March 2022, based on the letter report SMP/MM/2017-017 submitted by SMPC on 27 January 2017 (referred to as the 2017 ECC). An extension request letter SMPC/MM/2023-065 was submitted by SMPC to MONREC on 29 November 2023 however at the time of this audit report (May 2024), re-certification or extension of validity of the 2017 ECC by MONREC had not yet been issued by MONREC. SMPC is recommended to follow up with MONREC to seek an extension of the ECC during the operational phase of the Project.

The SMPC organisation chart provided for the Tenth Monitoring Round showed few changes compared with the previous chart (dated 2023), with a reduction of workforce contributed by 19 departures and eight new hires. Departures were observed across various functions such as the Commercial Team, Procurement Senior Executive, Operations Support Team, Technical Services and Human Resources. The IESC recommends that any 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.

For the year of 2024, SMPC conducted a series of Major Inspection (MI) outages, with planned shutdown of parts of the plant for inspection from August 2024 to December 2024.

In August 2024, a security incident occurred which required an emergency evacuation[2]. The Plant was shut down from 12 August 2024 to 22 August 2024. As highlighted in SMPC's quarterly report, operations resumed on 23rd August 2024. An undated Emergency Evacuation Plan, was partially adhered to. A Myingyan Deployment Checklist was also filled to determine safe deployment of the employees to restart the plant. The checklist comprises a status update as of 20th August on the plant, MI Outage, and its surroundings (Myingyan Town, neighbouring facilities and existing utility infrastructure). Application of the undated Emergency Evacuation Plan and the Myingyan

[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://links.sgx.com/FileOpen/MYINGYAN%20POWER%20PLANT%20-%20TEMPORARY%20SUSPENSION%20OF%20OPERATIONS.ashx?App=Announcement&FileID=815029

Deployment Checklist were not integrated in the Emergency Response Plan and Business Continuity Plan. No formal incident investigation was carried out.

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 2023. However, Covid-19 was less recurrent and affected less than 1% of the population in 2024.The combined effects of Covid-19 (2020-2022), the February 2021 event[3] and ongoing security risks have 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 2024. This situation may continue into 2025. As a result, Environmental and Social activities and monitoring in accordance with the Project Commitments have been affected during 2020-2024.

The Project is generally compliant with the requirements of the ESAP, however, the monitoring identified four 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.

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 CO_2 emissions related to the gas turbines) to monitor GHG emissions across the Plant in an appropriate unit such as CO_2 equivalent and is required to conduct stack emissions monitoring on an annual basis during the operational phase. A third-party contractor has been engaged to conduct stack emissions for 2025.

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 2024, the Project's total national workforce, including the Yangon workforce, security team and EPGE was 121, representing 99.17% of the total workforce; with one (1) foreign skilled worker making up 0.83% 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, however, as of the time of the Ninth and Tenth Monitoring Rounds, it is not known how many personnel working as security guards are from the local community.

During the Eighth Monitoring Round, 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.8, 22 January 2025 – 21 January 2028, the Updated BCP) where the entire BCP procedure was modified to align with the Sembcorp Group Business Continuity Management (HQ BCM) Framework, a framework which has not yet been provided for Ramboll's review. In the Tenth Round, the BCP procedure was updated twice. In Revision 07, the whole BCP procedure was updated, with no details of the changes conducted. Revision 08 was updated to include changes in signatories and to integrate with the emergency response plan and it includes an evacuation plan. While the evacuation plan procedures will depend on the criticality of each employee's role towards plant operations and the severity of a violence situation at Myingyan and in the community, they do not describe potential fires or natural disaster situations and any planned escape routes from

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

the workers accommodations in the event of fires or natural disaster situations. Limitations continued in 2024 on the implementation of the Stakeholder Engagement Plan (SEP) and Community Development Plan (CDP) 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 last conducted an Annual Public Stakeholder Engagement Meeting during 2020 (as reported in the Sixth Monitoring Round Report); 13 meetings took place, one in each of the villages, with an average of ten villagers attending each meeting. In view of the current situation in Myanmar, an Annual Public Stakeholder Engagement Meeting did not take place from 2021 – 2024. However, in lieu of an annual meeting, Annual Public Stakeholder Engagement (ASE) presentation material with updated Project information were posted in noticeboards in each of the 13 villages in 2022, 2023 and January 2025 for the year 2024 (**Appendix 8**).

Ramboll reviewed the Project's Stakeholder Engagement Database (**Appendix 6**) of actions taken and results achieved under the Stakeholder Engagement Plan (SEP). An Updated SEP (Revision 4 dated May 2024) includes Annual Stakeholder Engagement procedures, updated performance indicators, updated community data and an updated grievance committee organisation. SEP Key Performance Indicators (KPIs) for 2024 were provided to Ramboll. The Project was able to conduct 2,521 stakeholder engagements in 2024, mainly by having periodic telephone calls with stakeholders. The Project received no grievances in 2024. The Community Development Plan (CDP) was updated in 2024. The current CDP (Revision 4 dated May 2024) includes an updated Appendix A that includes Tables 12.1-12.4 with 2024 Village Baseline Data (i.e., water sources, healthcare facilities, educational facilities and energy sources); Appendix B with Stakeholder Expectations; Appendix C with Community Health Status (i.e., village morbidity and village mortality); and Appendix D with the List of 2024 Key Performance Indicators (KPIs). However, CDP KPIs should be expanded to include under the Achievements details on Activities conducted.

Positive community service initiatives undertaken by SMPC included the following:

- 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;

- 20 CSR activities were planned for 2023, and all were able to be completed, except the community health programs were only able to be provided to 12 villages due to security concerns;
- 19 CSR activities were planned for 2024, 24 were completed for 2024 which include additional requests from the community, however due to security concerns, solar energy support was provided to 11 out of 13 planned villages, cleaned container distributions were provided to 10 out of 13 planned villages, community health programs were provided to 11 out of 13 villages for one round and the second round was cancelled (for details, refer to **Appendix 5**).

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 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, 2022 or 2023; and meetings with the remaining 4 PAPs were recommended to take place during future monitoring rounds to close out this issue.

Ramboll planned to conduct consultations with 3 more PAPs from Ma Yoe Kone village, however due to Covid-19 and security restrictions in the village, the said consultations could not be conducted prior to 2024.

In 2024, consultations took place by SMPC's CSR Lead with the 3 PAPs and a new PAP. One of the three PAPs was a landowner who had hearing difficulty, and the engagement was facilitated through his brother. Subsequently, he transferred land ownership to another brother, a newly identified PAP. According to SMPC's CSR Lead, all the PAPs are in good health and lead normal daily lives with no reported concerns.

The original fourth PAP, PAP0046 U Aung Khin Myint (Kyun U Village), was not able to be located, despite repeated efforts by SMPC, and therefore consultation with this PAP will not be able to be conducted.

In 2024, the Tenth Monitoring round, 122 out of 131 identified PAPs were engaged, where 92 were visited, 30 were engaged via telecommunication, and nine (9) could not be contacted or located, despite efforts by SMPC.

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 2026 for the year 2025.

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 Agency[4] (MIGA) which is a member of the World Bank Group (WBG).

This Tenth Environmental and Social Monitoring Report covers the period from January 2024 to December 2024 and provides the IESC's findings following a January 2025 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 of 2019) pandemic is a global event which unfolded in 2020 and continued to affect countries, including Myanmar, from 2021 to 2023. In May 2023, the World Health Organisation (WHO) declared that COVID-19 is no longer considered a public health emergency of international concern.[5] However, COVID-19 remains an ongoing health issue that requires long-term management. In Myanmar, WHO has identified COVID-19 as a risk that can result in a minor contribution to excess morbidity and mortality in July 2023 to June 2024.[6] This is supported by the following: First, there was a decreasing trend in COVID-19 deaths and hospitalisations. Second, circulating variants did not appear to be associated with increased severity. Third, Myanmar has achieved a high level of population immunity against the SARS-CoV-2 virus through infection recovery, vaccination, or both.

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

[5] https://www.who.int/news/item/05-05-2023-statement-on-the-fifteenth-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-coronavirus-disease-(covid-19)-pandemic

[6] https://cdn.who.int/media/docs/default-source/searo/myanmar/documents/public-health-situation-analysis-phsa_myanmar_august-2023.pdf?sfvrsn=d01829f9_1&download=true

The combined effects of COVID-19, the February 2021 event[7] and ongoing security risks, have 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 - 2024. This situation may continue into 2025.

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

2. SCOPE AND STRUCTURE OF THE REPORT

2.1 Scope and Methodology

This Tenth Environmental and Social Monitoring Round Report details the Project's compliance with the Applicable Standards listed in **Section 2.2**, and in doing so, presents the environmental and social risks associated with the Project. It has been prepared for the attention of Sembcorp, IFC, ADB, AIIB, MIGA, and other entities defined as relying parties[8]. It addresses the various components of the Project (as defined in Section 3, Project Description).

The report presents the findings of the Tenth 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 audit undertaken on 15, 16, 17, 20 January 2025, by Sharon Maharg, Cara Quinn, Tricia Chong and Jessica Lee 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 for the Tenth Monitoring Round is presented in **Appendix 2**. The Monitoring Plan 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 could not take place due to restrictions and/or security concerns that were in place at the time of the virtual site audit (i.e., meeting with the hospital director, and visit to the hospital's medical waste incinerator). The activities that could not take place during this monitoring round should be included in future monitoring rounds' agendas.

A full list of Project documentation reviewed during preparation of this Tenth Environmental and Social Monitoring Report is included in **Appendix 9.**

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;
    - PS3: Resource Efficiency and Pollution Prevention;

[8] Relying parties include other lenders

  - 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 had not yet been issued an Environmental Compliance Certificate (ECC) by the Ministry of Natural Resources and Environmental Conservation (MONREC) at the time of commencement of operations, 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. It was understood at the time that the responsible department at MONREC (the Environmental Conservation Department) had no practice of issuing ECC certificates and issued approval letters only. Nevertheless, Ramboll recommended that SMPC follow up with MONREC regarding the ECC for the Project. SMPC subsequently followed up with MONREC and was awarded an ECC certification in August 2023 for the period 09 March 2017 to 08 March 2022, based on the letter report SMP/MM/2017-017 submitted by SMPC on 27 January 2017 (referred to as the 2017 ECC). An extension request letter SMPC/MM/2023-065 was submitted by SMPC to MONREC on 29 November 2023 however at the time of this audit report (April 2025), re-certification or extension of validity of the 2017 ECC by MONREC had not yet been issued by MONREC. Ramboll recommended that SMPC follow-up on the extension of validity.

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 Ninth 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 2024 to December 2024), 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 security situation 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 2021-2024. This situation may continue into 2025. As a result, Environmental and Social activities and monitoring in accordance with the Project Commitments have been affected during 2020-2024. Documents were reviewed related to the impact of the ongoing security situation on the environmental and social operations, as follows:

- SMPC Business Continuity Plan (BCP) Rev. 08, issued in January 2025 and valid through January 2028; which included a reduction in workforce size 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 2024, 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 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 2023;
    - Restrictions on meetings with the police and the hospital personnel as part of stakeholder engagement;

- Slowdown in completion of the CSR activities from 2021 including skills training (English language courses, tailoring and designer training) being provided to members of the 13 villages. In 2024, 2 out of 3 planned tailoring and designer training were completed, 1 was cancelled due to the security situation; and
- Cancellation of the Medical Officer providing health awareness clinics for members of the 13 villages during March 2020 – December 2021. While health awareness clinics for members of the 13 villages were not able to be provided from March 2020 - December 2021, a new Medical Officer was hired in 2022 and he has been providing health awareness clinics starting in 2022. In 2024, out of 2 planned rounds for all 13 villages, only one round was conducted for 11 villages. Due to the security situation, the first round did not cover 2 villages, and the second round was not conducted for all villages.

The IESC Monitoring Team was unable to physically travel to Myanmar to conduct the Sixth (2020), Seventh (2021), Eighth (2022), Ninth (2023) and Tenth (2024) Monitoring Rounds. Virtual monitoring rounds have been conducted, comprising Microsoft Teams video conference 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.

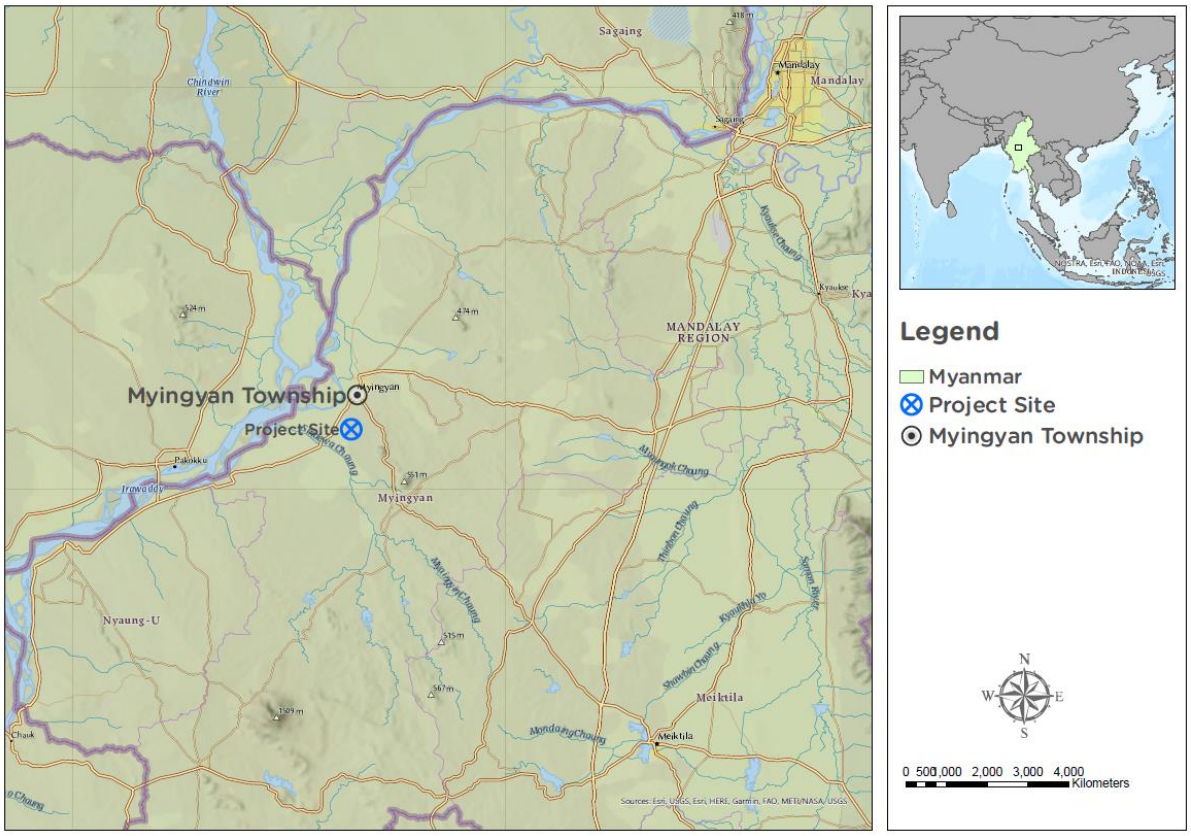


Figure 3-1: Project Location

SMPC has a land lease agreement with EPGE dated June 2019 for the lease of 120,593.6 sqm (12.06 hectare) of land (the Project Site) for the operation of the Project. The Project Site and surrounding land formerly belonged to the Ministry of Industry (MOI) and was transferred to EPGE in early 2019 (refer to EPGE Land Area shown in Figure 3-2). The Project Site lies immediately north of an existing steel mill (Myingyan Steel Mill No. 1) owned by the MOI, occupying a total area of 280 hectares.

3.2 Project Description

The Project, Sembcorp Myingyan Independent Power Plant (IPP), is a 225-megawatt combined-cycle, gas-fired power plant project. This project was developed under a build-operate-transfer agreement between Sembcorp Myingyan Power Company Limited and the Ministry of Electricity and Energy (MOEE) of Myanmar signed in January 2017. Under the agreement, SMPC will build and operate the power plant for 22 years, after which the facility will be transferred to the government[9].

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

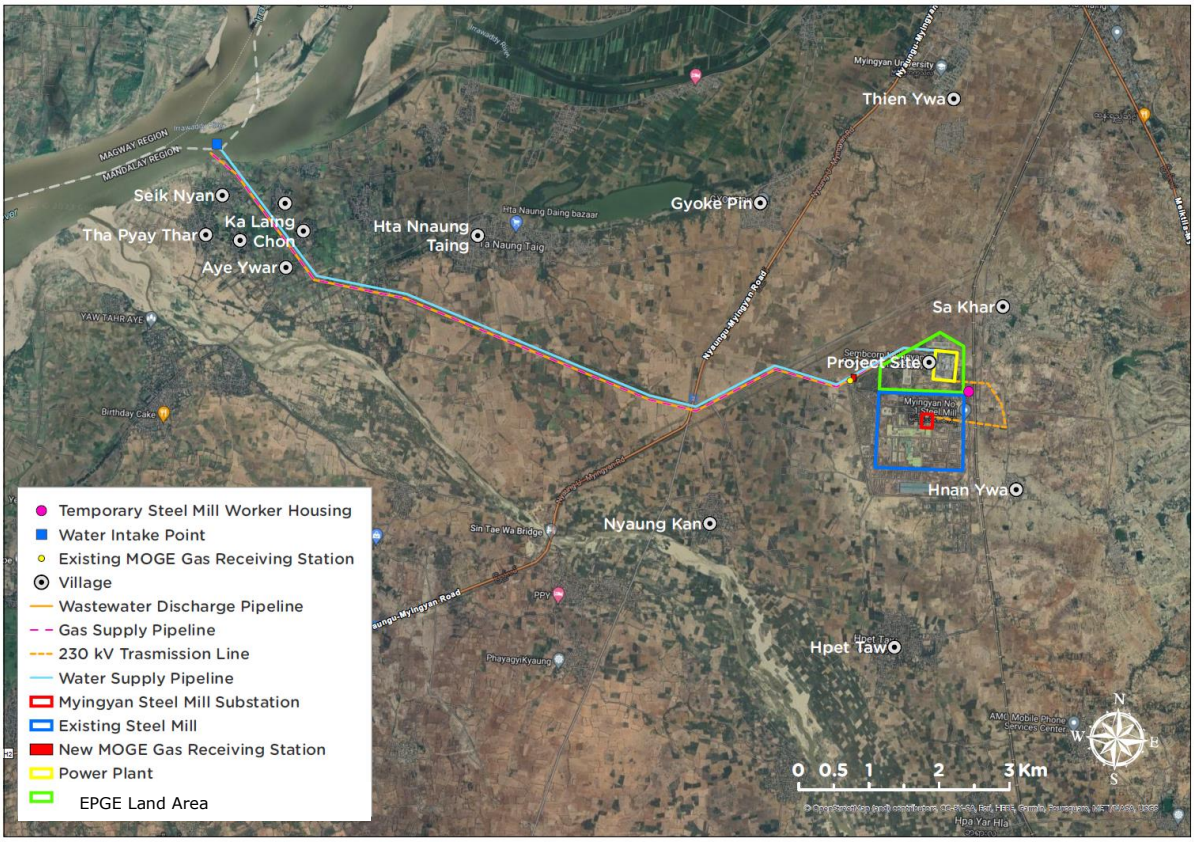


Figure 3-2: Project Site Layout

Figure 3-3: Project Aerial (Photo from Sembcorp)

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 (the Plant);
- 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 Plant and a substation in the adjacent steel mill (connection beyond the steel mill is GOM's responsibility);
- A buried 14 km 12" diameter river water supply pipeline linked to a water intake pumping station on the Ayeyarwady River, to the west;
- An overhead line adjacent to the river water supply pipeline supplies power to the pumping station; and
- A buried 14 km 12" diameter wastewater discharge pipeline parallel to the river water supply pipeline, discharging around 75 – 100 m downstream of the water intake pipeline.

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), the Community Development Plan (CDP) and the Stakeholder Engagement Plan (SEP), there are 13 villages located within the Project's area of influence (AoI), namely:

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

- Hta Hnaung Taking village

These 13 villages are located in the Myingyan Township and the Taung Thar Township, as follows:

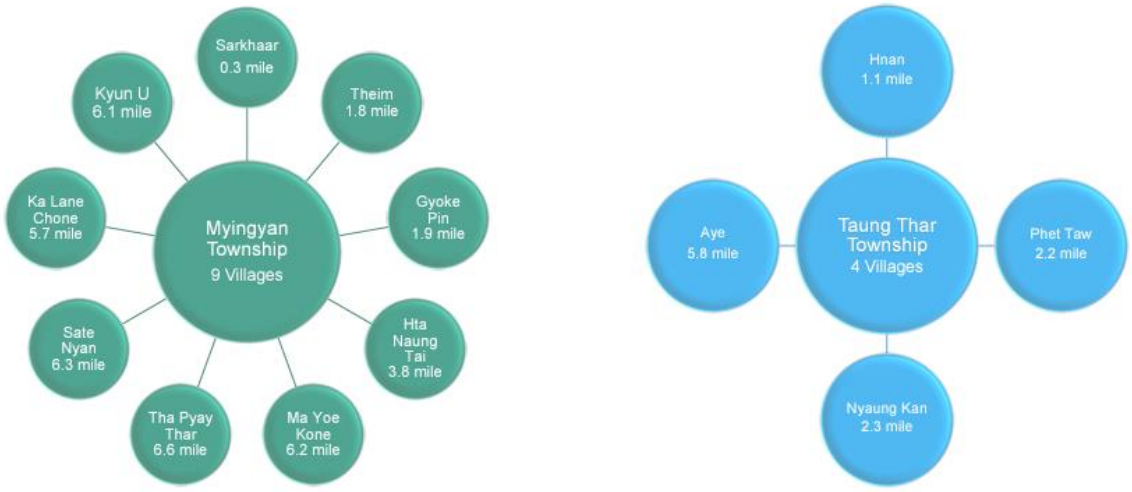


Figure 3-4: Villages in the Surrounding Townships (Provided by SMPC)

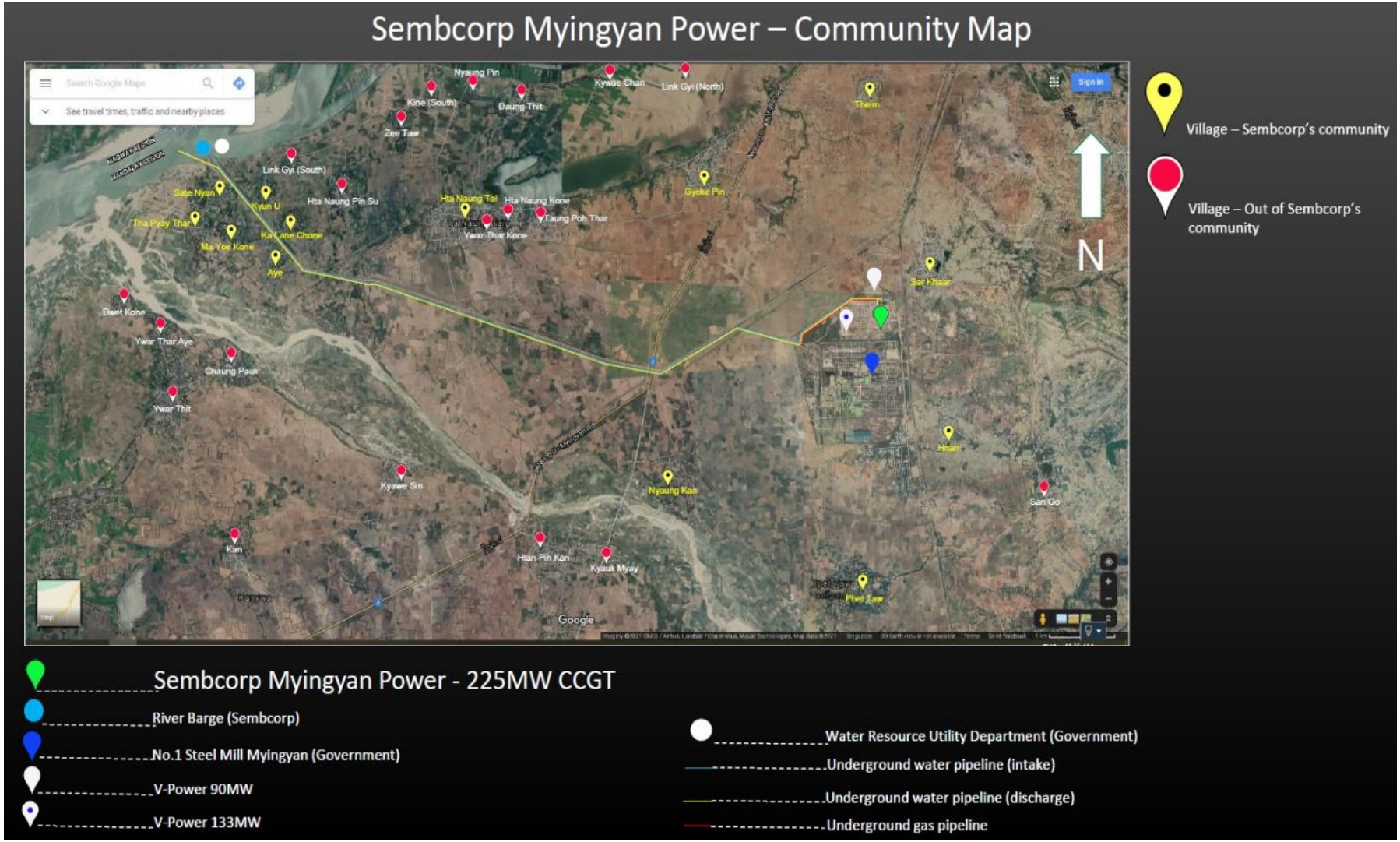


Figure 3-5: Community Map (Provided by SMPC)

3.5 Status of the Project at Time of the Tenth Monitoring Round

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. Engineering, procurement, and construction are complete and there were no significant changes to the Plant's operations during the monitoring period (January to December 2024).

In December 2024, a total of 121 people were working at the Project (see **Table 5-28** for details on the project workforce), which included SMPC plus external parties (i.e., external security team and EPGE) (see **Section 5.24.1**).

Two worker accommodation facilities were provided by SMPC during 2024:

- Safe House 1 adjacent to the Plant (EPGE Guest House with max capacity 33, Container accommodation with max. capacity 8, plus Extended Safe House max. capacity 40); and
- Safe House 2 located in an industrial park (max. capacity 30), 5 km from the Plant) (see **Section 5.17**).

According to SMPC, renovation works are in progress for a new container building to increase capacity at Safe House 1. Safe House 2 will no longer be in use in 2025.

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;
- The IESC's recommendation, where applicable, to resolve/manage the deficiency;
- Where applicable, updated status based on the January 2024 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 4-1** below:

Table 4-1: Significance Ranking

Category	Definition
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 4-2: Example of the Summary Table Format

ID	Aspect	Issue Description	Phase	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.	Operations	WBG EHS Guidelines ADB ES Framework	Company X shall expedite procurement of monitoring equipment with the support of senior management.		**Moderate**

Note: Phases can include construction, operations, decommissioning, or any combination of the aforementioned 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, Revision 03, 31 January 2022). 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; and
- 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 organisation chart (dated March 8, 2022), 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) 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 Yazar Myo 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 Mr 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. The organisation chart provided for the Ninth Monitoring Round (dated December 31, 2023) showed no major changes compared with December 31, 2022, with the exception of the appointment the Commercial and Risk Senior Manager at Sembcorp's Singapore headquarters. In the Tenth Monitoring Round, the organisation chart (dated December 31, 2024, Figure 5-1)reflected a reduction in workforce across various functions such as the Commercial team, Procurement Senior Executive, Operations Support Team (or Team E), Technical Services Engineering Unit, Technical Services Maintenance Electrical Lead, Technical Services Control and Instrumentation (C&I) systems), Human Resources and Administration (Senior Executive), and a driver. In total, there were 19 departures (including one Human Resources Senior Manager who relocated to Singapore), and eight new hires.

5.2.3 Recommendations

The IESC recommends that any 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.

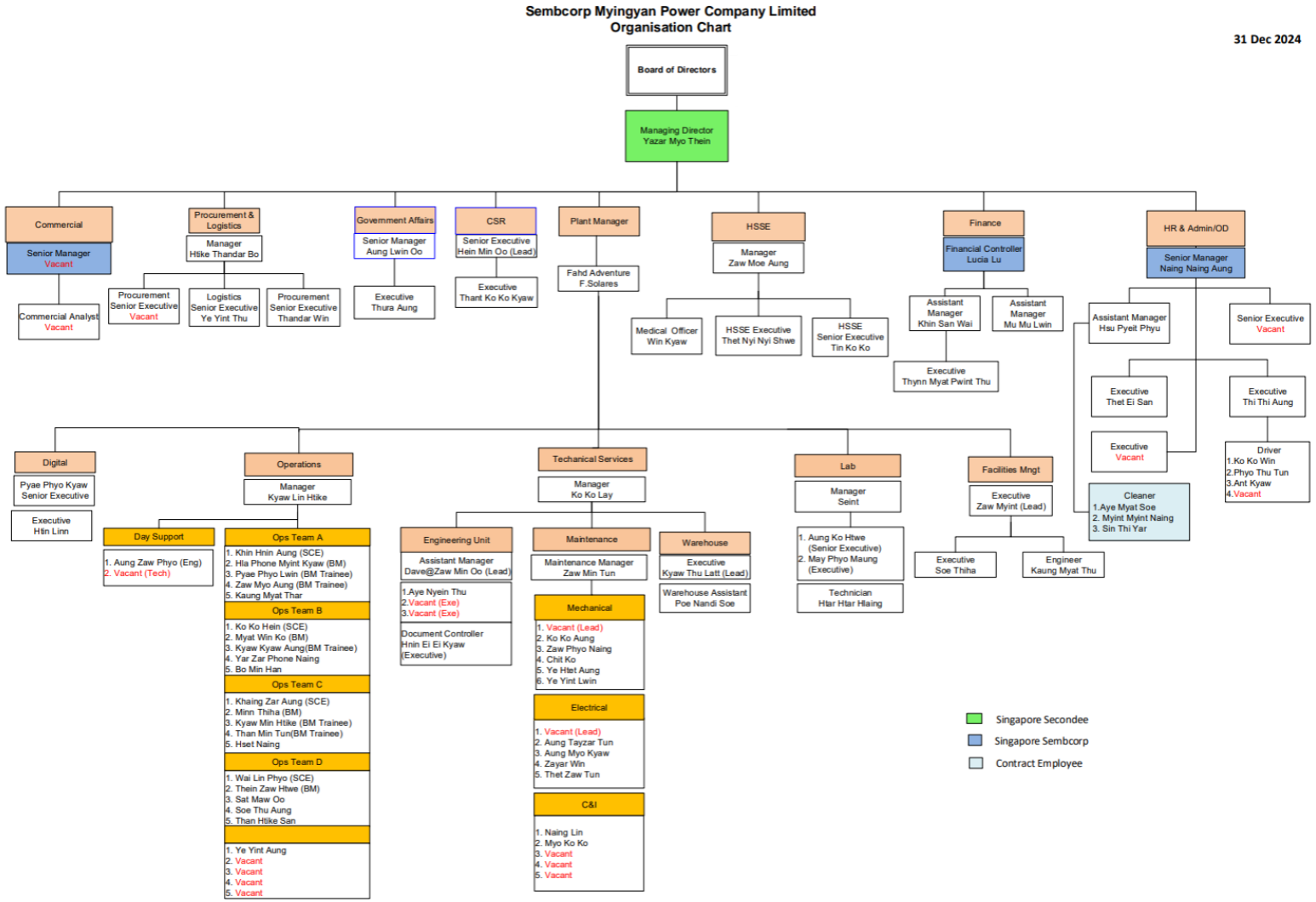


Figure 5-1: Project Operational Phase Environmental and Social Organisation Chart (Dated December 2024)

Table 5-1: Summary of Findings - Environmental and Social Management System

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

5.3 Air Quality and Dust

5.3.1 Air Quality Management

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.

5.3.2 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 5.3.4** below.

5.3.3 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.

5.3.4 Emissions Monitoring

5.3.4.1 Continuous Emissions Monitoring

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

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

A Continuous Emissions Monitoring System (CEMS), supplied by Yokogawa, has been installed for both Gas Turbines. They provide continuous monitoring of NOx, SO_2, CO_2, CO, O_2, PM and flow.

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

The available CEMS data (hourly NOx stack emissions monitored at 2 different emission units from January 1, 2024, to December 31, 2024) was reviewed by the IESC (refer to **Appendix 3**). The maximum hourly emissions are listed in **Table 5-2** below. Exceedances of IFC EHS guideline value of 25 ppmv for Thermal Power Plant were monitored for Unit 1. [10] The exceedances of IFC EHS emission limit only occurred during low load operations. The low load operations occurred rarely, only for 3 hours for Unit 1. Unit 2 did not operate in low load status in 2024. The temporary emission exceedances during infrequent low load operation are unlikely to cause a significant air quality impact. Generally, exceedances of Project Standard of 25 ppmv for NOx emissions were only recorded during rare low

[10] IFC EHS Guidelines Thermal Power Plants (2008)

load operations. The air quality impacts of the stack emissions from the 2 units are assessed as a minor issue.

It is noted also that SMPC conducted a series of MI outages, with planned shutdown of parts of the plant for inspection from August 2024 to December 2024, as well as emergency shut-down during August 2024, which could have impacted the stack emissions. The emissions will be kept under review and trends assessed again during the next monitoring round.

Table 5-2: Maximum Monitored Stack Emissions during Low Load Operations - Hourly NOx

Emission Unit	Date, Time	Maximum Hourly Emission (ppmv)	Maximum Hourly Emission (mg/Nm^{3a} @101.325 kPa, 293.15 K ^{b}, dry)
Unit 1	26 February 2024 18:00 – 18:59	35.3	67.5
Unit 2	06 December 2024 17:00 – 17:59	24.5	46.8

Note:

a. To convert NOx concentration from ppmv to mg/Nm^3, molecular weight of 46.01 g/mol is used for a conservative estimate.

b. Normal Temperature & Pressure (NTP): 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 NO_2 in the emissions. The range of the stack emissions are listed month by month in **Table 5-3** and **Table 5-4** for Unit 1 and Unit 2.

Table 5-3: Minimum and Maximum Monitored Stack Emissions during Normal Operations for Unit 1 - Hourly NOx

Month	Min (ppmv)	Max (ppmv)	Min (mg/Nm^{3a} @101.325 kPa, 293.15 K, dry)	Max (mg/Nm^{3a} @101.325 kPa, 293.15 K, dry)
Jan	0.00	13.04	0.0	24.9
Feb	0.00	35.30	0.0	67.4
Mar	0.00	17.70	0.0	33.8
Apr	0.00	13.10	0.0	25.0
May	0.00	13.60	0.0	26.0
Jun	0.00	23.20	0.0	44.3
Jul	0.00	24.70	0.0	47.2
Aug	0.00	23.00	0.0	43.9
Sep	0.00	24.30	0.0	46.4
Oct	0.00	15.60	0.0	29.8
Nov	0.00	18.10	0.0	34.6
Dec	0.00	22.90	0.0	43.7

Table 5-4: Minimum and Maximum Monitored Stack Emissions during Normal Operations for Unit 2 - Hourly NOx

Month	Min (ppmv)	Max (ppmv)	Min (mg/Nm^{3a} @101.325 kPa, 293.15 K, dry)	Max (mg/Nm^{3a} @101.325 kPa, 293.15 K, dry)
Jan	9.50	12.40	18.1	23.7
Feb	7.30	20.20	0.0	38.8
Mar	8.10	20.40	0.0	39.0

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)
Apr	0.00	16.10	0.0	30.8
May	0.00	19.60	0.0	37.4
Jun	0.00	14.40	0.0	27.5
Jul	0.00	15.70	0.0	30.0
Aug	0.00	0.00	0.0	0
Sep	0.00	0.00	0.0	0
Oct	0.00	0.00	0.0	0
Nov	0.00	23.20	0.0	44.3
Dec	0.00	24.50	0.0	46.8

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

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

5.3.5 Stack Emission Test

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. It is understood that a vendor was engaged in early 2025 for the annual stack emission test, and that the results will be provided to the IESC for review as part of the 2025 monitoring round.

5.3.6 Ambient Air Quality Monitoring

In accordance with the EMP, ambient air quality monitoring was conducted in 2024 by an independent third party, E Guard Environmental Services, at four external monitoring points located at village houses in the vicinity of the Project as listed below and depicted in **Figure 5-2**.

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

Figure 5-2: Ambient Air Quality and Noise Monitoring Locations

Ambient air quality monitoring was carried out on a quarterly basis at all monitoring points. Records for the following four monitoring rounds was provided for review:

- March 2024 (sampling period from March 18, 2024, to March 22, 2024);
- June 2024 (sampling period from June 11, 2024, to June 15, 2024);
- September 2024 (sampling period from September 18, 2024, to September 20, 2024); and
- December 2024 (sampling period from December 09, 2024, to December 11, 2024).

The parameters monitored were as follows:

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

The monitoring results were provided to the IESC and 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 ambient air quality levels recorded, compared to the relevant criteria, are presented in **Table 5-5** below.

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

Table 5-5: Ambient Air Quality Monitoring at Identified Villages

Name of Sampling Locations	Approximate Distance from Plant (m)	Parameters	Units	Mar-24	Jun-24	Sep-24	Dec-24	Project Standard	Average Period
Sa Khar Village (ASR 4)	630	CO	ppm	0	0	0	0	9	8 hrs
		CO2	ppm	326.42	451.8	468.65	340.66	5000	8 hrs
		SO2	µg/m^3	0.09	0.16	0.09	0.1	20	24 hrs
		NO2	µg/m^3	8.33	4.54	16.48	8.76	200	1 hr
		PM10	µg/m^3	10.96	6.86	4.36	8.85	50	24 hrs
		PM2.5	µg/m^3	5.56	3.59	2.17	4.51	25	24 hrs
Hnan Ywa Village (ASR 3)	1,560	CO	ppm	0	0	0	0	9	8 hrs
		CO2	ppm	358.07	447.2	426.3	349.69	5000	8 hrs
		SO2	µg/m^3	0.15	0.2	0.06	0.1	20	24 hrs
		NO2	µg/m^3	10.99	4.39	13.22	8.03	200	1 hr
		PM10	µg/m^3	11.71	7.7	4.69	10.89	50	24 hrs
		PM2.5	µg/m^3	5.87	3.86	2.37	5.39	25	24 hrs
Gyoke Pin Village (ASR 5)	2,720	CO	ppm	0	0	0	0	9	8 hrs
		CO2	ppm	316.37	441.49	470.33	328.3	5000	8 hrs
		SO2	µg/m^3	0.12	0.16	0.06	0.088	20	24 hrs
		NO2	µg/m^3	7.18	4.54	9.84	7.91	200	1 hr
		PM10	µg/m^3	11.49	9.21	5.36	7.99	50	24 hrs
		PM2.5	µg/m^3	5.82	4.64	2.67	4.37	25	24 hrs
Nyaung Kan Village (ASR 14)	2,760	CO	ppm	0	0	0	0	9	8 hrs
		CO2	ppm	477.34	479.36	427.29	317.84	5000	8 hrs
		SO2	µg/m^3	0.08	0.23	0.05	0.082	20	24 hrs
		NO2	µg/m^3	8.21	4.2	9.43	6.74	200	1 hr
		PM10	µg/m^3	9.19	8.04	4.31	10.33	50	24 hrs
		PM2.5	µg/m^3	4.63	4.03	2.15	5.06	25	24 hrs

5.3.7 Greenhouse Gas Emissions

As reported in Section 8.4 of the EMP (Revision 03, Document Ref: 3.02.03.001), during the operations phase, an estimated as 1984.58 tonnes CO_2e/day (722,386.4 tonnes CO_2e/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 CO_2e/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 CO_2e unit, and emissions off-sets, where feasible.

SMPC measured and reported on the CO_2 emissions from the Plant. The data was reported within the annual Stack Emission Report Continuous Emission Monitoring System for the year 2024 which was submitted to MONREC. According to the report, the CO_2 emissions for the year 2024 was 538,152 MT which is equivalent to a carbon intensity of 0.398 kg CO_2e/kWh-electricity. Based on this data, the CO_2 emission is equivalent to 538,152 reported as a CO_2e unit (e.g., tonnes of CO_2e 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., GHG 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 CO_2e related to solar PV deployment could be calculated and off-set from the total CO_2e per year.

5.3.8 Recommendations

As previously recommended by the IESC, the GHG emissions from the Plant reported in a CO_2e unit should be provided for the IESC to review on an annual basis as part of the operations phase E&S monitoring. In addition to the gas turbine GHG emissions as measured by CEMS and reported annually in the Stack Emission Report, SMPC is recommended to prepare an annual pollutant release inventory of other GHG emissions from the Plant (e.g., GHG 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.

In accordance with the EMP, SMPC should, where feasible, arrange emission off-sets. For example, the CO_2e related to solar PV deployment could be calculated and off-set from the total CO_2e per year.

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. As recommended in the Ninth Monitoring Round, SMPC has engaged a vendor for conducting an annual stack emission test following USEPA method or equivalent which will commence in 2025.

Based on the virtual interviews, there remain potentially unidentified affected communities in the plant vicinity that could be impacted by both air and noise emissions (also described in **Section 5.6**). It is recommended that SMPC update the socio-economic survey data for the site surroundings to identify any changes in nearby populations. Potentially affected communities in the vicinity of the Plant, including 13 villages that were identified in the ESIA should be confirmed, and new settlements or households should then be identified and the location of the four existing air quality monitoring points reviewed to ensure they continue to adequately represent local communities. Any new communities, settlements or households identified should be updated in the Stakeholder Engagement Plan (**Section 5.14**) and Community Development Plan (**Section 5.15**).

Table 5-6: Summary of Findings - Air Quality and Dust

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
001	Operations phase air emissions	The particulate matter sensors were not functioning during the site visit. Portable monitoring devices were being used to monitor particulate matter.	Operations	Management Plan IFC PS3 General EHS Guidelines ADB-ES Principle 9	Data from the CEMS for continuous monitoring of NOx, SO2, CO2, CO, PM and O2 is available. The IESC recommended that, in accordance with the EMP, USEPA method or equivalent testing is conducted on the stack emissions.	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. A contractor has been engaged to conduct stack emissions monitoring during 2025 and the stack emission results will be reviewed during the next monitoring round.	**Minor**
002	Greenhouse Gas (GHG) emissions	According to the EMP, an estimated 2,003.03 tCO2e/ day (731,106.32 t CO2e/year) of GHG emissions were estimated to be generated from the Project during the operations phase. The estimated GHG emission exceeds the threshold that defines significant emitters of GHGs by the ADB SPS and EP IV (100,000 tonnes CO2e/year) and IFC PS3 (25,000 tonnes CO2e/year).	Operations	Management Plan	The EMP requires reporting of GHG generation on an annual basis during the operations phase, reported as a CO_2e unit, and emissions off-sets, where feasible. The IESC recommends that, in accordance with the EMP, SMPC reports an annual pollutant release inventory to monitor GHG emissions from the Plant, with GHG emission reported as a CO_2e unit (e.g. tonnes of CO_2e per year). The GHG emission reported in a CO_2e unit should be provided for the IESC to review on an annual basis as part of the operations phase E&S monitoring.	SMPC measured and reported on the CO_2 emissions from the Plant. The data was reported within the annual Stack Emission Report Continuous Emission Monitoring System for the year 2023 which was submitted to MONREC. 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 CO_2e unit (e.g. tonnes of CO_2e per year). The GHG emission reported in a CO_2e unit should be provided for the IESC to review on an annual basis as part of the operations phase E&S monitoring. In accordance with the EMP, SMPC should, where feasible, arrange emission off-sets. For example, the CO_2e related to solar PV deployment could be calculated and off-set from the total CO_2e per year.	**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, Revision 01, 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.

Additionally, the Safe Work Procedures – Use of Vehicles and Traffic Management Plan (PPMS Document 3.02.01.015) describes policies and controls to ensure that operations involving the use of vehicles and traffic performed on the plant are carried out in accordance with health, safety, security and environmental requirements. This plan was revised in 2020 to ensure delivery drivers are briefed on SMPC driving rules example attachments of a driver's checklist, SMPC's driving rules, and a vehicle pass application. The Plan was revised again in September 2023 (3.02.01.015-Safe Work Procedure-Use of Vehicles and Traffic Management Plan, Revision 03) with changes such as formatting guidelines for PPMS documents, adding checklists requirement for wastewater collection and disposal and sludge waste collection vehicles, and updated vehicle route maps.

5.5.2 On-site Traffic Management

The Safe Work Procedures – Use of Vehicles and Traffic Management Plan (PPMS Document 3.02.01.015, Revision 01, 31 October 2019) describes policies and controls to ensure that operations involving the Use of Vehicles and Traffic performed on the plant are carried out in accordance with health, safety, security and environmental requirements. This management plan was revised in 2020 to ensure delivery drivers are briefed on SMPC driving rules example attachments of a driver's checklist, SMPC's driving rules, and a vehicle pass application. Recent updates to the management plan include guidelines for PPMS documents, checklist requirements for wastewater collection and disposal and sludge waste collection vehicles, and updated vehicle route maps.

Figure 5-3 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 5-3: 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 (**Figure 5-4**) 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 5-4: Approved Site Access Routes

5.5.4 Recommendations

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).

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

Table 5-7: Summary of Findings - Traffic Management

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
001	Management Plan	Requirements related to traffic for the operational phase have been incorporated into the Occupational Safety and Health (OSH) Management Plan (PPMS Document Reference: 3.02.01.010, First Issue, 2nd October 2018). However, the OSH Management Plan refers to a Site Traffic Plan in Section 17.2. which is a document that does not exist for the operational phase as the traffic requirements have already been incorporated into the OSH plan itself.	Operations	Management Plan	References to a Site Traffic Plan in the OSH Management Plan remains despite there being no such standalone document. The OSH Management Plan shall be reviewed and updated to ensure that information that is no longer relevant for the operations phase is removed.	The Safe Work Procedures – Use of Vehicles and Traffic Management Plan (PPMS Document 3.02.01.015, First Issue 31 October 2019) has been updated.	**Closed**

5.6 Noise and Vibration

5.6.1 Noise and Vibration Management

Noise and vibration management for the operations phase has been included in the site's Environmental Management Plan (EMP), Revision 02, dated 7 July 2020.

5.6.2 Ambient Noise Monitoring

Noise monitoring was conducted by a third party appointed by SMPC, 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.

Noise monitoring was carried out on a quarterly basis at the monitoring points. Records for the following four monitoring rounds was provided for review:

- March 2024 (sampling period from March 18, 2024, to March 20, 2024);
- June 2024 (sampling period from June 11, 2024, to June 13, 2024);
- September 2024 (sampling period from September 18, 2024, to September 19, 2024); and
- December 2024 (sampling period from December 09, 2024, to December 10, 2024).

The monitoring data 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, compared to the relevant criteria, are presented in **Table 5-8** below.

Table 5-8: Average Ambient Noise Levels for the Operations Phase

Name of Sampling Location	Noise monitoring location (time)	Mar 2024 Report (Leq)	Jun 2024 Report (Leq)	Sep 2024 Report (Leq)	Dec 2024 Report (Leq)	Project Standard
Myingyan CCPP Plant	N1 (daytime)	41.93	52.50	45.87	57.73	70
	N1 (night-time)	42.65	49.48	45.65	62.91	70
Sa Khar Village (630 m from site)	N2 (daytime)	45.65	54.06	47.59	53.68	55
	N2 (night-time)	42.53	52.14	44.90	53.70	45

Note: Values exceeding the project standard are underlined.

The ambient noise levels recorded were well below the relevant criteria of 70 dBA at the monitoring points which were identified as industrial areas. Exceedances of project standards for night-time were monitored at Sa Khar Village for most of the monitoring rounds. The maximum night-time noise level monitored at the plant is 62.91 dBA. Due to the noise attenuation over a distance of 630 m, the noise impacts from site to the village will be insignificant, with levels lower than 30 dBA. 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.

During the virtual site visit, it was identified that a shop with inhabitants is located outside the plant, within 150 m of the plant boundary. This is indicative of human receptors, who have yet to be formally identified in socio-economic survey data, that are exposed to noise levels above the relevant WHO noise criteria for night-time.

5.6.3 Recommendations

It is recommended that noise monitoring continue to be carried out. Any monitored exceedances should be studied as to whether they are caused by the Plant operations or likely to be caused by the ambient noise levels not related to the Project. It is also recommended to update the socio-economic survey data, identify all potentially affected communities in the plant vicinity and ensure that noise levels are within acceptable ranges. Any new communities, settlements or households identified should be updated in the Stakeholder Engagement Plan (**Section 5.14**) and Community Development Plan (**Section 5.15**).

Table 5-9: Summary of Findings - Noise and Vibration

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
001	Operations phase noise emissions	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.	Operations	IFC PS3 Myanmar NEQ World Health Organisation (WHO) guidance on environmental noise	Continue to carry out noise monitoring. Monitored exceedances should be studied as to whether they are caused by the Plant operations or likely to be caused by the ambient noise levels not related to the Project. Update the socio-economic survey data, identify all potentially affected communities in the plant vicinity and ensure that noise levels are within acceptable ranges. Any new communities, settlements or households identified should be updated in the Stakeholder Engagement Plan and Community Development Plan.	A shop with inhabitants was identified located outside the plant, within 150 m of the plant boundary. This is indicative of human receptors, who have yet to be formally identified in socio-economic survey data, that are exposed to noise levels above the relevant WHO noise criteria for night-time.	**Minor**

5.7 Water Resources

5.7.1 Surface Water Management

Surface water management requirements are included in the site's Environmental Management Plan (EMP) Rev02 dated 7 July 2020.

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

5.7.2 Water Use

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

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

The Surface Water Management Plan requires 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, and is not expected to be used during the operational phase, no further action is required related to the jetty at this time.

5.7.3 Sanitary Wastewater Management

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

- Sewage from the Administration Building; and
- Sewage from the canteen.

5.7.3.1 Sewage from Administration Building

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

5.7.3.2 Sewage from the Canteen

During the Fifth Monitoring Round (December 2019), the IESC was informed that the kitchen wash water from the canteen is passed through a grease trap and the water is used for gardening.

Sewage from the canteen is collected in a cess pit and is removed by the Myingyan Municipality, using vacuum tankers periodically. The contents of the cess pit are taken to a municipal wastewater disposal

site (unlined soil pit) adjacent to the Myingyan cemetery and graveyard, approximately 7 km south of the centre of Myingyan (**Figure 5-5** and **Figure 5-6**). 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 IESC noted in 2019 that no sensitive receptors were identified around the wastewater disposal site; 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 2023). A review of the grease trap in shared in the Tenth Monitoring Round shows that grease trap cleaning is conducted daily and there are no records on scheduled cleanups.

As per the Fifth Monitoring Round, 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.

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.

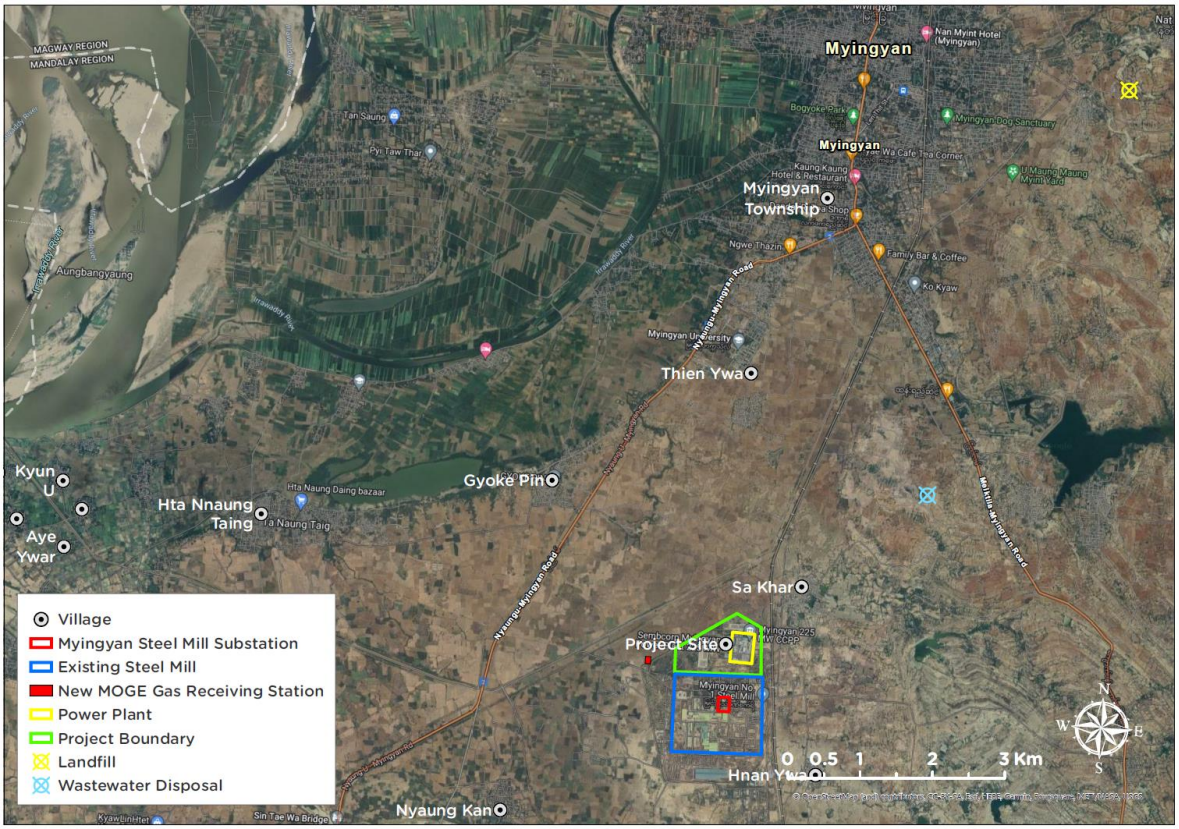


Figure 5-5: Sanitary Wastewater Disposal Site and Landfill Site Location

Figure 5-6: Sanitary Wastewater Disposal Site

5.7.4 Surface Water Runoff

During the Fifth Monitoring Round's site visit, conducted during a period of dry weather, the IESC 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.

5.7.5 Wastewater Streams and Treatment

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

- 80 m^3/hour from cooling tower blowdown;
- 35 m^3/hour from the oil water interceptor (intermittent source i.e., only when raining);
- 20 m^3/hour from the neutralising pit (as part of the raw water treatment process), after treatment; and
- 0.1 m^3/hour from the sewage treatment plant after treatment. Sewage is treated using methanol (for denitrification), sodium hydroxide (for pH control), ferric sulphate (a coagulant) and chlorine (for disinfection).

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

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

On average, approximately 115.1 m^3/hour of treated wastewater is monitored and then discharged from the CMB to the Ayeyarwady River, via a pipe 1 m above the riverbed, and 80 m downstream of the RWI pump barge.

5.7.6 Wastewater Discharge Monitoring

The CMB wastewater quality is monitored on a quarterly basis by an external vendor, Golden Dowa Eco-Systems, to ensure compliance to wastewater effluent quality before discharge.

The following parameters are monitored at CMB on a quarterly basis:

- 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.

Sampling was carried out on March 14, 2024, June 13, 2024, September 19, 2024, and December 19, 2024. The water quality monitoring results were provided to the IESC for review. The water quality recorded, compared to the relevant criteria, are presented in **Table 5-10** below.

Table 5-10: CMB Wastewater Quarterly Monitoring Results

Parameters	Units	Discharge Limits	Mar-24	Jun-24	Sep-24	Dec-24
pH	-	6-9*	8.15	8.2	7.8	7.31
Total Suspended Solids (TSS)	mg/L	50*	8	2	8	2
Chemical Oxygen Demand (COD)	mg/L	125**	7.2	11.1	20.4	18.4
Total Nitrogen	mg/L	10**	3.3	1.9	<0.5	6
Total Phosphorus	mg/L	2**	1.49	1.75	1.45	0.29
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*	0.484	0.348	0.866	0.008
Arsenic	mg/L	0.5*	≤ 0.01	≤ 0.01	≤ 0.01	≤ 0.01
Chromium	mg/L	0.5*	≤ 0.002	≤ 0.002	≤ 0.002	≤ 0.002
Cadmium	mg/L	0.1*	≤ 0.002	≤ 0.002	≤ 0.002	≤ 0.002
Copper	mg/L	0.5*	≤ 0.002	≤ 0.002	≤ 0.002	≤ 0.002
Lead	mg/L	0.5*	≤ 0.002	≤ 0.002	≤ 0.002	≤ 0.002
Iron	mg/L	1.0*	0.058	0.216	0.802	0.144
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).

SMPC also conducted continuous monitoring at the CMB throughout 2024 for pH, Total Suspended Solids, COD, Total Nitrogen, Total Phosphorus, Iron and Total Chlorine. SMPC also conducted continuous

monitoring at the CMB throughout 2024 for pH, Conductivity, Chloride, Free Residual Chlorine (FRC), Iron, Turbidity, Total Nitrogen, Total Phosphorus, and COD. **Table 5-11** presents the monitoring results for the parameters. As illustrated in **Table 5-10** and **Table 5-11**, the CMB wastewater is compliant with wastewater effluent quality limits before discharge.

Monitoring of the temperature of the water is also carried out at the discharge pipeline sampling point (shown in **Appendix 1B**) and the river water. Results in provided to the IESC for review showed that the temperature increase did not exceed 3 degrees Celsius (Myanmar Guideline Value) as presented in **Table 5-12**.

The 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 complied with the stipulated limits.

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

5.7.7 Recommendations

During the Fifth Monitoring Round, it was recommended to 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.

During the Eighth Monitoring Round, it was noted that the laboratory lacked a Quality Control / Quality Assurance (QA/QC) Manual or standard operating procedure. The recommendation remains that QA/QC measures and laboratory protocols be established, implemented and maintained.

It was observed that river water consumption and river water discharge were both being measured during 2023 and 2024, however only river water consumption was included in the IPP Quarterly Operations and Maintenance Report to management on the Plant's performance. It is recommended for river water discharge to be included in the quarterly report as well.

The Surface Water Management Plan requires 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.

Table 5-11: CMB Wastewater Monitoring

Parameters	Units	Project Standard	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
pH	-	6~9	8.06	8.2	8.16	8.1	8.36	7.88	8.78	7.68	8.02	8.2	8.36	7.04
Total Suspended Solids	mg/l	50	13	7	13	7	10	3	19	8	40	7	7	2
COD	mg/l	125	0	0	93	0	0	0	48	57	64	20	10	0
Total Nitrogen	mg/l	10	0	2	1	3	8	0	1	0	3	0	6	7
Total Phosphorus	mg/l	2	0.78	1.4	1	1.43	1.6	1.6	0.45	0.33	0.588	1.6	0	0
Iron	mg/l	1	0.11	0.13	0.098	0.11	0.08	0.19	0.11	0.112	0.24	0.125	0.16	0.067
Total Chlorine	mg/l	<0.2	0	0	0	0	0	0	<0.1	0	<0.1	0	0	0

Table 5-12: Monthly Average Water Temperature Increase

Parameters	Units	Project Standard	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
CMB Discharged Water Temperature	°C	-	21.4	21.7	23.1	25.7	27.6	28.3	27.8	28.1	28.1	27.3	26.5	21.3
River Water Temperature	°C	-	23.2	24.8	26.8	28.9	29.1	28.5	28.5	29.1	30.1	28.6	27.3	24.1
Temperature Increase	°C	<3	2.3	2.5	2.7	2.12	2.6	2.5	2.3	2.8	2.7	2.5	2.3	2.2

Table 5-13: Summary of Findings - Surface Water

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
001	Wastewater discharge for operations phase	Some wastewater quality parameters were not meeting the discharge standards.	Operations	IFC PS3 WBG EHS Guidelines ADB-ES Principle 9	The IESC recommends that site continues to monitor upstream and downstream of the discharge monitoring location periodically for better comparison of results and analysis of trends. Where possible, the monitoring reports should be clearer in attributing the cause of the recorded exceedances and in demonstrating and documenting the corrective measures that have been undertaken. River water discharge, which is being measured, should be included in IPP Quarterly Operations and Maintenance Report.	A Quality Control / Quality Assurance (QA/QC) Manual or standard operating has yet to be established, implemented and maintained. The recommendations remain.	**Minor**
002	Car park runoff	A concrete hard standing area has been constructed outside the Administration Building, which serves as the car park during the operations phase. Runoff, which could potentially be contaminated with oil or fuel from vehicles could contaminate surface water drainage.	Operations	IFC PS3 WBG EHS Guidelines ADB-ES Principle 9	It is recommended that SMPC consider installing an oil interceptor on the drainage system serving this area.	An oil interceptor has not yet been installed. The recommendation remains.	**Minor**

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
003	Surface Water Management	Water monitoring is conducted quarterly instead of monthly as required by the Surface Water Management Plan. The Surface Water Management Plan requires monthly monitoring of water quality at the jetty for the duration of its use by the Project.	Operations	IFC PS3 WBG EHS Guidelines ADB-ES Principle 9	Water quality monitoring in accordance with the EMP requirements is recommended to be re-established as soon as practicable.	The recommendation remains.	**Minor**

5.8 Soil and Groundwater

The Environmental Management Plan (EMP), Revision 02, 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 ERP has been actioned.

During the Ninth Monitoring Round, the IESC was informed that SMPC has ongoing discussions with a chemical supplier to potentially locate 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 and sediment monitoring is required by the EMP (**Section 10.3**) to assess potential soil and sediment contamination. Monitoring is required to be conducted half-yearly, at locations such as accidental spillage areas, the waste storage area and the Ayeyarwady River. The parameters to be monitored comprise pH, salinity, ammonium, total phosphorous, heavy metals, oil and grease and total suspended solids.

As reported in the Ninth Monitoring Round, soil quality monitoring was only conducted once in 2023, in December. The sample was taken from a monitoring point within the Plant boundary and tested for oil and grease by an independent third party, E Guard Environmental Services. The recorded oil and grease concentration was 453 mg/kg, below the Dutch Intervention Value standard of 6,000 mg/kg for mineral oil in soil. Soil sampling was not conducted in 2024.

Sediment quality monitoring was conducted semi-annually on 13 June 2024 and 19 December 2024. The samples were analysed by an external vendor, Golden Dowa Eco-System Myanmar Co. Ltd for the following parameters: cadmium, arsenic, lead, 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.

As recommended since the Sixth Monitoring Report, the IESC recommends that SMPC monitors soil and sediment quality in accordance with the EMP requirements.

Table 5-14: Sediment Monitoring Results

Parameters	Units	Project Standard	Jun-24	Dec-24
pH	-	-	8.26	7.52
Cadmium	mg/kg	12	6.086	3.4
Arsenic	mg/kg	55	≤0.340	≤0.340
Lead	mg/kg	530	61.506	14.620
Selenium	mg/kg	100	≤0.340	≤0.340
Chromium	mg/kg	380	7.038	5.780
Mercury	mg/kg	10	≤0.068	≤0.068

Table 5-15: Summary of Findings - Soil and Groundwater

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
001	Soil sampling	Soil and sediment monitoring has not taken place as required by the EMP. Only one monitoring round was conducted in 2023, and laboratory analysis was not conducted for the full suite of parameters as listed in the EMP.	Operations	Management Plan IFC PS3 WBG EHS Guidelines ADB-ES Principle 9	In accordance with the EMP, it is required that oil and grease be included in the list of analytical parameters. Both soil and sediment quality is to be monitored in accordance with the EMP.	It is required that soil and sediment monitoring be conducted in accordance with the EMP requirements. SMPC is to include the full list of parameters 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 Management Requirements

Waste management is included in the Environmental Management Plan (EMP), Revision 02, dated 7 July 2020 and the Waste (Hazardous & Non-Hazardous) Management Procedure, Revision 03, dated 27 September 2023. Since the plan became effective in February 2020, updates have been made to the Plant Manager (Revision 01, 20 August 2020), signatory changes (Revision 02, 31 January 2022), and formatting to be aligned with PPMS guidelines (Revision 03, 27 September 2023).

5.10.2 Waste Generation and Handling

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 Ninth Monitoring Round, facility personnel reported continued waste segregation at the site.

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 through 2023 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 2023 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 in 2022, 13 villages in 2023 and 10 out of 13 planned villages in 2024. Since 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 recommended 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. In the Tenth Monitoring Round, the IESC reviewed the Procedure for Cleaning Empty Chemical Containers (PPMS Document Reference: 4.02.07.294, Revision 05, 29 April 2024), which details the objectives, scope, responsibilities, personal protective equipment (PPE) to be worn during cleaning, cleaning procedures, quality control and references other PPMS documents for various chemicals and the Occupational Safety and Health Management Plan. Records of cleaned drums inspected by the Laboratory Manager were shared for March and October 2024. This recommendation is now closed.

5.10.3 Off-site Waste Disposal

5.10.3.1 General Waste

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

As of the Tenth Monitoring Round, a new local licensed waste contractor Word Star Padaether Co., Ltd, was engaged for general waste and sludge.

Records reviewed during the Tenth Monitoring Round showed that the following amounts of waste were disposed of during 2024, with a reduction from previous years:

- Total waste to landfill – 82.5 t (ranging between 2.5 t/month to 10 t/month);

This volume of waste likely includes sludge and general waste disposed of to landfill.

General waste is transported and disposed at a landfill site operated by the Myingyan Municipality, located around 4 km east of the centre of Myingyan (Figure 5-7). 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.

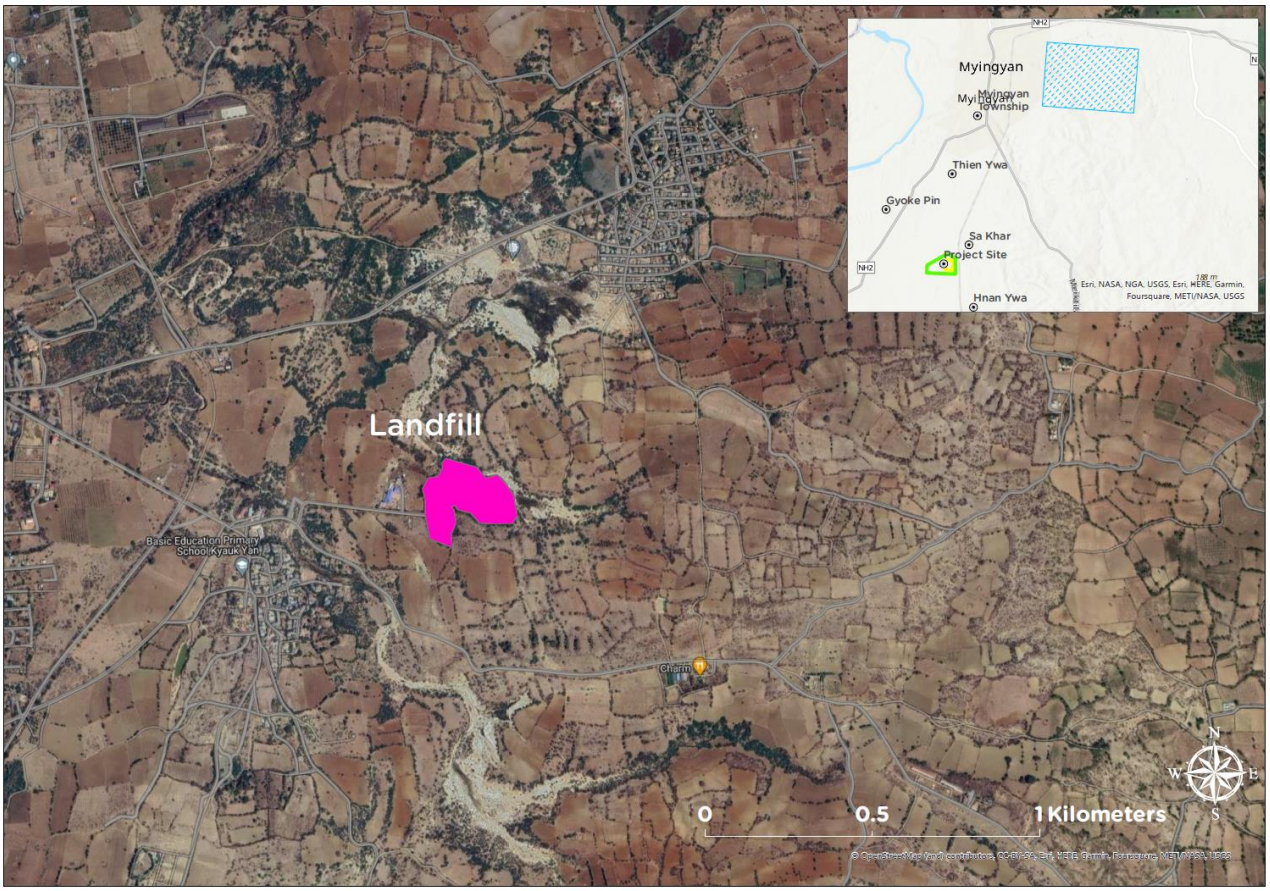


Figure 5-7: Municipal Waste Landfill Site

5.10.3.2 Wastewater Treatment Plant Sludge

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. 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. The facility was constructed by OK Services (also operating as Shwe Phyo Yan Co Ltd). The IESC recommended that bunding be improved and the sludge storage area be roofed to prevent rainwater infiltration and run-off controlled.

During the sixth and subsequent monitoring round, the sludge storage facility was reviewed to determine whether the recommendations for roofing and control of run-off had been implemented. The facility was still not fully contained and the recommended shelter had also not been constructed. It was again recommended that the facility be provided with full containment and shelter (roof).

For the Tenth Monitoring Round, the sludge disposal method with the new collector Word Star Padaethar Co., Ltd remains the same. It was found that no progress had been made on actioning the previous recommendations regarding the provision of shelter and full containment for the facility. These recommendations therefore remain open.

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.

5.10.3.3 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 Clinic 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 Clinic is collected every two weeks and taken to the SMPC plant and onward to the hospital's medical waste incinerator. During the Tenth Monitoring Round, SMPC shared an estimated volume of one cubic feet of medical waste and two cubic feet of expired medicine were stored in the clinic. SMPC also shared that the local hospital incinerator was no longer accepting waste and SMPC is working to find an alternative incinerator, such as at the local town. SMPC is recommended to continue to identify a suitable alternative incinerator and keep records of the volumes of biomedical waste stored at the plant.

During the Ninth Monitoring Round, it was observed that there is no biomedical waste procedure, and biomedical waste was not included in the EMP list of solid wastes generated. During the Tenth Monitoring Round, SMPC provided a list of expired medical drugs from the plant clinic. It is recommended for SMPC to include biomedical waste handling and management into the Waste Management Procedure. This should also include the process of periodic reviews on expired medical drugs.

5.10.3.4 Hazardous Waste

Whilst there are no local hazardous waste vendor in Myingyan, Golden Dowa EcoSystem Myanmar Co., Ltd (Golden Dowa) operates a waste facility in Yangon. Based on desktop review, the company operates a waste treatment and disposal facility including hazardous waste treatment and an engineered landfill in the Thilawa Special Economic Zone of Yangon. Golden Dowa is certified under ISO 14001:2015 for waste management and an EIA for the facility was conducted in 2015[11].

As discussed below, some chemical waste was disposed of off-site to Golden Dowa during 2024.

It was previously recommended to appoint a suitably qualified vendor for collection, treatment and disposal off-site to prevent stockpiling on-site for more than five years. During the Ninth Monitoring Round, SMPC reported that a vendor review will be conducted in 2024 to reduce hazardous waste stockpiles at the plant. In the Tenth Monitoring Round, Golden Dowa was observed to be the appointed collector for removal of stockpiled hazardous waste since 2023. However, details of the disposal destination have yet

[11] https://www.dowa-eco.co.jp/en/group/myanmar.html

to be shared. It remains recommended that SMPC include hazardous waste handling and storage in the Waste Management Procedure.

5.10.3.5 Chemical Waste

According to records made available to the IESC, SMPC engaged Golden Dowa in December 2024 for the collection and off-site disposal of chemical waste. Chemical waste disposed comprised of expired eliminox (250 kg), and lesser quantities of lab waste. Stored waste are located near the demineralisation plant.

Used chemical drums are stored at the site and require periodic off-site disposal. The estimated quantity of used chemical drums generated, disposed off-site and stored on-site in 2024 was provided as follows:

Table 5-16: Estimated Quantity of Chemical Drums Generated, Disposed Off-Site and Stored On-Site in 2024

Chemical Drum	Amount Generated	Amount Disposed Off-Site	Amount Added to On-Site Storage
200 Litres (L) drums	532	532	0
1000 L drums	24	0	24
25 kg drums	1,020	820	200

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. For the Tenth Monitoring Round, the Procedure for Cleaning Empty Chemical Containers (Revision 05) upholds this finding, details are lacking for assessing when a drum is deemed 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 in 2022, 13 villages in 2023 and 10 out of 13 planned villages in 2024.

Based on information provided to the IESC for review, used engine oil was disposed of to Tow Tet YGN Company Limited in 2024. It is recommended that SMPC ensure that the waste diesel oil vendor is suitably qualified to process and re-use the waste stream. Further details of nature of the re-use of this waste stream by the vendor should be retained by SMPC and provided to the IESC for review.

5.10.3.6 Recyclables

Some waste streams are segregated on-site for off-site recycling, most notably wood, scrap metal, and plastics. In the Tenth Monitoring Round, SMPC shared an estimated volume of four cubic feet of used batteries were stored in a battery room. SMPC is in progress to engage an authorised contractor for recycling batteries. Separately, electronic and instrument waste of an estimated eight cubic feet were stored in two cabinets that would be transferred to service providers that upgrade electronic equipment such as printers and IT accessories. No data were available on the contractors engaged for recycling of each type of material.

5.10.4 On-site Waste Disposal

5.10.4.1 Waste from Community / Faulty Solar Panels

Based on information shared during the site visit, a faulty solar panel in the village was brought back to the plant for storage as a waste, as there are no authorised disposal facilities for discarded solar panels in Myingyan. It is recommended that procedures related to on-site storage of waste such as faulty solar panels and batteries from the local community be included into the Waste Management Procedure. Training should also be conducted for relevant staff and communities for disposal of damaged solar panel units.

5.10.5 Recommendations

Based on the IESC's review, the following recommendations are made:

- Sludge - Address the sludge storage facility and put in place a procedure related to the process for assessment of sludge suitability for use as a construction material or other repurposing.
- Biomedical waste - Include biomedical waste handling and management into the Waste Management Procedure. Identify a suitable alternative incinerator and keep records of the volumes of biomedical waste stored at the plant.
- Hazardous waste - Include hazardous waste handling and storage in the Waste Management Procedure.
- Chemical waste - Ensure that the waste diesel oil vendor is suitably qualified to process and re-use the waste stream.
- Faulty solar panels – Ensure all waste streams, including solar panel waste stored at the plant, are identified in the Waste Management Procedure and records are maintained of quantities stored. Procedures related to on-site storage of waste such as faulty solar panels and batteries from the local community should be included in the Waste Management Procedure.
- 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.

Table 5-17: Summary of Findings - Waste Management

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
001	Waste management	Information in the Environmental Management Plan (EMP) dated May 30, 2018 is lacking some details related to off-site waste disposal routes for each waste stream, information on expected quantities and on-site storage arrangements for each type of waste.	Operations	IFC PS1 WB EHS Guidelines ADB-ES Principle 4	Sludge is stored at an off-site facility. 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 Environmental Management Plan (EMP). 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). With regards to the drums, the disposal route and the process for assessment of suitability for re-use, if any, should be clearly described in the procedure.	The recommendation remains. The recommendation remains. The recommendation remains.	**Minor**
002	Waste management monitoring and targeting	Waste minimisation targets have not been established and waste records do not meet the requirements of the management plan which requires chain-of custody documentation.	Operations	Management Plan IFC PS3 WBG EHS Guidelines	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. No specific	Quantities of waste generated are understood to remain relatively low, and the annual quantities of waste generated reduced in 2024, compared to previous years. However, opportunities to avoid or minimize waste have not progressed. Waste streams	**Minor**

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
				ADB-ES Principle 9	waste reduction targets have been set. Progress of discussions with suppliers to potentially return used empty chemical drums and containers is not clear. The IESC recommends that the drum cleaning process for community reuse is conducted under the close supervision of the HSE team and batch testing of pH is conducted at regular intervals for these drums. The test results for each batch shall be recorded and maintained by the site. In the absence of a robust drum cleaning process including testing, maintenance of records and assurance by the HSE team of the suitability of the cleaned-out drum for community use, the IESC recommends that the drum distribution discontinued until such time as measures can be in place to ensure the safety of the containers for use in the community.	such as the empty drums and hazardous waste are largely stored at the site. Discussions with suppliers have not significantly progressed. Targets for reduction have not been set. Empty chemical containers are provided to the local community through a CSR initiative. Appropriate procedures and records related to cleaning of the containers prior to donations are being maintained. Procedure for Cleaning Empty Chemical Containers are maintained with inspections conducted by the Laboratory Manager.	

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
003	Off-site waste disposal	The municipal waste disposal site operates at a level well below what is considered Good International Industry Practice (GIIP).	Operations	IFC PS3 WBG EHS Guidelines ADB-ES Principle 9	Work with OK Service and the municipality to improve conditions at the waste disposal site. In particular, effort should focus on improving containment of waste. The quantity of municipal waste generated during the operations phase has been drastically reduced compared to the construction phase due to a reduction in workforce. Therefore, this issue is considered to be minor for the operations phase.	It is recommended that the IESC re-visits the landfill to ensure proper disposal of SMPC waste during the next physical site visit.	**Minor**
004	Biomedical waste disposal	There is no biomedical waste procedure, and biomedical waste is not included in the EMP list of solid wastes generated.	Operations	IFC PS3 WBG EHS Guidelines ADB-ES Principle 9	None	Include biomedical waste handling and management into the Waste Management Procedure. Identify a suitable alternative incinerator and keep records of the volumes of biomedical waste stored at the plant.	**Minor**
005	Hazardous Waste Management	There was no off-site disposal of solid hazardous waste taking place as there was no local hazardous waste vendor in Myingyan.	Operations	IFC PS3 WBG EHS Guidelines ADB-ES Principle 9	None	Include hazardous waste handling and storage in the waste management procedure. Identify and appoint a suitably qualified vendor for collection, treatment and disposal off-site to prevent stockpiling on-site for more than five years.	**Minor**

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
006	On-site Waste Disposal	Faulty solar panel from the village was disposed on-site at the plant as it was noted that there are no official disposal areas for discarded solar panels off-site.	Operations	IFC PS3 WBG EHS Guidelines ADB-ES Principle 9	None	Develop procedures and implement training for disposal of damaged solar panel units and batteries that need to be taken away and disposed at the plant. These should be updated in the Waste Management Procedure.	**Minor**

5.11 Hazardous Substances Spill Contingency

5.11.1 Hazardous Substances Management

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, Revision 03, 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).

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.

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 in the Tenth Round, spill kits are present at the Chemical Shelter next to the lube oil shelter, the Chemical Shelter near the WTP, the laboratory, and the lube oil shelter. It is recommended that Annex C 'Plant Emergency Evacuation Layout with EAA, AED, Clinic and Chemical & Oil spill kits Locations' is updated with the latest spill kit locations. It is also recommended that the location, contents and conditions of all five 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.

5.11.2 Recommendations

There has been no change to the site's Plant Emergency Preparedness & Response Management Plan, Revision 07, dated January 2025 with respect to Hazardous Substances Spill Contingency. Thus, three 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. It is recommended that the plan is updated to describe unloading and loading protocols.
- Section 12 (Plant Emergency Response Flowchart for Fire outbreak, Hazardous Substances spillage, Gas pipe leak) lack detail. It is recommended that the plan is updated to describe how recommendations from an incident investigation will be implemented after submission of the incident report to the SMPC Managing Director.
- Annex C should be updated with the latest map of chemical spill and oil spill locations in the plant.

Table 5-18: Summary of Findings - Hazardous Substances Spill Contingency

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth 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. 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.	Operations	IFC PS 1&3 WB EHS Guidelines ADB-ES Principle 9	Review and revise the operation phase management plans to ensure it has a comprehensive list of materials stored, develop written procedures for deliveries and dispatch of hazardous liquids, and add written instructions for responding to spills at all relevant locations within the site. Include loading and unloading protocols be included in the Plant Emergency Preparedness and Response Plan and Occupational Safety and Health Management Plan under Section 19 'Control of Hazardous Materials'. Update Section 12 (Plant Emergency Response Flowchart for Fire outbreak, Hazardous Substances spillage, Gas pipe leak) lack detail. It is should describe how recommendations from an incident investigation will be implementedE after submission of the incident report to the SMPC Managing Director.	The recommendation remains. Based on photos provided in the Tenth Round, spill kits are present at the Chemical Shelter next to the lube oil shelter, the Chemical Shelter near the WTP, the laboratory, and the lube oil shelter. Update Annex C of the Plant Emergency Preparedness and Response Plan with details on the contents, conditions and latest map of locations of chemical and oil spill kits. The recommendation remains. The recommendation remains.	**Minor**

5.12 Emergency Preparedness and Response

5.12.1 Emergency Preparedness and Response Management

The Plant Emergency Preparedness & Response Management Plan (including Community Emergency Response, the ERP), Revision 07 dated 2 January 2025, 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 and bomb threat, and natural disasters. As recommended previously by the IESC, the updates to the ERP also included the emergency contacts section and incidents classification.

5.12.2 SMPC's Business Continuity Plan (BCP) Implementation

In June 2022, SMPC's previous Covid-19 focused Business Continuity Plan was superseded by the SMPC Business Continuity Plan (PPMS Documentary Ref: 1,02.03.003) (the Updated BCP). The entire procedure for the BCP was reportedly modified to align with the Sembcorp Group Business Continuity Management (referred to as the HQ BCM Framework), a framework that the IESC has requested but not yet received.

In July 2024, SMPC's BCP had an overall update of policy for Revision 07, effective from 29 July 2024 – 29 July 2027, where details of the changes were not explained. In January 2025, SMPC's BCP was updated once more for Revision 08, effective 22 January 2025 – 21 January 2028, where changes were made to signatories and the emergency response and evacuation plans included in Annex E (the Updated BCP).

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 Eleventh Monitoring Round:

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

5.12.3 Observations

In August 2024, in view of escalating civil unrest in Myanmar including in Myingyan township where the Plant is located, the Plant was shut down from 12 August 2024 to 22 August 2024[12]. A summary of the emergency response measures taken is as follows:

- SMPC was informed of Government shutdown of Banks and Offices;

[12] https://links.sgx.com/FileOpen/MYINGYAN%20POWER%20PLANT%20-%20TEMPORARY%20SUSPENSION%20OF%20OPERATIONS.ashx?App=Announcement&FileID=815029

- The Managing Director in conjunction with Sembcorp made the decision to shut down the plant and conduct an emergency evacuation of the Plant;
- The Electric Power Generation Enterprise, a power department within the Ministry of Electricity and Energy of Myanmar, was informed of the situation and approved the shutdown;
- Security measures were implemented to safeguard the Plant while relevant stakeholders were notified (e.g., Government authorities, Sembcorp HQ, employees, local communities); and
- Gas Turbine #11 (GT#11) and Steam Turbine (ST) were shut down on 12th August and operations resumed on 23rd August.

Records provided to the IESC showed that 12 out of the total of 12 planned monthly emergency drill exercises had been conducted by the site's emergency response team. These comprised the following scenarios:

- Two fire drill scenarios (both tier 2);
- One emergency drill response focused on physical security;
- First aid;
- Natural Disasters;
- Environmental spillage;
- Three OHS emergencies (confined space, kitchen fire and first aid, work at height,); and
- A medical case.

The IESC was also provided an evacuation plan drafted during 2023 which describes evacuation trigger points and corresponding actions to be taken in the event of five social conflict scenarios.

SMPC also prepared an evacuation plan for workers who are staying at the two Safe Houses and it was included in the Updated Annex E to the BCP, Revision 08, provided in the Tenth Round. While the evacuation plan procedures will depend on the criticality of each employee's role towards plant operations and the severity of a violent situation at Myingyan and in the community, they do not describe potential fires or natural disaster situations and any planned escape routes from the workers accommodations in the event of fires or natural disaster situations.

It was recommended since the Eighth Monitoring Round to conduct risk assessments for major-accident hazards for the Safe House 1 and, if necessary, based on the findings of the risk assessments, to conduct the necessary emergency drills for a major hazard event scenario at Safe House 1. In May 2024, a HSSE risk assessment was developed for worker accommodations, the document does not explicitly specify which Safe House it is applicable for. It was separately described in the list of worker accommodations that the risk assessment is applicable to both accommodations. For all worker accommodations, it is recommended in the Eleventh Monitoring Period, to develop an Emergency Response and Evacuation Plan that covers both violent situations and fires and natural disaster situations, and to provide training in emergency evacuation for the residing workers and families.

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 ERP. 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 ERP, 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 ERP 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.

The IESC noted that the existing ERP was not fully adhered to for the emergency evacuation in 2024:

- ERP Section 6.7 Civil Disturbance/Unrest/Bomb Threat does not cover Arms Clash, and so this section of the ERP did not apply and was not fully followed.
- A separate Emergency Evacuation Plan (undated), not found in the ERP, was implemented.
- A Myingyan deployment checklist, not found in the ERP, was filled to determine safe deployment of employees to restart the plant. The checklist comprises a status update as of 20th August on the plant, MI Outage, and its surroundings (Myingyan Town, neighbouring facilities and existing utility infrastructure).
- The decision-making process for the MD to order an Emergency Evacuation and conclude that it is safe to resume operations at the Plant is unclear.
- A procedure for communication to stakeholders (communities, Sembcorp Industries, Lenders, Contractors, etc) is lacking.
- It is unclear if there were any lessons learnt or follow-up actions needed.
- No incident investigation was conducted in 2024 and as a result, no Incident Investigation Report was available for review by the IESC.

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

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

5.12.4 Recommendations

SMPC is recommended to provide information on (i) any outreach to local hospitals or government agencies involved in emergency response, (ii) the sharing of the ERP and training provided to the three closest communities (i.e., Sa Khar, Hnan Ywa and Hpet Taw) and (iii) a specialist contractor engaged to provide training to workers and community members on the ERP.

As recommended in Ramboll's Eighth Monitoring Report, the Sembcorp HQ BCM Framework should be provided for Ramboll's review.

SMPC is also recommended to take action on Ramboll's recommendations on Annex E of the BCP related to Worker Accommodation meeting IFC PS2 (i.e., Emergency Response and Evacuation Plans should cover both violent situations and fires and natural disasters for workers who will stay in the workers accommodations) and, if necessary following risk assessments, and HSE plans and protocols for major-accident hazards in accordance with IFC PS4. A standalone Workers Accommodation Plan is recommended to be prepared and maintained.

SMPC's Emergency Evacuation Plan should be approved and included in the Emergency Preparedness & Response Management Plan, with training sessions to orientate employees on the necessary actions. As discussed in Section 5.17 Worker Accommodation, it is noted that Safe House 1 is located within 50 m of the plant boundary and has not had necessary risk assessments conducted. Safe House 2 was recently developed nearby. SMPC should conduct risk assessments and develop necessary emergency response plans and protocols related to the accommodation facilities. In addition, as recommended during the Eighth Monitoring Round, it is recommended to urgently conduct risk assessments for major-accident hazards for the Safe House 1 and, if necessary, based on the findings of the risk assessments, conduct the necessary emergency drills for a major hazard event scenario at Safe House 1, and include the dates and locations, including any of the affected local communities, that such emergency drills were conducted.

With respect to the emergency evacuation in 2024, SMPC is recommended to take the following actions:

- Update ERP sections 6 and 7 to integrate the undated emergency evacuation plan and application of the Myingyan Deployment Checklist with the ERP and the BCP;
- Ensure plans and procedures are clear on the decision-making process for the MD to order an Emergency Evacuation and then conclude when it is safe to resume operations at the Plant;
- Ensure the Emergency Evacuation Plan, the BCP and any other relevant documentation includes communication procedures to stakeholders (local communities, Contractors, Sembcorp Industries, Lenders, etc.) in the event of major incidents, evacuation, etc;
- Carry out a formal Incident Investigation of the emergency evacuation in 2024. The ERP should also incorporate procedures of conducting a formal Incident Investigation; and
- Completion of a formal Incident Investigation of the emergency evacuation in 2024, and acting on any resultant recommendations for improvement should be viewed as a critical action step for the project and should be provided to the IESC for review as part of the Eleventh Monitoring Round.

Table 5-19: Summary of Findings - Emergency Preparedness and Response

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
001	HSSE risk assessment for Safe Houses.	Risk assessments were not conducted for the Safe Houses.	Operations	IFC PS 1&4 ADB-ES Principle 10	Update Annex E of the BCP related to Worker Accommodation to meet IFC PS2 (i.e., Emergency Response and Evacuation Plans should cover both violent situations and fires and natural disasters for workers who will stay in the workers accommodations) and, if necessary following risk assessments, and HSE plans and protocols for major-accident hazards in accordance with IFC PS4. A standalone Workers Accommodation Plan is recommended to be prepared and maintained.	The recommendations remain. In May 2024, a HSSE risk assessment was developed for worker accommodations, the document does not explicitly specify which Safe House it is applicable for.	**Minor**

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
002	Sembcorp's BCM Framework	In June 2022, SMPC's previous Covid-19 focused Business Continuity Plan was superseded by the SMPC Business Continuity Plan (PPMS Documentary Ref: 1,02.03.003) (the Updated BCP). The entire procedure for the BCP was reportedly modified to align with the Sembcorp Group Business Continuity Management (referred to as the HQ BCM Framework), a framework that the IESC has requested but not yet received.	Operations	IFC PS 1&4 ADB-ES Principle 10	Provide Sembcorp HQ BCM Framework for IESC review.	The recommendation remains.	**Minor**

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
003	Evacuation plan for social conflict scenarios	In 2023, an undated evacuation plan for five social conflict scenarios was shared with the IESC and not yet included in the Emergency Response Plan.	Operations	IFC PS 1&4 ADB-ES Principle 10	Update the ERP to include the evacuation plan drafted in 2023 for five social conflict scenarios.	SMPC's Emergency Evacuation Plan should be approved and included in the Emergency Preparedness and Response Management Plan, with training sessions to orientate employees on the necessary actions.	**Minor**
004	Implementation of ERP	In August 2024, escalating civil unrest resulted in the Plant to shut down, and follow a series of emergency response measures. The ERP was not fully adhered to for the emergency evacuation in 2024: • ERP Section 6.7 Civil Disturbance/Unrest/Bomb Threat does not cover Arms Clash, and so this section of the ERP did not apply and was not fully followed. • A separate Emergency Evacuation Plan (undated), not found in the ERP, was implemented. • A Myingyan deployment checklist, not found in	Operations	IFC PS 1&4 ADB-ES Principle 10	None	With respect to the emergency evacuation in 2024, SMPC is recommended to take the following actions: • Update ERP sections 6 and 7 to integrate the undated emergency evacuation plan and application of the Myingyan Deployment Checklist with the ERP and the BCP; • Ensure plans and procedures are clear on the decision-making process for the MD to order an Emergency Evacuation and then conclude when it is safe to resume operations at the Plant; • Ensure the Emergency	**Major**

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
		the ERP, was filled to determine safe deployment of employees to restart the plant. The checklist comprises a status update as of 20th August on the plant, MI Outage, and its surroundings (Myingyan Town, neighbouring facilities and existing utility infrastructure). • The decision-making process for the MD to order an Emergency Evacuation and conclude that it is safe to resume operations at the Plant is unclear. • A procedure for communication to stakeholders (communities, Sembcorp Industries, Lenders, Contractors, etc) is lacking. • It is unclear if there were any lessons learnt or follow-up actions needed. • No incident investigation was conducted in 2024 and as a result, no Incident Investigation Report was available for review by the IESC.				Evacuation Plan, the BCP and any other relevant documentation includes communication procedures to stakeholders (local communities, Contractors, Sembcorp Industries, Lenders, etc.) in the event of major incidents, evacuation, etc; • Carry out a formal Incident Investigation of the emergency evacuation in 2024. Incorporate procedures of conducting a formal Incident Investigation; and • Completion of a formal Incident Investigation of the emergency evacuation in 2024, and acting on any resultant recommendations for improvement should be viewed as a critical action step for the project and should be provided to the IESC for review as part of the Eleventh Monitoring Round.	

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
005	Improve the ERP	Opportunities for improving the ERP.	Operations	IFC PS 1&4 ADB-ES Principle 10	None	SMPC is recommended to provide information on (i) any outreach to local hospitals or government agencies involved in emergency response, (ii) the sharing of the ERP and training provided to the three closest communities (i.e., Sa Khar, Hnan Ywa and Hpet Taw) and (iii) a specialist contractor engaged to provide training to workers and community members on the ERP.	**Minor**

5.13 Occupational Health and Safety

5.13.1 OHS Management

The Occupational Safety and Health Management Plan (PPMS Document Reference: 3.02.01.010, Revision 03, 31 January 2022) describes the Project's operational phase HSE-MS, and is based on Sembcorp's corporate HSE-MS.

SMPC uses Sembcorp's 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.

5.13.2 HSSE Statistics

According to SMPC 10th E&S Monitoring Presentation dated January 2025 and the HSSE Statistics provided to the IESC for review, the Project had achieved a total of more than 4.4 million man-hours since the last lost time injury (LTI), over 2,100 days ago.

The HSSE performance statistics for 2024 reported no environmental, security, asset damage, fire, first aid, medical treatment, restricted work, lost workday injuries, fatal injuries, or occupational disease cases, and only one near miss case.

- The one near miss case, subsequently investigated and closed out, related to the following incident: On 11 January 2024, at the gas turbine (GT#11)'s Packaged Electrical and Electronic Control Center (PEECC) fire suppression pilot Argon cylinder, a paint worker had touched the solenoid manual trigger wire which activated Argon gas release and tripped the gas turbine via the Fire Pre-Alarm Active and Master Protection Trip. There were no injured persons and the incident is now closed.

During the Ninth Monitoring Round, an interview with the Plant's medical doctor was conducted during which records of first aid cases rendered by the Plant's clinic were reviewed. It was noted that clinic-administered first aid cases were not included in the Plant's HSSE statistics. Based on the records of clinic cases in 2023, various cases such as musculoskeletal, sleep disorders, hearing and minor injury were presented to the doctor. However, no trend analysis or follow up by SMPC on potential trends or need for mitigation measures in the workplace had taken place.

In the Tenth Monitoring Round, clinic-administered cases remain excluded from the Plant's HSSE statistics. The medical officer kept medical records of employees and not the villagers. Commonly reported cases in 2024 included musculoskeletal, sleep disorders, hearing, and minor injury. As recommended in the Ninth Monitoring Round, a trend analysis was conducted for employees. The top two types of medical issues were influenza (143 cases) and musculoskeletal (71 cases). Influenza type B trended with seasonal outbreaks from winter to summer months, and rainy seasons. Covid-19 was less recurrent and affected less than 1% of the population. Musculoskeletal cases included ergonomic-related cases, and pains from the spine, neck, back, joint and legs. The recommendations remain to conduct a formal trend analysis and root cause review to determine whether additional worker welfare programmes are required. All workplace related near miss, first aid cases, medical treatment cases, restricted work cases, lost workday injury cases or fatal injuries or occupational disease cases, including those reported to the Plant's medical doctor, should be included in the Plant's HSSE Statistics. The statistics for 2024 should be updated where necessary.

5.13.3 Observations Related to OHS

The IESC noted various examples of good practice related to OHS including:

- Safety day with safety equipment exhibition;

- Behaviour based safety (BBS) programme with 2,845 observations during 2024 (more than the planned 1,800 observations);
- A total of 2,050.5 HSSE training manhours during 2024 (more than the planned 1,825 manhours); and
- Twelve HSSE awareness campaigns launched during the year.

Safety Improvement Programs for the safety awareness campaigns are planned based on the top three unsafe acts and unsafe conditions encountered per month. For example, during January 2023, the top three hot spot observations related to personal protective equipment, procedures, and housekeeping standards, and the safety improvements that month included a monthly tools and equipment inspection, weekly management site walk and weekly housekeeping inspection.

As discussed in Section 5.17 Worker Accommodation, it is noted that Safe House 1 is located within 50 m of the plant boundary and Safe House 2 is recently developed. A HSSE risk assessment has been developed for worker accommodation which identified accommodation related work activities such as smokers' behaviour, cooking and use of bathrooms. SMPC should develop necessary OSH plans and protocols (e.g., OHS inspections, training and drills) related to these accommodation facilities, preferably in a standalone Worker Accommodation Plan.

During the Ninth Monitoring Round, it was observed during the virtual site visit that there is only one medical officer, a doctor, who has no back up medical support on-site and takes limited leave. Previously, two medical officers were stationed at the Plant. During the Tenth Round, it remains that no medical support is available at the plant when the doctor is unavailable or visiting village communities.

During the Tenth Monitoring Round, SMPC conducted a series of major inspection (MI) outages from August to December 2024. It was noted during the virtual interview that a series of outages would be conducted during these inspections, and that it happens approximately once every four years. While a deck on MI outage procedure was submitted to the IESC, there was no mention of its objective and frequency. It is recommended for this procedure to be updated to include its objective, and frequency of occurrence. This procedure should also be formalised and included in the OSH Management Plan and integrated as a training drill for the BCP and the ERP.

It was also observed that the IESC's recommendations regarding improvements to the OSH Management Plan had not been implemented and remain an open item.

5.13.4 Recommendations

Based on the IESC's review of the OSH Management Plan, the Plan was due for review in January 2025 and is recommended to be further improved, 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.

- Section 10 (Safety Training) should include procedures for MI outage. It should state the objective of MI outage and frequency of occurrence. Procedures for MI outage should be integrated into the OSH Management Plan, BCP and the ERP.

With regards to the OHS records and medical support at the clinic, the following recommendations are made:

- Put in place a procedure for replacement service such as a government hospital or alternative medical support when the doctor is unavailable or visiting affected local communities.
- Include all incidents at the plant, including those reported directly to the Clinic, in the Plant's HSSE Statistics. For example, first aid rendered at the Clinic for OHS incidents reported directly to the Clinic but related to the workplace should be included in the statistics.
- Conduct a formal annual trend analysis and root cause review of clinic records (data anonymised to protect doctor-patient confidentiality) to study trends in illnesses such as musculoskeletal, sleep disorders, hearing and minor injury. Review potential root causes and put in place mitigation such as additional worker welfare programmes where necessary.

As discussed in Section 5.17 Worker Accommodation, it is noted that Safe House 1 is located within 50 m of the plant boundary and Safe House 2 was developed subsequently. Whilst a HSSE risk assessment dated May 2024 for worker accommodation has been developed, SMPC is recommended to also develop necessary OSH plans and protocols (e.g., OHS inspections, training and drills) related to these accommodation facilities. *It was noted by SMPC separately that the risk assessment is applicable to both worker accommodations, but the risk assessment document should also clearly specify which Worker Accommodation or Safe House it applies to and its location.*

All workplace related near miss, first aid cases, medical treatment cases, restricted work cases, lost workday injury cases or fatal injuries or occupational disease cases, including those reported to the Plant's medical doctor, should be included in the Plant's HSSE Statistics. The statistics for 2024 should be updated where necessary.

Table 5-20: Summary of Findings - Occupational Health and Safety

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
001	Improve the OSH Management Plan and relevant procedures	OSH Management plan due for review in January 2025. Section 1 (Purpose) does not specify relevant regulations and description of applicability and key requirements of each item. Section 10 (Safety Training) does not make comprehensive operational phase HSSE Training Plan which should include environment and social topics.	Operations	IFC PS 2&4 ADB-ES Principle 2	Section 1 (Purpose) 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. 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. All workplace related near miss, first aid cases, medical treatment cases, restricted work cases, lost workday injury cases or fatal injuries or occupational disease cases,	These recommendations remain. In addition, an MI Outage was conducted in 2024. Section 10 (Safety Training) should include procedures for MI outage, including its objective and frequency of occurrence. Procedures for MI Outage should be integrated into the OSH Management Plan, BCP and ERP. The medical officer kept medical records of employees and not the villagers. Commonly reported cases in 2024 included musculoskeletal, sleep disorders, hearing, and minor injury. A trend analysis was conducted for employees. However, the recommendations remain to conduct a formal trend analysis and root cause review to	**Minor**

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
					including those reported to the Plant's medical doctor, should be included in the Plant's HSSE Statistics.	determine whether additional worker welfare programmes are required.	
002	OHS records and medical support at the clinic	OSH Management plan due for review in January 2025 Section 1 (Purpose) does not specify relevant regulations and description of applicability and key requirements of each item. Section 10 (Safety Training) does not make comprehensive operational phase HSSE Training Plan which should include environment and social topics.	Operations	IFC PS 2&4 ADB-ES Principle 2	Put in place a procedure for replacement service such as a government hospital or alternative medical support when the doctor is unavailable or visiting affected local communities. Include all incidents at the plant, including those reported directly to the Clinic, in the Plant's HSSE Statistics. For example, first aid rendered at the Clinic for OHS incidents reported directly to the Clinic but related to the workplace should be included in the statistics. Conduct a formal annual trend analysis and root cause review of clinic records (data anonymised to protect doctor-patient confidentiality) to study trends in illnesses such as musculoskeletal, sleep	The recommendations remain.	**Minor**

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
					disorders, hearing and minor injury. Review potential root causes and put in place mitigation such as additional worker welfare programmes where necessary.		
003	OSH plans for Safe Houses	OSH plans not developed for worker accommodation.	Operations	IFC PS 2&4 ADB-ES Principle 2	Develop necessary OSH plans and protocols (e.g., OHS inspections, training and drills) related to all accommodation facilities, taking risk assessments into consideration.	This recommendation remains.	**Minor**

5.14 Stakeholder Engagement

5.14.1 Stakeholder Engagement Policy and Plan

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 (Revision 01), January 2023 (Revision 02), June 2023 (Revision 03) and in May 2024 (Revision 04). 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 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 5.14.5**). 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 Appendix C of the 2023 SEP Revision 02). 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 was an inconsistency in titles included in the 2023 SEP (Revision 02) for the parties involved. Updated job descriptions for the Government Affairs and CSR department managers, were provided to Ramboll during the Ninth Monitoring Round, and were reviewed and there is now a consistency in titles between the SEP, Community Development Plan (CDP, described in **Section 5.15**) and the job descriptions. The CSR Lead is responsible for implementing, monitoring, and reporting of the SEP and CDP. An updated job description for the Procurement and Logistics Manager was also provided to Ramboll.

A third revision of the SEP was prepared in June 2023 and submitted to Ramboll during the Ninth Monitoring Round. The SEP (Revision 03) includes objectives, an organization chart, roles and responsibilities, the Grievance Committee members, and the Community Grievance Mechanism (CGM) procedures. The CGM procedures are now included in section 10 of the SEP, and the CSR Lead is to be notified of all grievances and the Managing Director is to be notified of all Level 2 and 3 grievances. In this revision, the Grievance Committee Organization has shifted from Section 9.3.2 to Section 13.3 Appendix C.

An Updated SEP (Revision 04) was prepared in May 2024 and submitted for the Tenth Monitoring Round. The SEP was amended to update Community Data, Grievance Committee Organization changes, Performance Indicators, and newly included procedures for the Annual Stakeholder Engagement (ASE) procedures. While Community Data has been updated in the SEP, **Sections 5.3** and **5.6** addressed that existing socio-economic data may still be lacking for potentially affected communities within the plant vicinity which could be affected by air and noise emissions. A shop with inhabitants was identified within 150 m of the plant boundary, indicating that there are human receptors not yet formally identified in the socio-economic survey data.

5.14.1.1 Recommendations

There is inconsistency on the CGM Roles & Responsibilities (i.e., current titles of parties involved) in the SEP, except the Grievance Committee role and responsibilities that are included in Appendix C, for the Community Relations Officer should be revised to read CSR Lead.

As discussed in **Sections 5.3** and **5.6**, update the socio-economic survey data to identify all potentially affected communities in the plant vicinity and ensure that air and noise levels are within acceptable ranges. Any new communities, settlements or households identified should be updated in the Stakeholder Engagement Plan (**Section 5.14**) and Community Development Plan (**Section 5.15**).

5.14.2 Stakeholder Engagement Activities

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. As was confirmed by PCo/SMPC during all of Ramboll'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 SEP requires Annual Public Stakeholder Engagement Meetings. 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;
- CSR initiatives for the local community; and
- Engagement and Grievance Management.

The following Annual Public Stakeholder Engagement Meetings took place between 2015 and 2020):

- The First Public Stakeholder Engagement Meeting took place in September 2015;
- The Second Public Stakeholder Engagement Meeting took place in June 2016; and
- 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 provided 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 provided the meeting topics discussed, which included 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), ERP 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.

Subsequent to the Sixth Public Stakeholder Engagement Meeting (2020), SMPC has not been able to have in-person public engagement meetings. 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, 2022, 2023, and 2024 however, in lieu of an annual public meeting, Annual Public Stakeholder Engagement (ASE) presentation material with updated Project information were posted on noticeboards in each of the 13 villages in December 2022, in November 2023, and in January 2025. The ASE presentation material for 2024 is appended (**Appendix 8**).

Following the Covid-19 and the security situation in Myanmar, most communication since 2021 is by telephone, where feasible, with face-to-face meetings on a limited basis. Ramboll received a copy of the Stakeholder Engagement Database Year 2024 which included details on the 2,521 meetings (conducted mainly by telephone) held with stakeholders in 2024 (**Appendix 6**)**.**

5.14.2.1 Recommendations

The SEP requires monthly dissemination of Project information to the 13 village leaders, quarterly face-to-face meetings and an annual public engagement meeting. Whilst engagement and dissemination of information has continued, it is recommended that face-to-face meetings and annual public engagement meetings resume when possible.

It is also recommended that the IESC resumes stakeholder engagement (virtual meetings or, when physical monitoring re-commences, in person meetings) during future monitoring rounds.

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**). Subsequently, Public Stakeholder Engagement Meetings have not been held but ASE presentation material has been posted on noticeboards in each of the 13 villages in 2022, 2023 and January 2025.

In term of broader public disclosure, the following information is available on the SMPC website[13]:

- Environmental Management Plan Reports (2019-2024, Part 1 only);
- Stakeholder Engagement Presentation to the Community (November 2019); and
- Environmental and Social Monitoring Report (First to Seventh, Part 1 only).

5.14.3.1 Recommendations

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

Participatory monitoring of water temperatures should be reinstated as a routine practice, when current 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 2025 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 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. Following Ramboll's recommendations for improvement, the job descriptions were again included in the Ninth Monitoring Round, and the documents were dated and titled appropriately.

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 2024 of actions taken and results achieved under the SEP through December 2024. The Project was able to conduct 2,521 stakeholder engagements in 2024, mainly by having periodic telephone calls with stakeholders. However, SMPC had the following limitations on meeting the SEP KPIs for 2024:

- The annual public stakeholder engagement activity was not able to be conducted;
- 100% stakeholder engagement was only able to be conducted in January 2021;

[13] https://www.sembcorpmyingyanipp.com/reports_and_performance.html

- After January 2021, the CSR team was not able to engage physically with stakeholders and only telecommunication was available, and in 2022, 2023 and 2024, there was limited face-to-face contact with village heads
- Out of 131 stakeholders identified, 122 were contacted, and nine could not be contacted despite SMPC's efforts
- Some village authorities were not able to be contacted, as scheduled, SMPC should advise on which village authorities were not able to be contacted;
- 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, 2022, 2023 and 2024 (see **Section 5.14.5** below).

5.14.5 Community Grievance Mechanism

Sembcorp's Community Grievance Mechanism (CGM) is incorporated into the Project's 2023 SEP (Revision 03) 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 13.3 Appendix C of the 2023 SEP (Revision 03).

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, Government Affairs, 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.

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 Appendix C 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 Appendix C of the 2023 SEP (Revision 02). These have since shifted to Section 13.3 Appendix C of the 2023 SEP (Revision 03) and 2024 SEP (Revision 04).

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.

An update of the most recent Community Grievance Mechanism Database 2022, 2023 and 2024 was not provided to Ramboll for review. However, according to SMPC, there were no grievance that arose during that period.

5.14.5.1 Recommendations

As mentioned in Section 5.14, all Roles & Responsibilities under the CGM should be reviewed and revised, where needed, to ensure the correct names for roles are included in Section 10 of the Updated SEP and in the CGM Org Chart in Section 13.3 Appendix C. Role names mentioned in the CGM should be consistent with titles included in the current SMPC Org Chart (Figure 5-1). The updated procedures and organisation chart should be incorporated into the SEP and submitted for the Tenth 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.

The Annual Stakeholder Engagement (ASE) Presentation is noted to have replaced phone numbers with a QR code for Stakeholder Feedback, while maintaining a grievance suggestion box. It is recommended for the phone numbers to be retained in the ASE to provide options for phone calls as a communication channel.

Table 5-21: Summary of Findings - Stakeholder Engagement

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
001	Management Plan	SEP to be updated	Construction/ Operations Ongoing	Management Plan IFC PS1 ADB-ES Principle 4	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). As of June 2023, the SEP was updated (Revision 03) and includes an updated Org Chart and roles and responsibilities for the community grievance mechanism. 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 10 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 (Figure 5-1). Appendix C of the SEP should have the Community	An Updated SEP (Revision 04) was prepared in May 2024 and submitted for the Tenth Monitoring Round. The SEP was amended to update Community Data, Grievance Committee Organization changes, Performance Indicators, and newly included procedures for the Annual Stakeholder Engagement (ASE) procedures. Appendix C of the SEP continues to show the Community Relations Officer instead of the CSR Lead. While Community Data has been updated in the SEP (Revision 04), **Sections 5.3** and **5.6** addressed that existing socio-economic data may still be lacking for potentially affected communities within the plant vicinity which could be affected by air and noise emissions. A shop with inhabitants was identified within 150 m of the plant boundary, indicating that there are human receptors not yet formally identified in the socio-economic survey data. The socio-economic survey data should be updated to identify all potentially affected communities in the plant vicinity and ensure that air and noise levels are within acceptable ranges. Any new communities, settlements or households identified should be updated in the Stakeholder Engagement Plan (**Section 5.14**) and Community Development Plan (**Section 5.15**).	**Re-opened: Minor**

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
					Relations Officer revised to read CSR Lead.		
002	Stakeholder engagement	Stakeholder engagement with the 13 village leaders and PAPs.	Construction/ Operations Ongoing	Management Plan IFC PS1 ADB-SPS Paragraph No.54	PCo should continue to engage in frequent and open communication with the village leaders and in face-to-face communication with the individual PAPs; and the PCo should keep detailed records of these meetings, including meeting minutes.	Ramboll reviewed the Stakeholder Engagement Database during our Seventh Monitoring Assignment (January – December 2021); and can confirm that it continues to include sufficient detail.	**Closed**
003	Public Disclosure	During the ESIA process in Myanmar, the project owner's obligation to produce copies of the findings, as well as recommendations in the local language, and distribute them.	Pre-Construction	ADB-ES Principle 6 IFC PS1	Sembcorp to advise 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	ADB-ES Principle 7 IFC PS1	SMPC to provide details on how they share Project monitoring results with stakeholders. 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	It is recommended that participation of the local villages in the river water sampling activity be repeated in future years.	**Closed**

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
					November 2019 meeting presentation. SMPC last conducted river water sampling on January 28, 2020 with the participation of local villages (refer to Appendix 5C of the Fifth Monitoring Report for the participation records). SMPC again conducted river water sampling on June 16, 2020, however, due to Covid-19 restrictions, there was no participation of the local villages. It is recommended that participation of the local villages in the sampling activity be repeated in future years.		
005	Community Grievance Mechanism	While the community grievance mechanism is well structured and detailed, most timeframes for actions are too long.	Construction/ Operations Ongoing	Management Plan IFC PS1 ADB-SPS Paragraph 59	The time frames for all actions should be reviewed. The acknowledgement of receipt of a grievance and also responses on Level 1 and 2 grievances to the claimant should be shortened from 10-14 days to one week. As of January 2018, PCo had reduced its time for acknowledgement of receipt of a grievance from 10- 14 days to one week. According to the 2021 SEP, time for SMPC's acknowledgement of receipt of a grievance has reverted	As Ramboll was informed, no community or worker grievances were submitted during 2022, 2023 or 2024.	**Closed**

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
					back to 14 days, likely due to the current situation. This issue should be closely monitored.		
006	Community Grievance Mechanism	The Project's community grievance mechanism is part of the SEP. Since the PCo personnel process the grievances, this does not fully meet the criteria set in the ADB 2009 SPS Paragraph 59.	Construction/ Operations Ongoing	Management Plan ADB-SPS Paragraph 59	PCo to ensure that its new external grievance committee, to be established within two months (August 2018), involves all 13 village leaders, is managed by an individual from outside of PCo/Sembcorp and that its procedures are in compliance with the ADB 2009. 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. As of January 2023, the Grievance Mechanism is	As of January 2023, the Grievance Mechanism is updated in Section 10 and Grievance Committee Procedures are in Section 13.3 Appendix C of the 2023 SEP (Revision 03). However, the Grievance Committee Procedures was still not revised to include the Grievance Committees for 13 villages as members of the Project's Grievance Committee. The finding remains for 2024. As Ramboll was informed, no community or worker grievances were submitted during 2022, 2023 or 2024. For future grievances received, if any: Records of grievance resolution in the Community Grievance Database should include mention of the Village Heads and members of the Grievance Committees for the Villages when they are involved in the decision.	**Minor**

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
					updated in Section 10 and Grievance Committee Procedures are in Section 13.3 Appendix C of the 2023 SEP (Revision 03). However, the Grievance Committee Procedures was still not revised to include the Grievance Committees for 13 villages as members of the Project's Grievance Committee.		

5.15 Community Development

5.15.1 Community Development Plan

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.

SMPC has a Community Development Plan (CDP) for the Project's Operations Phase. 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 CDP (PPMS Document Ref. 1.01.04.002, Revision 03, effective 1 January 2023 to 15 January 2026 became effective in August 2018 and was updated in January 2021, February 2022, January 2023 (CDP Revision 02, 16 January 2023), and June 2023 (CDP, Revision 03, 1 June 2023), and May 2024 (CDP Revision 04, 1 May 2024).

The 2021 CDP supersedes the 2018 CDP (SCI-HSSEC-SMP-002, Revision 1.3, dated 23 August 2018). The 2021 CDP included a change in management, new organizational chart, updated roles and responsibilities and other details.

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 2023 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 in 2022 with the Community Health baseline studies on all 13 villages that were included in the Construction Phase CHMP, 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).

The 2023 CDP (Revision 03) includes an updated Appendix A that includes Tables 12.1-12.4 with 2023 Village Baseline Data (i.e., water sources, healthcare facilities, educational facilities and energy sources); Appendix B with Stakeholder Expectations; Appendix C with Community Health Status (i.e., village morbidity and village mortality)' and Appendix D with the List of Key Performance Indicators. However, the budget was not included for the 2023 updated CDP. In addition, updated job descriptions for the Government Affairs, CSR department and Procurement and Logistics managers were provided to Ramboll and deemed adequate.

Similarly, the 2024 CDP (Revision 04) includes an update on Appendices, based on 2024 village data (Appendix A: Baseline Data, Appendix B: Stakeholder Expectations, Appendix C: Community Health Status); and an update on Appendix D: List of Key Performance Indicators. The budget remains excluded for the 2024 updated CDP. While Community Data has been updated in the CDP, **Sections 5.3** and **5.6** addressed that existing socio-economic data may still be lacking for potentially affected communities within the plant vicinity which could be affected by air and noise emissions. A shop with inhabitants was identified within 150 m of the plant boundary, indicating that there are human receptors not yet formally identified in the socio-economic survey data.

5.15.2 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). In 2023, 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 (both Round 1 and Round 2 in 12 villages). In 2024, the Medical Officer spent 5.5 days per week at the plant and he travelled to 11 villages with the CSR team and was only able to perform one out of two planned cycles of the Community Healthcare Program due to security risks. As Ramboll understands, the Medical Officer who is assigned to the plant 5.5 days per week and travels to the local villages is the same Medical Officer who is assigned to the Safe Houses 1 and 2. In view of the expectation that he will be supporting the plant and travelling to the villages, in Ramboll's opinion, the Medical Officer is overly committed and would not have time to attend to any emergencies or issues at the safe houses.

5.15.3 Skills development training for local communities

Sembcorp/SMPC had previously partnered with a local technical school to provide skills training (i.e., 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.

During 2019, English language classes were provided to three villages, as follows:

- 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, a three-month class in Basic Tailoring & Designer Training was provided on a limited basis to 10 women in Sa Khar Village, whilst in 2023, the training was provided to 36 women in 7 villages (12 women in Gyoke Pin Village; 12 women in Hta Naung Tai Village; and 12 women in Aye, Ma Yoe Klone, Tha Pyay Thor, Sate Nyan and Kyun U Villages). In 2024, the training was provided to 24 women in 2 villages (12 women in Sa Khar Village and 12 women in Hta Naung Tai Village). Two out of three planned trainings were conducted.

The skills development training for local communities was intended to be an ongoing program; however, courses were either cancelled or provided on a limited basis from 2020 to 2024 due to the ongoing security situation.

5.15.4 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 2024 activities from village representatives during individual engagements in 2023, 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.

Community Development Activity, including school upgrades (teachers' lounges, fences, walls, desks and chairs); a village clinic construction; Covid-19 support; community health awareness programs (2 rounds); and water treatment plant maintenance.

- 24 Community Investments were completed in 2024 and included:
    - Projects with the following themes: Infrastructure, Education, Health and Skills Training
    - Support was provided for social events (Myanmar New Year Thingyan Festival)
    - Support was provided upon community's requests (Replacement of Futsal Grass and Myingyan Township Multi Sports Hall roof)
- Project Themes:
    - Infrastructure: Solar Energy Support (11 villages out of 13 planned), flood support for solar energy systems (3 villages), filters for maintenance of village water treatment plants (all 13 villages), cleaned container distributions (10 villages out of 13 planned), fencing (1 village clinic), donation of water bottles (5 villages)
    - Education: Fencing (1 school and 1 chain link for solar panel)
    - Health: Community Health Awareness Program (1 round out of 2 planned) with SMPC doctor visits to 11 villages over 11 days out of the planned 13 villages
    - Skills Training to communities: Basic Tailoring and Designer Training (2 courses out of the 3 planned)
- Community Investments planned for 2025 include:
    - Clean Energy Support (5 villages), Fencing (3 schools and 1 village clinic), Water tank (1 school), Toilet (1 school), Ceiling (1 school), Main Doors (1 village), medical camps (2 rounds), skills training (3 rounds), WTP maintenance (all 13 villages) and Thingyan Festival (Myingyan and Taung Thar Township)

SMPC planned to conduct 19 community development projects during 2024 (Appendix D Table 12.9). The actions taken and results achieved for 2024 were provided to Ramboll for review. **Appendix 5** includes a listing of the 19 projects planned that were able to be accomplished in 2024 in the following categories:

- Education and Infrastructure: 13 CSR activities throughout 2024 (1 per village);
- Enhancing Water: 1 CSR activity;
- Youth Development/Skills Set Training: 3 CSR activities; and
- Health: 2 CSR activities throughout 2024.

In addition to the records kept, it is recommended that the CDP KPIs should also be expanded to include details of the activities conducted under 'Achievements'.

According to SMPC, additional projects over and above the 19 planned projects were also conducted in response to ad hoc requests and needs of the community. 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.

SMPC supported the provision of 5 kW solar photovoltaic panel installations at 11 villages as part of CSR activities in 2024. The solar panel installation projects are handed over to the community and SMPC does not intend to have ongoing involvement in the operations. During the virtual site visit, photos of the solar installations in the community were reviewed. It was noted that some low and surmountable fencing was installed around the ground mounted solar panels whilst safety signage was lacking at both the ground mounted and rooftop installations. SMPC shared with the IESC that all construction work for the projects is contracted to a local contractor who engages four local sub-contractors. Whilst SMPC's contractor had

a risk assessment and method statement for the construction phase, evidence of an assessment of the potential risks and impacts associated with the projects (e.g. work at height, electrical safety, etc) was not available for review.

Subsequently, SMPC informed the IESC that it is committed to enhancing the fencing around ground mounted solar panel installations, with work to be conducted in July 2024, and that warning signage has been placed at the installations. SMPC also informed the IESC that its contractor, MTKK Engineering & Trading Co., Ltd, has conducted an Operation and Maintenance Training Program for the community users, with training records maintained. A solar installation user 'manual' in both local language and English was also provided to the community users. In 2024, a chain link fencing for solar panels was installed at Hnan Village school. Flood support was also given to three villages, where solar panel systems were temporarily uninstalled and reinstalled during the flood season. The system layouts were modified to avoid future flooding and ensure long-term resilience and efficiency. Additionally, SMPC supported an uninstallation of a faulty solar panel from one of the villages and it was disposed on-site at the plant, as described in **Section 5.10.4**.

5.15.5 Recommendations

As discussed in **Sections 5.3** and **5.6**, it is recommended to update the socio-economic survey data to identify all potentially affected communities in the plant vicinity and ensure that air and noise levels are within acceptable ranges. Any new communities, settlements or households identified should be updated in the Stakeholder Engagement Plan (**Section 5.14**) and Community Development Plan (**Section 5.15**).

It is recommended that all community projects involving infrastructure be accompanied by a safety program which identifies potential risks and impacts to be managed during the construction, operational and future decommissioning phases, with roles and responsibilities clearly identified.

It is also recommended that additional staff support is needed in the medical clinic to provide coverage when the medical officer is out of the clinic (i.e., either when he is in the villages or at one of the Safe Houses) and adequate medical coverage needs to be ensured for both employees and village communities.

Table 5-22: Summary of Findings - Community Development

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
001	Community Development Plan	CDP needs to be updated for the Operations Phase	Construction/ Operations Ongoing	IFC PS 1 & 4	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 were not included in the Operations Phase CDP and health-related programs with benefits beyond water and healthcare facilities were not included. As of August 2018, the CDP was updated for the Operations Phase and some but not all health-related components of the Construction Phase CHMP were included. The Community Health baseline studies on all 13 villages that were included in the Construction Phase CHMP should be included in the Operations Phase CDP. Also, the updated CDP included a new requirement for monitoring Key Performance Indicators (KPIs). As of January 2021, the Operations Phase 2018 CDP was superseded by the 2021 CDP. The Community Health baseline studies on all 13 villages that were included in the Construction	The Community Health baseline studies on all 13 villages that were included in the Construction Phase CHMP are still outstanding and should be included in the Operations Phase CDP. The 2024 CDP (Revision 04) (effective 1 May 2024 to 15 January 2026) includes an updated Appendix A that includes Tables 12.1-12.4 with 2024 Village Baseline Data; Appendix B with Stakeholder Expectations; Appendix C with Community Health Status; and Appendix D with the List of Key Performance Indicators, and was provided to Ramboll during the Tenth Monitoring Round. However, the Community Health baseline studies on all 13 villages that were included in the Construction Phase CHMP should be included and updated in the Operations Phase CDP. While Community Data has been updated in the CDP (Revision 04), **Sections 5.3** and **5.6** addressed that existing socio-economic data may still be lacking for potentially affected communities within the plant vicinity which could be affected by air and noise emissions. A shop with inhabitants was identified within 150 m of the plant boundary, indicating that there are human receptors not yet formally identified in the socio-economic survey data. The socio-economic survey data should be updated to identify all potentially affected communities in the plant vicinity and ensure that air and noise levels are within acceptable ranges. Any new communities, settlements or households identified should be updated in the Stakeholder Engagement Plan (**Section 5.14**)	**Minor**

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
					Phase CHMP were still not included in the 2021 CDP. As of January 2022, while the Ops Phase 2021 CDP was not updated with the Community Health baseline studies on all 13 villages that were included in the Construction Phase CHMP, 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). 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. The 2023 CDP (Revision 03) includes an updated Appendix A that includes Tables 12.1-12.4 with 2023 Village Baseline Data (i.e., water sources, healthcare facilities, educational facilities, and energy sources); Appendix B with Stakeholder Expectations; Appendix C with Community	and Community Development Plan (**Section 5.15**). All community projects involving infrastructure should be accompanied by a safety program which identifies potential risks and impacts to be managed during the construction, operational and future decommissioning phases, with roles and responsibilities clearly identified. It is also recommended that additional staff support is needed in the medical clinic to provide coverage when the medical officer is out of the clinic (i.e., either when he is in the villages or at one of the Safe Houses) and adequate medical coverage needs to be ensured for both employees and village communities.	

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
					Health Status (i.e., village morbidity and village mortality); and Appendix D with the List of Key Performance Indicators, and was provided to Ramboll during the Ninth Monitoring Round. However, the Community Health baseline studies on all 13 villages that were included in the Construction Phase CHMP should be included and updated in the Operations Phase CDP.		

5.16 Community Health

5.16.1 Community Health Management Plan

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 (Table 1: Village Morbidity and Table 2: Village Mortality), 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).

The Operation Phase 2024 CDP (Revision 04, May 2024) includes Appendix A: Village Baseline Data with updated community baseline data, as of 2024, for all 13 villages (i.e., water sources, healthcare (facilities, educational facilities and energy sources), Appendix B: Stakeholder Expectations and Appendix C: Community Health Status (with Table 12.7 Village Morbidity and Table 12.8 Village Mortality) for all 13 villages, however, Appendix C does not include water sources, healthcare facilities, and healthcare risks and mitigation measures, all data that was also included in the 2018 CHMP.

5.16.2 Recommendations

An updated appendix (combining Appendices A and C) should be prepared and include in one appendix updates to the detailed Village Baseline Data and Community Health baseline studies that were prepared for all 13 villages and included in the Construction Phase CHMP, and all results should be re-organized by village to create profiles on each of the 13 villages, and then included in an updated CDP in the year in which it is updated, preferably 2025. Each village profile should also include that village's updated stakeholder expectations from the project (as reported in Appendix B for each village). The updated CDP should also include the CDP budget for the corresponding year.

5.17 Workers' Accommodation

5.17.1 Overview

After the commencement of the Project's Operations Phase, workers from outside the area stayed in rental houses, apartments and/or hotels in the Myingyan area. 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 were able to stay either at accommodation in Myingyan, at a safe house located adjacent to the SMPC plant (now referred to as Safe House 1) or at a second safe house in rented accommodation in Myingyan.

As of 2024, the following worker accommodation is provided for workers and their families:

- Safe House 1, located adjacent to the SMPC plant; and
- Safe House 2, located in an industrial park, away from residential areas where there is a reduced risk of road blocks, 5 km from the plant).

Safe House 1 includes the EPGE Guest House with a maximum capacity of 33, container accommodation with maximum capacity of 8, plus an extended safe house with maximum capacity 40.

Safe House 2, also known as GM (as the previous owner was a factory called Green Momentum), has a maximum capacity of 30.

According to SMPC, workers with small children (up to 3 years of age) can stay at the Safe Houses, and workers' student family members can come to the Safe Houses to do online learning. Safe House 1 provides three meals per day seven days per week; Safe House 2 does not provide meals with workers instead self-catering. Round-trip transportation is available from the Safe Houses to the plant.

Annex E of the BCP serves the purpose of a Worker Accommodation Plan. Based on the information included in Annex E to the BCP (updated January 2025) and photos provided of the exteriors and interiors of the Safe Houses, SMPC has closed most of the gaps in the Project's compliance with the IFC requirements for workers accommodations, including the following basic services requirements:

- Minimum space, (include number of workers per room);
- Supply of water;
- Adequate sewage and garbage disposal system;
- Appropriate protection against heat, cold, damp, noise, fire and disease-carrying animals;
- Adequate sanitary and washing facilities;
- Ventilation, cooking and storage facilities and natural and artificial lighting; and
- Basic medical services.

A HSSE risk assessment for SMPC Worker Accommodation was conducted in May 2024, which identified accommodation related work activities such as smokers' behaviour, cooking and use of bathrooms. All activities were deemed to have a Medium or Low Risk Rating and control measures were described. This document is tagged to the HSE risk register, but the document does not clearly identify which worker accommodation it applies to.

There is still the need for the necessary HSE plans and protocols (e.g., HAZOP analysis, ERP, training, and drills) to be developed, given that the Safe House 1 is located within 50 m of the plant boundary.

5.17.2 Recommendations

Ensure that the two Safe Houses are compliant with the requirements of IFC PS2 and guidance such as the IFC/EBRD *Workers' accommodation: processes and standards*.

Ramboll's recommendations regarding updating 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 have not been implemented.

A standalone Operations Phase Worker Accommodation Plan is recommended to be prepared and cover all worker accommodation facilities including rented accommodation. It should include details of the following aspects:

- Full list of accommodation including addresses, number and breakdown by type (worker, spouse, child, etc) of people housed;
- Full description of facilities such as bedrooms, living quarters, toilet and shower facilities, canteens, health care facilities, including number of such facilities per person housed;
- Emergency response procedures, risk assessments and necessary HSE plans and protocols (e.g., HAZOP analysis, ERP, training, and drills) to be developed, given that the Safe House 1 is located within 50 m of the Plant's boundary;
- Clearly outlines roles and responsibilities, commitments to meet IFC guidelines;
- Selection criteria / guidelines for worker accommodation.

The necessary HSE plans and protocols related to worker accommodation should be included in an Updated BCP Annex E. The risk assessment should be included in the BCP and should specify which worker accommodation it is applicable to. It is also recommended to update BCP to include evacuation training and drills for the workers who will stay in the worker accommodation.

As basic medical services are required by the BCP Annex E, additional medical staff support is needed to provide coverage for the people staying in the worker accommodation, especially when the medical officer is travelling to village communities.

Table 5-23: Summary of Findings - Workers' Accommodation

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
001	Develop a standalone Workers' Accommodation Plan	Details of Workers' Accommodation are in Annex E of the BCP with no standalone plan.	Operations	IFC PS 2 & 4	Develop a standalone Operations Phase Worker Accommodation Plan for all worker accommodation facilities including rented accommodation. It should include the following: • Full list of accommodation including addresses, number and breakdown by type (worker, spouse, child, etc) of people housed; • Full description of facilities such as bedrooms, living quarters, toilet and shower facilities, canteens, health care facilities, including number of such facilities per person housed; • Emergency response procedures, risk assessments and necessary HSE plans and protocols (e.g., HAZOP analysis, ERP, training, and drills) to be developed, given that the Safe House 1 is located within 50 m of the Plant's boundary; • Clearly outlines roles and responsibilities, commitments to meet IFC guidelines; • Selection criteria / guidelines for worker accommodation. Update Annex E of the BCP to include the necessary HSE plans and protocols related to worker accommodation should be included in an Updated BCP Annex E. The risk assessment should be included in the BCP and should specify which worker accommodation it is applicable to. Update the BCP to include evacuation training and drills for the workers who will stay in the worker accommodation. Ensure that medical staff is available to provide coverage for the people staying in the worker accommodation, especially when the medical officer is travelling to village communities. Ensure that the two Safe Houses are compliant with the requirements of IFC PS2 and guidance	The recommendation remains.	**Minor**

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
					such as the IFC/EBRD Workers' accommodation: processes and standards.		

5.18 Local Recruitment and Procurement

5.18.1 Local Recruitment and Procurement Management

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 (i) Sembcorp group-wide policies applicable to SMPC and (ii) the role of the Procurement Manager in the Plan, and no renewal date is mentioned. However, while policy names were provided on the Sembcorp group-wide policies applicable to SMPC, the policy details, along with the job description for the Procurement Manager, were not provided in 2022; and 2023 updated information on the LRPMP, for the Operations Phase was also not provided. However, a job description for the Procurement and Logistics Manager was provided to Ramboll in January 2024 and was found to be comprehensive and fit-for-purpose, except it was not dated.

The Project's LRPMP for the Operations Phase was reviewed, and 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 2023, the Project employed 23 local workers from villages within the Project's DAI (20 permanent plus 3 contract workers), which is 17.92% 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 2024, the Project's total national workforce, including the Yangon workforce, security team and EPGE was 121, representing 99.17% of the total workforce; foreign skilled workers (1) made up only 0.83% of the total Project workforce (**Table 5-28**).

5.18.2 Recommendations

As mentioned in Ramboll's comments on the OESMPs (12 February 2019), SMPC should revise the LRPMP to a format consistent with other management plans. The LRPMP should be updated into the PPMS format with a document reference number and a Table of Contents.

SMPC should provide an updated LRPMP with details on the relevant Sembcorp group-wide policies applicable to the LRPMP and include a document reference number and Table of Contents in the Tenth 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.

Table 5-24: Summary of Findings - Local Recruitment and Procurement

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
001	Local Recruitment and Procurement Management Plan	Improvements for the Local Recruitment and Procurement Management Plan	Operations	IFC PS 2	SMPC should revise the LRPMP to a format consistent with other management plans. The LRPMP should be updated into the PPMS format with a document reference number and a Table of Contents. SMPC should provide an updated LRPMP with details on the relevant Sembcorp group-wide policies applicable to the LRPMP and include a document reference number and Table of Contents in the Tenth 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_C. 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.	The recommendation remains.	**Minor**

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 also 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 HSSE Training Requirements

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, Section 10 of the OSH Plan (Safety Training) specifies safety training requirements with a HSSE training matrix provided in Appendix B of this plan.

5.20.2 Observations related to Workers' Training and Capacity

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) was provided to the IESC 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).

As recommended in the Fifth through Eighth 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.

The Training Matrix which records completed training per month was also provided for review. According to the matrix, training on various OHS topics such as confined space safety, First Aid and AED appliances, OHS awareness, office environment safety, safe lifting and electrical safety was provided during the year.

As recommended by the Seventh Monitoring Round, training in Environmental Legal Compliance (ESMPs) was conducted in 2023 as a new topic. 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 Waste Management, GHG Management, Sustainable Procurement/Sustainable Supply Chain and CSR.

Safety training is provided to each new employee; the Plant HSSE Induction training was delivered six times during the year.

External training was delivered in 2023 for Scaffolding Assessors, Fire-Fighting and Rescue (Basic) and Incident Commanders. Training on improvised explosive device (IED) awareness and practical response, listed on the training matrix as a topic, was not planned or conducted during the year. This training was recommended to be conducted during 2024, if the risk of IED incidents remains. In addition, first aid training (five-days) previously provided to workers by the Red Cross is recommended to be reinstated as soon as possible.

During the Tenth Monitoring Round, due to local security concerns, first aid and AED appliance training was held internally instead of externally. External training in IED awareness and practical response, Hazmat Safety and Fire-Fighting and rescue were not conducted, and postponed to 2025.

5.20.3 Recommendations

As recommended by the Seventh Monitoring Round, 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 Waste Management, GHG Management, Sustainable Procurement/Sustainable Supply Chain and CSR.

Training on IED awareness and practical response, listed on the training matrix as a topic, is recommended if the risk of IED incidents remains. In addition, first aid training (five-days) previously provided to workers by the Red Cross is recommended to be reinstated as soon as possible.

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.

SMPC is recommended to engage a specialist contractor to provide training to workers and community members on the ERP.

Table 5-25: Summary of Findings - HSSE Training

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
001	HSSE Training plans	Improve completeness of HSSE Training	Operations	IFC PS 2	As recommended by the Seventh Monitoring Round, 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 Waste Management, GHG Management, Sustainable Procurement/Sustainable Supply Chain and CSR. Training on IED awareness and practical response, listed on the training matrix as a topic, is recommended if the risk of IED incidents remains. In addition, first aid training (five-days) previously provided to workers by the Red Cross is recommended to be reinstated as soon as possible. SMPC is recommended to engage a specialist contractor to provide training to workers and community members on the ERP.	The recommendation remains.	**Minor**

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 Operational Phase (Revision 02, dated 31 January 2022, PPMS Document Ref: 3.02.01.007) describes the procedures to ensure that Project worksites are protected against unauthorised entry, theft and damage.

Security at the Project Site continues to be provided by a private security company, who supplies 24-hour site security. 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.

During the IESC's 2017 site visit, Ramboll and SMPC met with the chief of the Myingyan District Police; 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. During the IESC's last visit to the Myingyan District Police Station (December 2019), the police chief confirmed that he had no record of any incident involving Project workers or any of its contractors.

During 2024, one emergency drill response focused on physical security in January 2024. In August 2024, a gunfire emergency evacuation was conducted due to the security situation described in **Section 5.12**.

5.23 Land Acquisition & Resettlement

5.23.1 Resettlement Framework

SMPC 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:

<u>Negotiation Meetings with PAPs</u>

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

<u>Compensation Ceremonies</u>

- 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 General Administration Department (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 Myingyan local authorities (GAD & LRD) to confirm the owners of the land who would be affected (permanently) by the elevated link bridge. The land measuring process was a very time-consuming and laborious exercise. The alteration of the original design, identification of PAP's and calculation of necessary compensation was the reason why the compensation process for the 8 PAP's affected by the elevated link bridge was done after its construction.

Ramboll 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 recommended that meetings be held with 3 of the 4 remaining PAPs during future monitoring rounds in order to close this item. Ramboll planned to conduct consultations with three (03) more PAPs from Ma Yoe Kone village, however due to Covid-19 and security restrictions in the village, the said consultations could not be conducted prior to 2024.

In 2024, consultations took place by SMPC's CSR Lead with the 3 PAPs and a new PAP. SMPC provided Ramboll with the following update on consultations with these PAPs:

- PAP0133 Khaing Ming Thant – Met twice in person (March 1, 2024, and November 1, 2024).
- PAP0138 U Thaung Swe – Met once in person (November 1, 2024).
- PAP0139 U Thaung Sein (Previous Owner) – Contacted once via telephone on July 24, 2024. Due to hearing difficulties, communication was facilitated through his brother, U Khin Mg Kyi. Subsequently, he transferred ownership of the land to his brother, U Sein Hlaing.
- PAP0139 U Sein Hlaing (New Owner) – Met once in person (November 1, 2024).

According to SMPC's CSR Lead, all the PAPs are in good health and lead normal daily lives with no reported concerns.

The original fourth PAP, PAP0046 U Aung Khin Myint (Kyun U Village), was not able to be located, despite repeated efforts by SMPC, and therefore consultation with this PAP will not be able to be conducted.

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 5-26** 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 5-26: 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 5-27: Summary of Findings - Land Acquisition & Resettlement

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
008	Land Compensation	Identification of all PAPs who will give up land for the elevated section of the pipeline near the river and determine compensation for each PAP. Compensation is to be completed before COD 2 and PCo is waiting to receive a formal letter from EPGE to begin the process of compensation.	Construction	ABD-IRS Principle 6 IFC PS 5	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. 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. Ramboll received Notarized English translations of the compensation documentation for the remaining 8 PAPs. During the December 2019 site visit, Ramboll met with three of the eight PAPs. 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. Meetings with the remaining four PAPs were recommended for future monitoring rounds.	No change over previous findings. Meetings were held in 2024 with 3 of the 4 remaining PAPs, and the fourth PAP could not be located for consultation, despite repeated efforts by SMPC, and therefore consultation with this PAP will not be able to be conducted.	**Closed**

5.24 Labor & Working Conditions

5.24.1 Overview

Labour and working conditions documentation is described as follows:

- 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

5.24.1.1 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.

5.24.1.2 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.

5.24.1.3 Grievance Mechanism

A Grievance Handling 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). An updated Grievance Handling Policy was prepared in 2022 (PPMS Document Ref. 2.01.01.012) and is in effect until March 31, 2025. This policy was reviewed by Ramboll during the Eighth Monitoring Round. The document includes SMPC's worker grievance mechanism procedures and provides a policy to address worker grievances, which applies to all full-time employees, contract employees, permanent and temporary employees working with SMPC.

5.24.2 Project Workforce

Table 5-28 below includes a breakdown of the Project workforce for the operations phase, as of December 2024, (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 (regional), (iv) foreigners, and (v) Yangon workforce.

The security team comprises mainly local community; in 2024, 42 out of the 43 security guards were from the local community.

Table 5-28: Project Workforce in December 2024

Unit	Gender		Plant Workforce				Yangon Workforce	Security (External)	EPGE	Total
	Male	Female	Local		Regional	Foreign				
			Permanent	Contract						
Workers	103	18	15	3	47	1	9	43	3	121
%	85.12	14.88	12.40	2.48	38.84	0.82	7.44	35.54	2.48	100

5.24.3 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. 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 5.24.5 below.

5.24.4 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, Eighth, Ninth or Tenth 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. Subsequently, the SMPC Human Resources Manager has confirmed to Ramboll during the virtual site visits that there were no worker grievances in 2020-2024.

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; and
- Singapore and Southeast Asia (SG & SEA) Townhall.

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

5.24.5 Workers Engaged by Third Parties

As of 1 August 2018, no workers engaged by contractors were working at the Project, and, with the exception of the security workforce and EPGE, all workers were hired directly by SMPC.

Based on information included in this report, it appears that SMPC has now engaged workers of several different contractors. More information should be provided on these contractors, and possibly sub-contractors (i.e., name, location, services being provided and length of service). Confirmation is requested that all contractors' and sub-contractors' workers have received employment contracts covering their work at SMPC and that the employment contracts are in compliance with the IFC PS2 requirements.

In addition, all new-hire contractors and sub-contractors and their workers should be provided with Sembcorp's Code of Business Conduct and Global Human Rights Policy, and the SMPC Grievance Handling Policy and Human Resources procedures; and they should provide their signatures confirming receipt. Confirmation that this action has taken place should be provided to Ramboll.

5.24.6 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, Refer to Section 5.17;
- Local Recruitment and Procurement, Refer to Section 5.18; and
- Influx Management, Refer to Section 5.19.

5.24.7 Recommendations

- More information should be provided on any currently engaged contractors, and possibly sub-contractors (i.e., name, location, services being provided and length of service).
- Confirmation is requested that all Operations Phase contractors' and sub-contractors' workers have received employment contracts covering their work at SMPC and that the employment contracts are in compliance with the IFC PS2 requirements.
- All Operations Phase contractors and sub-contractors and their workers should be provided with Sembcorp's Code of Business Conduct and Global Human Rights Policy, and the SMPC Grievance Handling Policy and Human Resources procedures; and they should provide their signatures confirming receipt. Confirmation that this action has taken place should be provided to Ramboll.

Table 5-29: Summary of Findings - Labour & Working Conditions

ID	Aspect	Issue Description	Phase	Standard	IESC's prior Recommendations	Tenth Monitoring Round Update	Significance
005	Retrenchment	Retrenchment is not addressed in the ESMP	Transition from Construction to Operations	IFC PS 2	PCo should identify potential impacts of the retrenchment phase and identify policies and procedures to minimize its impacts. 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. However, in November 2019, Ramboll was informed that a Retrenchment Plan was not prepared. 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.	None	**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 6-1: Status of ESAP

No.	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
1/PS1	Develop and implement construction phase E&S Management Program (ESMP) consistent with ESIA recommendation and IFC requirements and which includes: • Dust Management Plan; • Traffic Safety Management Plan; • Noise and Vibration Management Plan; • Surface Water Management Plan; • Soil and Groundwater Management Plan; • Waste Management Plan (Hazardous and non-Hazardous Waste); • Oil and Chemical Spill Contingency Management Plan; • Emergency Response Plan (including Community Emergency Response Plan); • Stakeholder Engagement Plan (including Grievance Management Plan); • Community Development Plan (CDP); • Community Health Management Plan;	Documented ESMPs in from and substance acceptable to IFC: by 15/05/2016 or prior to construction, whichever is earlier. Evidence of inclusion of plans in EPC HSE requirements: by 15/05/2016 or prior to construction, whichever is earlier.	The construction phase ESMP consists of 20 individual management plans, covering the topics included in the ESIA. The list is slightly different to that proposed in the ESAP. The main changes are: • The Project has not developed a Contractor Management Plan. Instead, roles and responsibilities of contractors are defined in the project's Occupational Health and Safety Management Plan (SDC-HSSEC-SMP-012) and in the Project HSE Plan. • The Project has developed three plans that are not mentioned in the ESAP: ○ Plant and Vehicle Management and Maintenance Plan; ○ Biodiversity Management Plan; and ○ HSSE Training Plan. The construction phase ESMP was developed prior to construction. IESC observations on the implementation of each plan are detailed in section 5 of this report. The IESC has reviewed the EPC contracts (see section 5.2 of this report) and concluded that they are not directly referenced in the contract documentation. However, annexes to the contract refer to the ESMP. 15 of the 20 plans were written by the EPC Contractors, and the EPC Contractors are responsible for implementation of each of the plans except for Community Development and Stakeholder

No.	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
	• 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. The sponsor will also complement the EPC HSE construction requirements to include the aforementioned aspects.		Engagement, which are the responsibility of the Project Company. **Status Summary: Closed**
2/PS1	Develop and implement Operational Phase E&S Management Program (ESMP) consistent with the outcomes of the ESIA, local legal requirements, and IFC PS requirements. The ESMP will cover applicable environmental, occupational health and safety, community health and safety, and social management aspects.	Documented Operational Phase ESMP in form and substance acceptable to IFC: 15/09/2018 or prior to commencement of operations, whichever is earlier.	During the fourth IESC monitoring visit, it was reported that the OHS Management Plan will serve as the HSE manual for the operations phase, and that life-saving rules which are commonly used in oil and gas companies, will be enforced. The Operational Phase ESMP was prepared and seven operational phase plans were developed. These seven plans were reviewed by Ramboll and its observations were reported in a separate report (February 12, 2019). During 2021, SMPC prepared a BCP Implementation procedure 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. The Sembcorp HQ BCM Framework should be provided to Ramboll for its review during the next Monitoring Round, along with the Emergency Response Plan, Crisis Communication Plan, and the Incident Reporting and Conduct of Root Cause Analysis.

No.	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
			Annex E to the BCP includes Manpower Arrangements for Contingency. This plan which serves as the Workers' Accommodation Plan for the Operations Phase has been updated (Revision 08, 22 January 2025), however, it lacks a major hazard risk assessment, relevant HSE plans and protocols, evacuation training and drills; these should be included in the Plan as a matter of urgency. A full standalone Operations Phase Workers' Accommodation Plan is also recommended to be prepared for each accommodation. The Operations Phase LRPMP should be updated to include: • 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 • PPMS format with a document reference number (previously known as plan number), and Table of Contents. **Status Summary:** **Re-opened** **Work in Progress**
3/PS1	Assign a dedicated technically qualified construction phase ESHS management team comprised of a Head and supported by its own ESHS coordinators. Prior to the start of operations, define an ESHS organizational structure comprised of a Head of ESHS with supporting OHS and community affairs coordinators who will be fully responsible for implementation of the operational phase ESMP.	Assignment of construction ESHS team: 15/05/2016 or prior to construction, whichever is earlier.	A technically qualified ESHS management team has been appointed by the Project Sponsor as detailed in section 5.2 of this report. **Status Summary:** **Closed**
		Assignment of operation ESHS team: 15/09/2018 or prior to commencement of operations, whichever is earlier.	The current operations phase HSSE Manager was part of the construction phase HSSE team during the IESC visit in August 2018. He took over the role of the HSSE Operations Manager in February 2019 and he will continue to manage environmental and social issues in the operations phase of the Project, supported by a HSSE team. **Status Summary:** **Closed**

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

No.	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
			During the Seventh Monitoring Round, information on whether or not a specialist contractor has been engaged to provide training on the ERP was not available for review. Furthermore, it is not evident whether SMPC has shared details of its ERP 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. During the Ninth and Tenth Monitoring Round, Ramboll did not receive any additional information on a specialist contractor being engaged to provide training to workers or community members on the Emergency Response Plan. **Status Summary: Work in Progress**
5/PS1	Develop and implement a detailed, project specific monitoring and reporting program with monitoring measures applicable to each of the relevant management plans. Monitoring and reporting activities will be reviewed by an independent E&S consultant on a semi-annual basis during construction and annually thereafter for the first year of operation. A summary monitoring report will be disclosed to local communities semi-annually during construction and annually during first year of operation.	Program developed in form and substance acceptable to IFC: by 15/05/2016 or prior to construction, whichever is earlier. Independent reviews (construction): Semi-annually during construction phase (15/09/2016). Independent reviews operation): By start of operations and annually for first year of operations (15/09/2019).	Rather than develop a stand-alone environmental and social monitoring plan the Project has included a monitoring and reporting section into each management plan where appropriate. 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. 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. Sembcorp and PCo agreed to include project monitoring results in their presentations to be provided at future annual Public Stakeholder Engagement Meetings.

No.	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
			Status Summary: Closed
6/PS1	Develop and implement a community development and stakeholder engagement program - to include clearly defined objectives, stakeholder identification and analysis, performance indicators, activities, resource allocation, assigned implementation personnel, grievance mechanisms for local stakeholders, and mechanisms to appropriately disclose project related information to communities on an ongoing basis. The program will be communicated to project affected local communities on an ongoing basis, so that they are well aware of its existence and can also easily access the grievance mechanisms.	Documented program in form and substance acceptable to IFC: 15/05/2016 or prior to construction, whichever is earlier.	Community Development Program As of August 2018, the CDP was updated for the Operations Phase. The updated CDP incorporated some components of the Construction Phase CHMP, however, not all health-related components of the Construction Phase CHMP were included. The Community Health baseline studies on all 13 villages that were included in the Construction Phase CHMP (**Tables 1 and 2**) should be included in the Operations Phase CDP. In addition, the updated CDP included a new requirement for monitoring Key Performance Indicators (KPIs). The actions taken and results achieved under the KPIs for 2019 were provided to Ramboll for our review and were in compliance. As of January 2021, an updated CDP (PPMS Document Ref 1.01.04.002, the 2021 CDP) superseded the 2018 CDP. The 2021 CDP included a change in management, new organizational chart, updated roles and responsibilities, community baseline data as of 2020 for the 13 villages and other details. 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. The 2023 CDP Revision 3 (effective 1/6/23-15/1/26) includes an updated Appendix A with 2023 Village Baseline Data for all 13 villages (i.e., water sources, healthcare facilities, educational facilities, and energy sources); Appendix B with Stakeholder Expectations; Appendix C with Community Health Status (i.e., village morbidity and village mortality); and Appendix D with the List of Key Performance Indicators, and was provided to Ramboll during the Ninth Monitoring Round. In addition, updated job descriptions for the Government Affairs and CSR department managers were provided to Ramboll.

No.	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
			Issuance dates should be included in the updated job descriptions. In addition to consideration of the construction phase, community projects involving solar panels (and other infrastructure) should be accompanied by a safety program which identifies potential risks and impacts to be managed during the operational and future decommissioning phases. Each annual update of the CDP should include such safety program information. The 2024 CDP Revision 04 (effective 1 January 2024) includes an updated Appendix A that includes Tables 12.1-12.4 with 2024 Village Baseline Data; Appendix B with Stakeholder Expectations; Appendix C with Community Health Status; and Appendix D with the List of Key Performance Indicators; and was provided to Ramboll during the Tenth Monitoring Round. However, the Community Health baseline studies on all 13 villages that were included in the Construction Phase CHMP should be included and updated in the Operations Phase CDP. **Status Summary: Re-opened: Work in Progress** <u>Stakeholder Engagement Program</u> The SEP is well written with objectives, key standards and legislation, stakeholder identification and mapping, planned stakeholder activities, a Project Management Team 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. PCo has engaged with multiple stakeholders including national and local governmental agencies and the local communities since 2015. The SEP has been updated to include a revised organization chart that includes the Community Relations/Development Department and its reporting lines. As of August 2018, the SEP was updated for the Operations Phase and included a new requirement for monitoring Key Performance Indicators (KPIs). The actions taken and results achieved under the KPIs for 2019 were provided to Ramboll for our review and were in compliance.

No.	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
			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. 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. An updated SEP (Revision 03) was prepared in June 2023 and submitted to Ramboll during the Ninth Monitoring Round. The CGM procedures are now included in Section 10 of the SEP, and the CSR Lead is to be notified of all grievances and the Managing Director is to be notified of all Level 2 and 3 grievances. There is consistency on the CGM Roles & Responsibilities (i.e., current titles of parties involved) in the SEP, except the Grievance Committee role and responsibilities that are included in Appendix C for the Community Relations Officer which should be revised to read CSR Lead. In addition, the Relevant Village Authorities should be defined in the SEP. The updated SEP should be submitted to Ramboll during the Ninth Monitoring Round. Issuance dates should be included in the updated job descriptions. These findings remain for the Updated SEP (Revision 04) prepared in May 2024 and submitted during the Tenth Monitoring Round. The SEP was amended to update Community Data, Grievance Committee Organization changes, Performance Indicators, and newly included procedures for the Annual Stakeholder Engagement (ASE) procedures.

No.	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
			Status Summary: **Re-opened: Work in Progress**
7/PS2	Ensure relevant parts of project HR policies and procedures cover labour practices of contractors and sub-contractors.	Documented program in form and substance acceptable to IFC: 15/05/2016 or prior to construction, whichever is earlier. Documentation requested on the potential Operations Phase contractors and sub-contractors should be provided to Ramboll prior to completion of the Tenth Monitoring Round.	All workers at the Project employed by SMPC are expected to follow SMPC's HR policies and procedures. However, more information should be provided on any currently engaged contractors, and possibly sub-contractors (i.e., name, location, services being provided and length of service). Confirmation is requested that Operations Phase contractors' and sub-contractors' workers have received employment contracts covering their work at SMPC and that the employment contracts are in compliance with the IFC PS2 requirements. All Operations Phase contractors and sub-contractors and their workers should be provided with Sembcorp's Code of Business Conduct and Global Human Rights Policy, and the SMPC Grievance Handling Policy and Human Resources procedures; and they should provide their signatures confirming receipt. Confirmation that this action has taken place should be provided to Ramboll. **Status Summary:** **Re-opened: Work in Progress**
8/PS2	During construction, regularly monitor the labour practices of contractors and sub- contractors (e.g. non-use of child/forced labour) against a checklist to ensure compliance with national labour laws and regulations.	Monitoring reports in form and substance acceptable to IFC: Annually following the start of construction activities (15/03/2017).	PCo through the monthly monitoring procedure does monitor contractors and subcontractors to ensure compliance with national labour laws and regulations, but additional monitoring needs to be put in place for subcontractors' engagement of unskilled workers (see section 5.24 of this report). Sembcorp completed the "mini-contract" template and provided it to subcontractors to use when engaging local unskilled and/or short-term workers. This new procedure went into effect in August 2017 and is no longer in effect since contractors and sub-contractors are no longer engaged for work at the Project. Ramboll never received any details on how PCo monitors the subcontractors use of the mini–contracts. **Status Summary:** **Closed**
9/PS2	Ensure that the housing provided by contractors/subcontractors to their workers meets standards required by the company as specified in the	Working housing specifications included in EPC contract making	Workers' accommodations provided by JEM and one remaining subcontractor (Min Dhama) was not in full compliance with IFC PS2

No.	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
	project HSE Plan and in IFC PS2, and are also consistent with principles of non- discrimination and equal opportunity.	reference to IFC standards: 15/05/2016 or prior to construction, whichever is earlier.	and the Project's Workers Accommodation Management Plan. However, all three camps were closed by 1 August 2018. **Status Summary: Closed**
10/PS3	Ensure that wastewater discharge from construction and operational activities meets applicable World Bank Group (WBG) General EHS Guideline values including those applicable to sanitary wastewater, oily runoff, and cooling water blowdown.	Results submitted in AMRs (15/03/2017).	Wastewater treatment facilities have been constructed for the operations phase and have been designed to meet the standards specified in the WBG EHS Guidelines for Thermal Power Plants. In general, the wastewater discharges meet the stipulated limits with the exception of a one-off exceedance of some parameters due to faulty equipment which was rectified by the site. However, iron had exceeded the limits on a number of occasions and the exact cause of the iron exceedances at the discharge location cannot be pinpointed. Monitoring of the downstream locations in 2019, 2020 and 2024 indicated iron levels were well below the stipulated limits. However, recorded values in 2021 were at 0.9 mg/L, and June 2023 was at 0.971 mg/L close to the allowable limit of 1 mg/L. Therefore, the IESC recommends that the Project continues to monitor wastewater discharge quality. **Status Summary: Work in Progress**
11/PS4	Mitigate traffic related accident risks during construction through measures such as: access control, barricading, reflectors, signage, community safety awareness programs, posting of traffic marshal, equipment back up alarms, proper securing of material while moving them from one place to another, planning material movement to cause minimum disruption, speed controls; alarms; posting traffic marshals at high risk locations; undertaking appropriate measures to reduce fugitive emissions from storage and transport of construction and waste material, implementing driver safety management and training requirements for the transport of people and materials. Require the EPC contractor to prepare a detailed traffic and transport management plan including such elements as: implementation of a personnel and materials movement plan which takes daily life and	Evidence of inclusion in EPC HSE requirements: 15/05/2016 or prior to construction, whichever is earlier.	Traffic related accident risks are well managed. The Project has a comprehensive Traffic Management Plan, which has been implemented effectively through a combination of physical controls (e.g. reversing alarms, vehicle maintenance), use of clear traffic signs on site, a strictly enforced speed limit, risk assessments for unusual loads, awareness training, and use of PPE such as reflective jackets. As a result, there have been no traffic related injuries. Community impacts have been considered in the construction phase Traffic Management Plan. Designated traffic routes have been established to avoid populated areas, and the Project monitors noise at the six community sensitive receptor points identified in the ESIA report. **Status Summary: Closed**

No.	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
	traffic patterns into account; periodical monitoring of noise levels at community sensitive receptor points.		
12/PS4	Require EPC contractor to implement a management plan that will include: ensuring that appropriate medical facilities are available for all labour; a periodic health check-up program is in place; an awareness program on STI and HIV/AIDS; and measures to control disease vectors.	Evidence of inclusion in EPC HSE requirements: 15/05/2016 or prior to construction, whichever is earlier.	Immediate medical assistance is available at the Project Site, and arrangements are in place with the medical centre in Myingyan for emergency services. A periodic (annual) health check-up program is in place, along with measures to control disease vectors. An NGO was engaged to provide training for an awareness program on STI and HIV/AIDS. **Status Summary: Closed**
13/PS5	Develop a resettlement framework with a set of project-level PS5 compliant procedures on land acquisition and involuntary resettlement which will be applied to all ongoing, and future land acquisition related activities should they occur.	Procedure in form and substance acceptable to IFC: 31/05/2016 or as advised by EPGE.	PCo developed a Resettlement Framework for the Project (November 2015) which was disclosed on ADB's website. Ramboll's Land Acquisition and Resettlement Plan Observer Report serves the purposes of a Resettlement Action Plan. **Status Summary: Closed**
14/PS5	Proactively work with EPGE during the river water supply pipeline and T-line RoW land acquisition process and demonstrate that the outcome and process are consistent with PS5 requirements.	RoW land acquisition work plan in place and consistent with PS5 requirements – 31/05/2016 or as advised by EPGE RoW outcome/process report prepared by the company verifies consistency with PS5 requirements - prior to operations (15/09/2018).	PCo proactively worked with EPGE during the river water supply pipeline and T-line RoW land acquisition process. Livelihood impacts are limited. The impacts on livelihood due to the laying of the pipelines have been temporary and livelihoods were restored after the completion of the construction activities. As of 12th April 2017, all PAPs were compensated (at full replacement cost) for land and crop loss, with the exception of the 8 PAPs impacted by the elevated section of the pipeline towards the river, who received compensation (at full replacement cost) for land and crop loss, between 27 -30 August 2018 (as described below). After the construction was completed for the buried sections of the river water supply pipeline, T-line towers and T-line wires had been installed, and PAPs had been re-planting crops; PCo conducted face-to-face meetings with each of the PAPs to assess resettlement outcomes. PCo met with the 147 PAPs along the river water supply pipeline, T-line towers and where T-line wires had been installed. The land acquisition process was to be completed before COD 2; and the land acquisition and compensation paid to the 8 PAPs for the elevated section of the pipeline towards the river took place in August

No.	Task Title / Description	Anticipated Completion Date	Status and Reference to Supporting Documentation and Section(s) of E&S Monitoring Report
			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. 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. During the 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. In 2024, SMPC conducted consultations with 3 more PAPs from Ma Yoe Kone village, and according to the SMPC CSR Lead, the three PAPs are in good health and lead normal daily lives with no reported concerns. The fourth PAP was not able to be located, despite repeated efforts by SMPC, and therefore consultation with this PAP will not be able to be conducted. **Status Summary: Closed**

7. SUMMARY

The Tenth Environmental and Social Monitoring Round has assessed the sixth 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 Tenth Environmental and Social Monitoring Report reports the findings of the monitoring for the period January 2024 to December 2024. The IESC finds the Project is generally compliant with the ESAP with the exception of five actions that are still work in progress. Some efforts to remediate these actions were challenged by security risks and the Major Inspection (MI) outage. In addition, a number of opportunities for improvement in the Project's environmental and social performance have been identified.

Ambient air monitoring, noise monitoring and water quality monitoring programmes in accordance with the Environmental Management Plan (EMP) requirements were largely re-established since 2022. 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. 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.

Personnel changes during 2024 included a reduction in the workforce (as shown on the December 31, 2024, organisation chart). The IESC recommends that any 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 2025 and Ramboll was informed the entire BCP procedure was modified to update changes in signatories and ERP. The Sembcorp HQ BCM Framework should be provided for Ramboll's review during the Eleventh Monitoring Round, along with the Crisis Communication Plan, and the Incident Reporting and Conduct of Root Cause Analysis.

The following updated plans and other information should be provided for Ramboll's review during the Eleventh Monitoring Round:

- An Updated SEP should be prepared and include an updated CGM with revised Roles & Responsibilities, where needed, to ensure the correct current name for the Community Relations role (i,e., CSR Lead) is included in Section 10 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.
- In addition, the Relevant Village Authorities should be defined in the SEP.
- The updated CDP should also include the CDP budget for the year.
- An Updated Annex E to the BCP: Manpower Arrangements for Contingency (or preferably, a stand-alone Workers Accommodation Plan) to comply with the Lenders' requirements under IFC PS2 for a Workers' Accommodation Plan for the Operations Phase, including a major hazard risk assessment and emergency response and evacuation plans covering both violent situations and fires and natural risk situations for workers staying at the workers accommodations in the Safe Houses.

- 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 PPMS number and Table of Contents.

- To ensure compliance with IFC PS2, the following information should be provided to Ramboll:
    - More information on any currently engaged Operations Phase contractors, and possibly sub-contractors (i.e., name, location, services being provided and length of service); and confirmation is requested that their workers have received employment contracts covering their work at SMPC and that the employment contracts are in compliance with the IFC PS2 requirements.
    - Confirmation that all Operations Phase contractors and sub-contractors and their workers have been provided with Sembcorp's Code of Business Conduct and Global Human Rights Policy, and the SMPC Grievance Handling Policy and Human Resources procedures; and that their signatures have been provided confirming receipt.

In addition, with respect to the emergency evacuation in 2024, SMPC is recommended to take the following actions:

- Update the ERP to integrate the undated emergency evacuation plan and application of the Myingyan Deployment Checklist with the ERP and the BCP;
- Ensure plans and procedures are clear on the decision-making process for the MD to order an Emergency Evacuation and then conclude when it is safe to resume operations at the Plant;
- Ensure the Emergency Evacuation Plan, the BCP and any other relevant documentation includes communication procedures to stakeholders (local communities, Contractors, Sembcorp Industries, Lenders, etc.) in the event of major incidents, evacuation, etc;
- Carry out a formal Incident Investigation of the emergency evacuation in 2024. The ERP should also incorporate procedures of conducting a formal Incident Investigation; and

Completion of a formal Incident Investigation of the emergency evacuation in 2024, and acting on any resultant recommendations for improvement should be viewed as a critical action step for the project and should be provided to the IESC for review as part of the Eleventh Monitoring Round.

Appendix 1A

Site Visit Photo Records (Current Round 2024)

Photo 1: Administration Building at Myingyan CCGT Power Plant (Photo provided during January 2025 Site Visit)

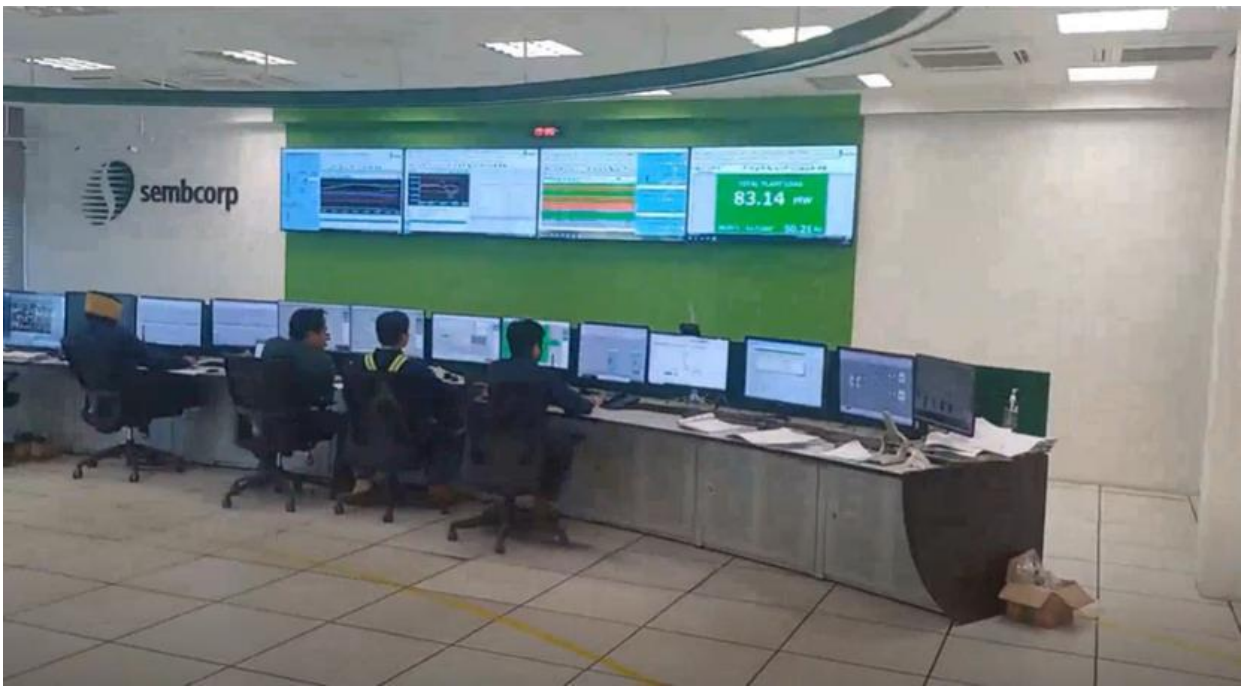


Photo 2: Plant Control Room with Continuous Operations Monitoring System within the main administration building (Photo taken from video during January 2025 Site Visit)

Photo 3: Myingyan CCGT Unit 1 (Photo provided during January 2025 Site Visit)

Photo 4: Steam Turbine Building (Photo provided during January 2025 Site Visit)

Photo 5: Switch Yard (Photo provided during January 2025 Site Visit)

Photo 6: Station Transformer next to Unit 2 (Photo provided during January 2025 Site Visit)

Photo 7: Central Monitoring Basin (Photo taken from video during January 2025 Site Visit)

Photo 8: Water Storage Tanks next to Central Monitoring Basin (Photo taken from video provided during January 2025 Site Visit)

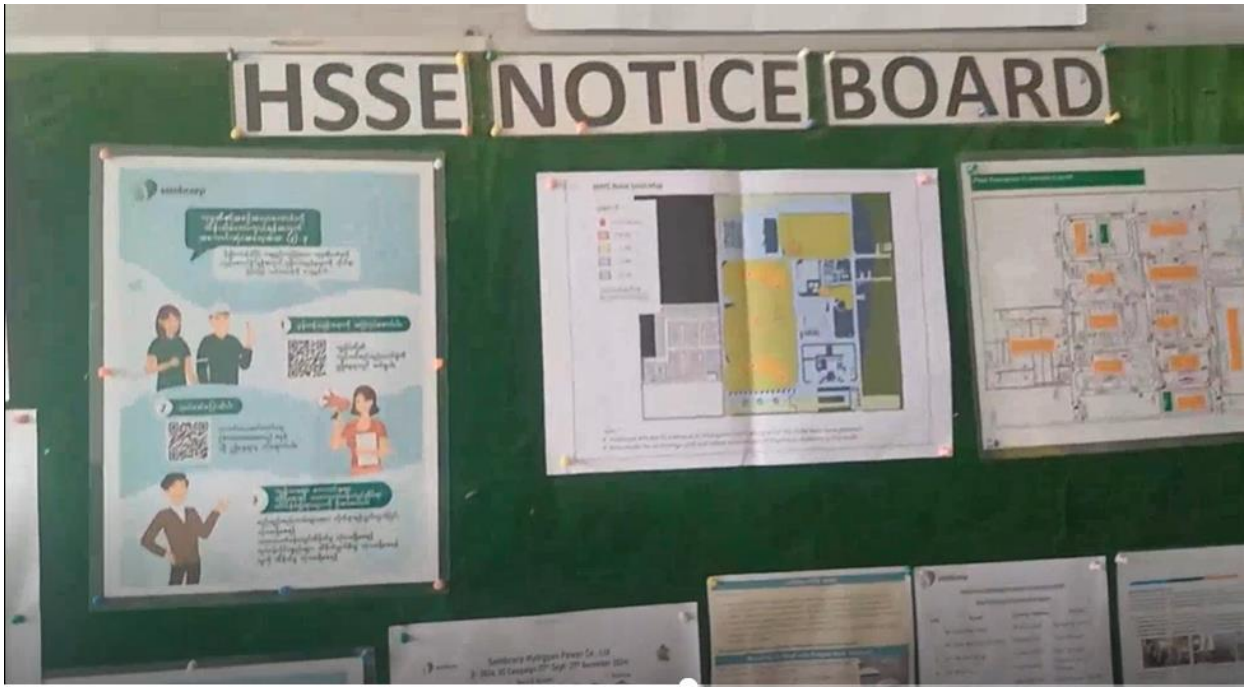


Photo 9: Display of HSSE Noticeboard outside the Clinic (Photo taken from video provided during January 2025 Site Visit)

Photo 10: Display of HSSE Noticeboard outside the Chemical Store (Photo taken from video provided during January 2025 Site Visit)

Photo 11: Chemicals at the Chemical Store (Photo taken from video provided during January 2025 Site Visit)

Photo 12: Spill Kits at the Chemical Store (Photo provided during January 2025 Site Visit)

Photo 13: Spill kit and emergency eyewash station in the Laboratory; Entrance to the Laboratory (Photos provided during January 2025 Site Visit)

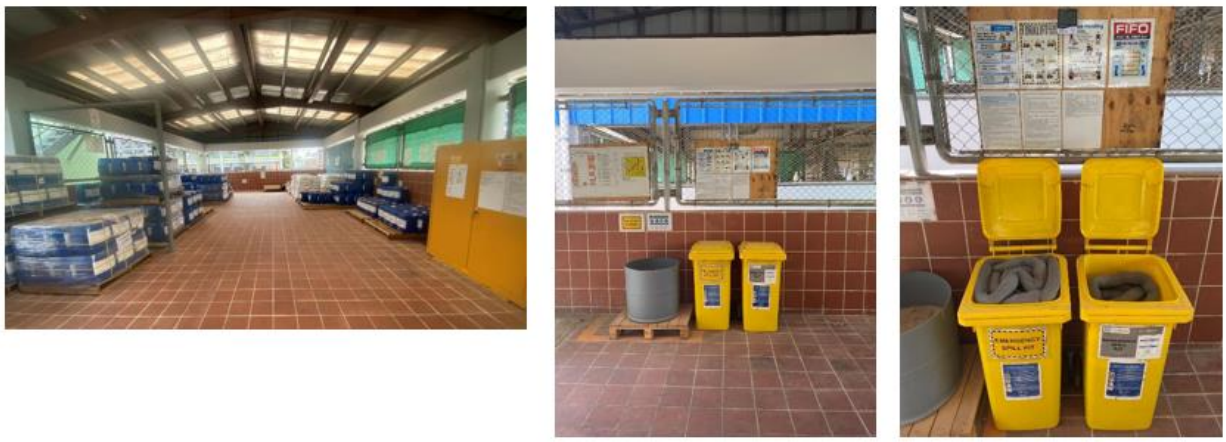


Photo 14: Chemical storage and spill kits inside the Water Treatment Plant (Photo provided during January 2025 Site Visit)

Photo 15: HSSE Observation Box located outside the Clinic (Photo provided during January 2025 Site Visit)

Photo 16: Canteen Grease Trap (Photo provided during January 2025 Site Visit)

Photo 17: Damaged solar panel from a village now stored at the Plant as waste (Photo provided during January 2025 Site Visit)

Photo 18: Expired Eliminox carboys stored at the Laboratory (Photo provided during January 2025 Site Visit)

Photo 19: Expired drugs stored at the Clinic (Photo provided during January 2025 Site Visit)

Photo 20: New and used (obsolete) batteries stored at the Battery Room (Photos provided during January 2025 Site Visit)

Photo 21: Electronic waste stored at IT Cabinet (Photos provided during January 2025 Site Visit)

Photo 22: Safe House 1 Entrance (Photos provided during January 2025 Site Visit)

Photo 23: Safe House 1 Temporary Container Dormitory (Photos provided during January 2025 Site Visit)

Photo 24: "JEM" Worker Accommodation (Photos provided during January 2025 Site Visit)

Photo 25: Safe House 2 (Photos provided during January 2025 Site Visit)

Photo 26: Safe House 2 Bedrooms (Photos provided during January 2025 Site Visit)

Appendix 1B

Site Visit Photo Records (2019-2025)

Photo 1: Main Entrance Gate to Myingyan CCGT Power Plant (Photo taken from live video during February 2022 Site Visit)

Photo 2: View of the Administration Building (Photo provided during January 2025 Site Visit)

Photo 3: Display of HSSE Performance Data adjacent to the Plant Control Room (December 2019 Site Visit)

Photo 4: Plant Control Room with Continuous Operations Monitoring System within the main administration building (Photo taken from live video during January 2023 Site Visit)

Photo 5: View of the Myingyan CCGT Power Plant from Administration Building rooftop (Photo taken from video provided during January 2023 Site Visit)

Photo 6: Display of HSSE Notice board at reception area of administration building (Photo taken from live video during January 2023 Site Visit)

Photo 7: The banks of the Ayeyarwady River, next to the river water pumping station (Dec 2019 Site Visit)

Photo 8: Overview of the river water supply pipeline and pumping station (December 2019 Site Visit)

Photo 9: River water intake pumps (Photos provided for January 2024 Site Visit)

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

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

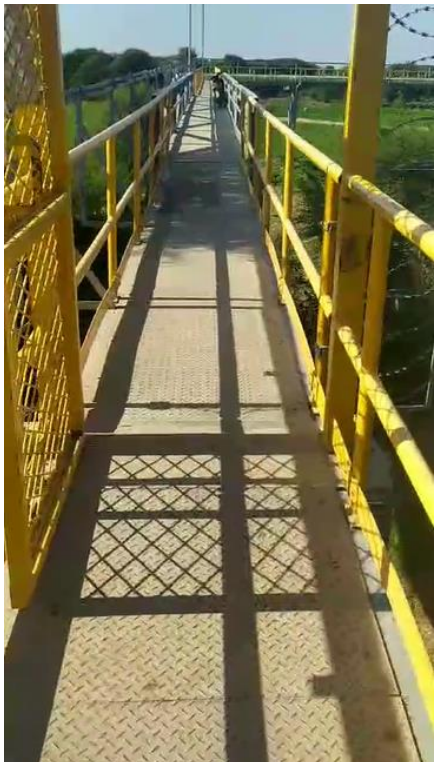


Photo 12: Entrance leading to the river water supply pumping station (Photo taken from video provided by SMPC, January 2022 Site Visit)

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

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

Photo 15: Inside Lube Oil Shelter (Photos taken from video provided for January 2024 Site Visit)

Photo 16: Full and used oil drums stored at Lube Oil Shelter (Photo taken from video shared during January 2024 Site Visit)

Photo 17: Sanitary wastewater treatment plant (December 2019 Site Visit)

Photo 18: View of Unit 1 plant exterior (Photo taken from video shared during January 2023 Site Visit)

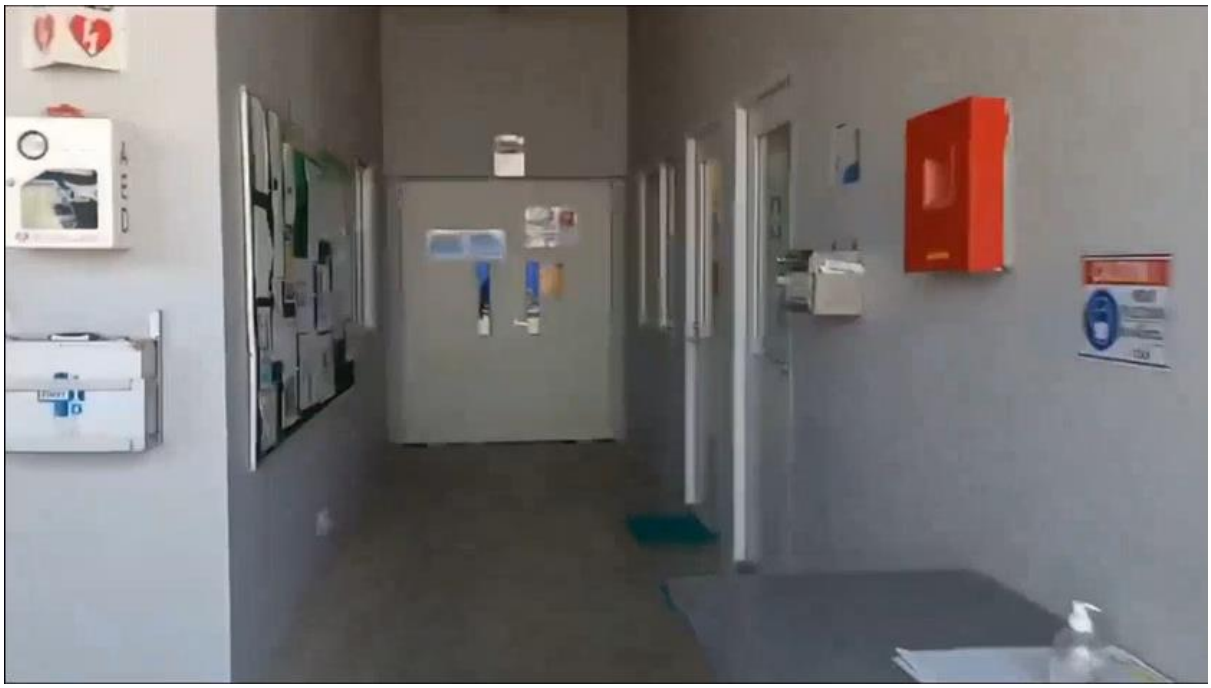


Photo 19: Entrance to the Warehouse ahead and Clinic on the right with AED Defibrillator and First Aid Kit on the left (Photo taken from video shared during January 2023 Site Visit)

Photo 20: Two (2) fire water storage tanks of 1200 m^3 capacity each (Photo taken from video provided for January 2023 Site Visit)

Photo 21: View of V Power and river water storage reservoir from office in administration building (Photo taken from live video during January 2023 Site Visit)

Photo 22: Central Monitoring Basin of water storage reservoir (Photo taken from video shared during January 2023 Site Visit)

Photo 23: Raw Water Pond of water storage reservoir (Photo taken from video shared during January 2023 Site Visit)

Photo 24: Chemical feeding area (Photo taken from video provided by SMPC, January 2022 Site Visit)

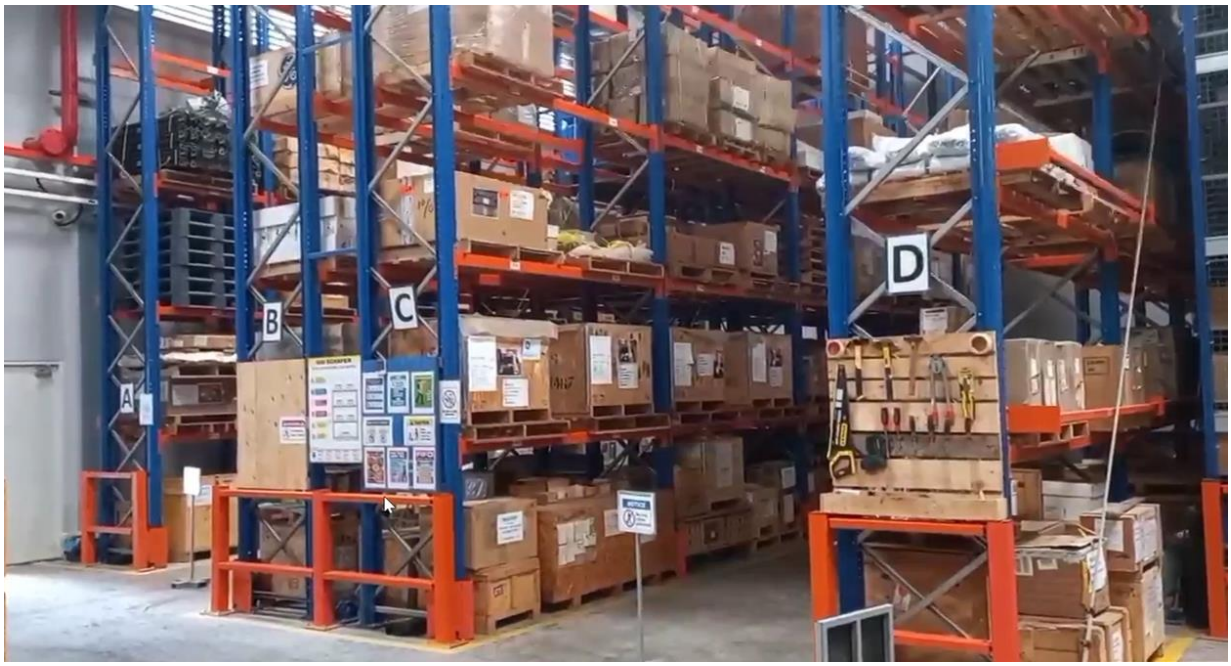


Photo 25: Warehouse (Photo taken from video shared during January 2023 Site Visit)

Photo 26: Workshop (Photo taken from video shared during January 2023 Site Visit)

Photo 27: Sludge hoppers for collection of sludge from the water treatment plant (Photos taken from video provided for January 2023 Site Visit)

Photo 28: Full and used oil drums stored at Lube Oil Shelter (Photo taken from video shared during January 2023 Site Visit)

Photo 29: Inside Lube Oil Shelter with eyewash and oil fuel spill control kit (Photos taken from video provided for January 2023 Site Visit)

Photo 30: Internal Sewerage Treatment Plant (Photos taken from video shared during January 2023 Site Visit)

Photo 31: Water treatment plant (Photo taken from video shared during January 2023 Site Visit)

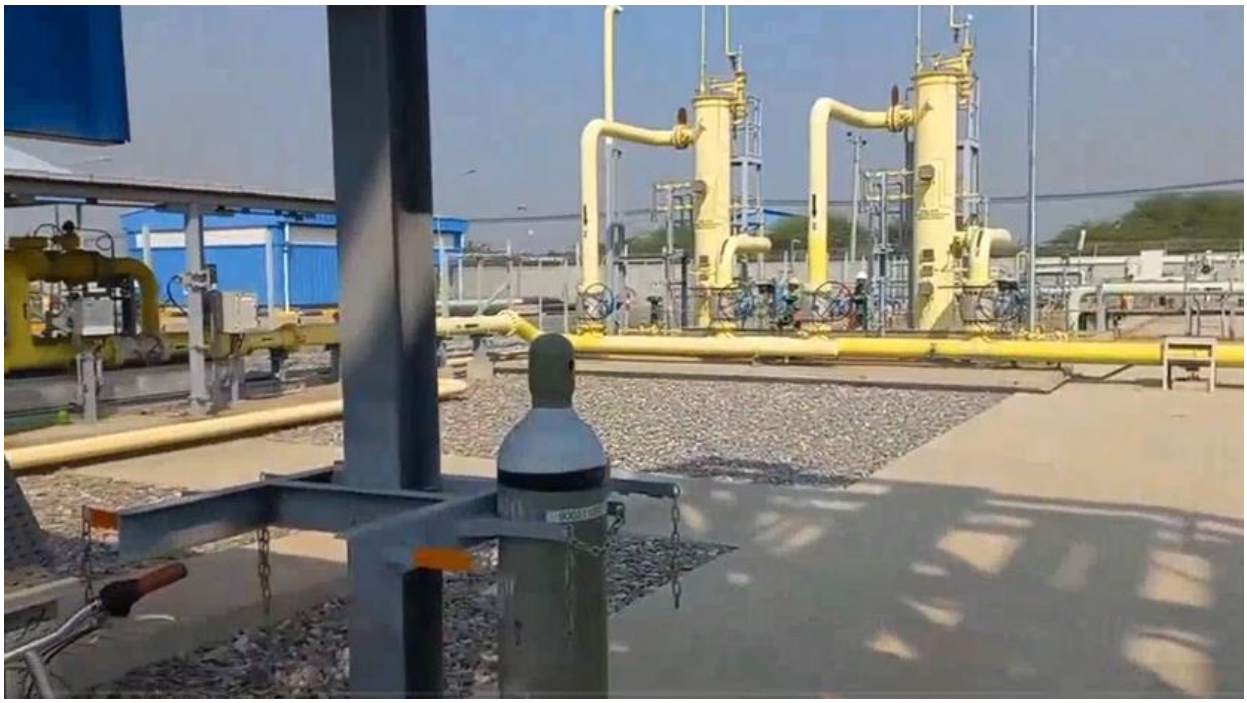


Photo 32: MOGE gas receiving station (Photo taken from video shared during January 2023 Site Visit)

Photo 33: Off-site sludge storage facility owned and operated by OK Service for sludge from the water treatment plant (Photos taken from video provided for January 2023 Site Visit)

Photo 34: Off-site sludge storage facility owned and operated by OK Service for sludge from the water treatment plant (Photo provided for January 2024 Site Visit)

Photo 35: Emergency Spill Kits in Chemical Storage Area (Photos taken from video provided for January 2023 Site Visit)

Photo 36: Entrance to Chemical Store (Photo taken from video provided for January 2023 Site Visit)

Photo 37: Chemical Storage Area with eyewash and emergency spill kits (Photos taken from video provided for January 2023 Site Visit)

Photo 38: Smoking Area (Photos taken from video provided for January 2023 Site Visit)

Photo 39: EDG Diesel Day Tank (Photo taken from video provided for January 2023 Site Visit)

Photo 40: Diesel Generator/EDG Genset (Photo taken from video provided for January 2023 Site Visit)

Photo 41: Cooling Tower (Photo taken from video provided for January 2023 Site Visit)

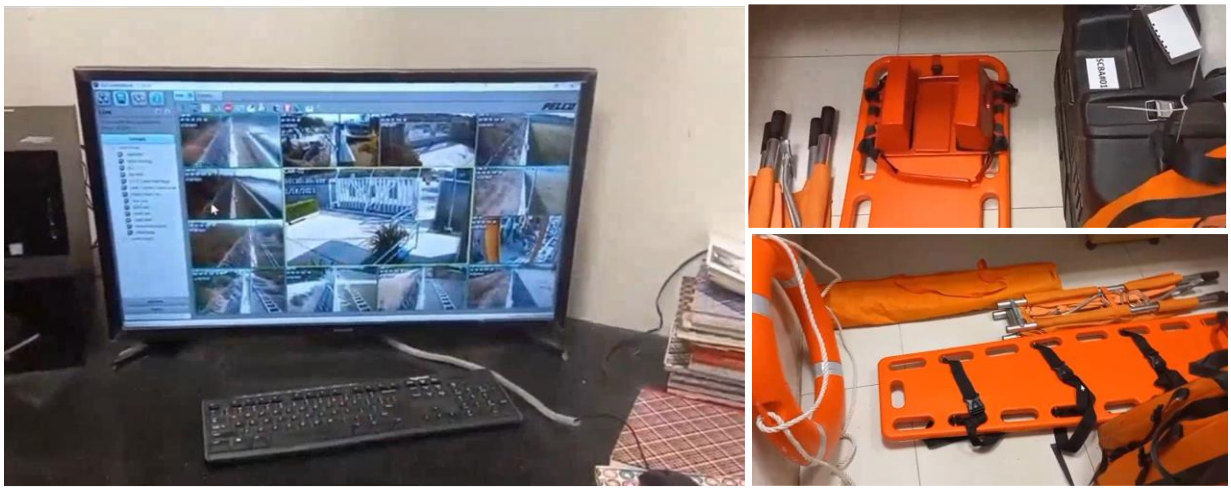


Photo 42: Emergency Equipment and CCTV monitoring in Security Guardhouse (Photos taken from video provided for January 2023 Site Visit)

Photo 43: Fire Truck (Photo taken from video provided for January 2023 Site Visit)

Photo 44: Equipment in Fire Truck (Photo taken from video provided for January 2023 Site Visit)

Photo 45: Security at Safe House 1 Entrance (Photo taken from video for January 2023 Site Visit)

Photo 46: Second security post at rear corner of Safe House 1 (Photo taken from video for January 2023 Site Visit)

Photo 47: Waste bins within Safe House 1 site. (Photo taken from video for January 2023 Site Visit)

Photo 48: Safe House 1 Canteen (Photos taken from video provided for January 2023 Site Visit)

Photo 49: Female bathroom at Safe House 1 (Photos taken from video provided for January 2023 Site Visit)

Photo 50: Male bathroom at Safe House 1 (Photos taken from video provided for January 2023 Site Visit)

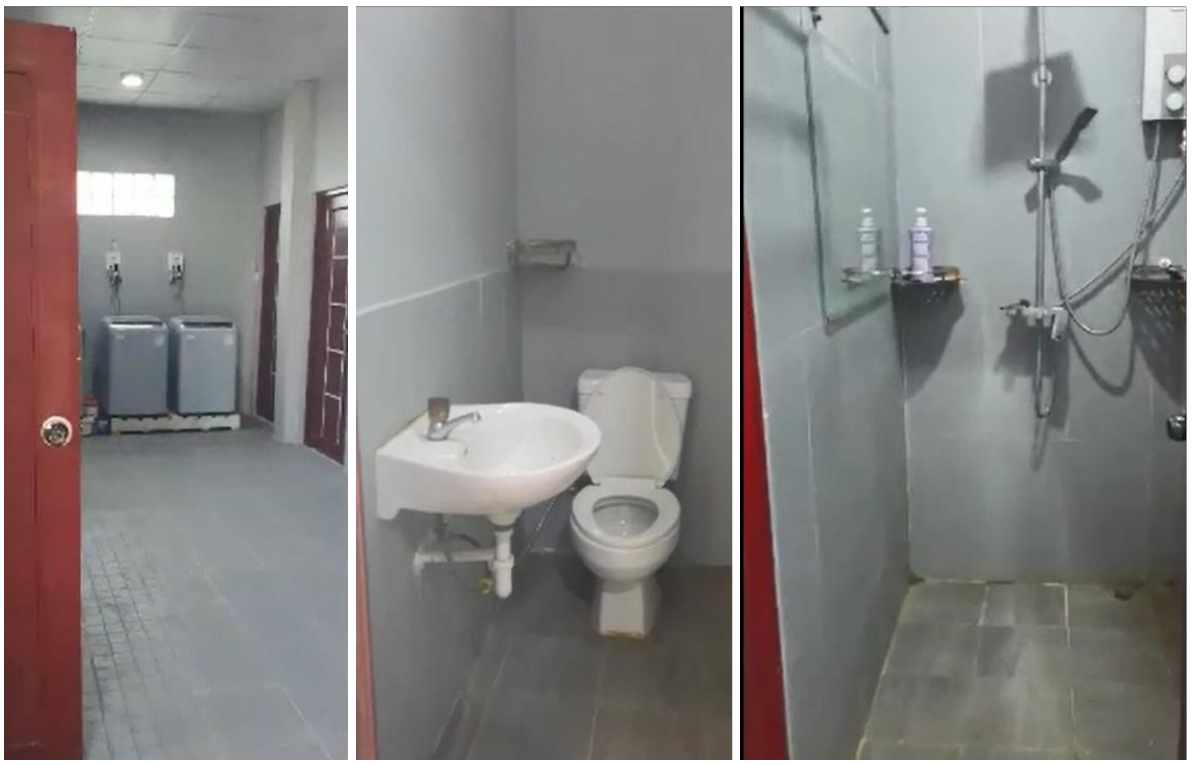


Photo 51: Separate toilet building at Safe House 1 (Photos taken from video provided for January 2023 Site Visit)

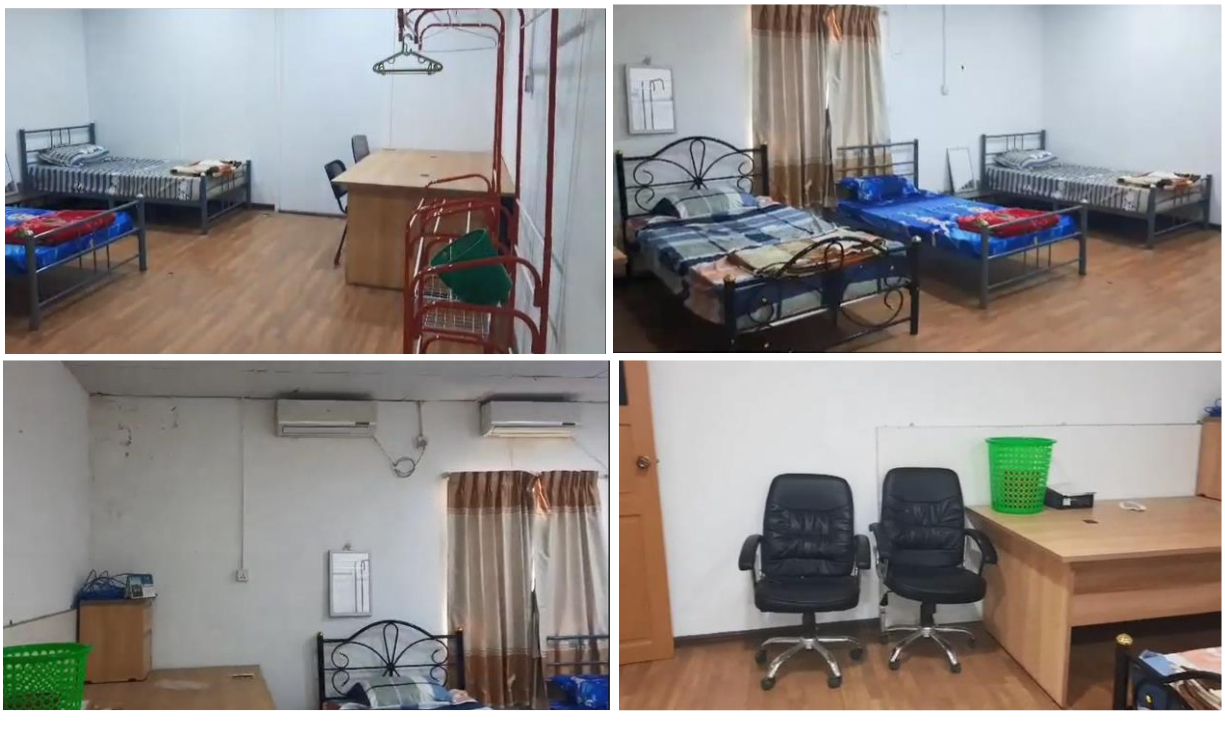


Photo 52: Triple bedroom at Safe House 1 (Photos taken from video provided for January 2023 Site Visit)

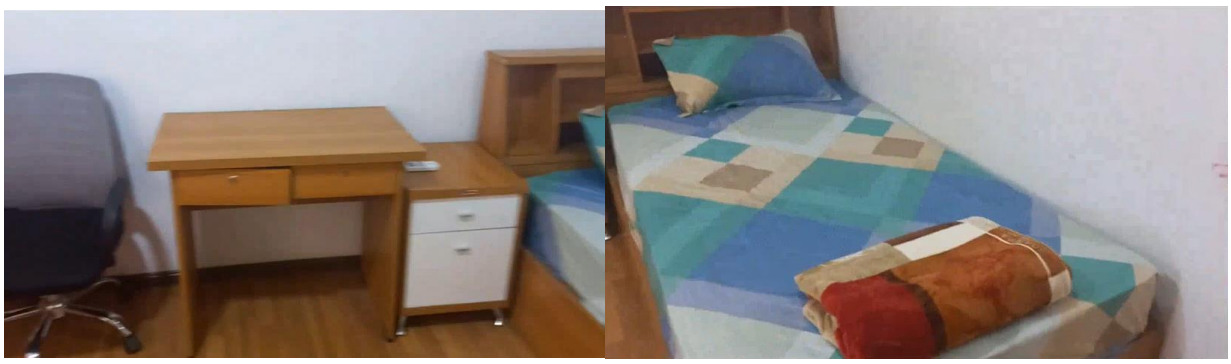


Photo 53: Single bedroom in Safe House 1. (Photos taken from video provided for January 2023 Site Visit)

Photo 54: CCTV monitoring at Safe House 1 (Photo taken from video provided for January 2023 Site Visit)

Photo 55: Swimming pool at Safe House 1 (Photo taken from video provided for January 2023 Site Visit)

Appendix 2
Monitoring Plan

Myingyan Natural Gas Power Project
Lenders' Environmental and Social Consultant (LESC)
10th Monitoring Round - Monitoring Plan

Monitoring Round Dates:	**January 15, 2025** **January 16, 2025** **January 17, 2025** **January 20, 2025** **January 24, 2025**	**Site Location:**	**Sembcorp Myingyan Power Company Ltd, Myingyan, Myanmar**

Monitoring Team:	The monitoring team will comprise: • Ms Sharon Maharg, Ramboll – Social Specialist • Ms. Cara Quinn, Ramboll – Environmental Specialist • Ms. Tricia Chong, Ramboll – E&S Consultant • Ms. Ruimin Li, Ramboll – Environmental Consultant • Ms. Jessica Lee, Ramboll – E&S Consultant
Principal Client Representatives:	• Mr. Aung Lwin Oo – SMPC, Government Affairs, Senior Manager • Mr. Hein Min Oo @ Koyin – SMPC, CSR Lead • Mr. Fahd Adventure Solares – SMPC, Plant Manager • Mr. Zaw Moe Aung, – SMPC, HSSE Manager • Ms. Naing Naing Aung – SMPC, Human Resources Senior Manager • Mr. Dave Zaw Min Oo – SMPC, Eng Lead (Commercial & Risk Representative) • Mr. Yazar Myo Thein – SMPC, Managing Director • Mr. Win Kyaw – SMPC, Medical Officer • Ms. Hsu Pyeit Phyu – SMPC, HR & Administration, Assistant Manager • Ms. Ma Seint – SMPC, Laboratory Manager • Mr. Pyae Phyo Kyaw – SMPC, IT Senior Executive • Mr. Zaw Myint – SMPC, Lead, Facilities
Lender Team	• Beatrice Gomez – ADB • Olga Skotareva – ADB • Siela B. Teng-Almocera – ADB • Diana Christina B Velaso – ADB • Melissa Moyano Manguiat – ADB • Wenlei Zhou – IFC • Sajid Imtiaz Khan – IFC • Saadia Hassan – IFC • Jackie Jing Cui – AIIB • Yang Shuai – AIIB • Mingkai Zhang – AIIB

	• Joana Nicolau – MIGA
Persons to be Notified of Monitoring Visit:	In addition to those listed above: • Che Yu Kok, DZ Bank
Scope of Monitoring:	The 10th 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, if possible, with the four remaining PAPs, local village heads and other local stakeholders. It will also include a 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 during 2024 of the Stakeholder Engagement Plan, Community Grievance Mechanism and Community Development Plan. 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 (9th Round) and of items noted in the environmental and social action plan (ESAP).
Objectives:	The primary objectives of the monitoring visit, as defined in the scope of work, are to: a) Verify that the Project complies with the Applicable Standards in relation to the environment, local communities, health and safety; b) Identify any E&S, labour, and Health and Safety (H&S) related impacts, risks or liabilities which have not been properly mitigated or controlled in the Project; c) Assess the technical adequacy and the implementation status of the Project's environmental, safety and social management systems, its management plans and other related documents; and d) Recommend any necessary additional preventive and corrective actions to address any ESHS related impacts, risks or liabilities identified to achieve compliance to the Lenders safeguard policy requirements.
Components of Monitoring Plan:	The monitoring round will include: ○ Open cycle power plant, including: ○ General site inspection via photographic / video records within the boundary of the SMPC site ○ Hazardous materials storage – onsite and offsite storage locations (if any) ○ Waste storage onsite and offsite storage locations ○ Process wastewater treatment and disposal ○ Domestic sewage treatment and disposal ○ Stormwater drainage ○ Water treatment plant (demineralised water) ○ Inspection of raw water intake station, process water discharge point, pipeline right of way, transmission towers, and gas receiving station. ○ External social-related activities (e.g., visits to villages; interviews with stakeholders outside the project site such as Village Heads, the District Hospital Administrator and District Police Chief, the remaining 4 PAPs and

other landowners; and a visit the hospital medical waste incinerator, etc.) may be restricted due to security considerations. A discussion will take place among Ramboll, SMBC and the Lenders during the monitoring round on the social-related activities SMPC was able to do over the past year with the key stakeholders and local communities.

- Discussions with SMPC and Sembcorp Senior Management Representatives on:
    - Overview of the project, including key environmental and social challenges
    - Overview of any ongoing E&S issues with the affected local communities, including an update on issues raised by the NGOs and agreed actions to address NGO / community concerns (e.g., upstream and downstream ambient water quality monitoring, development of a participatory monitoring program, updated strategy for better information dissemination).
    - Status of issues raised in our last monitoring report, and Ramboll's recommendations to address these issues, which are detailed in the document request list.

- Legal compliance status
- Status is requested on the extension request letter SMPC/MM/2023-065 that was submitted by SMPC to MONREC on 29 November 2023. At the time of the previous audit report (May 2024), re-certification or extension of validity of the 2017 ECC by MONREC had not yet been issued by MONREC.
- Project HSE Manager
    - Roles and responsibilities of the HSSE staff for operations phase
    - Site specific HSSE procedures for operations phase
    - Management of change
    - Review internal audit and inspection programme and reports
    - Environmental monitoring data from January 2024 to current monitoring reports (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
- Human Resources Manager
    - Workforce update (with breakdown: local vs. national workers, male and female). Also, an update on any foreign workers currently working at the site.
    - Update on the worker skills training programme
    - Update on the workers using rental housing and other means of accommodation
    - Update on the procedures for workers' daily transportation to the site

- Update on OHS practices and any incidents since the last visit
- Update on the workers' grievance mechanism, and register review

- Development and Community Relations Managers
  - Update on community development and community/stakeholder engagement activities since the last visit, including status of the 2024 Annual Stakeholder Meeting.
  - Update on the Community Grievance Mechanism, external grievance committee organization, and a review of the Grievance Mechanism register
- Current workers (discussions during site inspection)
  - HSSE awareness
  - Knowledge of grievance mechanism
- 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.
  - Environmental Management Plan which includes:
    - Air Quality Management
    - Noise and Vibration Management
    - Surface Water Quality Management
    - Waste Management
  - Security Management Plan
  - Occupational Safety and Health Management Plan
  - Emergency preparedness and response plan
  - Stakeholder Engagement Plan
  - Local Recruitment and Procurement Management Plan
  - Community Development Plan (which includes community health management)
- Updated Worker Accommodation Plan and (Virtual) Photographs / Video recording of the following:
  - Dormitories (showing bedding arrangements, closet/storage area, table, smoke detector, AC)
  - Isolation room
  - Canteen, including hand wash areas
  - Toilets, showers and washbasins
  - Smoking area
  - Emergency response signage in rooms and across unit
  - Signage/Posters with contact information of nurse or first aiders
  - Drinking water facilities
  - Sewage Treatment Plant

	○ Laundry facility ○ Waste storage and disposal areas ○ Grease trap ○ Fire extinguishers inside or near rooms ○ Grievance boxes ○ Any recreational facilities (gym, pool etc)
Monitoring Schedule: Yangon Time	**Wednesday, January 15, 2025:** • 08:45 - 09:00 Join the teleconference call • 09:00 – 10:00 Opening meeting (Ramboll and Lenders) ○ Introductions ○ Company overview of the project, including key environmental and social challenges, including an update on the current 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 any recent stakeholder or NGO criticisms that Ramboll may not be aware of, and to receive an update on how they are addressing these feedback. • 10:00 – 11:30 Company Presentation and Overview (Ramboll 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. ○ Update on the August 2024 media reporting of the SMPC plant shut down due to escalating civil unrest and the mitigation measures SMPC put in place. ○ Provide details of ▪ Communications shared with stakeholders (the Electric Power Generation Enterprise, media, communities and employees) at the start and end of shut down ▪ How safety of employees was managed ▪ What security measures were implemented • 11:30 – 12:30 Interview with Doctor (Ramboll and Lenders) *Short breaks as required* ○ Overview of medical access for employees and communities ○ Review of medical records and health training among plant employees and communities ○ Identify if there are any persistent health issues and how were they addressed ○ Schedule for visiting local communities and villages for 2024 ○ Measures against Covid-19 and any persistent health concerns

Thursday, January 16, 2025:

- 09:00 – 10:00 Virtual Walk Through the Plant (Ramboll Environmental Specialist 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, rest areas etc)
    - View up to date (2024/Jan 2025) photographs of the gas receiving station, raw water intake station, process water discharge point, the municipal waste disposal site, off-site sludge storage area
- 10:00 – 12:30 Environmental Interviews with Zaw Moe Aung (SMPC HSSE Manager) (Ramboll Environmental Specialist and Lenders)
    - Review environmental monitoring records for
        - Air quality monitoring and CEMS data
        - GHG Reporting
        - Noise (quarterly)
        - Noise (occupational noise exposure and noise mapping)
        - Water
        - Wastewater discharge
        - Sludge handling
        - Soil
        - Waste
    - Traffic Management: on-site traffic management to be reviewed again during the virtual site visit.
    - Register of Regulatory Requirements, Permits and Licences
    - Register of HSSE risks and impacts
    - Review HSSE Training
        - Training Matrix
        - Example Training Material

Friday, January 17, 2025:

- 9:00 – 10:30 Environmental Management Plans Review (Ramboll Environmental Specialist and Lenders)
    - Interview with Project HSSE Manager and HSSE Team regarding:
        - Review of Roles and Responsibilities of the HSSE
        - Behavioural based safety observations (BBSO)
    - Offline:
        - Site specific HSSE procedures for operations phase
        - Review internal audit and inspection programme and reports for operations phase
        - Emergency response
        - Non-conformities and corrective actions
        - External reporting of environmental and social issues (e.g., reporting to government agencies and lenders)
        - Status of ESAP issues

Monday, January 20, 2025:

- 9:00 – 9:30 Social Interviews with Naing Naing Aung, SMPC Human Resources Manager (Ramboll Social Specialist and Lenders) regarding:
  - Update on implementation of the Workers' Accommodation Plan and the Emergency Response Plan for all workers' accommodation facilities.
  - An update on implementation of the Human Resources procedures, current Project workforce numbers, and workers' skills training program
  - An update on implementation of the Local Recruitment and Procurement Management Plan and any limitations on recruitment/procurement during the current Covid/security environment
  - Update on the Workers' Grievance Mechanism and database
  - Procedures for workers' daily transportation to the SMPC site; and
  - Discussion on gender, diversity and inclusion
- 9:30 – 10:00 Interview on Emergency Evacuation with Plant Manager, HSSE, HR and any relevant managers (Ramboll and Lenders) regarding:
  - Update on the Emergency Evacuation
  - Escalation protocols, Roles and responsibilities undertaken during the evacuation
  - Contacts with local authorities
  - Implementation of the Emergency Response Plan for all affected parties
- 10:00 – 11:00 Virtual Visit to the Worker Accommodation Site(s) (Ramboll and Lenders)
- 11:00 – 12:00 Social Management Plans Review (Ramboll Social Specialist and Lenders)
  - 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.

Friday, January 24, 2025:

- 9:00 – 10:30 Closing Meeting (SMPC, Sembcorp, Ramboll and All Lenders)
  - Closing Meeting

Reporting:	A draft report will be available four 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:	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 pollutant concentrations of NOx (stated as NO_2), SO_2, CO_2, CO, PM_{10} and $PM_{2.5}$ were recorded by a third party, E Guard Environmental Services, appointed by SMPC, at four locations:

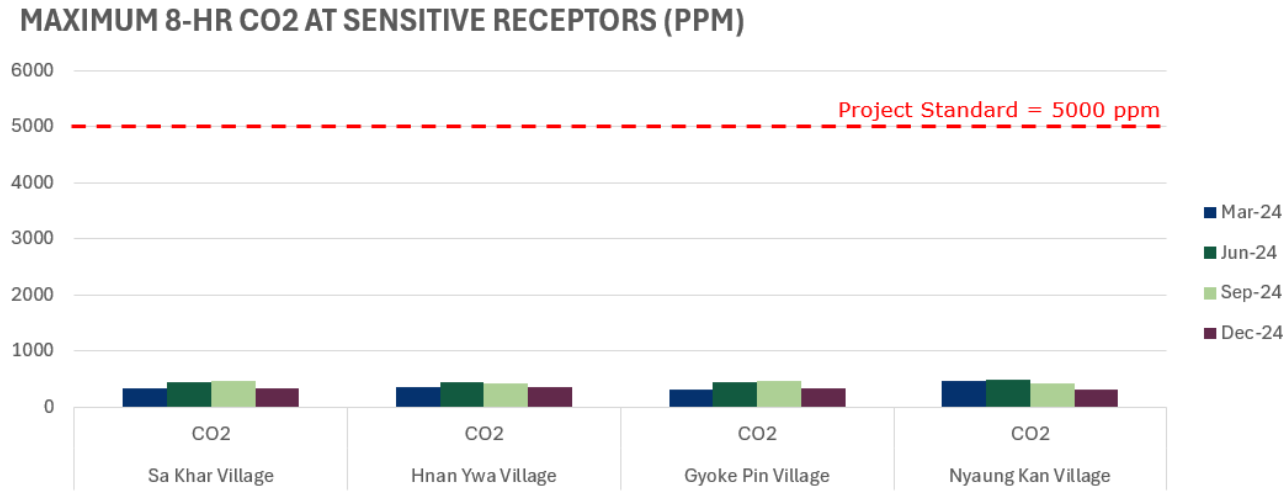
- One village house at Sa Khar Village;
- One village house at Hnan Ywa Village;
- One village house at Gyoke Pin Village;
- One village house at Nyaung Kan Village.

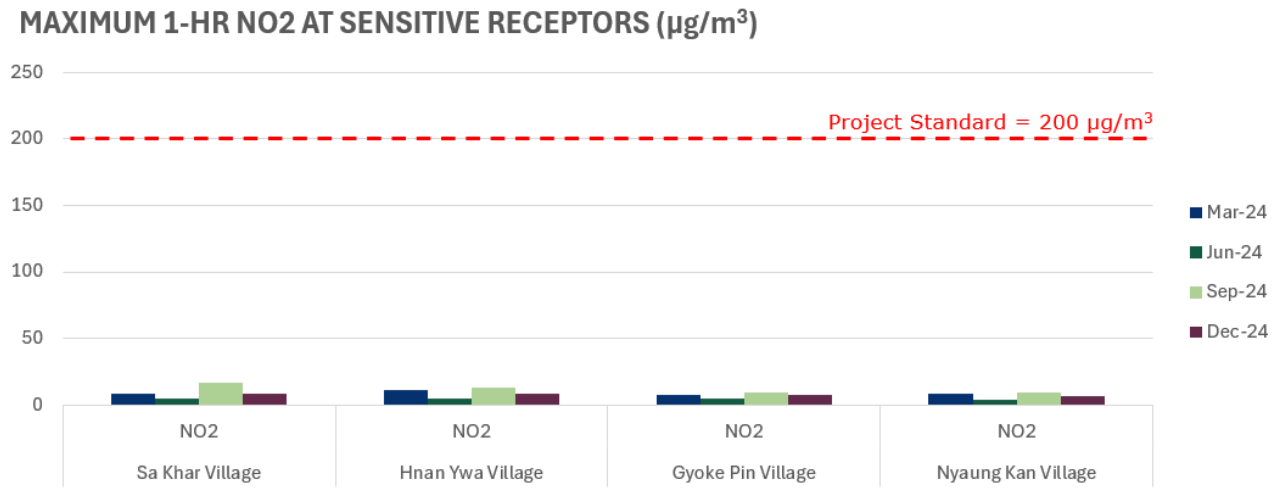
The monitoring results were compared against the Myanmar National Environmental Quality (Emission) (NEQ) Guidelines (2015), World Health Organization (WHO) Air Quality Guidelines Global Update 2005 as well as the National Ambient Air Quality Standards (NAAQS) issued by the US Environmental Protection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

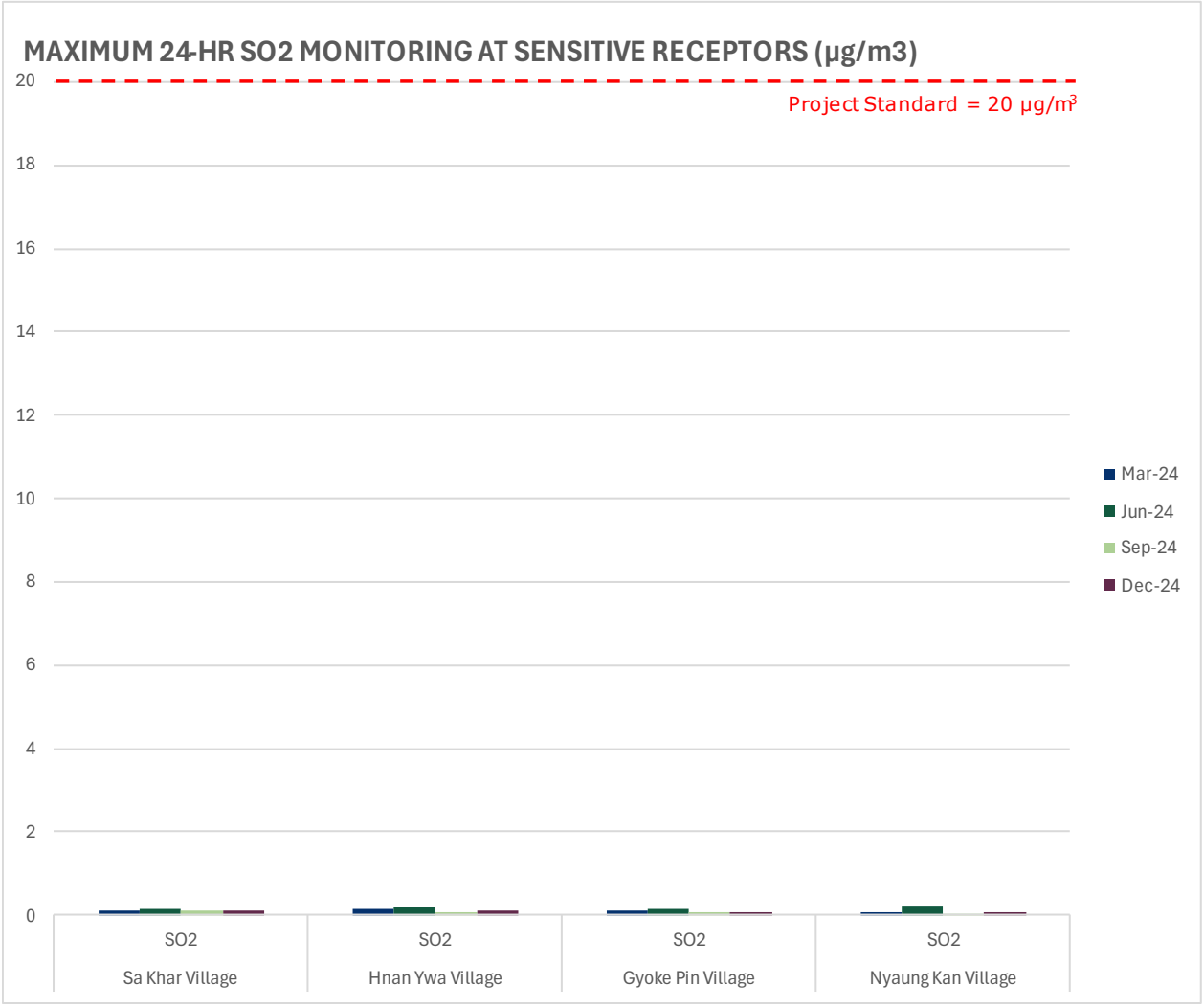
The data is reported in the following table and summarised in the subsequent charts.

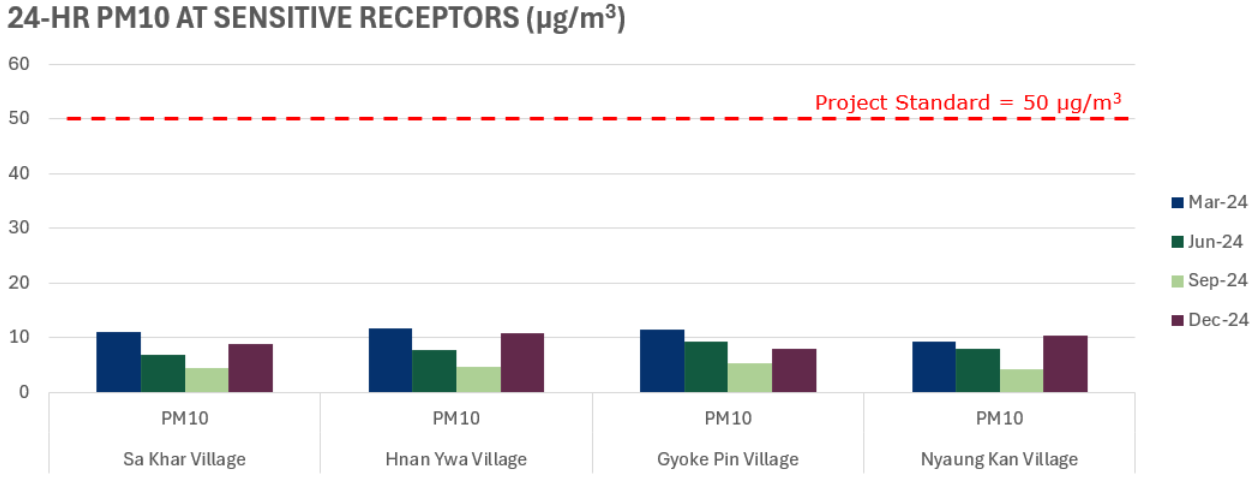
Ambient Air Quality Monitoring at Identified Villages (Sensitive Receptors)

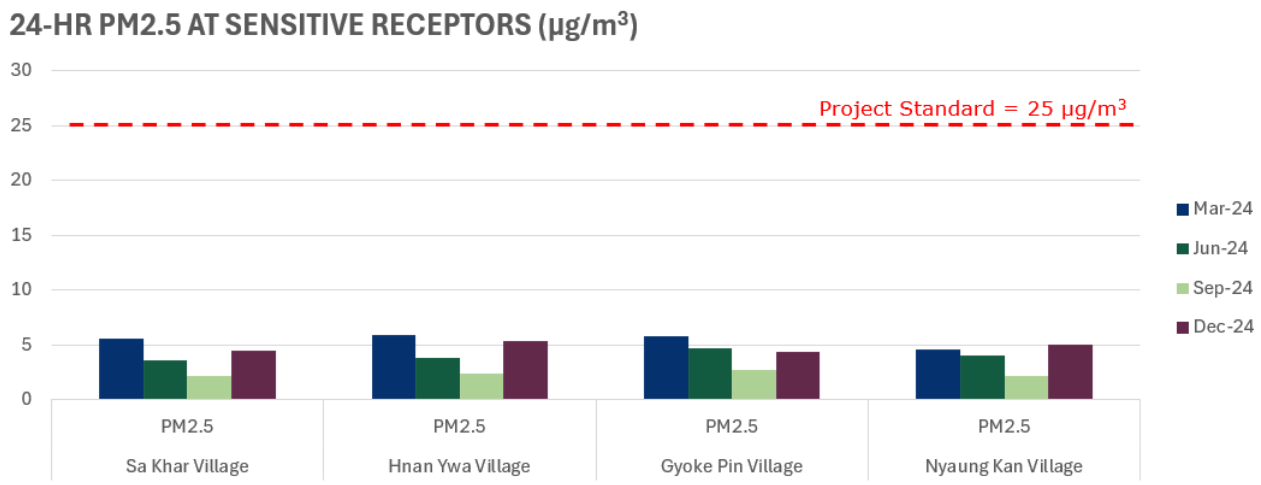
Name of Sampling Locations	Approximate Distance from Site (m)	Parameters	Units	Mar-24	Jun-24	Sep-24	Dec-24	Project Standard	Average Period
Sa Khar Village	630	CO	ppm	0	0	0	0	9	8 hrs
		CO_2	ppm	326.42	451.8	468.65	340.66	5000	8 hrs
		SO_2	µg/m^3	0.09	0.16	0.09	0.1	20	24 hrs
		NO_2	µg/m^3	8.33	4.54	16.48	8.76	200	1 hr
		PM_{10}	µg/m^3	10.96	6.86	4.36	8.85	50	24 hrs
		$PM_{2.5}$	µg/m^3	5.56	3.59	2.17	4.51	25	24 hrs
Hnan Ywa Village	1,560	CO	ppm	0	0	0	0	9	8 hrs
		CO_2	ppm	358.07	447.2	426.3	349.69	5000	8 hrs
		SO_2	µg/m^3	0.15	0.2	0.06	0.1	20	24 hrs
		NO_2	µg/m^3	10.99	4.39	13.22	8.03	200	1 hr
		PM_{10}	µg/m^3	11.71	7.7	4.69	10.89	50	24 hrs
		$PM_{2.5}$	µg/m^3	5.87	3.86	2.37	5.39	25	24 hrs
Gyoke Pin Village	2,720	CO	ppm	0	0	0	0	9	8 hrs
		CO_2	ppm	316.37	441.49	470.33	328.3	5000	8 hrs
		SO_2	µg/m^3	0.12	0.16	0.06	0.088	20	24 hrs
		NO_2	µg/m^3	7.18	4.54	9.84	7.91	200	1 hr
		PM_{10}	µg/m^3	11.49	9.21	5.36	7.99	50	24 hrs
		$PM_{2.5}$	µg/m^3	5.82	4.64	2.67	4.37	25	24 hrs
Nyaung Kan Village	2,760	CO	ppm	0	0	0	0	9	8 hrs
		CO_2	ppm	477.34	479.36	427.29	317.84	5000	8 hrs
		SO_2	µg/m^3	0.08	0.23	0.05	0.082	20	24 hrs
		NO_2	µg/m^3	8.21	4.2	9.43	6.74	200	1 hr
		PM_{10}	µg/m^3	9.19	8.04	4.31	10.33	50	24 hrs
		$PM_{2.5}$	µg/m^3	4.63	4.03	2.15	5.06	25	24 hrs


MAXIMUM 8-HR CO2 AT SENSITIVE RECEPTORS (PPM)
6000
5000
4000
3000
2000
1000
0
Project Standard = 5000 ppm
Mar-24
Jun-24
Sep-24
Dec-24
CO2
Sa Khar Village
CO2
Hnan Ywa Village
CO2
Gyoke Pin Village
CO2
Nyaung Kan Village


MAXIMUM 1-HR NO2 AT SENSITIVE RECEPTORS (µg/m3)
250
200
150
100
50
0
Project Standard = 200 µg/m3
Mar-24
Jun-24
Sep-24
Dec-24
NO2
Sa Khar Village
NO2
Hnan Ywa Village
NO2
Gyoke Pin Village
NO2
Nyaung Kan Village


MAXIMUM 24-HR SO2 MONITORING AT SENSITIVE RECEPTORS (µg/m3)
Project Standard = 20 µg/m3
20
18
16
14
12
10
8
6
4
2
0
SO2
Sa Khar Village
SO2
Hnan Ywa Village
SO2
Gyoke Pin Village
SO2
Nyaung Kan Village
Mar-24
Jun-24
Sep-24
Dec-24


24-HR PM10 AT SENSITIVE RECEPTORS (µg/m3)
Project Standard = 50 µg/m3
60
50
40
30
20
10
0
PM10
Sa Khar Village
PM10
Hnan Ywa Village
PM10
Gyoke Pin Village
PM10
Nyaung Kan Village
Mar-24
Jun-24
Sep-24
Dec-24


24-HR PM2.5 AT SENSITIVE RECEPTORS (µg/m³)
30
25
20
15
10
5
0
Project Standard = 25 µg/m³
Mar-24
Jun-24
Sep-24
Dec-24
PM2.5
Sa Khar Village
PM2.5
Hnan Ywa Village
PM2.5
Gyoke Pin Village
PM2.5
Nyaung Kan Village

Ambient Noise Monitoring

Noise monitoring was conducted by a third party appointed by SMPC, 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. Noise monitoring was carried out on a quarterly basis at the monitoring points. Records for the following four monitoring rounds was provided for review:

- March 2024 (sampling period from March 18, 2024, to March 20, 2024);
- June 2024 (sampling period from June 11, 2024, to June 13, 2024);
- September 2024 (sampling period from September 18, 2024, to September 19, 2024); and
- December 2024 (sampling period from December 9, 2024, to December 10, 2024).

The monitoring data 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, compared to the relevant criteria, are presented in the following table.

The ambient noise levels recorded were well below the relevant criteria of 70 dBA at the monitoring points which were identified as industrial areas. Exceedances of project standards for night-time were monitored at Sa Khar Village for most of the monitoring rounds. The maximum night-time noise level monitored at the plant is 62.91 dBA. Due to the noise attenuation over a distance of 630 m, the noise impacts from site to the village will be insignificant, with levels lower than 30 dBA. The monitored exceedances are likely to be caused by the background noise levels.

Average Ambient Noise Levels for the Operations Phase

Name of Sampling Location	Noise monitoring location (time)	Mar 2024 Report (Leq)	Jun 2024 Report (Leq)	Sep 2024 Report (Leq)	Dec 2024 Report (Leq)	Project Standard
Myingyan CCPP Plant	N1 (daytime)	41.93	52.5	45.87	57.73	70
	N1 (night-time)	42.65	49.48	54.65	62.91	70
Sa Khar Village (630 m from site)	N2 (daytime)	45.65	54.06	47.59	53.68	55
	N2 (night-time)	42.53	52.14	44.90	53.7	45

Note: Values exceeding the project standard are underlined.

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

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.

Stack Emissions Monitoring

Hourly NOx stack emissions were monitored at 2 different emission units from January 1, 2024 to December 31, 2024. The maximum hourly emissions are listed in the table below: the hourly emissions are well 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 exceedances of IFC EHS emission limit only occurred during low load operations. The low load operations occurred rarely, only for 3 hours for Unit 1. Unit 2 did not operate in low load status during 2024. The temporary emission exceedances during infrequent low load operation are unlikely to cause a significant air quality impact.

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

Maximum Monitored Stack Emissions during Low Load Operations – Hourly NOx

Emission Unit	Date, Time	Maximum Hourly Emission (ppmv)	Maximum Hourly Emission (mg/Nm^{3a} @101.325 kPa, 293.15 K ^{b}, dry)
Unit 1	26 February 2024 18:00 – 18:59	35.3	67.5
Unit 2	06 December 2024 17:00 – 17:59	24.5	46.8

Note:

a. To convert NOx concentration from ppmv to mg/Nm^3, molecular weight of 46.01 g/mol is used for a conservative estimate.

b. Normal Temperature & Pressure (NTP): 101.325 kPa, 293.15. The molar volume of ideal gas is about 24.04 L/mol at NTP and dry condition.

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

Month	Min (ppmv)	Max (ppmv)	Min (mg/Nm^{3a} @101.325 kPa, 293.15 K, dry)	Max (mg/Nm^{3a} @101.325 kPa, 293.15 K, dry)
Jan	0.00	13.04	0.0	24.9
Feb	0.00	35.30	0.0	67.4
Mar	0.00	17.70	0.0	33.8
Apr	0.00	13.10	0.0	25.0
May	0.00	13.60	0.0	26.0
Jun	0.00	23.20	0.0	44.3
Jul	0.00	24.70	0.0	47.2
Aug	0.00	23.00	0.0	43.9
Sep	0.00	24.30	0.0	46.4
Oct	0.00	15.60	0.0	29.8
Nov	0.00	18.10	0.0	34.6
Dec	0.00	22.90	0.0	43.7

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

Month	Min (ppmv)	Max (ppmv)	Min (mg/Nm^{3a} @101.325 kPa, 293.15 K, dry)	Max (mg/Nm^{3a} @101.325 kPa, 293.15 K, dry)
Jan	9.50	12.40	18.1	23.7
Feb	7.30	20.20	0.0	38.8
Mar	8.10	20.40	0.0	39.0
Apr	0.00	16.10	0.0	30.8
May	0.00	19.60	0.0	37.4
Jun	0.00	14.40	0.0	27.5
Jul	0.00	15.70	0.0	30.0
Aug	0.00	0.00	0.0	0
Sep	0.00	0.00	0.0	0
Oct	0.00	0.00	0.0	0
Nov	0.00	23.20	0.0	44.3
Dec	0.00	24.50	0.0	46.8

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 (NOx)
Combustion turbine			
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 (NOx)
Combustion turbine			
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

Four (4) surface water monitoring events were conducted at the Central Monitoring Basin (CMB) wastewater discharge point on March 14, 2024, June 13, 2024, September 19, 2024, and December 19, 2024. 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 complied with the stipulated limits.

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

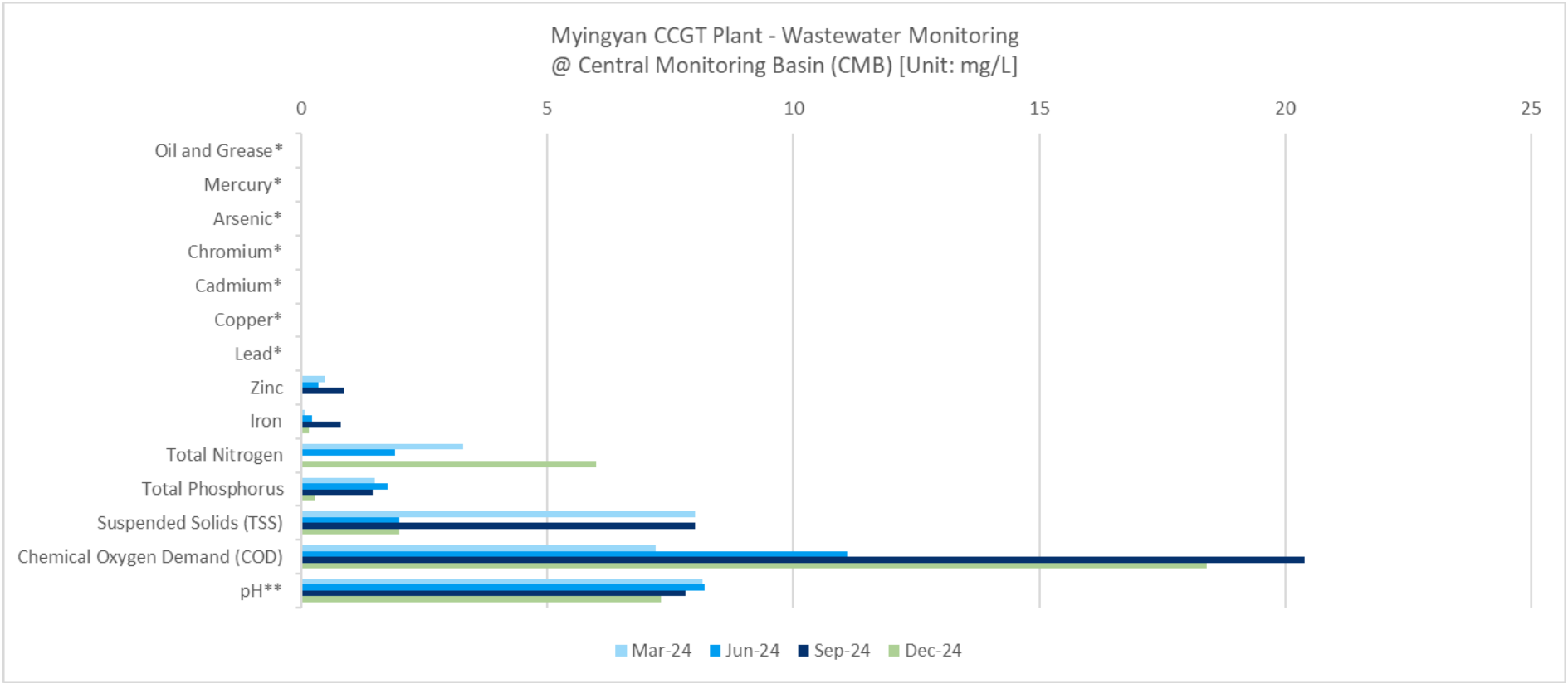
CMB Wastewater Quarterly Monitoring Results

Parameters	Units	Discharge Limits	Mar-24	Jun-24	Sep-24	Dec-24
pH	-	6-9*	8.15	8.2	7.8	7.31
Total Suspended Solids (TSS)	mg/L	50*	8	2	8	2
Chemical Oxygen Demand (COD)	mg/L	125**	7.2	11.1	20.4	18.4
Total Nitrogen	mg/L	10**	3.3	1.9	<0.5	6
Total Phosphorus	mg/L	2**	1.49	1.75	1.45	0.29
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*	0.484	0.348	0.866	0.008
Arsenic	mg/L	0.5*	≤ 0.01	≤ 0.01	≤ 0.01	≤ 0.01
Chromium	mg/L	0.5*	≤ 0.002	≤ 0.002	≤ 0.002	≤ 0.002
Cadmium	mg/L	0.1*	≤ 0.002	≤ 0.002	≤ 0.002	≤ 0.002
Copper	mg/L	0.5*	≤ 0.002	≤ 0.002	≤ 0.002	≤ 0.002
Lead	mg/L	0.5*	≤ 0.002	≤ 0.002	≤ 0.002	≤ 0.002
Iron	mg/L	1.0*	0.058	0.216	0.802	0.144
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).

CMB Wastewater Quarterly Monitoring Results



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

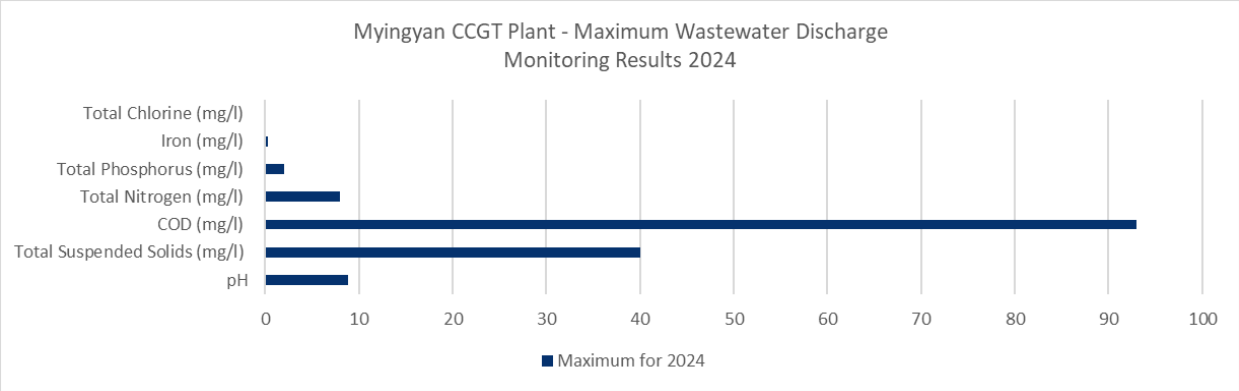
** The mg/L is not appliable for pH which is a unit of measure describes the degree of acidity or alkalinity of a solution. It is measured on a scale of 0 to 14.

Continuous monitoring was conducted at the same sampling point by SMPC for pH, Total Suspended Solids, COD, Total Nitrogen, Total Phosphorus, Iron and Total Chlorine from January 2024 to December 2024. The monitoring results were analysed by internal laboratory of SMPC and are reported in the following table and chart. The maximum values of the results across all months were well below the stipulated limits.

Wastewater Discharge Monitoring Results for the Myingyan CCGT Plant – Maximum Values

Parameters	Units	IFC Standard	Maximum for 2024
pH	-	6~9	8.78
Total Suspended Solids	mg/l	50	40
COD	mg/l	125	93
Total Nitrogen	mg/l	10	8
Total Phosphorus	mg/l	2	1.6
Iron	mg/l	1	0.24
Total Chlorine	mg/l	-	0

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 compliant with the stipulated limits.

Monitoring of the temperature of the water is also carried out at the discharge pipeline sampling point and the river water. Results in provided to the IESC for review showed that the temperature increase did not exceed 3 degrees Celsius (Myanmar Guideline Value).

CMB Wastewater Monitoring for the Myingyan CCGT Plant, 2024

Parameters	Units	IFC Standard	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
pH	-	6~9	8.06	8.2	8.16	8.1	8.36	7.88	8.78	7.68	8.02	8.2	8.36	7.04
Total Suspended Solids	mg/l	50	13	7	13	7	10	3	19	8	40	7	7	2
COD	mg/l	125	0	0	93	0	0	0	48	57	64	20	10	0
Total Nitrogen	mg/l	10	0	2	1	3	8	0	1	0	3	0	6	7
Total Phosphorus	mg/l	2	0.78	1.4	1	1.43	1.6	1.6	0.45	0.33	0.588	1.6	0	0
Iron	mg/l	1	0.11	0.13	0.098	0.11	0.08	0.19	0.11	0.112	0.24	0.125	0.16	0.067
Total Chlorine	mg/l	<0.2	0	0	0	0	0	0	<0.1	0	<0.1	0	0	0

Monthly Average Water Temperature Increase, 2024

Parameters	Units	Project Standard	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
CMB Discharged Water Temperature	°C	-	21.4	21.7	23.1	25.7	27.6	28.3	27.8	28.1	28.1	27.3	26.5	21.3
River Water Temperature	°C	-	23.2	24.8	26.8	28.9	29.1	28.5	28.5	29.1	30.1	28.6	27.3	24.1
Temperature Increase	°C	<3	2.3	2.5	2.7	2.12	2.6	2.5	2.3	2.8	2.7	2.5	2.3	2.2

Appendix 5

Community Development Activities Accomplished in 2024

Appendix 6

Stakeholder Engagement Database Year 2024

Appendix 7
Annual Public Stakeholder Engagement Presentation December 2024

Appendix 8
ASE Slide Posted on Noticeboards January 2025

Appendix 9
Project Documentation Reviewed for the Tenth 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	Rev07, 02 Jan 2025	PPMS Document Ref: 3.02.01.009
8	Occupational Health and Safety Management Plan	SMPC	Rev03, 31 Jan 2022	PPMS Document Ref: 3.02.01.010
9	Safe Work Procedure-Use of Vehicles and Traffic Management Plan	SMPC	Rev03, 27 Sep 2023	PPMS Document Ref: 3.02.01.015
10	Waste (Hazardous & Non-Hazardous) Management Procedure	SMPC	Rev03, 27 Sep 2023	PPMS Document Ref: 3.02.01.027
11	Ministry of Natural Resources and Environmental Conservation (MONREC) Environmental Conservation Certificate (ECC)	MONREC	August 2023	-
12	Incident Investigation and Reporting	SMPC	Rev03, 01 Apr 2024	PPMS Document Ref: 3.02.01.016
13	Quantitative Risk Assessment (QRA) Report	ERM (Singapore) Pte. Ltd.	2 May 2017	-
14	Sembcorp Myingyan Power Company Limited Organisation Chart	SMPC	31 December 2024	-
15	Soil Analysis Laboratory Certificates	Golden Dowa Ecosystem Myanmar Co. Ltd.	June 2020	GEM-LAB-202406099 and GEM-LAB-202412134
16	Third Party Wastewater Monitoring Laboratory Analysis for 2024	Golden Dowa Ecosystem Myanmar Co. Ltd.	Q1, Q2, Q3, Q4 2024	GEM-LAB-202403105, 202406098, 202409119, 202412133
17	Third Party Ambient Air and Noise Emissions Monitoring Reports for 2024	E-guard Environmental Services	Q1, Q2, Q3, Q4 2024	-
18	Third Party Wastewater and River Water Laboratory Analysis from Discharge Pipeline	Golden Dowa Ecosystem Myanmar Co. Ltd	Q1, Q2, Q3, Q4 2024	
19	Internal river water quality data	SMPC	Q1, Q2, Q3, Q4 2024	-
20	Myingyan Waste Data Summary 2024	SMPC	-	
21	Vendor Golden Dowa EcoSystem Myanmar Co., Ltd ISO 14001-2015 Certificate		January 2023	-
22	Job Descriptions for CSR Officer, Government Affairs Manager, Procurement and Logistics Manager, HSSE Manager	SMPC	-	-
23	Stakeholder Engagement Plan (4th revision)	SMPC	January 2024	1.01.04.001
24	Community Development Plan (4th revision)	SMPC	January 2024	1.01.04.992
25	Stakeholder Engagement Database 2023	SMPC	January 2024	-
26	Annual Public Stakeholder Engagement Presentation – English & Myanmar	SMPC	December 2024	-
27	Community Grievance Mechanism Procedures, Committee Org Chart and Reporting Lines	SMPC	2024	-
28	Community Development Activities Accomplished for 2024	SMPC	January 2025	-

Ref no.	Document Title	Organisation	Date	Document Number
29	Planned Community Development Activities for 2025	SMPC	January 2025	-
30	Workforce Data 2024 including EPGE and Security Force	SMPC	January 2025	-
31	SEP & CDP KPIs and Actual Achievements in 2024	SMPC	January 2025	-
32	MONREC Letter_SMPC-MM-2023-006 Submission of EMP and GHG	SMPC	31 January 2023	-
33	MONREC Report Jan-Jun 2024, MONREC Report Jul-Dec 2024	SMPC	31 January 2025	SMPC/MM/2024-052, SMPC/MM/2025-009
34	Myingyan IPP – Quarterly Operations and Maintenance Report	SMPC	Q1, Q2, Q3, Q4 2025	-
35	Stack Emission Data for NOx (CEMS data) for January – December 2024	SMPC	January 2025	-
36	HSSE Training Programs for 2024	SMPC	January 2025	-
37	HSSE Training Matrix for 2024	SMPC	January 2025	-
38	Tenth E&S Monitoring HSSE Report Presentation	SMPC	January 2025	-
39	Business Continuity Plan (BCP) PPMS Document	SMPC	Rev07, 29 July 2024; Rev08, 22 January 2025	1.02.03.003
40	SMPC Accommodation OHS Risk Assessment	SMPC	21 May 2024	MYN-FAC-RA-055
41	Operation and Maintenance Training Program	MTKK Engineering & Trading Co., Ltd	-	-