Environmental Monitoring Report

for Redevelopment and Enhanced Oil Recovery (EOR) Programme

April 2024 ~ September 2024

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Table 1: List of Acronyms

Acronym	Definition
ALARM	Advancing Life and Regenerating Motherland
API	American Petroleum Institute
Bcf	Billion Cubic Feet
BHA	Bottom-Hole Assembly
CSR	Corporate Social Responsibility
DNA	Deoxyribonucleic Acid
DWQS	Drinking Water Quality Standard
ECC	Environmental Compliance Certificate
ECD	Environmental Conservation Department
EIA	Environmental Impact Assessment
EMoR	Environmental Monitoring Report
EMP	Environmental Management Plan
EOR	Enhanced Oil Recovery
ERP	Emergency Response Plan
ETA	Estimated Time Arrival
GOCS	Gas and Oil Collecting Station
HoDs	Head of Departments
HSE	Health, Safety and Environment
IGC	International General Certificate
ISO	International Standard Organization
KPIs	Key Performance Indicators
LPG	Liquefied Petroleum Gas
MEDEVAC	Medical Evacuation
MFO	Mann Field Office
MMbbls	One Million Barrels of Oil
MOGE	Myanma Oil and Gas Enterprise
MYO	MPRL E&P Yangon Office
NDT	Non-Destructive Testing
NEBOSH	National Examination Board in Occupational Safety and Health
NEQEG	National Environmental Quality (Emission) Guidelines
PCC	Performance Compensation Contract
PPE	Planning and Production Engineering
PSD	Process Shut-Down
RO	Reverse Osmosis
SMC	Sludge Management Compound
WMC	Waste Management Compound

1. Executive Summary

Since 1996, MPRL E&P has established itself as a leading player in Myanmar's energy sector through its expertise in onshore and offshore exploration and production. Our success is built on a foundation of integrity, transparency, and ethical conduct, combined with a strong commitment to social and environmental responsibility. We prioritize creating a collaborative and supportive work environment that promotes continuous learning and personal growth, empowering our employees to drive the company's development. Our core mission is to operate with honesty and integrity while fulfilling our social and environmental obligations.

This ninth environmental monitoring report provides a detailed summary of the environmental activities and progress made from April 2024 to September 2024. It is the first report following the extension of the Environmental Compliance Certificate (ECC). The report includes data on our monitoring activities, improvements in environmental measures as outlined in our Environmental Management Plan (EMP), and assessments of air, noise, soil, surface water, and groundwater quality. These efforts were carried out in collaboration with the regional Environmental Conservation Department (ECD) of Magway. Additionally, the report highlights our initiatives to monitor tree survival rates in Mann Field, the successful implementation of the EMP and its eight sub-plans, and the challenges faced during daily operations.

Key Highlights within the monitoring periods (April 2024 to September 2024)

Environmental Performance

The Environmental Compliance Certificate (ECC) for our Mann Field EOR Project has been extended for the first time, with a new validity period of up to five years, until March 2029.

From July 23-26, 2024, MPRL E&P conducted an Environmental Monitoring Survey in partnership with the regional Environmental Conservation Department (ECD), as required by the approved Environmental Impact Assessment (EIA) and Environmental Compliance Certificate (ECC). The survey covered baseline sampling points near our operations, but Z4GW1 in Shwewargone ward was excluded due to its conversion to a waste disposal well. Additionally, the tube well near injection well #132 was unavailable for sampling due to recent flooding. Despite security and logistical constraints, we successfully completed the survey at the nearest accessible locations.

On May 14, 2024, the director of the regional Environmental Conservation Department (ECD), Magway, led an inspection tour of Mann Field. The visit included key sites such as the CSR mobile clinic in Kyarkan village, the summer art training program for children in Nan Oo village, GOCS-1, the concrete pad and additional cellar at well M-64, the mechanical workshop, the bio-filtration unit, and MPRL E&P's Base Camp.

Between July 23, 2024, to July 26, 2024, the Regional ECD (Magway) carried out the following monitoring activities:

- Air and Noise Quality monitoring at points Z3AQN and Z4AQN.
- Soil Quality monitoring at points Z3S1, Z3S2, Z4S1, and Z4S2.

Due to security concerns, Mann Field operations have been limited to daytime with a reduced crew. As a result, we selected Z3AQN and Z4AQN as monitoring points for air, noise, and soil quality, as they are closest to our current operations. The remaining monitoring points are temporarily inaccessible due to security and logistical challenges. Monitoring at these additional points will resume once conditions allow.

During our self-monitoring efforts, MPRL E&P conducted examinations of different water sources, such as Drinking Water Quality, Discharged Water from the MPRL E&P Base Camp, Domestic Water from the Down-hole and Mechanical Workshop, Hydro-test Water from the Warehouse, and groundwater near injection well M-132, adhering to our predetermined schedule. It was depicted in Articles 8.8 and 8.10.

As per the comments of ECD which was made on our presented EMoRs by ECD, MPRL E&P compared and presented the monitoring results of air, noise, soil, surface water and ground water quality with the baseline data from 2015, and implementations for those ECD's comments are presented in the Article 7.

Laboratory results for air, noise, water and soil quality monitoring, along with details of self-environmental monitoring activities, are included in the Annex section. Explanations for any parameters exceeding the guidelines are provided in their respective sections as necessary. While we conducted tests for all available parameters, DOWA has informed us that certain water parameters could not be tested at this time due to limitations and technical difficulties in their facilities.

In alignment with the waste management hierarchy, approximately 3.39 tons of used rubber waste, including V-belts, washers and worn-out safety shoes, were sent to the Yangon City Development Committee (Waste-to-Energy Plant) for energy recovery.

As part of our initiative to combat climate change, MPRL E&P, in collaboration with MOGE, conducted a tree planting campaign near the guest house area of MOGE (Mann). A total of 232 Seintalone mango plants were planted during this campaign.

To enhance awareness of Health, Safety and Environmental (HSE) practices among our workforce, the HSE department conducts monthly training sessions as detailed in our training plan. These sessions alternate between internal and external resources based on availability. Additionally, to promote environmental consciousness, presentations address topics such as "El Niño and La Niña," "Land Restoration, Desertification, and Drought Resilience," and "Catering with Care: Food and Workplace Safety Essentials."

During reading habit promotion events organized by the regional government, MPRL E&P participated alongside MOGE to present our Occupational Health and Safety

(OHS), environmental, and CSR activities, as well as our Environmental Impact Assessment report and bi-annual monitoring reports.

We actively engage in discussions on ecosystem and biodiversity conservation, water conservation, energy conservation, waste segregation, and waste management during induction training for new hires and at regular safety meetings. These initiatives are designed to foster a comprehensive understanding of HSE principles across our organization.

To enhance our Environmental Management Plan, we have reviewed our Occupational Health and Safety (OHS) and Environmental policies, updated our waste management procedures, and are in the process of drafting a corporate biodiversity policy, among other improvements.

All the formation water produced was 100% disposed into shut-in wells. The field operations continue to maintain the achievement of zero discharge of produced water since 24 August 2017.

MPRL E&P has successfully analyzed and measured nearly all parameters as pledged in the Environmental Impact Assessment (EIA) report, utilizing favorable conditions and laboratory facilities available in Myanmar.

MPRL E&P has shared the authorized Environmental Impact Assessment (EIA) report and all environmental monitoring reports through multiple channels, including our website, relevant government departments, public meeting venues, and project offices.

We are committed to fulfilling the obligations outlined in the Environmental Compliance Certificate (ECC) and EIA. Our ongoing monitoring and assessment efforts will continue to ensure strict compliance with all applicable regulations and standards.

Social Performance

In the first half of Fiscal Year 2024-2025 (April 2024 - September 2024), MPRL E&P's CSR Program achieved significant progress across various social performance initiatives. These include Community Infrastructure Development, Community Livelihood Development, the Educational Partnership Program, Community Capacity Building, the Community Healthcare Program, the Community-led Waste Management Program, the Operational Grievance Mechanism, Stakeholder Engagement, Corporate Philanthropy, and MOGE's Employee-centered CSR Program. These initiatives have not only empowered local communities but also reinforced our dedication to social responsibility and sustainable development.

In this reporting period, the development of community infrastructure remained a key focus, highlighted by the completion of a new access road to Auk Kyaung Pagoda and Monastery, improving connectivity to this important cultural site. We also maintained water filtration systems at schools in Mann Field, ensuring access to safe drinking

water. Regular inspections, testing, and upgrades were carried out, and clean water was provided to schools with inadequate systems. In support of education, essential school furniture and supplies were distributed to schools in Let Pan Ta Pin, Makyee Chaung, Chin Taung, and Let Pa Taw, reinforcing our commitment to enhancing the learning environment and fostering community development.

Our CSR Program continued to prioritize agriculture and livestock support. By collecting data on sunflower and chickpea harvests, we enabled local farmers in Mann Field to gain valuable insights into their crop yields. We also provided tomato seed packages and plastic mulches to promote sustainable farming in Mann Field. To improve livestock health and local breeding productivity, I-2 eye drop vaccines for chicken were distributed in the collaboration of Livestock Breeding Veterinary Department (Minbu).

We remained committed to empowering youth by providing scholarship supports under the educational partnership program. A total of 21 youths from Mann Field Communities received scholarships to pursue education at institutions such as the No.5 Industrial Training Center (Magway), Government Technical High School (Magway), State Agriculture and Livestock Institute (Pwint Phyu), and University of Medicine (Magway). Specialized training at the Noble Lamp Pharmacist Aide and Nurse Aide Training Centre (Magway) was also supported. Our continuous academic progress monitoring ensured that scholarship recipients achieved significant advancements in their respective fields.

During the reporting period, our CSR Program made a significant impact on fostering creativity and enhancing the educational development of children in the Mann Field Communities. Over the summer holiday, we organized both basic and advanced Summer Art Classes to encourage artistic expression. Additionally, with support from the CSR Program, primary school students received training in Basic Computer Skills and English Grammar, preparing them for participation in the Online English Learning Program (OELP). As of this period, a total of 45 children (Grades 2-4) are actively learning online English at the community centers in Mann Field.

Raising community awareness on environmental sustainability has remained a key focus of our CSR efforts. Since 2017, we have consistently supported community-led waste management and cleanup initiatives. In this Fiscal Year, in partnership with the Environmental Conservation Department (ECD Magway), we marked World Environment Day 2024, with a focus on themes such as ‘Land Restoration, Desertification and Drought Resilience.’ As part of our environmental awareness efforts, we organized essay and painting competitions, community talks, and awareness campaigns, underscoring our commitment to environmental conservation and leadership in sustainability.

With the commitment to enhancing healthcare for vulnerable populations, our Mobile Clinic Program continued to provide free healthcare services, treating 17,290 patients through 587 clinic sessions. In collaboration with the Trachoma Control and Prevention of Blindness Program (Minbu), we organized an eye health program for seniors in the Mann Field Communities. The event, held at Auk Kyaung Pagoda, attracted 314 attendees for health talks and eye screenings. Of the participants, 266 received

comprehensive eye exams, leading to the results of cataract surgeries, eyeglass prescriptions, and other treatments. Eyeglasses and eye drops have been distributed, with cataract surgeries scheduled to begin in October 2024.

During the first half of this Fiscal Year, we successfully resolved eight cases through our Operational Grievance Mechanism (OGM), raising the total number of resolved cases to 182 since the mechanism's launch in 2014. This initiative underscores our dedication to promptly and effectively addressing community concerns, thereby fostering trust and collaboration with local stakeholders.

We placed a strong emphasis on transparency and engagement through consistent communication with local stakeholders and government officials. Key stakeholder meetings were convened to discuss community investments and to provide updates on the progress of our CSR initiatives. Significant documents, including the Sustainability Report 2023 and the UNGC Communication on Progress (CoP) report, were disseminated to stakeholders. Furthermore, updates to the company's website and publications, such as the newsletters Insight! and Doh Mann Myay, further exemplified our commitment to ensuring that stakeholders remain well-informed.

In addition to infrastructure and healthcare, we actively supported local cultural events, including the Magway and Minbu District Thingyan Festivals. Our CSR contributions extended to educational initiatives, such as the 'Development of School Libraries and Promoting Reading Habit' event. We also made a significant donation of essential endotracheal tubes to the Intensive Care Unit at Yangon Children Hospital.

In this Fiscal Year 2024-2025, MPRL E&P introduced an extensive CSR Program aimed at supporting MOGE employees and their families. In partnership with MOGE, MPRL E&P provided essential supplies and contributed to religious events. By placing employees at the center of our efforts, we ensure that the well-being of MOGE employees and their families is effectively prioritized.

In conclusion, we believe that our strategic social investments have made a lasting positive impact on local communities. These achievements not only demonstrate our commitment to enhancing lives but also underscore our leadership in promoting sustainable development. MPRL E&P remains a dedicated partner in building stronger, healthier, and more empowered communities.

Environmental Monitoring Report

for Redevelopment and Enhanced Oil Recovery (EOR) Programme

April 2024 ~ September 2024

2. Project Description and Production Information

The Mann Field, discovered in 1970 by MOGE, currently includes 674 wells of which 287 were produced as of August 2024 while the remaining wells were shut in. The total produced oil and associated gas from the Production Enhancement Project is 16.11 MMbbls, including 10.2 MMbbls above the normal decline curve, and 18.5 Bcf gas as of August 2024.

2.1 Mann Field Operation Status

Under the PCC, MPRL E&P is undertaking a re-development operations activity of the Mann Field to improve the environmental performance of the operations.

The operation activity includes:

Infill well drillings – due to the current decline of the field, MOGE and MPRL E&P have been drilling infill wells in main Mann Field areas close to currently producing wells and outside of surrounding communities, however no infill well activity during the last six months.

Deepening Wells – to deepen tens to hundreds of feet from existing wellbore by drilling, no activity of deepening well during six months.

Chemical Treatment –to ensure that oil is maximized from the reservoir by using small amount of chemicals such as paraffin dispersant, paraffin inhibitor, and non-chemical GreenZyme. GreenZyme is a biological liquid enzyme that is not only harmless to any individual's health but also an environmentally friendly product.

Remedial and workover operations – maintain oil production by servicing such as swabbing, scraping and bailing of producing wells.

Improvement of Pumping Unit – pumping units will be / have been repaired to reduce the likelihood of spills in the surrounding areas.

Refurbishments of the Gas and Oil Collecting Stations (GOCS), Flow Pipes and Drain Pits – to ensure the health and safety to surrounding communities and reduce the risk of spills.

Rehabilitation of Shut-in Wells – sealing off shut-in wells to avoid contamination of surrounding and restoring surrounding areas to resemble their original state.

Re-perforations will be undertaken for better control of the well.

Development of Produced Water Management System – produced water will be injected into the shut-in wells.

2.2 Current Operations Summary

2.2.1 Remedial and Work Over Operations within 6 months

The following table shows the monitoring and tracking of the remedial and work-over operations activities within six months.

Table 2: Remedial and Work Over Operation Activities

No.	Service	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Total
		Frequency of Activities						
1	Bailing & Change Tubing	3	5	3	8	11	9	39
2	Bailing Inside Liner		1					1
3	Bump Valve & RSBV	1	4	5	5	2	2	19
4	Change all Tubing	1		1	1	2		5
5	Change Casing Protector	1						1
6	Change Wellhead		1				1	2
7	Check BHA and Change all Tubing	3					2	5
8	Check BHA, Bailing and Change Tubing	1	1			1		3
9	Clean out Bottom	4	3	6	3	3		19
10	Fishing						2	2
11	Injectivity Test	1						1
12	Isolation for 5-1/2" × 9-5/8" Annulus					1		1
13	Lower down PSD & Pump Service					1		1
14	Prepare for BHP/BHT Survey				1			1
15	Preparation for P-100 Operation	1		2	2	1	1	7

No.	Service	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Total
		Frequency of Activities						
16	Pull Out Sucker Rod String	1						1
17	Pull Out Open Shoe Tubing String				1			1
18	Pump Service	23	34	31	28	25	31	172
19	Pumping Test	1	1	1	2			5
20	Raise Up PSD and Pump Service		1	1	2	1		5
21	Recover BHA	3	3				1	7
22	Replace Polished Rod Liner & Rotator	1				1	2	4
23	Retighten Wellhead	1						1
24	Run in Sucker Rod String & PTP			2	2	1		5
25	Scrapping, Bailing & Change Tubing	2		6	3	1	1	13
26	Swabbing, Bailing & Change Tubing	2	1	1	1			5
27	Swabbing Test				1			1
28	Zone Combination	1					1	2
29	Zone Isolation			1				1
Total Serviced Wells (Monthly)		**51**	**55**	**60**	**60**	**51**	**52**	**330**

2.2.2 Mobile Power Generator Register Lists in Mann Field

The following Plant/ Equipment are being used in Mann Field.

Table 3: Mobile Power Generator List

No	Unit Name	Engine Type	Horse Power	Units
1	P-100	CAT-3408	365HP	1

No	Unit Name	Engine Type	Horse Power	Units
2	P-82	CAT-3306	270HP	1
3	P-75	Cummins N855-P-236	235HP	1
4	P-70	Cummins N855-P-250	250HP	1
5	P-69	Cummins N855-P-250	250HP	1
6	P-65	Detroit 6V71	260HP	1
7	Tractors	KaSaLa	50HP	3
8	35Tons Tadano Crane	Nissan-RF8	340HP	1
9	416 Backhoe	CAT-4.236	85HP	1
10	950 Forklift	CAT-3304	160HP	1
11	966 Wheel Loader	CAT-3306	200HP	1
12	L-39 Forklift	Nissan – PE6	275HP	1
13	Grader	CAT-3306	200HP	1
14	D8K Dozer	CAT-D342	275HP	1
15	GD Mud Pump	CAT-3306	350HP	1
16	OPI Mud Pump	Detroit-6V71	365HP	1
17	JWS Mud Pump	Detroit-8V92	469HP	1
18	15PS King Power Swivel	CAT-3034(C6.6)	173HP	1
19	Power Pack	Deutz-F6L912	63HP	2
20	Welding Machine	Deutz-F3L912	25HP	2
21	Sullair Compressor	CAT-3054	85HP	1
22	55Tons Kato Crane	MITSUBISHI-8DC9 engine	320HP	1
23	Ford Ranger (2Q/6064)	Ford (TDCi engine)	2.2CC (150 HP)	1
24	Wire Line Unit	YAMAHA	10HP	1
25	Blue Truck	Cummins NTC-350	350HP	1
26	White Truck	Cummins NTC-350	350HP	1
27	Vehicle			25
28	Weed Cutting Machine	Honda	1.3 HP	5
29	Weed Cutting Machine	VHV	7.5 HP	1
30	Diesel Engine Water Pump	KEMAGE	4 HP	2
31	Denyo, Genset: DCA-400SPK-II	Komatsu Eng: SA6D140-A	480 HP	1

3. Environmental Management Organization

MPRL E&P is dedicated to allocating necessary resources for the execution and management of the EMP, which includes skilled human resources. The organizational structure responsible for environmental management and implementation of the EMP can be found in Table 4.

Table 4: Environmental Management Organization Roles and Responsibilities

Position	Responsibility
MPRL E&P	
Deputy Chief Executive Officer and Executive Director	Oversee and coordinate all activities on the Project; ultimately responsible for environmental issues. Ensure delivery by the asset of its environmental, and operational targets. Ensure effective communication with all stakeholders.
Field Operations Manager	Technical aspects of the Project include contractor supervision during operations. Responsible for the execution of the Emergency Response Plan including the Oil Spill Contingency Plan. The Field Operations Manager has control over strategic project aspects and interaction with subcontractor staff where project activities take place.
Construction Manager	Technical aspects of the Project including subcontractor supervision during Project implementation.
Assistant HSE Manager / Site HSE Officer	Ensuring in cooperation with the Environmental Officer, that the Project and subcontractors operate following applicable regulatory environmental requirements and plans. Monitor implementation of environmental protection measures, (on-behalf of Environmental Officer), and assist with technical input into oil spill requirements. The HSE Officer is monitoring the implementation of Health, Safety, and Environmental protection measures, including tracking, inspection, reporting, and assisting with technical input into emergency response procedures and implementation as per the EMP.
Community Liaison Officer	Liaise with local communities, farmers and government regulators on the Project's behalf. Implement environmental awareness and education programmes with communities.
Contractor	
Project Manager	Responsible for subcontractor technical performance and compliance
HSE Manager	Ensure that environmental regulatory requirements are met and that EMP requirements are properly implemented.

4. Highlights on HSE Key Performance Indicators

The Field Management team and HSE team have agreed to set up KPIs for the field operation team. These KPIs are essential for ensuring safe and environmentally friendly operations. Integrating Health, Safety, and Environment (HSE) practices as a vital part of the field operation is a key aspect of sustaining continual improvement.

Achievement vs. Failure based on Set KPIs

In this context, the field operation team's KPIs are continuously monitored and reviewed throughout the fiscal year to identify both the performance attainment and opportunities for enhancement by the end of the specified timeframe. Despite facing highly challenging circumstances, the review indicates that the following KPIs were successfully achieved.

For Fiscal Year 2024– 2025

We are pleased to announce that the Mann Field Production Enhancement Project has successfully achieved total of 3,949,363 man-hours as of 25 September 2024, without a lost-time accident. This achievement marks another significant milestone reached through the dedicated efforts of our field team and the support of the MOGE team.

In terms of reactive performance, as previously mentioned, there were no lost-time accidents during the fiscal year, and the total number of recordable cases (Environmental Incident) also met the established KPI.

As part of our proactive performance efforts, the field team received 4,456 CARE Cards from 01 April to 25 September 2024. The organization has shown significant progress by achieving 70% of the annual target of 6,000 CARE Cards within the first six months, reflecting strong engagement and commitment to safety and improvement initiatives. We analyzed the trends in unsafe actions and conditions by utilizing data from the submitted CARE cards and have the opportunity to apply this analysis for further improvements. These achievements are made possible by the dedication of CARE Card submitters and the continued support from all Heads of Departments (HoDs) and the MOGE Team.

Due to the acceleration of operational activities, we are placing greater emphasis on training to enhance HSE knowledge and staff competency. The implementation of mandatory HSE training and awareness programs has been completed as per the planned schedule. (Refer to section 9.4 HSE Training).

To prevent accidents, protect workers, and ensure that operations are conducted in accordance with industry standards and regulations, as well as to maintain a high level of safety and compliance, Permit to Work audits were performed using a checklist. These audits were carried out 100% in accordance with the plan.

To ensure the safety of staff and assets, multiple inspections were carried out for Lifting Gear, Eye Wash Station, and Wheeled Spill Kits. These inspections successfully met of the set target.

As part of MPRL E&P's commitment to foster a positive HSE culture within the organization, several award programs have been established. The "Outstanding HSE Best Performance" award program aims to bolster the HSE culture, while the "Contribution Award in HSE Activity" recognizes nominated personnel to encourage participation and effectiveness. Additionally, the "Best Quality CARE Card Award" promotes ownership and helps reduce property damage and loss.

To enhance safety performance, mitigate risks, ensure compliance, and foster a safety culture within the organization, individual field workers have HSE Key Performance Indicators (KPIs) established and regularly reviewed as part of their performance monitoring process. To enhance safety performance, reduce risks, ensure compliance, and foster a safety culture within the organization, individual field workers have HSE Key Performance Indicators (KPIs) established and regularly reviewed as part of their performance monitoring process.

A Heat Stroke and Heat Stress Awareness Campaign was conducted at Mann Field, aiming to educate outdoor workers on preventive measures and first aid techniques to manage potential heat-related hazards in their work environments.

As part of the environmental action plan's implementation, the field team maintained a 100% reinjecting record of disposal of produced water back into the shut-in well. Achieving such a record requires tremendous effort, including proper monitoring and maintenance of injection facilities, control and monitoring of critical data such as injection pressure, volume, and rates, as well as the proper maintenance and servicing of injection wells.

To mitigate environmental impact, to conserve biodiversity, to have positive impact on community health and wellbeing and for the purpose of social cohesion and engagement, Tree Plantation Campaign is conducted in Mann Field.

A Man-Down Drill exercise was conducted at Mann Field as a crucial element of emergency preparedness and safety planning, ensuring that workers are adequately prepared to respond promptly and effectively to medical emergencies.

To encourage the team's emergency response capabilities and assess their readiness, the Field Management team successfully conducted a "Muster Drill" at the Base Camp.

On 15 September 2024, the Field Management team efficiently conducted an "Oil Spill Drill" near the M-98 well site at Mann Field, with the objective of evaluating response procedures and ensuring the team can effectively handle such situations in the event of a spill.

5. Environmental Management Plan

The Environmental Management Plan (EMP) aims to enforce compliance with the project's policies and fulfill the mitigation, monitoring, and other commitments outlined in the EIA Report. While the EMP serves as a broad framework document, it is intricately linked to various comprehensive management plans detailed below, each designed to set criteria for meeting specific environmental requirements.

The management plans, which were developed to ensure compliance with specific environmental elements, are described in detail in the EIA report. These plans outline the management and mitigation measures that must be implemented, the responsible parties and timeframe for implementation, and reporting requirements. MPRL E&P is currently implementing and monitoring these plans according to the schedule outlined in the EIA report.

- Waste Management Plan
- Emergency Response Plan (including Fire Risk Management Plan)
- Spill Response Plan
- Health and Hygiene Management Plan
- MEDEVAC Procedures
- Transportation Management Procedures
- Contractor's Environmental Management Plan(s)
- Environmental Monitoring Plan

5.1 Environmental Management System Framework

MPRL E&P's approach to environmental management is based on the ISO 14001 framework and incorporates internal policies, national regulations, and best practices from international sources. The company conducts regular environmental analysis and monitoring to ensure that its business activities have minimal negative impacts on the environment and the communities affected by its operations.

Figure 1: MPRL E&P Environmental Management System Framework

5.2 Waste Management Plan

The Waste Management Plan aims to effectively manage any surplus materials from the construction and operational activities in the Mann field, ensuring proper handling and disposal of waste.

The waste management plan aims to achieve the following objectives:

- Managing waste in a controlled and environmentally sound manner,
- Complying with all statutory and contractual requirements related to waste management,
- Recovering resources whenever possible and safe for re-use and recycling,
- Recording and tracking all generated waste appropriately.

The waste management plan has been implemented during the operation phases, dividing waste streams into four categories:

1. Hazardous recyclable,
2. Hazardous non-recyclable,
3. Non-hazardous recyclable, and
4. Non-hazardous non-recyclable.

The key steps in the waste management process are:

- Segregating waste into hazardous, general and recyclable categories using suitably labeled bins,
- Transporting bins/drums to approved disposal locations with the waste type clearly labeled on each one,
- Including each waste bin/drum sent on the backload manifest,
- Recording waste transportation in the waste database.

Brief Waste Management Process is described as follows:

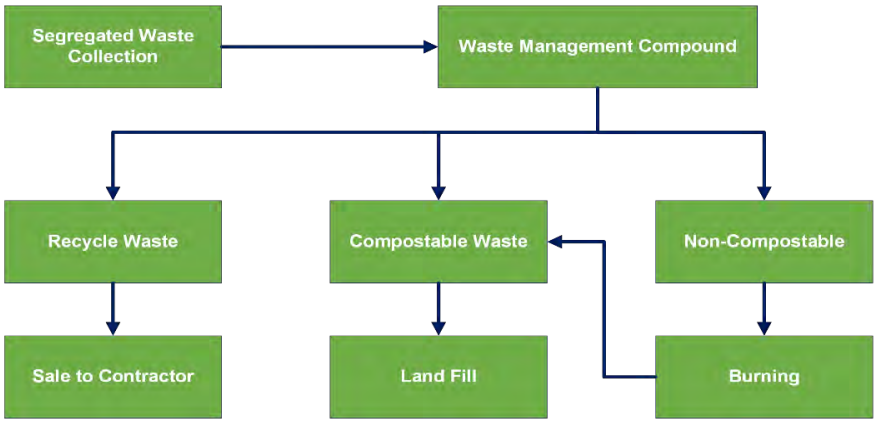

Figure 2: Waste Management Flowchart

5.2.1 Monitoring on Waste Management Status

During the monitoring period of April 2024 to September 2024, the waste management compound facilities remain unchanged from previous monitoring periods.

Existing Solid Waste Management System

The solid waste management framework implemented by MPRL E&P primarily encompasses waste collection, segregation, and recycling, with a limited emphasis on the principles of the 3Rs (Reduce, Reuse, Recycle) that have been introduced.

Figure 3: 3Rs

At Mann field, waste segregation has been implemented, which involves sorting and separating waste based on its characteristics. The waste materials are segregated at the source by providing bins that are marked with universal symbols and labelled in both English and Burmese, and are coloured for storing waste as follows:

- **Green** – General Wastes,
- **Yellow** – Recycle Wastes,
- **Red** – Hazardous Wastes,
- **Black** – Non-Hazardous Wastes,
- **Blue** – Paper

Bins were placed in all locations, including GOCS, offices, warehouses, workshops, construction sites, base camps, and clinics, for waste collection. The waste collection bins will not be allowed to overflow before they are emptied, and damaged waste storage receptacles will be promptly replaced. A sufficient number of bins were placed at each waste collection point for each type of waste, based on the expected variety and quantity of waste from that location.

Waste of any kind will not be stored permanently or for prolonged periods at the Waste Management Compound. The following procedure has been implemented for the temporary storage of all waste:

- The waste is properly stored in the designated area that is separated from storage areas for other materials/substances,
- The facilities are identified for each designated area, such as Recycle Area, Hazardous Area, etc.

5.2.2 Solid Waste Management in MPRL E&P

The management of waste is a crucial aspect of business operations, and all waste produced is recorded. MPRL E&P is monitoring and ensuring compliance with the National Environmental Quality (Emission) Guidelines and adhering to industry best practices.

Composting

Based on our self-monitoring records spanning six months from April 2024 to September 2024, the composting process has yielded approximately 1310 kg. of compost. While the process is notably rapid during summer, the composting bacteria do not function optimally under neutral conditions in the rainy season.

Figure 4: Composting of food waste and garden waste at WMC

Recycling

At our facility, we collect and sell recyclable materials such as glass, paper, cardboard, plastic bottles, and materials to third-party vendors. To ensure proper recycling, these materials are separated from general waste during the collection process.

General Waste is collected from all areas within the Mann Field Operations and temporarily stored at the Waste Management Compound. Waste collection is carried out periodically every week using Jumbo big bags to reduce plastic bag usage, which can be reused multiple times. Additionally, the plastic bags used in the waste bins are also reused, except for the organic waste bin.

Figure 5: Food Waste Temporary Collection at Base Camp and Sold out Used Lead-Acid Batteries to Re-use/ Re-cycle Parties

General Waste Storage in WMC

Figure 6: Waste Management Compound (WMC)

After being re-sorted, packed and stored in the recycle waste storage area, the recycle materials are disposed of by an authorized third party.

The details of the type and quantity of recycle wastes have been registered using the 'Waste Register' form.

Recycle waste intended for disposal with an approved third-party vendor must be monitored using the "Waste Disposal Contractor Approval' form, which has been approved by the Field Operations Manager and/or the HSE Officer/ Environmental Officer.

Figure 7: Oil Contaminated Waste Stored at WMC

From April 2024 to September 2024, a total of 22,300 kg. of hazardous waste is collected from all work-related areas and is properly stored at the Waste Management Compound. The volume of hazardous waste collected was the highest amount in May 2024, with most of it being dry sludge from GOCSs. The dry sludge/ produced sand is temporarily stored at the Waste Management Compound, while the wet sludge is stored at the Sludge Management Compound.

5.2.3 Monitoring Data and Statistics

The Waste Statistics during the monitoring period from April 2024 to September 2024 are as follows:

Table 5: Monthly Waste Monitoring Record

Month	Hazardous Waste (kg.)	Non-hazardous Waste (kg.)	Composting (kg.)
April 2024	6,000	660	240
May 2024	11,900	695	280
June 2024	4,400	710	215
July 2024	0	636	120
August 2024	0	595	215
September 2024	0	4,544	240
Total	**22,300**	**7,840**	**1,310**

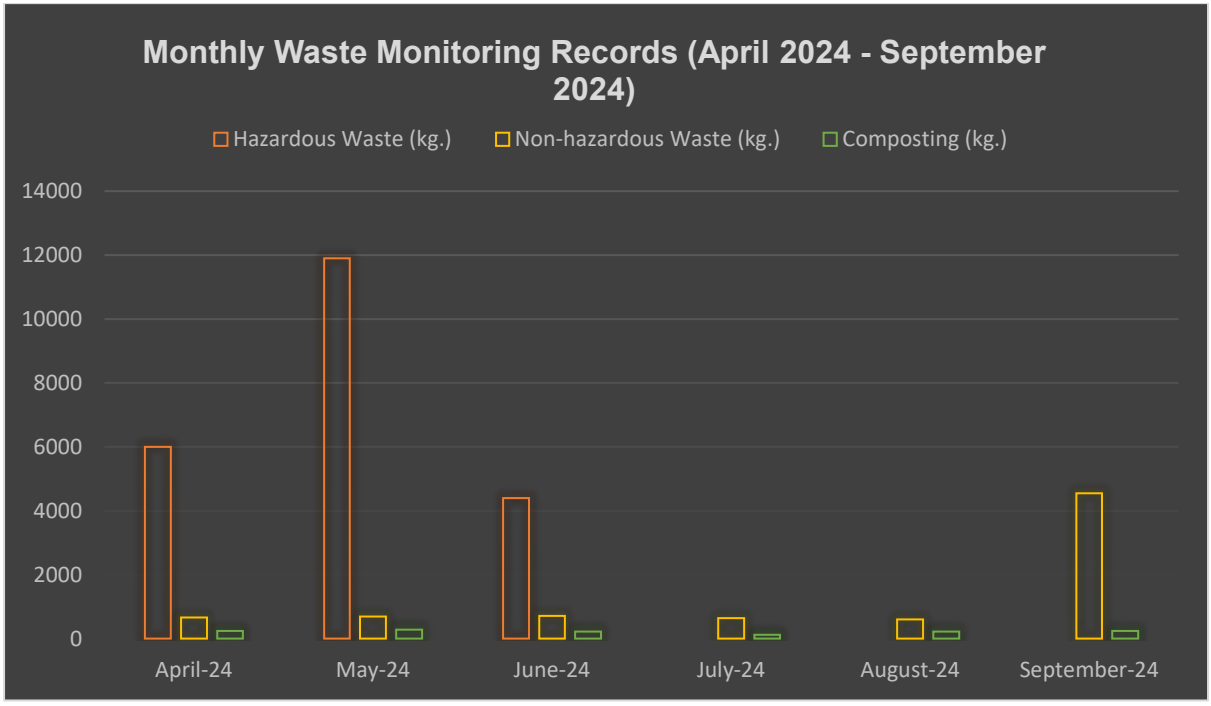

Figure 8: Monthly Waste Monitoring Records from Oct 2023 - Mar 2024

Table 6: Yearly Waste Monitoring Record

Year	Hazardous Waste (kg.)	Non-hazardous Waste (kg.)	Composting (kg.)
2020	1,470	16,267	1,204
2021	96	5,369	1,901
2022	48,113	9,000	2,880
2023	23,718	13,324	2,560
2024	32,800	16,476	2,075

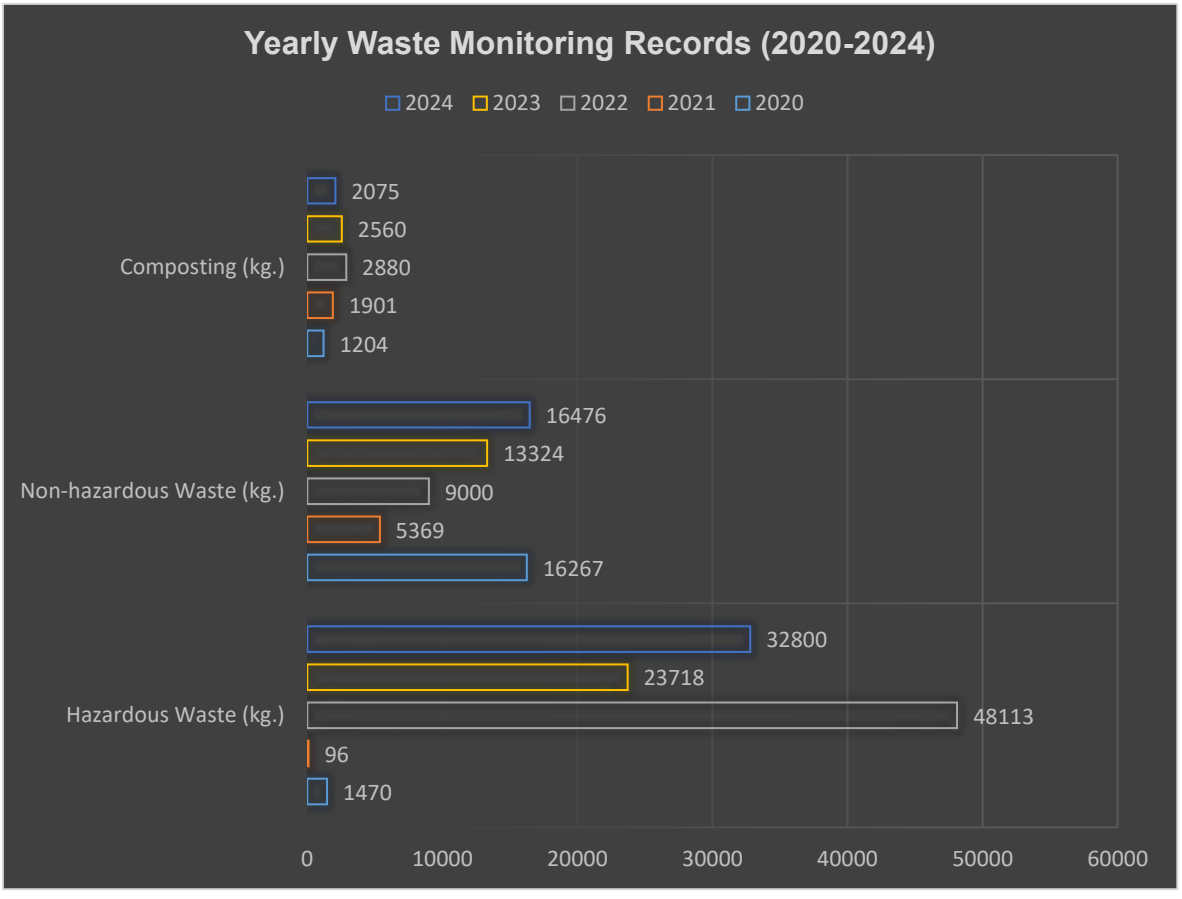

Figure 9: Yearly Waste Monitoring Record (2020 - 2024)

5.3 Emergency Response Plan

MPRL E&P will develop plans and procedures to identify potential environmental accidents, health and safety emergencies, and adverse environmental and social impacts that may arise. These plans will include, but not be limited to, the following measures:

- Notification procedures,
- An emergency response organization with personnel trained to fulfill their roles and responsibilities,
- Adequate and appropriate emergency response equipment readily available to respond to minor incidents,
- Capability to quickly request additional assistance.

MPRL E&P is responsible for managing and responding to emergencies arising from the Project activities in Mann Field. The emergency response plan (ERP) which also covers fire risk management, includes:

- Hierarchy of protection,
- Preparedness and planning for emergencies,
- Employee responsibilities,
- Emergency response procedures,
- Medical emergencies including medevac procedures,
- Natural Disasters (e.g. floods, cyclones, earthquakes) related emergencies,
- Fire and electrical related emergencies, and
- Any other emergency response plan is required by the Republic of the Union of Myanmar Authorities.

5.3.1 Emergency Response Plan Implementation and Progress

MPRL E&P has prepared emergency response plans for potential scenarios that may arise during field operations. These plans effectively communicate with staff at all levels of the operation and allocate responsibilities based on their respective roles.

MPRL E&P reviews and revises the emergency response plans within predefined timeframe. In the event of an incident, the related emergency response plan is reviewed and revised as necessary.

Furthermore, regular training sessions are organized to ensure all personnel remain fully informed about emergency protocols, fostering a culture of safety and preparedness across the operation.

The aim to acquaint all employees with fire outbreak scenarios and enhance ties with local authorities was achieved through a muster drill conducted at 06 July 2024 at the base camp. The drills aimed to enable employees to proficiently execute the designated fire emergency response procedure.

Figure 10: Muster Drill Exercise

5.4 Spill Response Plan

MPRL E&P has developed spill response plans and procedures to identify and respond to potential spills and prevent or mitigate any adverse environmental and social impacts that may arise. The plans include but are not limited to:

- Spill control hierarchy,
- Control measures to prevent spills such as proper engineering design, handling, storage and transportation guidelines on hazardous materials,
- Spill response training,
- Spill response organization and procedures as well as spill response PPE and drill requirements.

5.4.1 Spill Response Plan Implementation and Progress

MPRL E&P has developed a comprehensive spill response plan, incorporating key risk control measures such as impermeable bases for facilities, segregated drainage systems, and oil sumps with interceptors. A zero-discharge wastewater recycling

system reduces spill risks, while secondary containments are added to well sites, and the sludge compound is equipped to handle spill responses effectively.

Spill response drills are scheduled to enhance understanding of spill procedures and emergency protocols. These drills aim to clarify team responsibilities, improve practices, and raise awareness, ensuring a more efficient response to real spill incidents.

To evaluate the team's response procedures in the event of a spill and ensure effective handling of such situations, the HSE Department conducted a Spill Drill at M-98 on September 15, 2024. The drill was organized by the Production Team Leaders in collaboration with the HSE team, who provided briefings to staff to ensure that everyone was well informed and prepared for a proper spill response.

Figure 11: Spill Drill Exercise at M-98 on 15 September 2024

5.5 Health & Hygiene Management Plan

MPRL E&P has established a system to evaluate and manage risks associated with personal health and hygiene, and regularly assesses preventive measures that should be implemented.

MPRL E&P identified hazards as well as developed preventive and mitigation measures related to the health and hygiene of personnel working at Mann Field. The plan includes but is not limited to:

- Responsibility for implementation of the Health and Hygiene Management Plan,
- Identification, prevention, and responses to illnesses such as health-related illnesses and diseases such as those transmitted by insects and parasites,
- Pre-assignment immunization and health screening requirements,
- Preventive measures to avoid snake bites as well as sickness arising from general hygiene issues and travel to and from the Mann Field

5.5.1 Health & Hygiene Management Plan Implementation and Progress

MPRL E&P has established a comprehensive plan to evaluate and manage risks related to personal health and hygiene. The plan includes advice and resources

provided by an MPRL E&P onsite Doctor, as well as control measures to mitigate risks associated with diseases that are prevalent in the operational area. The plan is regularly assessed and updated to ensure its effectiveness.

Figure 12: Camp inspection at MPRL E&P Mann Field Base Camp

To enhance safety, anticipate challenges, and minimize risks, weekly camp inspections are conducted. The findings from these inspections are documented, communicated, and appropriate actions are taken to address any issues.

Figure 13: Physical Exercising at MPRL E&P Base Camp

5.6 MEDEVAC Procedures

To address the challenges posed by the remote location of the Mann field and the time required for medical evacuations, MPRL E&P has developed specific procedures that must be followed in the event of a medical evacuation (MEDEVAC). To ensure the health and safety of all personnel, anyone rotating to work at the Mann field undergoes a thorough medical examination before being engaged, and these examinations are repeated at two-year intervals.

MPRL E&P will continue to provide information about the Mann field's conditions and remoteness to the medical examiner. The medical examiner will assess whether individuals are suitable for working at the Mann Field, taking into account the potential health and safety risks. Any information obtained during the medical examination will be kept confidential between the employee and the medical examiner, unless the employee provides express written permission to share the information with MPRL E&P. MPRL E&P is committed to providing medical evacuation (MEDEVAC) facilities to all personnel working on the MPRL E&P project in Mann Field, including sub-contracted personnel. This includes a field clinic located at the worker base camp, where emergency medical treatment can be provided by MPRL E&P's medical staff. In the event that additional medical support is required, MEDEVAC services are available to transport patients to appropriate medical facilities for further treatment.

5.6.1 MEDEVAC Procedure Implementation and Progress

To ensure the safety of personnel working in the Mann field project, MPRL E&P has developed procedures for medical evacuation (MEDEVAC) in the event of an injury or illness. The company is committed to providing MEDEVAC facilities to all staff, which include a field clinic with a site doctor at the worker base camp, an ambulance, and medical supplies for emergency treatment. The procedures are designed to minimize the time taken to transport patients to hospitals with appropriate medical standards.

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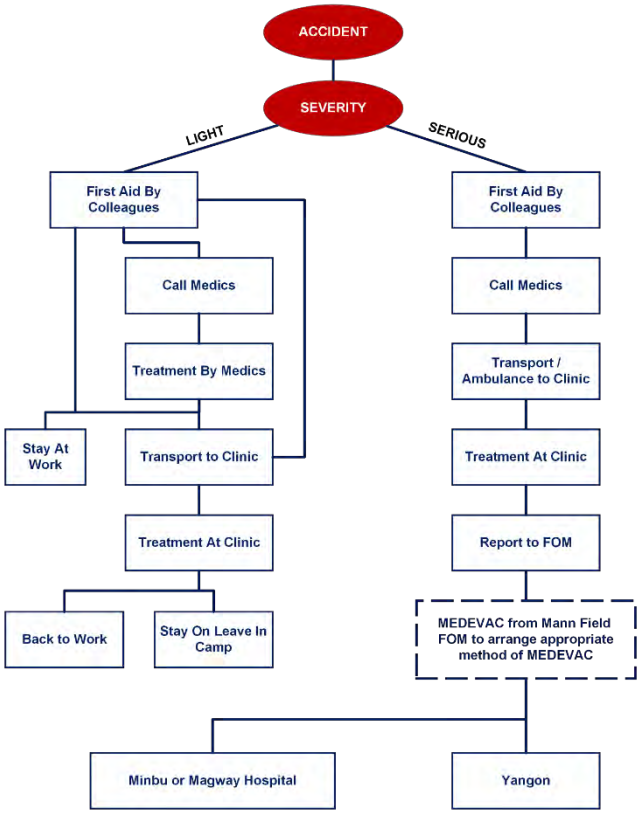


Figure 14: Medical Evacuation Flowchart

Medevac drill exercises are essential for ensuring the safety and well-being of individuals in high-risk environments, especially in the oil and gas industry. They enable organizations to prepare for and respond to medical emergencies efficiently, minimize risks, and continuously improve their capabilities, ultimately contributing to the overall safety and success of their missions or operations.

To get all employees familiar with the medical emergency condition and to be able to handle per the set procedure, MEDEVAC drills are planned and conducted.

To practice and evaluate emergency team's response to a man-down situation, ensuring effective communication, timely medical intervention, and efficient evacuation, Man Down & Stretcher Drill Exercises were conducted on 30 July 2024.

Figure 15: Man-down & Stretcher Drill Exercises

5.7 Transportation Management Procedures

The Transportation Management Procedures aim to establish strict controls over traffic routes, speed limits, road safety requirements, vehicle loading and maintenance measures, as well as response procedures to traffic-related emergencies. These measures are implemented to ensure the safe and efficient transportation of personnel and equipment. The following management actions are covered under Transportation Management Procedures:

- Good practices on rest regime, timing routes and speed of driving,
- Safety rules related to MPRL E&P vehicles usage,
- Procedures for road risk assessment, and
- Procedures to rescue the driver and passenger(s) who fail to get to their check calls or destination by the ETA designated on the Journey Management Plan

5.7.1 Transportation Management Procedures Implementation and Progress

MPRL E&P has established a transport management procedure to control traffic routes, speed limits, road safety requirements, vehicle loading, and maintenance measures. The procedure also includes protocols for responding to traffic emergencies. To maintain high safety standards, MPRL E&P has outsourced transportation to its sister company, M&AS. M&AS follows the same safety rules and regulations as MPRL E&P regarding vehicle usage and practices good measures such as road risk assessments, rest regime, timing routes, speed of driving, and alcohol testing.

Figure 16: Safe Crew Change Activities

5.8 Contractor Environmental Management Plan(s)

The Project will sometimes require engaging contractors to carry out Project activities. The contractors are responsible for performing all work:

- In compliance with relevant national and international HSE legislation and regulations and with other requirements to which the project subscribes,
- In conformance with the Project's EMP, and
- By contractual technical and quality specifications

The Project will also provide a specification for environmental compliance and performance (through approved EIA and EMP and the associated plans) and, as a contractual requirement, the contractor will develop and provide to the Project its specific management plans demonstrating how they intend to comply with the stipulated requirements.

Contractors must also provide documentation detailing their plans for:

- Implementing the measures required in the EIA and this EMP,
- Local content,
- Logistics,
- Community relations

The contractor management plans must conform to the requirements of the Project's overarching plans. Contractor plans will be reviewed and approved by MPRL E&P and incorporated into, and form part of, the Project's overall EMP.

Contractors will be required to self-monitor against their plan and the contractor's compliance with the plan will be routinely monitored by MPRL E&P directly or by third parties. Contractors will be required to submit regular reports of monitoring activities and the Project will review these regularly. An external assurance process will be conducted on an annual basis the results of which will be disclosed after the process.

As a contractual requirement, the subcontractors are required to provide sufficient resources to manage HSE aspects of the work to be performed. This includes providing resources to ensure compliance of next-tier subcontractors and a process for emergency stop-work orders in response to monitoring triggers.

5.8.1 Contractor Environmental Management Plan(s) Implementation

At Mann Field, there may be contractors engaged in activities such as providing MPRL E&P with manpower services, logistic services, catering services, machinery maintenance and repairing of machines and instruments for the field operations. M&AS is one of the companies involved in the MPRL E&P camp rules and fulfilled the environmental-related management plans, including waste management procedures. If there are any contractors or third-party monitoring teams working in the Mann Field, also required to respect and obey MPRL E&P HSE rules and policies.

6. Environmental Monitoring Plan

The project will conduct monitoring activities to assess compliance with regulatory requirements and to evaluate the effectiveness of operational controls and other measures aimed at mitigating potential impacts.

As a minimum, the following monitoring of the physical environment will be undertaken:

Physical Environmental Monitoring:

- Ambient Air Quality,
- Noise,
- Groundwater Quality,
- Surface-water Quality,
- Soil Quality

In accordance with the EIA commitments, MPRL E&P has been regularly conducting environmental monitoring activities and submitting monitoring reports to the ECD bi-annually. This is the eighth monitoring report, and it follows the committed monitoring plan from the EIA Report, as stated in Table 8 of the Environmental and Social Monitoring Program (as shown in Table 8.3 of the EIA Report).

Ambient air quality and noise quality monitoring were conducted at Z3AQN and Z4AQN, water samples were collected at seven locations, and soil quality monitoring was carried out at Z3S1, Z3S2, Z4S1 and Z4S2. In addition to this, self-monitoring activities for water analysis were conducted and tested at ALARM lab, and their results were covered in this report.

In addition, self-monitoring activities are involved depending on the management plans and operational control. Based on the activities, the following are stated in Table 7 as MPRL E&P's self-monitoring activities scheduled from Mann Field:

- Vent Gas Monitoring,
- Drinking-Water Monitoring,
- Discharged from Sewage Treatment System,
- Hydro-test Water Quality,
- Monitoring on Wastes

Table 7: MPRL E&P's Self-Monitoring Plan and Schedule

No.	Self-Monitoring Activities	Purpose of Monitoring	Locations	Parameters to be monitored	Frequency
1.	Vent Gas Monitoring	Regular monitor the amount of vent gas connection line, measuring with Echo meter.	All Vent Gas Wells	Methane, CH_4	Monthly and Bi-Annual
2.	Hydrogen Sulfide (H_2S) Monitoring	To fulfill the obligation from the ECC and ensure the safety of operations & personnel living nearby.	All Operating Wells	H_2S(ppm), CO(ppm), O_2(%), and LEL%	Monthly and Bi-Annual
3	Drinking-Water Monitoring	Ensuring Safe Drinking Water for the health of personnel	MPRL E&P Base Camp	pH, Turbidity, Apparent Color, Hardness, Arsenic, Chloride, Lead, Total Dissolved Solids, Iron, Electrical Conductivity, Sulphate, Calcium, Magnesium, Nitrate-Nitrogen	Bi-Annual
4.	Discharged of Sewage Treatment System	To mitigate the pollution of soil and ground water, and environment	MPRL E&P Base Camp	pH, Temperature, TSS, BOD_5, COD, Total Phosphorous, Oil & Grease, Total Nitrogen, Turbidity, Electrical Conductivity, Total Coliforms	Bi-Annual
5.	Hydro-test Water Quality	to monitor the quality of water	Warehouse	BOD_5, COD, Chloride, Heavy Metals (Total), pH, Phenols, Sulfides, Total hydrocarbon content, Total suspended solids	Bi-Annual

No.	Self-Monitoring Activities	Purpose of Monitoring	Locations	Parameters to be monitored	Frequency
6.	Domestic water	to monitor the quality of water	Downhole Workshop & Mechanical Workshop	BOD_5, COD, Ammonia, Arsenic, Cadmium, Chlorine (Total residual), Chromium (hexavalent), Chromium (total), Copper, Cyanide (free), Cyanide (total), Fluoride, Heavy Metals (Total), Iron, Lead, Mercury, Nickel, Oil & Grease, pH, Phenols, selenium, Silver, Sulfides, Temperature increase, Total coliforms, Total phosphorous, Total suspended solids, Zinc	Bi-annual
7.	Ground water (Tube-well)	To monitor the quality of groundwater near wells of chemical treatment for EOR	Ko Win Maung & Ma Nyein (near #132)	pH, DO, Turbidity, Apparent Color, Alkalinity, Hardness, BOD_5, COD, total Nitrogen, total Phosphorous, Oil & Grease, TSS, E. coli, Total coliforms, Arsenic, Barium, Boron, Total Chromium, Flouride, Selenium, Uranium, Electrical Conductivity	Bi-annual
8.	Produced Water Monitoring	Zero discharge by injecting 100% to shut-in wells	All Operating Wells	produced volume and disposal volume	Daily
9.	Monitoring on Wastes	Implementing as per Waste Management Procedure	Waste Management Compound and Sludge Management Compound	General, Recyclable, Organic, Hazardous	Weekly

Table 8: Environmental and Social Monitoring Programme (Construction and Operation Phase)

Project Stage	Potential Impact	Parameters to be Monitored	Location	Measurements	Frequency	Responsibility
At least two weeks before the construction activities for baseline data collection. Construction and Operation	Air Quality	NOx, SO_2, $PM_{2.5}$, PM_{10}, CO. Check compliance with Myanmar National Environmental Quality (Emission) Guidelines (2015).	Z1AQN, Z2AQN, Z3AQN and Z4AQN, locations indicated on Table 5.1 and Figure 5.10	Sampling and analysis of ambient air pollutants to be conducted accordingly to the guidelines of Myanmar NEQEG. Haz-Scanner EPAS Wireless Environmental Perimeter Air Station to be used for measurement.	Monthly monitoring for the first three months during both the construction and operation phase. After the three month period, a review should be conducted to determine whether the collected data indicates an impact has occurred beyond what has been predicted within the EIA. Should no higher impacts be observed, monitoring can be reduced to a six-monthly or yearly programme. Should higher impacts be observed, monitoring should continue and appropriate actions be taken to alleviate the impacts with an aim to prevent any further impacts from occurring.	MPRL E&P HSE Coordinator

Project Stage	Potential Impact	Parameters to be Monitored	Location	Measurements	Frequency	Responsibility
At least two weeks before the construction activities for baseline data collection. Construction and Operation	Noise	Check compliance with Myanmar National Environmental Quality (Emission) Guidelines (2015)	Z1AQN, Z2AQN, Z3AQN and Z4AQN, locations indicated on Table 5.1 and Figure 5.10	24-hour noise monitoring using the portable sound meter (Lutron, SL-0423SD, unit: dB). Noise level (LAeq) measured and recorded at a ten-minute interval and averaged at an hourly and daily (i.e. 24-hour) interval.	As above	MPRL E&P HSE Coordinator
At least two weeks before the construction activities for baseline data collection. Construction and Operation	Groundwater Quality	In-situ measurements for transparency, temperature, pH, DO, turbidity, colour, alkalinity and hardness. Laboratory analysis of BOD_5, COD, Total Nitrogen, Total Phosphorus, Oil and grease, TSS, E. coli, Arsenic, Barium, Boron, Total Chromium, Floride, Selenium, Uranium	Z1GW, Z2GW, Z3GW and Z4GW, locations indicated on Table 5.11and Figure 5.14	In-situ measurements for transparency, temperature, pH DO, turbidity, colour, alkalinity and hardness. Laboratory analysis of BOD_5, COD, Total Nitrogen, Total Phosphorus, Oil and grease, TSS, E. coli, Arsenic, Barium, Boron, Total Chromium, Floride, Selenium, Uranium	As above	MPRL E&P HSE Coordinator

Project Stage	Potential Impact	Parameters to be Monitored	Location	Measurements	Frequency	Responsibility
At least two weeks before the construction activities for baseline data collection. Construction and Operation	Surface Water Quality	In-situ measurements for transparency, temperature, pH DO, turbidity, colour, alkalinity and hardness. Laboratory analysis of BOD_5, COD, Total Nitrogen, Total Phosphorus, Oil and grease, TSS, E. coli, Arsenic, Barium, Boron, Total Chromium, Fluoride, Selenium, Uranium	Z1SW, Z2SW, Z3SW and Z4SW, locations indicated on Table 5.7 and Figure 5.12	In-situ measurements for transparency, temperature, pH DO, turbidity, colour, alkalinity and hardness. Laboratory analysis of BOD_5, COD, Total Nitrogen, Total Phosphorus, Oil and grease, TSS, E. coli, Arsenic, Barium, Boron, Total Chromium, Fluoride, Selenium, Uranium	As above	MPRL E&P HSE Coordinator
At least two weeks before the construction activities for baseline data collection. Construction and Operation	Soil Quality	pH; Arsenic (As); Lead (Pb); Cadmium (Cd); Copper (Cu); Zinc (Zn); Manganese (Mn); and Iron (Fe). Comparison with the Dutch Standard 2000.	Z1S, Z2S, Z3S and Z4S, locations indicated on Table 5.13 and Figure 5.16	Follow sampling procedure, sample preservation and sample analysis recommended in Myanmar NEQEG. Laboratory analysis of pH; Arsenic (As); Lead (Pb); Cadmium (Cd); Copper (Cu); Zinc (Zn); Manganese (Mn); and Iron (Fe).	As above	MPRL E&P HSE Coordinator

Project Stage	Potential Impact	Parameters to be Monitored	Location	Measurements	Frequency	Responsibility
Construction and Operation	Discharge of treated wastewater and runoff	Check compliance with Myanmar National Environmental Quality (Emissions) Guidelines for site runoff and wastewater discharges (for BOD_5, COD, TSS, oil and grease, pH, total coliform bacteria, total nitrogen, total phosphorus) during construction. Check compliance with Myanmar National Environmental Quality (Emissions) Guidelines for Onshore Oil and Gas Development during operation.	Treated wastewater discharge points at discharge points such as worker camps, GOCS, shut in wells.	In-situ measurements for pH, temperature, dissolved oxygen (DO), electrical conductivity (EC), and turbidity. Laboratory analysis of BOD_5, COD, Total Suspended Solids, Total Nitrogen, Total Phosphorous, Oil and Grease	As above	MPRL E&P HSE Coordinator

Project Stage	Potential Impact	Parameters to be Monitored	Location	Measurements	Frequency	Responsibility
Operation	Vented gas	Check compliance with Myanmar National Environmental Quality(Emissions) Guidelines for Onshore Oil and Gas Development during operation (H_2S)	Three vented gas location (randomly selected)	Real-time measurement	Monthly monitoring for the first three months during operation phase. After the three months' period, a review should be conducted to determine whether the collected data indicates an impact has occurred beyond what has been predicted within the EIA. Should no higher impacts be observed, monitoring can be reduced to a six-monthly or yearly programme. Should higher impacts be observed, monitoring should continue and appropriate actions be taken to alleviate the impacts with an aim to prevent any further impacts from occurring	MPRL E&P HSE Coordinator

7. Complying with ECC Commitments and Follow-up Actions

MPRL E&P is committed to implementing the activities and mitigation measures outlined in the approved Environmental Impact Assessment (EIA) Report and Environmental Compliance Certificate (ECC), specifically in Articles 5 (Environmental Management Plan) and 6 (Environmental Monitoring Plan). We will continue to deliver comprehensive Environmental Monitoring Reports at regular intervals, detailing our self-monitoring activities and implementations, even during challenging periods.

The first extension of our Mann Field ECC was granted and achieved and the certificate awarding ceremony was attended by HSE manager as an MPRL E&P representative. The first extension of Mann Field ECC is valid for next 5 years up to March 2029.

MPRL E&P upholds a solid alliance with both district and regional ECD offices, proactively incorporating and executing their proposed recommendations. Furthermore, we maintain continual communication with pertinent departments and authorities to guarantee timely responses as situations arise.

We had the opportunity to conduct a comprehensive assessment of environmental factors, including air quality, noise levels, and soil condition, in collaboration with the Environmental Conservation Department (Magway). This assessment covered multiple locations, namely Z3AQN, Z4AQN, Z3S1, Z3S2, Z4S1, and Z4S2.

For air and noise quality monitoring, we initially selected Z3AQN and Z4AQN due to their favorable conditions, including security for monitoring devices, a reliable power supply, and proximity to our field operations. As conditions improve, we intend to extend our monitoring activities to the remaining two areas.

On May 14, 2024, the regional Environmental Conservation Department (Magway) led by a director conducted an extensive inspection of Mann Field operations regarding our submitted 8th environmental monitoring report. This inspection encompassed various critical areas, including CSR's mobile clinic at Kyarkan village, summer art training for children at Nan Oo village, GOCS-1, Concrete pad and additional cellar at M-64, mechanical workshop, bio-filtration unit, and MPRL E&P (Base Camp).

On the occasions arranged by the regional ECD (Magway) regarding World Environment Day 2024 and World Ozone Day 2024, MPRL E&P actively attended and participated.

To date, we have submitted a total of nine Bi-Annual Environmental Monitoring Reports to the Environmental Conservation Department. In addition to our collaboration with the ECD, we have actively engaged in self-monitoring activities, including water quality assessments at seven different locations. We remain dedicated to meeting our obligations and adhering to the planned monitoring schedule within the specified timeframe.

Looking ahead, we plan to conduct monitoring activities for air, noise, surface water, groundwater, and soil quality. The scheduling and implementation of these initiatives will be contingent on current socio-political conditions and security considerations.

Table 9: Implementation and Follow-up Actions on ECD's comments

ရက်စွဲ	၁၂-၆-၂၀၂၀
စာအမှတ်	အရည်အသွေး-၂/ဆစရ (၂၂၆/၂၀၂၀)
ဌာန	ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန၊ ညွှန်ကြားရေးမှူးချုပ်ရုံး၊နေပြည်တော်
အကြောင်းအရာ	**MPRL E&P Pte. Ltd မှ မကွေးတိုင်းဒေသကြီး၊ မန်းရေနံမြေတွင် အကောင်အထည်ဖော် ဆောင်ရွက်လျက်ရှိသည့် ကုန်းတွင်းရေနံဖွံ့ဖြိုးတိုးတက်ရေးအစီအစဉ် (Redevelopment and Enhanced Oil Recovery – EOR Programme) ၏ ဒုတိယအကြိမ် ပတ်ဝန်းကျင်ဆိုင်ရာ စောင့်ကြည့်စစ်ဆေးမှုအစီရင်ခံစာ တင်ပြလာခြင်းနှင့်ပတ်သက်၍ အကြောင်းကြားခြင်း**

စဉ်	အကြောင်းကြားစာပါ လိုက်နာဆောင်ရွက်ရမည့် အချက်များ	လိုက်နာဆောင်ရွက်ထားရှိမှု အခြေအနေ
(က)	လေထုအရည်အသွေးဆိုင်ရာ Parameter ဖြစ်သည့် SO2 ၏ ရလဒ်အား အမျိုးသား ပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ် လွှတ်မှု) လမ်းညွှန်ချက်များ (NEQEGs) ၏ သတ်မှတ်ချက်အတွင်းရှိရေး စောင့်ကြပ်ကြည့်ရှု သွားရန်၊	- သတ်မှတ်ချက် အတွင်းရှိရေး စောင့်ကြပ်ကြည့်ရှုလျက် ရှိပါသည်။ - COVID-19 pandemic & Security Concern ကြောင့် စတုတ္ထနှင့် ပဉ္စမအကြိမ် အစီရင်ခံစာတွင် Third party monitoring survey မပြုလုပ်နိုင်ခဲ့ပါ။ ဆဋ္ဌမ အကြိမ်နှင့် သတ္တမအကြိမ် အစီရင်ခံစာများတွင် ထည့်သွင်းတိုင်းတာ စောင့်ကြပ်ကြည့်ရှုလျက် ရှိပါသည်။

စဉ်	အကြောင်းကြားစာပါ လိုက်နာဆောင်ရွက်ရမည့် အချက်များ	လိုက်နာဆောင်ရွက်ထားရှိမှု အခြေအနေ
(ခ)	ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်တွင် တိုင်းတာမည်ဟု ဖော်ပြပါရှိသော ရေထု အရည်အသွေး (မြေပေါ်ရေ၊ မြေအောက်ရေ) ဆိုင်ရာ Parameter များကို ပြည့်စုံစွာ တိုင်းတာရန်၊	- COVID-19 pandemic & Security Concern ကြောင့် စတုတ္ထနှင့် ပဉ္စမအကြိမ် အစီရင်ခံစာတွင် Third party monitoring survey မပြုလုပ် နိုင်ခဲ့ပါ။ တိုင်းတာသည့် အဖွဲ့အစည်း၊ ရရှိနိုင်သည့် စက်ပစ္စည်းအမျိုးအစား နှင့် ဓါတ်ခွဲခန်းအခြေအနေ တို့ပေါ်မူတည်၍ ပြည့်စုံစွာ တိုင်းတာနိုင်ရေး ကြိုးစား ဆောင်ရွက်လျက်ရှိပါသည်။ - နိုင်ငံအတွင်းရှိ ဓါတ်ခွဲခန်း များ၌ စစ်ဆေးနိုင်သည့် Parameter များအား စစ်ဆေး တိုင်းတာလျက် ရှိပါသည်။
(ဂ)	မြေပေါ်ရေအရည်အသွေးကို စောင့်ကြည့် စစ်ဆေးမှု အစီရင်ခံစာတွင် NEQEGs နှင့် နှိုင်းယှဉ်ထားပါသဖြင့် အိမ်နီးချင်းနိုင်ငံများ၏ မြေပေါ်ရေအရည်အသွေး သတ်မှတ်စံချိန် စံညွှန်းများနှင့် နှိုင်းယှဉ်ဖော်ပြရန်၊	- ဒုတိယအကြိမ် ပတ်ဝန်းကျင် စောင့်ကြပ်ကြည့်ရှုမှု အစီရင်ခံစာ မှစတင်၍ နှိုင်းယှဉ် ဖော်ပြခဲ့ ပါသည်။ - COVID-19 pandemic & Security Concern ကြောင့် စတုတ္ထနှင့် ပဉ္စမအကြိမ် အစီရင်ခံစာတွင် Third party monitoring survey မပြုလုပ်နိုင်ခဲ့ပါ။ ယခု သတ္တမအကြိမ်တွင် မြေပေါ်ရေ အရည်အသွေး စောင့်ကြည့်တိုင်းတာ စစ်ဆေးမှု ကို အခြေအနေ ပေးသည့်နေရာ (၄) ခု၌ မကွေးတိုင်းဒေသကြီး ပတ်ဝန်းကျင်ထိန်းသိမ်းရေး ဦးစီးဌာန နှင့် ပြန်လည် ပြုလုပ်နိုင်ခဲ့ပါသည်။

စဉ်	အကြောင်းကြားစာပါ လိုက်နာဆောင်ရွက်ရမည့် အချက်များ	လိုက်နာဆောင်ရွက်ထားရှိမှု အခြေအနေ
(ဃ)	ဆူညံသံ သက်ရောက်မှုကို အမျိုးသား ပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ် မှု) လမ်းညွှန်ချက်များ၏ သတ်မှတ်ချက် အတွင်းရှိစေရေး ဆောင်ရွက်သွားရန်၊	- အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာ အရည် အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက် များ၏ သတ်မှတ်ချက် အတွင်း ရှိစေရေး ဆောင်ရွက် ထားရှိပါသည်။ - COVID-19 pandemic & Security Concern ကြောင့် စတုတ္ထနှင့် ပဉ္စမအကြိမ် အစီရင်ခံစာတွင် Third party monitoring survey မပြုလုပ်နိုင်ခဲ့ပါ။ ယခု သတ္တမအကြိမ် စောင့်ကြည်စစ်ဆေးမှု အစီရင်ခံစာ တွင် မကွေးတိုင်းဒေသကြီး ပတ်ဝန်းကျင် ထိန်းသိမ်းရေး ဦးစီးဌာနနှင့်အတူ နေရာ (၂) ခုတွင် စောင့်ကြည့်တိုင်းတာ စစ်ဆေးမှု ပြုလုပ်နိုင် ခဲ့ပါသည်။
(င)	အတည်ပြုပြီး ပတ်ဝန်းကျင်ထိခိုက်မှု ဆန်းစစ်ခြင်း အစီရင်ခံစာတွင် ဖော်ပြပါရှိသည့် ထိခိုက်မှု လျော့ချမည့်နည်းလမ်းများအား လိုက်နာ ဆောင်ရွက်သွားရန်နှင့် စောင့်ကြည့် စစ်ဆေးမှု အစီရင်ခံစာတွင် ထည့်သွင်း ဖော်ပြ သွားရန်။	- လိုက်နာဆောင်ရွက်လျက်ရှိပါသည်။ စောင့်ကြည့် စစ်ဆေးမှု အစီရင်ခံစာတွင် ထည့်သွင်း ဖော်ပြ ထားပါသည်။

ရက်စွဲ	၇-၃-၂၀၂၃
စာအမှတ်	၅/ ထိန်းချုပ်/ စကရ (၀၁) (၄၂၂/၂၀၂၃)
ဌာန	ညွှန်ကြားရေးမှူးရုံး၊ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန၊ မကွေးတိုင်းဒေသကြီး၊ မကွေးမြို့
အကြောင်းအရာ	**မင်းဘူးခရိုင်၊ မင်းဘူးမြို့နယ်၊ မန်းရေနံမြေအတွင်းရှိ Environmental Impact Assessment (EIA) အတည်ပြုပြီး MPRL E&P Pte. Ltd ၏ ရေနံပြန်လည်ဖွံ့ဖြိုးတိုးတက်ရေးအစီအစဉ် (Redevelopment and Enhanced Oil Recovery – EOR Programme) အတွက် (၂၀၂၀ ခုနှစ် ဧပြီလမှ စက်တင်ဘာလအထိ)၊ (၂၀၂၁ အောက်တိုဘာလမှ ၂၀၂၂ မတ်လအထိ) နှင့် (၂၀၂၂ ဧပြီလမှ စက်တင်ဘာလအထိ) စောင့်ကြပ်ကြည့်ရှုမှုအစီရင်ခံစာ များနှင့် ပတ်သက်၍ အကြောင်းကြားခြင်း**

စဉ်	အကြောင်းကြားစာပါ လိုက်နာဆောင်ရွက်ရမည့် အချက်များ	လိုက်နာဆောင်ရွက်ထားရှိမှုအခြေအနေ
(က)	ကုမ္ပဏီမှ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဆိုင်ရာ လိုက်နာ ဆောင်ရွက်မှု သက်သေခံလက်မှတ်၏ အပိုဒ် (B1) အရ အတည်ပြုအစီရင်ခံစာ ဇယား (၈.၃) တွင် ဖော်ပြထားသော ကတိကဝတ်များအား အကောင်အထည်ဖော် ဆောင်ရွက်သွားရန်၊	- သတ်မှတ်ချက်အတွင်းရှိရေး စောင့်ကြပ် ကြည့်ရှုလျက်ရှိပါသည်။
(ခ)	ပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေးများ တိုင်းတာစစ်ဆေးရာတွင် တိုင်းတာစစ်ဆေးမှု ရလဒ်များအပေါ် မူတည်၍ အကျိုးအကြောင်း ခိုင်လုံစွာ ဖော်ပြရန်၊	- (၆)လပတ် ပတ်ဝန်းကျင် စောင့်ကြပ် ကြည့်ရှုမှု အစီရင်ခံစာများတွင် ထည့်သွင်း တင်ပြလျက်ရှိပါသည်။

စဉ်	အကြောင်းကြားစာပါ လိုက်နာဆောင်ရွက်ရမည့် အချက်များ	လိုက်နာဆောင်ရွက်ထားရှိမှုအခြေအနေ
(ဂ)	ကုမ္ပဏီမှ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဆိုင်ရာ လိုက်နာ ဆောင်ရွက်မှု သက်သေခံလက်မှတ်၏ အပိုဒ် (C3) အရ စီမံကိန်း၏ လုပ်ဆောင်မှုများ၊ Sites (သို့) ဆိုးရွားသော ထိခိုက်မှုများ ပြောင်းလဲမှုရှိပါက ပြန်လည်ပြင်ဆင်ထားသည့် EMP အား စိစစ်နိုင်ရန် နှင့် အတည်ပြုနိုင်ရန် အတွက် ECD သို့တင်ပြသွားရန်၊	- စီမံကိန်း၏ လုပ်ဆောင်မှုများ/ ဆိုးရွားသော ထိခိုက်မှုများ ပြောင်းလဲမှု ရှိပါက တင်ပြသွားပါမည်။
(ဃ)	ထပ်မံတင်ပြမည့် စောင့်ကြပ်ကြည့်ရှုမှုအစီရင်ခံစာတွင် အတည်ပြုပြီး EIA အစီရင်ခံစာပါ အပိုဒ် (၈.၃) ပတ်ဝန်းကျင် စောင့်ကြပ်ကြည့်ရှုခြင်း အစီအစဉ်တွင် ဖော်ပြထားသည့်အတိုင်း လေထုအရည်အသွေး၊ ဆူညံသံ၊ မြေအောက်ရေအရည်အသွေး၊ မြေပေါ်ရေအရည်အသွေး နှင့် မြေဆီလွှာအရည်အသွေးတို့အား တိုင်းတာစစ်ဆေးသွားရန်၊ တိုင်းတာ စစ်ဆေးမှုရလဒ်များအား Baseline data များနှင့် နှိုင်းယှဉ်ဖော်ပြရန်နှင့် တိုင်းတာစစ်ဆေးမှု ရလဒ်များအား သတ်မှတ်စံချိန်စံညွှန်းအတွင်း ရှိစေရေး စီမံဆောင်ရွက်သွားရန်၊	- ပတ်ဝန်းကျင် စောင့်ကြပ်ကြည့်ရှုခြင်း အစီအစဉ်တွင် ဖော်ပြထားသည့် အတိုင်း တိုင်းတာစစ်ဆေးလျက် ရှိပါသည်။ - တိုင်းတာစစ်ဆေးသည့် အဖွဲ့အစည်း နှင့် တိုင်းတာသည့် စက်ပစ္စည်း၊ ခါတ်ခွဲခန်းမှ တိုင်းတာနိုင်သည့် အခြေအနေ စသည်တို့ပေါ်မူတည်၍ ကျန်ရှိ parameter များကို တိုင်းတာ စစ်ဆေးနိုင်ရေး ဆောင်ရွက်သွားမည် ဖြစ်ပါသည်။

စဉ်	အကြောင်းကြားစာပါ လိုက်နာဆောင်ရွက်ရမည့် အချက်များ	လိုက်နာဆောင်ရွက်ထားရှိမှုအခြေအနေ
(c)	လေထု၊ ရေထု၊ မြေထု၊ ဆူညံသံ အရည်အသွေးများအား အတည်ပြုပြီး EIA အစီရင်ခံစာတွင် ပါရှိသည့် သတ်မှတ် Parameter များ၊ သတ်မှတ်နေရာများအတိုင်း တိုင်းတာသွားရန် နှင့် လုပ်ကွက်အတွင်း တိုင်းတာသည့်နေရာ၊ location point များနှင့် နမူနာ ကောက်ယူသည့်နေရာများအား Google Map ဖြင့်လည်းကောင်း၊ Layout plan ဖြင့်လည်းကောင်း ထည့်သွင်းဖော်ပြရန်နှင့် တိုင်းတာသည့် ရလဒ်များကို အချိန် ပါသည့် မှတ်တမ်းဓါတ်ပုံများနှင့်တကွ ဖော်ပြရန်၊	- ကိုဗစ်-၁၉ ရောဂါဖြစ်ပွားမှု၊ လုံခြုံရေးအခြေအနေ၊ ခရီးသွားလာ နိုင်မှုအခြေအနေ၊ တိုင်းတာ စစ်ဆေးသည့် အဖွဲ့အစည်း နှင့် တိုင်းတာသည့် စက်ပစ္စည်း၊ ဓါတ်ခွဲခန်းမှ တိုင်းတာနိုင်သည့် အခြေအနေ စသည်တို့ပေါ်မူတည်၍ ပတ်ဝန်းကျင် စောင့်ကြပ်ကြည့်ရှုခြင်း အစီအစဉ်ကို အကောင်အထည်ဖော်ဆောင်ရွက် လျက်ရှိပါသည်။ - လက်ရှိ ဒေသတွင်းအခြေအနေအရ တိုင်းတာနိုင်သည့် နေရာ အကန့် အသတ်ရှိသောကြောင့် နေရာအချို့တွင် သွားရောက် တိုင်းတာ စစ်ဆေးနိုင်မှု မရှိသေးပါ။
(စ)	လေထုအရည်အသွေးတိုင်းတာသည့် Data Result များအား Data Analysis ပြုလုပ်ရန်အတွက် အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များပါ သတ်မှတ်ထားသည့် အချိန်ကာလအတိုင်း တိုင်းတာထားသည့် ရလဒ်များအား Excel Form ဖြင့် ပြည့်စုံစွာ ထည့်သွင်းဖော်ပြရန်၊	- (၆)လပတ် ပတ်ဝန်းကျင်စောင့်ကြပ် ကြည့်ရှုမှု အစီရင်ခံစာများတွင် သတ်မှတ်ထားသည့် အချိန်ကာလ အတိုင်း ထည့်သွင်း တင်ပြလျက်ရှိပါသည်။
(ဆ)	ဂေဟစနစ်ထိန်းသိမ်းရေးအနေဖြင့် ပတ်ဝန်းကျင်စိမ်းလန်း စိုပြေရေး အတွက် ထိန်းသိမ်းကာကွယ်ထားသော သဘာဝ ပေါက်ပင်များအား ကောင်းမွန်စွာ ရှင်သန်နိုင်ရေး၊ ပျက်စီးဆုံးရှုံးမှုများ မဖြစ်ပေါ်စေရေး ဂရုပြုဆောင်ရွက်သွားရန်၊	- ကောင်းမွန်စွာ ရှင်သန်နိုင်ရေး နှင့် ပျက်စီးဆုံးရှုံးမှုများ မဖြစ်ပေါ်စေရေး ဂရုပြု လိုက်နာ ဆောင်ရွက်လျက်ရှိပါသည်။

စဉ်	အကြောင်းကြားစာပါ လိုက်နာဆောင်ရွက်ရမည့် အချက်များ	လိုက်နာဆောင်ရွက်ထားရှိမှုအခြေအနေ
(၈)	လုပ်ငန်းတွင် မီးဘေးအန္တရာယ်ကာကွယ်ရေးအတွက် မီးသတ်ဦးစီးဌာန၏ လမ်းညွှန်ချက်များအတိုင်း အထူးအလေးထားလိုက်နာဆောင်ရွက်ရန်၊	- မီးသတ်ဦးစီးဌာန၏ လမ်းညွှန်ချက်များအတိုင်း အထူးအလေးထား လိုက်နာ ဆောင်ရွက်လျက် ရှိပါသည်။
(၈၂)	အတည်ပြုပြီး EIA အစီရင်ခံစာအား အများပြည်သူများ သိရှိနိုင်ရေး ကုမ္ပဏီ Website ကဲ့သို့သော အများပြည်သူများ သိရှိနိုင်မည့် နည်းလမ်းများအသုံးပြု၍ လွှင့်တင်ထားရှိရန်၊	- လိုက်နာ ဆောင်ရွက်လျက် ရှိပါသည်။
(၈၃)	အတည်ပြုပြီး အစီရင်ခံစာပါ ကတိကဝတ်များနှင့် ECC ပါ လိုက်နာဆောင်ရွက်ရမည့် အချက်များအား အလေးထား လိုက်နာဆောင်ရွက်သွားရန်၊	- အလေးထား လိုက်နာ ဆောင်ရွက် လျက် ရှိပါသည်။
(၈၄)	ကုမ္ပဏီအနေဖြင့် ဒေသခံပြည်သူတို့၏ ဆန္ဒနှင့် သဘောထားများကို အလေးထား လိုက်နာဆောင်ရွက်ရန်နှင့် စောင့်ကြပ်ကြည့်ရှုမှု လုပ်ငန်းစဉ်များကို ပတ်ဝန်းကျင် ထိန်းသိမ်းရေး ဥပဒေ၊ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေး နည်းဥပဒေများ၊ ပတ်ဝန်းကျင်ထိခိုက်မှု ဆန်းစစ်ခြင်း ဆိုင်ရာ လုပ်ထုံးလုပ်နည်း၊ အမျိုးသား ပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များနှင့်အညီ ဆက်လက် အကောင်အထည်ဖော် ဆောင်ရွက်သွားရန်၊	- လိုက်နာ အကောင်အထည်ဖော် ဆောင်ရွက်လျက် ရှိပါသည်။

စဉ်	အကြောင်းကြားစာပါ လိုက်နာဆောင်ရွက်ရမည့် အချက်များ	လိုက်နာဆောင်ရွက်ထားရှိမှုအခြေအနေ
(၄)	စောင့်ကြပ်ကြည့်ရှုမှုအစီရင်ခံစာအား ပတ်ဝန်းကျင်ထိခိုက်မှု ဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်း အပိုဒ် (၁၀၉) နှင့်အညီ ရေးဆွဲပြုစု၍ အပိုဒ် (၁၀၈) နှင့်အညီ (ဖ)လလျှင် (၁)ကြိမ် ပုံမှန်အစီရင်ခံတင်ပြရန်။	- (ဖ) လ လျှင် တစ်ကြိမ် ပုံမှန် အစီရင်ခံ တင်ပြလျက်ရှိပါသည်။

ရက်စွဲ	၇-၉-၂၀၂၃
စာအမှတ်	၅/ ထိန်းချုပ်/ စကရ (၀၁) (၁၈၆၀/၂၀၂၃)
ဌာန	ညွှန်ကြားရေးမှူးရုံး၊ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန၊ မကွေးတိုင်းဒေသကြီး၊ မကွေးမြို့
အကြောင်းအရာ	**မကွေးတိုင်းဒေသကြီး၊ မင်းဘူးမြို့နယ်၊ မန်းရေနံမြေအတွင်းရှိ Environmental Impact Assessment (EIA) အတည်ပြုပြီး MPRL E&P Pte. Ltd ၏ ရေနံပြန်လည်ဖွံ့ဖြိုးတိုးတက်ရေးအစီအစဉ် (Re-development and Enhanced Oil Recovery – EOR Programme) အတွက် (၂၀၂၂ ခုနှစ်၊ အောက်တိုဘာလ မှ ၂၀၂၃ ခုနှစ်၊ မတ်လအထိ) တင်ပြလာသော (ဖ)လပတ် စောင့်ကြပ်ကြည့်ရှုမှု အစီရင်ခံစာနှင့်ပတ်သက်၍ အကြောင်းကြားခြင်း**

စဉ်	အကြောင်းကြားစာပါ လိုက်နာဆောင်ရွက်ရမည့် အချက်များ	လိုက်နာဆောင်ရွက်ထားရှိမှုအခြေအနေ
(က)	လေထုအရည်အသွေး တိုင်းတာထားသည့်ရလဒ်များအား အမျိုးသား ပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များ (National Environmental Quality Emission Guideline – NEQEG) ပါ သတ်မှတ် Unit ဖြင့် ဖော်ပြရန်၊	- လေထုအရည်အသွေး တိုင်းတာထားသည့် ရလဒ်များအား NEQEG ပါ သတ်မှတ် Unit ဖြင့် ဖော်ပြလျက် ရှိပါသည်။

စဉ်	အကြောင်းကြားစာပါ လိုက်နာဆောင်ရွက်ရမည့် အချက်များ	လိုက်နာဆောင်ရွက်ထားရှိမှုအခြေအနေ
(ခ)	လုပ်ကွက်အတွင်းရှိ မြေအောက်ရေနှင့် တိုင်းတာ ဖော်ပြထားသော မြေပေါ်ရေအား ဝန်ထမ်းများ သောက်သုံးရေအဖြစ် အသုံးပြုပါက World Health Organization (WHO) ၏ Drinking Water Quality Guideline (2011) (သို့မဟုတ်) ကျန်းမာရေးဝန်ကြီးဌာနမှ ထုတ်ပြန်ထားသော National Drinking Water Quality Standard ဖြင့် နှိုင်းယှဉ်ဖော်ပြရန်၊	- လိုက်နာဆောင်ရွက်လျက် ရှိပါသည်။
(ဂ)	စွန့်ပစ်ရေ အရည်အသွေးတိုင်းတာမှုတွင် Total Coliform bacteria၊ Biochemical Oxygen Demand (BOD)၊ Total Suspended Solid တန်ဖိုးတို့သည် သတ်မှတ်စံချိန် စံညွှန်းထက် ကျော်လွန်နေသည်ကို တွေ့ရှိရသဖြင့် ကျော်လွန်ရသည့် အကြောင်းရင်းအား ဖော်ပြရန်နှင့် သတ်မှတ်စံချိန်စံညွှန်းအတွင်းရှိစေရေး စီမံဆောင်ရွက် သွားရန်၊	- သတ်မှတ်စံချိန်စံညွှန်းထက် ကျော်လွန်ရသည့် အကြောင်းရင်းအား ပတ်ဝန်းကျင် စောင့်ကြပ်ကြည့်ရှုမှု အစီရင်ခံစာ ၏ သက်ဆိုင်ရာ ခေါင်းစဉ်အခန်းများတွင် ထည့်သွင်း ရှင်းလင်း တင်ပြ ထားရှိပါသည်။ သတ်မှတ်စံချိန်စံညွှန်းအတွင်း ရှိစေရေး စီမံဆောင်ရွက်လျက် ရှိပါသည်။
(ဃ)	မြေထုအရည်အသွေးတိုင်းတာမှုတွင် အတည်ပြုပြီး EIA အစီရင်ခံစာပါ သတ်မှတ် Parameter များအား ပြည့်စုံစွာ တိုင်းတာဖော်ပြရန်၊ လိုက်နာဆောင်ရွက်မည့် သတ်မှတ် Guideline ဖြင့် နှိုင်းယှဉ်ဖော်ပြရန်နှင့် Guideline အမည်အား ဖော်ပြရန်၊	- လိုက်နာ ဆောင်ရွက်လျက် ရှိပါသည်။ Table-17: Soil Quality Monitoring Results တွင် ထည့်သွင်း ရှင်းလင်း တင်ပြထားရှိပါသည်။

စဉ်	အကြောင်းကြားစာပါ လိုက်နာဆောင်ရွက်ရမည့် အချက်များ	လိုက်နာဆောင်ရွက်ထားရှိမှုအခြေအနေ
(ငြ)	ပတ်ဝန်းကျင်အရည်အသွေးများ တိုင်းတာစစ်ဆေးရာတွင် တိုင်းတာစစ်ဆေးမှု ရလဒ်များအပေါ် မူတည်၍ အကျိုး အကြောင်းခိုင်လုံစွာ ဖော်ပြရန်နှင့် ပတ်ဝန်းကျင် အရည်အသွေး တိုင်းတာစစ်ဆေးမှု ရလဒ်များအား ဖော်ပြရာတွင် Unit များ မှန်ကန်စေရေး အလေးထား ဆောင်ရွက်ရန်၊	- အလေးထားလိုက်နာ ဆောင်ရွက်လျက် ရှိပါသည်။
(စ)	ဂေဟစနစ်ထိန်းသိမ်းရေးအနေဖြင့် ပတ်ဝန်းကျင်စိမ်းလန်း စိုပြည်ရေးအတွက် ထိန်းသိမ်းကာကွယ်ထားသော သဘာဝ ပေါက်ပင်များအား ကောင်းမွန်စွာ ရှင်သန်နိုင်ရေး၊ ပျက်စီး ဆုံးရှုံးမှုများ မဖြစ်ပေါ်စေရေး ဂရုပြုဆောင်ရွက်သွားရန်၊	- ဂေဟစနစ် ထိန်းသိမ်းရေး အနေဖြင့် သဘာဝ ပေါက်ပင်များအပေါ် ကောင်းမွန်စွာ ရှင်သန်နိုင်ရေး နှင့် ပျက်စီးဆုံးရှုံးမှု မဖြစ်ပေါ်စေရေး ဂရုပြု ဆောင်ရွက်လျက် ရှိပါသည်။
(ဆ)	လုပ်ငန်းတွင် မီးဘေးအန္တရာယ်ကာကွယ်ရေးအတွက် မီးသတ် ဦးစီးဌာန၏ လမ်းညွှန်ချက်များအတိုင်း အထူးအလေးထား လိုက်နာဆောင်ရွက်ရန်၊	- မီးသတ် ဦးစီးဌာန၏ လမ်းညွှန်ချက်များအတိုင်း အထူးအလေးထား လိုက်နာ ဆောင်ရွက်လျက် ရှိပါသည်။

စဉ်	အကြောင်းကြားစာပါ လိုက်နာဆောင်ရွက်ရမည့် အချက်များ	လိုက်နာဆောင်ရွက်ထားရှိမှုအခြေအနေ
(၈)	တင်ပြလာသော စောင့်ကြပ်ကြည့်ရှုမှု အစီရင်ခံစာများနှင့် ပတ်သက်၍ လေထု၊ ရေထု၊ မြေထုအရည်အသွေးအပါအဝင် ပတ်ဝန်းကျင်အရည်အသွေး စောင့်ကြည့်တိုင်းတာမှု ရလဒ်များအရ သတ်မှတ်စံချိန်စံညွှန်းများထက် ကျော်လွန်မှု ရှိနေပါက အတည်ပြုပြီး EIA ပါ Mitigation Measure များ၊ ဆောင်ရွက်မည့် လုပ်ငန်းအစီအစဉ်များနှင့် စောင့်ကြပ် ကြည့်ရှုမှု အစီရင်ခံစာတွင် ဖော်ပြပါရှိသော တိုင်းတာစောင့်ကြည့်မည့် လုပ်ငန်းစဉ်များ အတိုင်း ဆက်လက် ဆောင်ရွက်သွားရန်နှင့် ထပ်မံတင်ပြမည့် စောင့်ကြပ် ကြည့်ရှုမှုအစီရင်ခံစာများတွင် ဆောင်ရွက်မည့် အစီအစဉ် များကို ထည့်သွင်းဖော်ပြရန်၊	- မှတ်သား လိုက်နာ ဆောင်ရွက် လျက်ရှိပါသည်။
(၈၂)	ကုမ္ပဏီမှ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဆိုင်ရာ လိုက်နာ ဆောင်ရွက်မှု သက်သေခံလက်မှတ် Environmental Compliance Certificate (ECC) ၏ အပိုဒ် (B1) အရ အတည်ပြုပြီး EIA အစီရင်ခံစာ၏ ဇယား (၈.၃) တွင် ဖော်ပြထားသော ကတိကဝတ်များအား အကောင် အထည်ဖော် ဆောင်ရွက်သွားရန်၊	- ဖော်ပြထားသော ကတိကဝတ်များအား လိုက်နာ အကောင်အထည်ဖော် ဆောင်ရွက်လျက် ရှိပါသည်။

စဉ်	အကြောင်းကြားစာပါ လိုက်နာဆောင်ရွက်ရမည့် အချက်များ	လိုက်နာဆောင်ရွက်ထားရှိမှုအခြေအနေ
(ည)	ကုမ္ပဏီမှ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဆိုင်ရာ လိုက်နာ ဆောင်ရွက်မှု သက်သေခံလက်မှတ် Environmental Compliance Certificate (ECC) ၏ အပိုဒ် (C3) အရ စီမံကိန်း၏လုပ်ဆောင်မှုများ၊ Sites (သို့) ဆိုးရွားသော ထိခိုက်မှုများ ပြောင်းလဲမှုရှိပါက ပြန်လည်ပြင်ဆင်ထားသည့် EMP အား စိစစ်နိုင်ရန်နှင့် အတည်ပြုနိုင်ရန်အတွက် ECD သို့ တင်ပြသွားရန်၊	- စီမံကိန်း၏ လုပ်ဆောင်မှုများ၊ ဆိုးရွားသော ထိခိုက်မှုများ ပြောင်းလဲမှုရှိပါက တင်ပြသွားမည် ဖြစ်ပါသည်။
(ဋ)	ကုမ္ပဏီအနေဖြင့် စာချုပ်သက်တမ်းပြီးဆုံးပါက MOGE ထံ ပြန်လည် အပ်နှံသည့်အချိန်တွင် EIA Procedure အပိုဒ် (၁၀၂) နှင့် အပိုဒ် (၁၀၆) တို့အား အလေးထား လိုက်နာ ဆောင်ရွက်သွားရန်၊	- လိုက်နာ ဆောင်ရွက်သွားမည် ဖြစ်ပါသည်။
(ဌ)	ရေနံပြန်လည်ဖွံ့ဖြိုးတိုးတက်ရေးအစီအစဉ် (Re-development and Enhanced Oil Recovery – EOR Programme) အတွက် ခွင့်ပြုမိန့်တွင် လိုက်နာရမည့် စည်းကမ်းချက်များအတိုင်း အကောင်အထည်ဖော် ဆောင်ရွက် သွားရန်၊	- ခွင့်ပြုမိန့်ပါ လိုက်နာရမည့် စည်းကမ်းချက်များ အတိုင်း အကောင်အထည်ဖော် လိုက်နာ ဆောင်ရွက်လျက် ရှိပါသည်။

စဉ်	အကြောင်းကြားစာပါ လိုက်နာဆောင်ရွက်ရမည့် အချက်များ	လိုက်နာဆောင်ရွက်ထားရှိမှုအခြေအနေ
(၃)	EIA Procedure အပိုဒ်(၁၀၆)အရ စီမံကိန်းအဆင့်အားလုံးတွင် ဆိုးကျိုးသက်ရောက်မှုအားလုံးအတွက် စီမံကိန်းနှင့် ဆက်စပ်ဆောင်ရွက်မှုများအား မိမိကိုယ်မိမိ ဘက်စုံ စောင့်ကြပ် ကြည့်ရှုစစ်ဆေးခြင်းကို စဉ်ဆက်မပြတ် လက်တွေ့ဆောင်ရွက်ရမည့်အပြင် သက်ဆိုင်ရာ ဥပဒေများ၊ နည်းဥပဒေများ၊ ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်း နှင့် စံချိန်စံညွှန်းများ၊ ပတ်ဝန်းကျင် ထိန်းသိမ်းရေးဆိုင်ရာ လိုက်နာဆောင်ရွက်မှုသက်သေခံလက်မှတ်ပါ စည်းကမ်းချက်များနှင့် ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှု အစီအစဉ်ပါ အချက်များကို အလေးထား လိုက်နာဆောင်ရွက်သွားရန်၊	- အလေးထား လိုက်နာ ဆောင်ရွက်လျက် ရှိပါသည်။
(၄)	EIA Procedure အပိုဒ် (၁၀၇) အရ လုပ်ငန်းစီမံကိန်း၏ ပျက်ကွက်မှုတစ်ခုခုကြောင့် အန္တရာယ်ဖြစ်စေနိုင်သော ပတ်ဝန်းကျင်အပေါ် သက်ရောက်မှုဖြစ်နိုင်သည့်ကိစ္စ (သို့မဟုတ်) သယံဇာတ နှင့် သဘာဝပ တ်ဝန်းကျင် ထိန်းသိမ်းရေးဝန်ကြီးဌာနက အမြန်သိရှိရန် လိုအပ်သည့် ကိစ္စကို (၂၄) နာရီအတွင်းလည်းကောင်း၊ အခြားကိစ္စများ အားလုံးတွင် ယင်းဖြစ်စဉ်ဖြစ်ရပ်ကို စတင်သိရှိသည့်အချိန်မှ (၇) ရက်အတွင်းတွင်လည်းကောင်း၊ စီမံကိန်းလုပ်ငန်းပိုင်ရှင်မှ ဝန်ကြီးဌာနသို့ အသိပေးတင်ပြသွားရန်၊	- သိရှိလိုက်နာ ဆောင်ရွက် သွားပါမည်။

စဉ်	အကြောင်းကြားစာပါ လိုက်နာဆောင်ရွက်ရမည့် အချက်များ	လိုက်နာဆောင်ရွက်ထားရှိမှုအခြေအနေ
(ဏ)	အတည်ပြုပြီး EIA အစီရင်ခံစာပါအတိုင်း လိုက်နာ ဆောင်ရွက်မှုနှင့် ပတ်သက်၍ ဆောင်ရွက်တိုးတက်မှု အခြေအနေအား (၆) လလျှင် (၁)ကြိမ် တင်ပြမည့် စောင့်ကြပ် ကြည့်ရှုမှုအစီရင်ခံစာများတွင် ပြည့်စုံစွာ ထည့်သွင်း ဖော်ပြသွားရန်၊	- စောင့်ကြပ် ကြည့်ရှုမှု အစီရင်ခံ စာများတွင် ပြည့်စုံစွာ ထည့်သွင်း တင်ပြလျက် ရှိပါသည်။
(တ)	EIA Procedure အပိုဒ် (၁၁၀) အရ စောင့်ကြပ် ကြည့်ရှုမှုအစီရင်ခံစာအား ဝန်ကြီးဌာနသို့ တင်ပြမည့် နေ့ရက်မှ (၁၀) ရက်အတွင်း အများပြည်သူ သိရှိနိုင်ရန် စီမံကိန်း၏ Website သို့မဟုတ် သင့်တော်သော နည်းလမ်းတစ်ရပ်ရပ်အသုံးပြု၍ အသိပေးထုတ်ပြန် ကြေညာရန် နှင့် ထုတ်ဖော်မည့် Website သို့မဟုတ် နေရာတို့ကို ထပ်မံတင်ပြမည့် စောင့်ကြပ်ကြည့်ရှုမှု အစီရင်ခံစာ၌ ထည့်သွင်းဖော်ပြရန်၊	- တင်ပြပြီးစီးခဲ့သော စောင့်ကြပ် ကြည့်ရှုမှု အစီရင်ခံစာများကို အများပြည်သူ သိရှိနိုင်ရန် ကုမ္ပဏီ Website ၌ အသိပေးထုတ်ပြန် ထားပြီး ဖြစ်ပါသည်။ ထပ်မံတင်ပြမည့် စောင့်ကြပ် ကြည့်ရှုမှု အစီရင်ခံ စာများ၌လည်း ထုတ်ဖော်မည့် Website သို့မဟုတ် နေရာတို့ကို ထည့်သွင်းဖော်ပြ သွားပါမည်။
(ထ)	(၂၀၂၂ ခုနှစ်၊ အောက်တိုဘာလမှ ၂၀၂၃ ခုနှစ်၊ မတ်လအထိ) တင်ပြလာသော စောင့်ကြပ်ကြည့်ရှုမှုအစီရင်ခံစာအား စိစစ် အကြောင်းကြားမည့် အချက်များ အပြင် (ယခင် စောင့်ကြပ် ကြည့်ရှုမှုအစီရင်ခံစာများအပေါ် စိစစ် ပြန်ကြားချက်များအား ဆက်လက်လိုက်နာ ဆောင်ရွက်သွားရန်နှင့် ထပ်မံတင်ပြမည့် စောင့်ကြပ် ကြည့်ရှုမှု အစီရင်ခံစာတွင် ဆောင်ရွက် ထားရှိမှုများအား ထည့်သွင်း ဖော်ပြရန်၊	- စောင့်ကြပ်ကြည့်ရှုမှု အစီရင်ခံစာ များတွင် ပတ်ဝန်းကျင် ထိန်းသိမ်းရေး ဦးစီးဌာန၏ စိစစ် ပြန်ကြားချက်များအား လိုက်နာ ဆောင်ရွက် ထားရှိမှု အခြေအနေများကို ထည့်သွင်း တင်ပြလျက် ရှိပါသည်။

စဉ်	အကြောင်းကြားစာပါ လိုက်နာဆောင်ရွက်ရမည့် အချက်များ	လိုက်နာဆောင်ရွက်ထားရှိမှုအခြေအနေ
(ဒ)	အတည်ပြုပြီး အစီရင်ခံစာပါ ကတိကဝတ်များနှင့် ECC ပါ လိုက်နာဆောင်ရွက်ရမည့်အချက်များအား အလေးထား လိုက်နာ ဆောင်ရွက်သွားရန်၊	- အတည်ပြုပြီး အစီရင်ခံစာပါ ကတိကဝတ်များနှင့် ECC ပါ လိုက်နာဆောင်ရွက်ရမည့်အချက်များအား အလေးထား လိုက်နာ ဆောင်ရွက်လျက် ရှိပါသည်။
(ဓ)	ကုမ္ပဏီအနေဖြင့် ဒေသခံပြည်သူတို့၏ ဆန္ဒနှင့် သဘောထားများကို အလေးထားလိုက်နာ ဆောင်ရွက်သွားရန်နှင့် စောင့်ကြပ်ကြည့်ရှုမှု လုပ်ငန်းစဉ်များကို ပတ်ဝန်းကျင်ထိခိုက်မှု ဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်း၊ အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များ နှင့်အညီ ဆက်လက် အကောင်အထည်ဖော် ဆောင်ရွက်သွားရန်၊	- ဒေသခံပြည်သူတို့၏ ဆန္ဒနှင့် သဘောထားများကို အလေးထား လိုက်နာ ဆောင်ရွက်လျက် ရှိပါသည်။
(န)	စောင့်ကြပ်ကြည့်ရှုမှုအစီရင်ခံစာအား ပတ်ဝန်းကျင် ထိခိုက်မှုဆန်းစစ်ခြင်း ဆိုင်ရာ လုပ်ထုံးလုပ်နည်း အပိုဒ် (၁၀၉) နှင့်အညီ ရေးဆွဲပြုစု၍ အပိုဒ် (၁၀၈) နှင့်အညီ (ဖ) လလျှင် (၁) ကြိမ် ပုံမှန် အစီရင်ခံတင်ပြရန်၊	- ပတ်ဝန်းကျင်ထိန်းသိမ်းရေး ဦးစီးဌာန သို့ စောင့်ကြပ် ကြည့်ရှုမှု အစီရင်ခံစာ ကို (ဖ) လလျှင် တစ်ကြိမ် ပုံမှန် အစီရင်ခံ တင်ပြလျက် ရှိပါသည်။






Figure 17: Field Inspection of the Regional ECD (Magway) Team

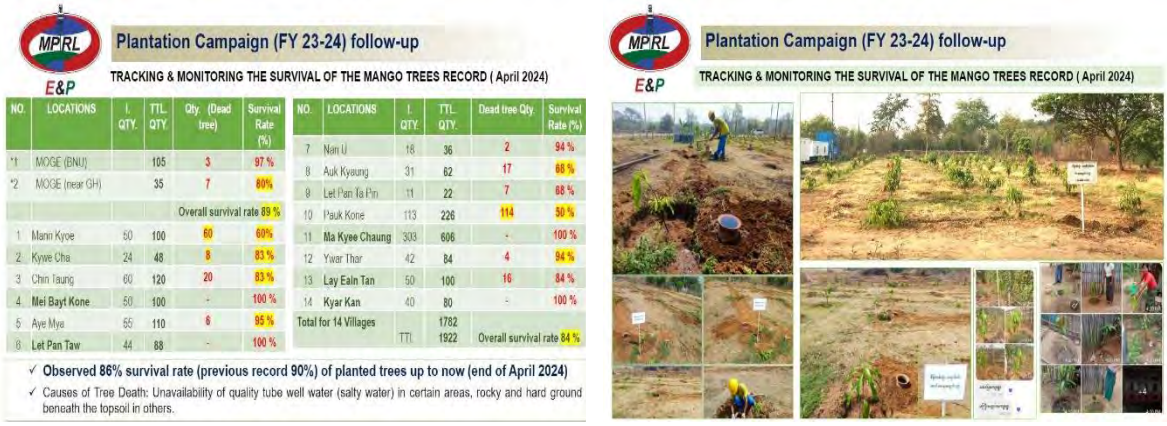
Figure 18: Tree Planting Campaign (2024)

Figure 19: Community Engagement Meeting at Aukkyaung Pagoda Campus

Figure 20: General Waste Disposal at YCDC's Waste to Energy Plant

Figure 21: Pumping Unit Fencing at M-209 and M-449

Figure 22: Containment Cellar Renovation at M-273



Plantation Campaign (FY 23-24) follow-up

TRACKING & MONITORING THE SURVIVAL OF THE MANGO TREES RECORD (April 2024)

NO.	LOCATIONS	I. QTY.	TTL. QTY.	Qty. (Dead tree)	Survival Rate (%)
*1	MOGE (BNU)		105	3	97 %
*2	MOGE (near GH)		35	7	80%
				Overall survival rate	89 %
1	Mann Kyoe	50	100	60	60%
2	Kywe Cha	24	48	8	83 %
3	Chin Taung	60	120	20	83 %
4	Mei Bayt Kone	50	100	-	100 %
5	Aye Mye	55	110	6	95 %
6	Let Pan Taw	44	88	-	100 %

NO.	LOCATIONS	I. QTY.	TTL. QTY.	Dead tree Qty.	Survival Rate (%)
7	Nan U	18	36	2	94 %
8	Auk Kyaung	31	62	17	68 %
9	Let Pan Ya Pin	11	22	7	68 %
10	Pauk Kone	113	226	114	50 %
11	Ma Kyee Chaung	303	606	-	100 %
12	Ywar Thar	42	84	4	94 %
13	Lay Ealn Tan	50	100	16	84 %
14	Kyar Kan	40	80	-	100 %
Total for 14 Villages		TTL.	1782 1922	Overall survival rate	84 %

✓ Observed 86% survival rate (previous record 90%) of planted trees up to now (end of April 2024)

✓ Causes of Tree Death: Unavailability of quality tube well water (salty water) in certain areas, rocky and hard ground beneath the topsoil in others.

Figure 23: Plantation Campaign (FY 23-24) Survival Rate Follow-up

Figure 24: Participation with MOGE at Reading Habit Promotion Affairs

Figure 25: Attending of Online Awareness Sharing Session at Mann Field Base Camp

Figure 26: Produced Water Injection at SI-303

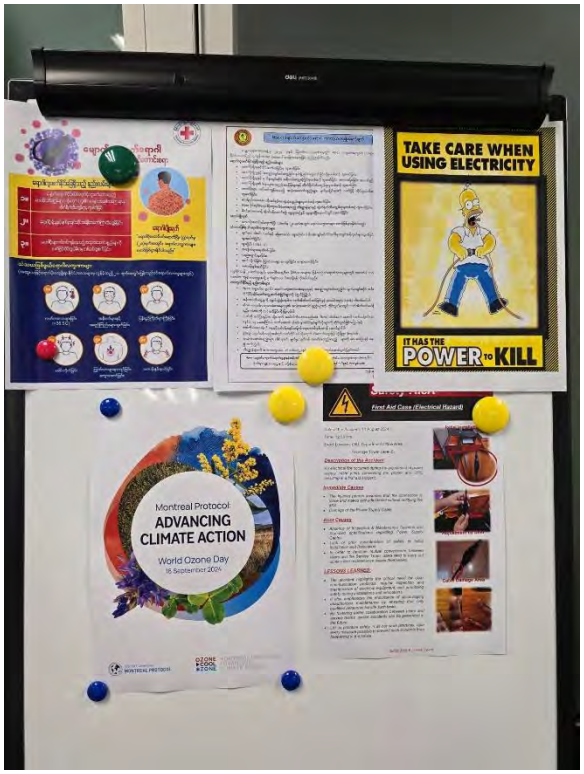


Figure 27: HSE Awareness Notice Board

Figure 28: Achieving an Extension of Mann Field ECC (2024-2029)

8. Monitoring Survey & Activities

Throughout the monitoring period spanning from April 2024 to September 2024, each article provides an extensive account of the monitoring surveys and activities carried out. The following is a summary of the monitoring activities conducted:

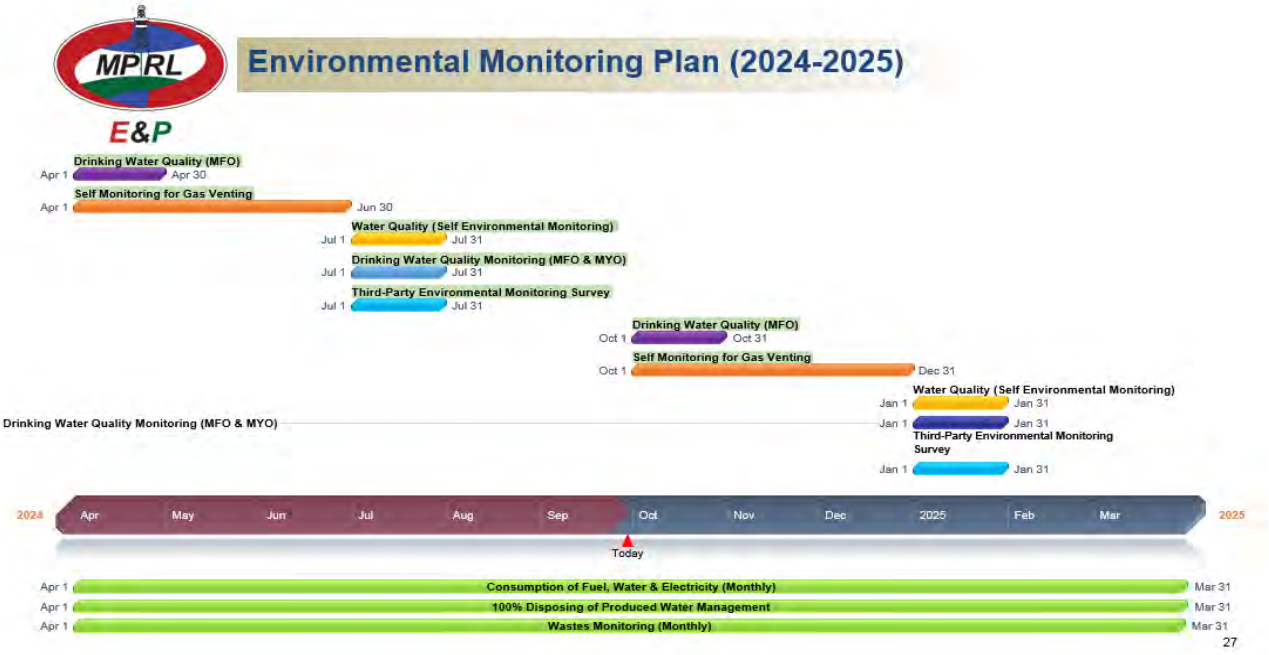


Figure 29: Timeline of Environmental Monitoring Plan (2024-25)

With the regional ECD (Magway) team, we conducted air and noise quality monitoring at Z3AQN and Z4AQN, soil quality monitoring at Z3S1, Z3S2, Z4S1, and Z4S2.

Monitoring activities are conducted as much as possible during these situations, and MPRL E&P remains highly committed to monitoring as an obligation and commitment from the ECC and EIA if the situations permit.

8.1 Ambient Air Quality Monitoring

Ambient air pollutants were sampled and analyzed in accordance with NEQEG guidelines, using the Haz-Scanner EPAS Wireless Environmental Perimeter Air Station. This portable meter records real-time data, including ambient air quality measurements and climatological data. Table 10 and table 11 provide the locations and parameters for air and noise quality monitoring.

Table 10: Ambient Air Quality Monitoring Stations

Monitoring Stations	GPS Coordinate	Sampling Date (Baseline)	Sampling Date (Monitoring)
Z1AQN	20° 19' 39.0" N 94° 49' 18.4" E	8 - 9 May 2015	-
Z2AQN	20° 15' 40.6" N 94° 50' 08.0" E	7 - 8 May 2015	-
Z3AQN	20° 13' 21.5" N 94° 51' 19.6" E	6 - 7 May 2015	25 – 26 July 2024
Z4AQN	20° 11' 41.9" N 94° 52' 32.4" E	6 - 7 May 2015	24-25 July 2024

Table 11: Air Quality Monitoring Parameters

Parameters	Unit	Method and Duration
Air Quality		In situ reading for 24 hour
Sulphur Dioxide (SO_2)	µg/m^3	
Carbon Monoxide (CO)	ppm	
Nitric Oxide (NO)	µg/m^3	
Nitrogen dioxides (NO_2)	µg/m^3	
Particulate Matter <2.5 µm ($PM_{2.5}$)	µg/m^3	
Particulate Matter <10 µm (PM_{10})	µg/m^3	
Meteorological Data		
Relative Humidity (R.H)	%	
Temperature	°C	
Wind Speed	kph	
Wind Direction	-	

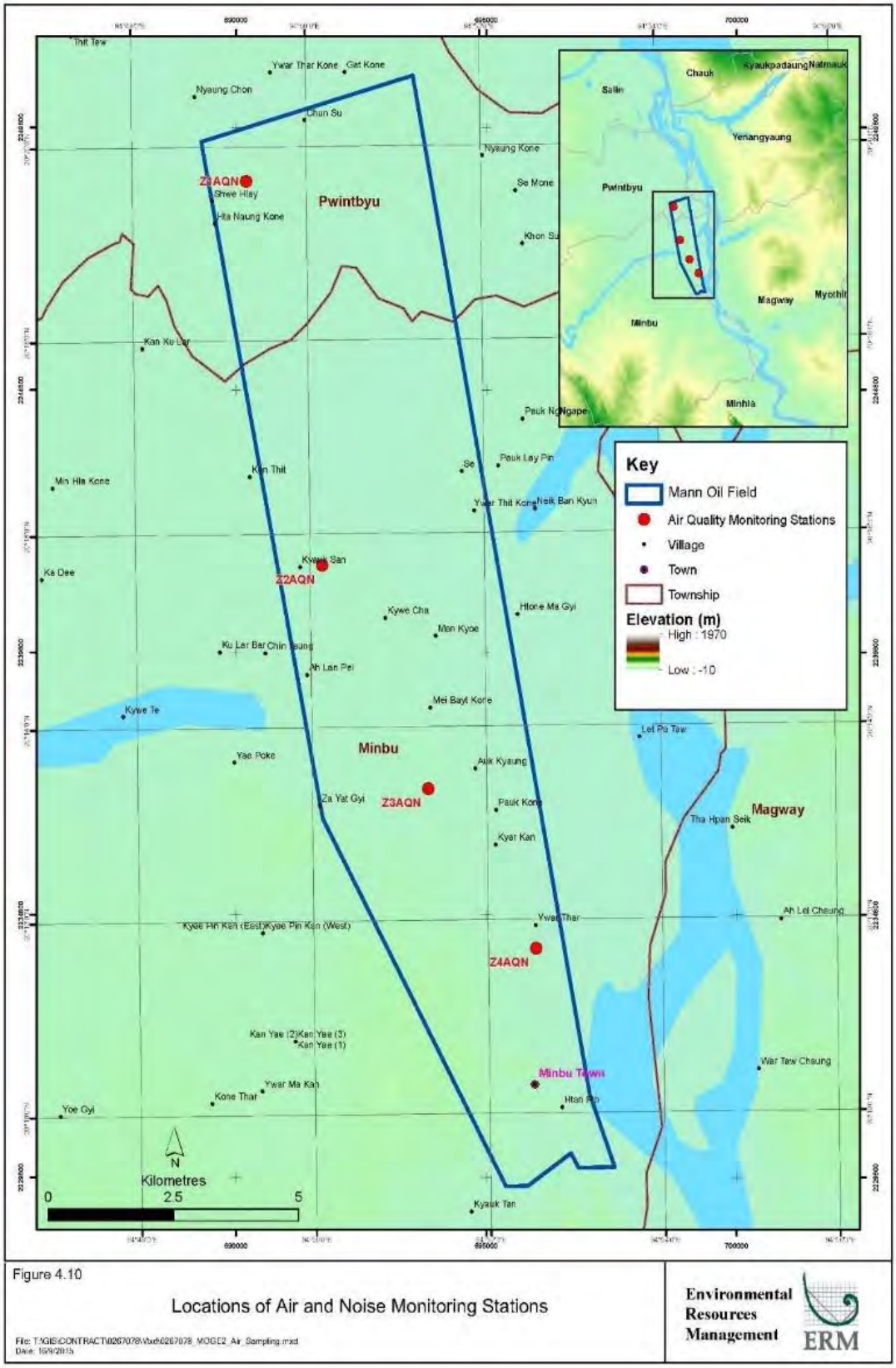


Figure 4.10

Locations of Air and Noise Monitoring Stations

File: T:\GIS\CONTRACT\0267078\Mxd\0267078_MOGE2_Air_Sampling.mxd
Date: 16/9/2015

Environmental Resources Management ERM

Figure 30: Locations of Air and Noise Monitoring Stations

Figure 31: Air and Noise Quality Monitoring at Z3AQN

Figure 32: Air & Noise Quality Monitoring at Z4AQN

Table 12: Summary of Air Quality Monitoring Results

Parameters	Monitoring Stations (Baseline May 2015)				Monitoring Stations (July 2024)			
	Z1AQN	Z2AQN	Z3AQN	Z4AQN	Z1AQN	Z2AQN	Z3AQN	Z4AQN
CO (24 - hr)	160.38 µg/m^3	126.02 µg/m^3	57.28 µg/m^3	148.93 µg/m^3	-	-	0.00014 ppm	0.0096 ppm
NO_2 (1 - hr)	188.18 µg/m^3	188.18 µg/m^3	56.45 µg/m^3	169.36 µg/m^3	-	-	7.48 ppb	7.13 ppb
NO	380.49 µg/m^3	85.92 µg/m^3	<12.27 µg/m^3	171.84 µg/m^3	-	-	43.89 µg/m^3	46.56 µg/m^3
PM $_{2.5}$ (24 - hr)	40 µg/m^3	30 µg/m^3	20 µg/m^3	30 µg/m^3	-	-	-	-
PM_{10} (24 - hr)	50 µg/m^3	40 µg/m^3	40 µg/m^3	40 µg/m^3	-	-	7.46 µg/m^3	10.16 µg/m^3
SO_2 (10 min)	52.36 µg/m^3	78.54 µg/m^3	<26.18 µg/m^3	26.18 µg/m^3	-	-	0.0 µg/m^3	72.57 µg/m^3
Hydrogen Sulfide (H_2S)	-	-	-	-	-	-	0.0 ppb	0 ppb
Ozone (O_3)	-	-	-	-	-	-	-	-
Temp (°C)	30.7	29	31.5	27.1	-	-	-	-
Relative Humidity (%)	61	61	56	55	-	-	60.93	52.8
Wind Speed (m/s)	0	0.015	0.081	0.85	-	-	-	-
Wind Direction	-	Southwest	Southeast	Southeast	-	-	-	-

Assessment Criteria: National Environmental Emission Guideline Value					
	O_3	NO_2	PM $_{2.5}$	PM_{10}	SO_2
24 - hr	-	-	25 µg/m^3	50 µg/m^3	20 µg/m^3
8 - hr	100 µg/m^3	-	-		-
1 - hr	-	200 µg/m^3	-		-
10 - min	-	-	-		500 µg/m^3

Due to security concerns, administrative and operational constraints, Mann Field operations are currently limited to daytime shifts with a limited crew. To optimize the monitoring station's accessibility and ensure reliable power supply and security, we selected Z3AQN and Z4AQN as the location for 24-hour Air and Noise Quality monitoring in collaboration with ECD (Magway) staff.

By Table 12, the Air Quality Monitoring results at both the Z3AQN and Z4AQN during July 2024 indicate that all the parameters are within NEQEG standards except for the Sulphur dioxide value at Z4AQN. Z4AQN is the point where away from field operations and surrounded by households now. The reasons for higher value of SO2 may be many reasons such as combustion of fossil fuels or incomplete combustion of vehicles and motorcycles, meteorological conditions, etc. The monitoring results are attached and shown in Appendix A.

8.2 Noise Quality Monitoring

Table 13 presents the noise monitoring locations and parameters. According to the Noise Quality Monitoring conducted by the regional ECD (Magway) at Z3AQN and Z4AQN, the LAeq value (dBA)a for both daytime and nighttime periods was found to be below the NEQEG limit. The comparison between the July 2024 Noise Quality Monitoring results and the 2015 baseline results is shown in Table 14 and Table 15.

Table 13: Noise Monitoring Stations

Monitoring Stations	GPS Coordinate	Description	Land-use
Z1AQN	20° 19' 39.0" N 94° 49' 18.4" E	Located at south western part of Pauk Su village, Pwint Phyu Township	Residential
Z2AQN	20° 15' 40.6" N 94° 50' 08.0" E	Located at south eastern part of Kyauk San village, near monestary compound	Residential
Z3AQN	20° 13' 21.5" N 94° 51' 19.6" E	In the MPRL E&P office compound, south of staff housing, Minnbu Township	Commercial
Z4AQN	20° 11' 41.9" N 94° 52' 32.4" E	Located at eastern part of Minnbu Township, close to the west bank of Ayeyarwady River	Bare ground

Table 14: Noise Quality Monitoring Results at Z3AQN

Receptor	One-hour LAeq (dBA)[a]			
	2015		July 2024	
	Daytime 07:00 - 22:00 (10:00 - 22:00 for public holidays)	Nighttime 22:00 - 07:00 (22:00 - 10:00 for public holidays)	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	55	45
Industrial, commercial	70	70	70	70
Average Test Result	**55**	**50**	**43.4**	**43.1**

Table 15: Noise Quality Monitoring Results at Z4AQN

Receptor	One-hour LAeq (dBA)[a]			
	2015		July 2024	
	Daytime 07:00 - 22:00 (10:00 - 22:00 for public holidays)	Nighttime 22:00 - 07:00 (22:00 - 10:00 for public holidays)	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	55	45
Industrial, commercial	70	70	70	70
Average Test Result	**49**	**56**	**43.1**	**41.0**

8.3 Soil Quality Monitoring

The baseline soil sampling locations are listed in table 16. The soil quality monitoring results provided by the regional ECD (Magway) indicated that lead, copper, and zinc parameters are exceeding above Dutch Standard 2000. The possible reasons are waste are dumped due to flooding near the sample collection point, contaminated water or fertilizer used, agricultural activities, municipal waste, excessive use of copper-based fertilizers and pesticides, runoff from contaminated sites, industrial effluents and waste, etc. The results are provided as shown in Table 17.

Table 16: Baseline soil sampling locations

Sampling Station	Replicate	Coordinates	Description	Baseline Sampling Date	Sampling Date
Z1S	1	20° 19' 45.30" N 94° 49' 13.99" E	at west of Pauk Su village, Pwint Phyu Township	6 - 9 May 2015	
	2	20° 19' 45.38" N 94° 49' 21.05" E	at Pauk Su village, Pwint Phyu Township	6 - 9 May 2015	
Z2S	1	20° 15' 41.70" N 94° 50' 8.41" E	in the paddy field located at the east of Kyauk San village, Minbu Township	6 - 9 May 2015	
	2	20° 15' 40.05" N 94° 50' 10.40" E	at east of Kyauk San village, Minbu Township	6 - 9 May 2015	
Z3S	1	20° 13' 22.04" N 94° 51' 19.59" E	in the compound of MPRL E&P office, Minbu Township	6 - 9 May 2015	12-Jun-24
	2	20° 13' 2.60" N 94° 51' 14.86" E	in the compound of MPRL E&P office, Minbu Township	6 - 9 May 2015	12-Jun-24
Z4S	1	20° 11' 41.31" N 94° 52' 39.20" E	near western bank of Ayeyarwady River, north of Minbu Town	6 - 9 May 2015	12-Jun-24
	2	20° 11' 45.77" N 94° 52' 38.30" E	near western bank of Ayeyarwady River, north of Minbu Town	6 - 9 May 2015	12-Jun-24

Figure 4.17

Locations of Soil Monitoring Stations

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Figure 33: Location of Soil Monitoring

Figure 34: Soil Quality Monitoring at Z3S1, Z3S2, Z4S1, Z4S2

Table 17: Soil Quality Monitoring Results

Parameter	Unit	Baseline Data Sampling Station (May 2015)								Soil Analysis Result (July 2024)								Dutch Standard 2000
		Z1S1	Z1S2	Z2S1	Z2S2	Z3S1	Z3S2	Z4S1	Z4S2	Z1S1	Z1S2	Z2S1	Z2S2	Z3S1	Z3S2	Z4S1	Z4S2	
pH	-	6.8	6.8	6.7	6.7	6.8	6.8	6.9	6.9	-	-	-	-	7.2	7.34	7.23	7.27	-
Arsenic	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	0.004	0.009	0.008	0.008	55
Lead	mg/kg	115	120	135	130	120	124	137	135	-	-	-	-	817.8	739.6	830.7	910.1	530
Cadmium	mg/kg	0.009	0.008	0.009	0.007	0.007	0.007	0.006	0.007	-	-	-	-	8.546	8.992	7.4	7.365	12
Copper	mg/kg	105	99	110	115	90	95	85	88	-	-	-	-	334.3	370.4	798.3	903.1	800
Zinc	mg/kg	75	80	72	69	65	70	75	78	-	-	-	-	270.4	230.4	845.7	911	720
Manganese	mg/kg	30	32	38	35	28	25	31	30	-	-	-	-	8806	9770	11340	13440	500
Iron	mg/kg	4850	4790	4900	4930	4870	4950	4700	4690	-	-	-	-	48630	48830	50900	51530	-
Soil Texture	-	Silty clay	Silty clay	Silty Sand	Silty Sand	Silty Sand	Silty Sand	Sandy silt with minor clay	Sandy silt with minor clay	-	-	-	-	-	-	-	-	-
Soil Color	-	Grey	Grey	Yellowish Brown	Yellowish Brown	Yellowish Brown	Yellowish Brown	Yellowish Grey	Yellowish Grey	-	-	-	-	-	-	-	-	-

8.4 Surface Water Quality Monitoring

The surface water quality monitoring within the Project Area was carried out at two locations in July 2024. Details of the sampling locations were presented in Table 18.

The monitoring results of surface water in July 2024 as shown in Table 19.

Table 18: Surface Water Quality Monitoring Locations

Sampling Locations	Coordinate	Description	Sampling Date (Monitoring)
Z3SW1	20° 14' 46.51" N 94° 51' 0.27" E	Mann Chaung, near Kywegya village	25 July 2024
Z3SW2	20° 14' 45.74" N 94° 51' 1.87" E	Mann Chaung, about 50 m downstream of Z3SW1	25 July 2024
Z4SW1	20° 11' 41.31" N 94° 52' 41.11" E	Near west bank of Ayeyarwady river, Minbu Township	25 July 2024
Z4SW2	20° 11' 38.80" N 94° 52' 42.50" E	Ayeyarwady river, about 90 m downstream of Z4SW1	25 July 2024

Figure 4.13

Locations of Surface Water Monitoring Stations

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Date: 16/9/2015

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Figure 35: Locations of Surface Water Quality Monitoring

Figure 36: Surface Water Quality Monitoring at Z3SW1, Z3SW2, Z4SW1, and Z4SW2

Table 19: Surface Water Quality Monitoring Results

Item/ Sample Name	2015				2024 (July)				Vietnam Standard	NEQEG Standard
	Z3SW1	Z3SW2	Z4SW1	Z4SW2	Z3SW1	Z3SW2	Z4SW1	Z4SW2		
Date/ Time	6/5/15 (12:08)	6/5/15 (12:08)	6/5/15 (12:08)	6/5/15 (12:08)	25/7/24 (12:25)	25/7/24 (12:35)	25/7/24 (15:00)	25/7/24 (15:15)		
Weather	Sunny	Sunny	Sunny	Sunny	Sunny	Sunny	Sunny	Sunny	-	-
Transparency	High	High	Medium	Medium	-	-	-	-	-	-
Temperature Water (C)	37.66	37.62	31.55	31.18	24.5	24.8	25.0	24.9	-	-
pH	8.1	8.11	7.73	7.65	7.4	7.6	7.4	7.4	5.5-9	6-9
DO (mg/l)	11.33	11.52	7.12	7.15	4.7	4.9	5.5	5	≥2	-
EC (µs)	711.8	705.7	153	152.5	0.292	0.31	0.159	0.169	-	-
Turbidity (FNU)	7.1	7	25	43.7	40	28	36	63	-	-
Colour	5	10	45	55	40	12	294	239	-	-
Alkalinity	238	237	58	58	<5	<5	9	9	-	-
Hardness	144	150	58	50	38	48	25.6	16	-	-
BOD5 (mg/l)	10	10	14	16	4.8	3.8	5.1	4.3	<25	30
COD (mg/l)	32	32	32	32	<15	<15	18	<15	<35	125
Total Nitrogen (mg/l)	3	9	19	18	1.8	1.1	1.2	1.5	15	10
Total Phosphorous (mg/l)	0.047	0.051	0.071	0.031	1.8	1.8	1.2	1.6	-	2.0
Oil and grease (mg/l)	5	7	<1	<1	6	4	4	4	0.3	10
TSS (mg/l)	7	13	124	138	12	15	18	25	80	50
E.Coli (CFU/100ml)	-	-	-	-	0	0	0	0		
Arsenic (mg/l)	-	-	-	-	0.005	0.005	0.005	0.005		
Barium (mg/l)	-	-	-	-	-	-	-	-		
Boron (mg/l)	-	-	-	-	0.9	0.6	2.1	0.18		
Total Chromium (mg/l)	-	-	-	-	0.15	0.18	0.12	0.16		
Fluoride (mg/l)	-	-	-	-	0	0	0	0		
Selenium (mg/l)	-	-	-	-	-	-	-	-		
Uranium (mg/l)	-	-	-	-	-	-	-	-		

8.5 Groundwater Quality Monitoring

The groundwater quality monitoring was conducted at three existing residential wells (dug wells and drilled/ tube wells) in the Project Area. The sampling locations are presented in Table 20 and its monitoring locations are expressed in Figure 37.

Table 20: Groundwater Quality Monitoring Locations

Sampling Locations	Coordinate	Description	Sampling Date (Monitoring)
Z3GW1	20° 15' 5.35" N 94° 50' 54.52" E	Tube well in Kywegya village, Minbu Township	25 July 2024
Z3GW2	20° 15' 6.44" N 94° 50' 53.77" E	Tube well in Kywegya village, Minbu Township	25 July 2024
Z4GW1	20° 11' 37.92" N 94° 52' 29.67" E	Well in Shwe War Gone Ward, Minbu Township	-
Z4GW2	20° 11' 29.50" N 94° 52' 27.85" E	Well in Shwe War Gone Ward, Minbu Township	25 July 2024

Figure 4.15

Locations of Groundwater Monitoring Stations

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Figure 37: Groundwater Quality Monitoring Locations

Figure 38: Groundwater Quality Monitoring at Z3GW1, Z3GW2, and Z4GW2

The results of groundwater quality monitoring are summarized in Table 21. As per the results, total coliform and total chromium values are higher than the WHO Drinking Water Quality Standard at all locations but other parameters are complied with the standards and the reasons may be such as surface water intrusion, animal waste contamination, shallow wells and inadequately protected, flooding events, etc. The presence of total chromium would be natural occurrences, industrial pollution, landfills and improper disposal of waste, leaching from contaminated soils, corrosion of well components, increased urbanization and inadequate waste management, etc.

Table 21: Result Summary of Groundwater Quality Monitoring

Item/ Sample Name	2015				2024 (July)				WHO Drinking Water Quality Standard (2011)
	Z3GW1	Z3GW2	Z4GW1	Z4GW2	Z3GW1	Z3GW2	Z4GW1	Z4GW2	
Date/ Time	6/5/15 (11:04)	6/5/15 (11:30)	6/5/15 (14:32)	6/5/15 (14:58)	25/7/24 (12:15)	17/1/24 (12:05)	-	17/1/24 (15:40)	-
Weather	Sunny	Sunny	Sunny	Sunny	Sunny	Sunny	-	Sunny	-
Transparency	High	High	High	High	-	-	-	-	
Temperature Water (C)	36.12	37.57	31.77	31.67	25.0	25.0	-	25.1	
pH	6.68	6.63	6.95	7.22	7.7	7.7	-	7.6	6.5-8.5
DO (mg/l)	2.9	2.29	1.44	3.41	2.64	2.5	-	4.72	
EC (µs)	1498.3	1198.7	5060.4	7740.8	1.9	0.488	-	1.3	
Turbidity (FNU)	4.9	4.6	0.5	1	<5	<5	-	<5	
Colour	5	10	Nil	Nil	0	0	-	0	
Alkalinity	354	279	462	624	<5	12	-	8	
Hardness	246	222	539	639	41	49	-	448.72	
BOD_5 (mg/l)	10	14	8	10	3.4	3.1	-	3.2	3
COD (mg/l)	32	32	32	32	<15	<15	-	<15	250
Total Nitrogen (mg/l)	4	73	4	63	1.2	0.8	-	0.7	
Total Phosphorous (mg/l)	0.239	0.168	0.251	0.042	1.3	1.8	-	1.6	
Oil and grease (mg/l)	<1	<1	<1	<1	3	3	-	3	10
TSS (mg/l)	<5	<5	5	<5	0	0	-	0	
E.Coli (CFU/100 ml)	-	-	-	-	0	0	-	0	0
Arsenic (mg/l)	-	-	-	-	0.005	0.005	-	0.005	0.05
Barium (mg/l)	-	-	-	-	-	-	-	-	0.7
Boron (mg/l)	-	-	-	-	0.2	0.5	-	0.7	2.4
Total Chromium (mg/l)	-	-	-	-	0.11	0.14	-	0.16	0.05
Fluoride (mg/l)	-	-	-	-	0	0	-	0	1.5
Selenium (mg/l)	-	-	-	-	-	-	-	-	0.04
Uranium (mg/l)	-	-	-	-	-	-	-	-	0.03

8.6 Monitoring on Sludge Management Status

The Mann Field produces around 1800 BBL of produced water per day, which typically contains a mixture of inorganic compounds (such as dissolved salts, trace metals, suspended particles) and organic compounds (such as dispersed and dissolved hydrocarbons and organic acids). As a result of these compounds, produced water generates sludge. Improper discharge of this sludge can have potential impacts on the receiving environment, including soil, surface water, and groundwater, as well as community health, terrestrial, and aquatic ecological resources.

Dried sludge, weighing approximately 145 tons (estimated weight), is currently being stored temporarily at the Waste Management Compound and at the Sludge Management Compound (extended dried sludge storage shed).

Figure 39: Sludge Management Compound (SMC)

Currently, all the collected wet sludge is being stored properly in two concrete pits to ensure compliance with the NEQEG guideline levels for Onshore Oil and Gas Development. Any hazardous waste will be disposed of according to the commitments made in the ECC.

8.7 Monitoring on Produced Water Management Status

MPRL E&P to minimize environmental impact to Zero Discharge in produced water management. The team recording milestones on achievements of Zero Discharge on produced water management was implemented on 24 August 2017.

MPRL E&P is undertaking to inject all produced water (100%) into the shut-in wells by using 9 units of injection pumps to meet guideline levels in NEQEG for Onshore Oil and Gas Development.

Figure 40: Produced Water Injection into Shut-in Wells

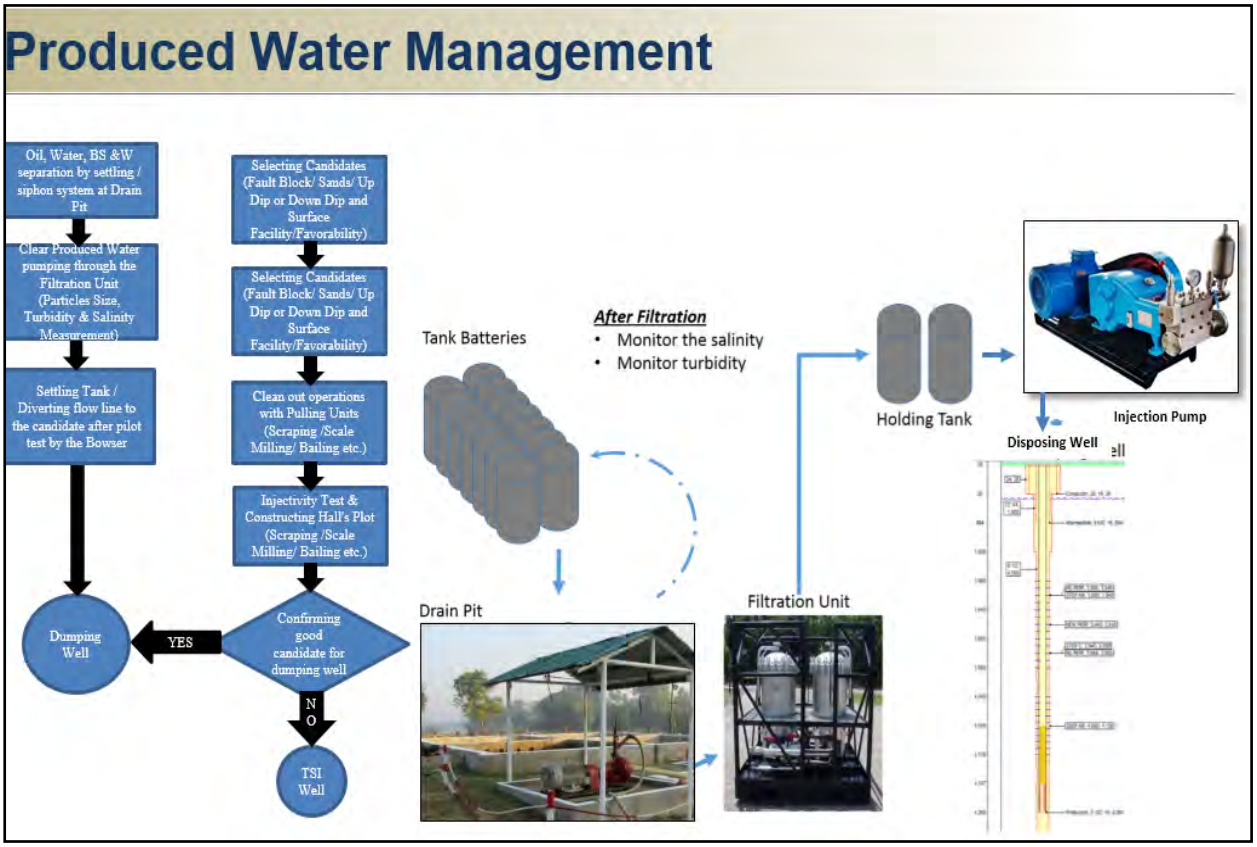

Figure 41: Produced Water Management Process

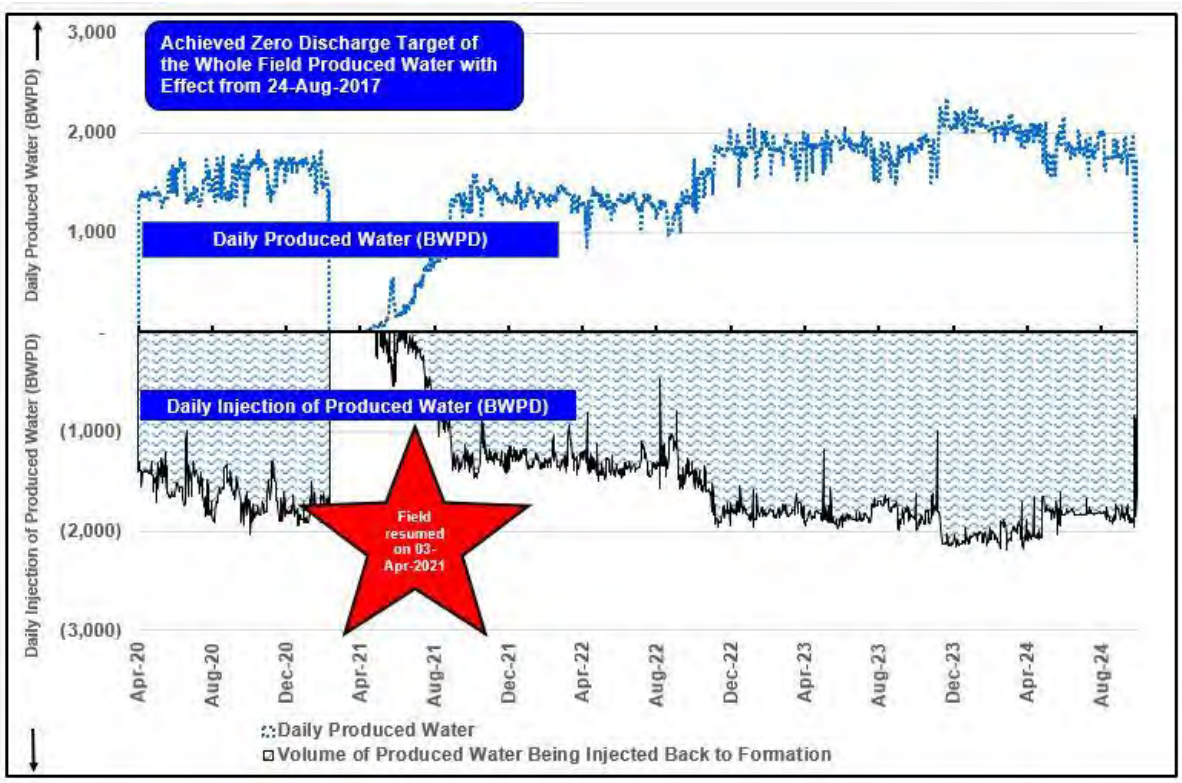

Figure 42: Produced Water Management

According to Table 8 in this report, as per Table 8.3 Environmental and Social Monitoring Program of the approved EIA report, it is committed to testing the wastewaters from the discharged points. However, all the produced water from the GOCS is being disposed of back into the formation and thus there is no discharge to the environment. Again, there is no discharge from the hydro test activities and also from shut-in wells.

Therefore, wastewater monitoring will be continued with the parameters committed in Table 8.3 of the approved EIA report on the treated discharged water of the base camp.

8.8 Monitoring on Discharge of Treated Wastewater and Runoff

MPRL E&P conducted self-monitoring activities to access the quality of discharged water from various sources, including domestic wastewater treated from Bio-filter water, hydro test water from warehouse, drinking water quality, domestic wastewater quality from Down-hole and Mechanical Workshop Zero Discharged Tank, and groundwater quality near the injection well. The monitoring was conducted according to the planned schedule.

8.8.1 Base Camp Water Discharge

Domestic-type wastewater and sewage are managed in the existing operational phase. Based on the camp water consumption monitoring results, approximately 8,000 liters of sewage and wastewater are generated per day from the base camp within the Mann Field, which can accommodate 60 – 80 workers.

Water consumption is monitored using water flow meters installed at the base camp, workshop, warehouse, and down-hole workshop. The team is also aware of the water consumption to minimize its volume.

Regular safety meetings and toolbox talks are held to raise awareness about water conservation, energy conservation, and water pollution among all crew members. Additionally, inspections are conducted to ensure that there are no leaks or wastage of water from pipelines and basins during routine camp inspections.

Figure 43: Regular Maintenance of Bio-filter by Third-party

Sanitary and domestic wastewater are managed in accordance with the mitigation plan. The following measures are in place:

- Sanitary wastewater is collected in septic holding tanks in the main camp, which are periodically serviced by a licensed firm. Currently, the wastewater is collected in a concrete pit, with no discharge outside.
- MPRL E&P has installed the wastewater treatment unit to treat sanitary wastewater in accordance with NEQEG guidelines. The field team monitors the discharge water parameters on a quarterly basis.
- Storm water run-off is directed to a pond to remove silt particles before being discharge via a storm drain.
- Surface runoff from potential sources of contamination is prevented.
- All discharge facilities and sediment control structures are regularly inspected and maintained to ensure proper and efficient operation, particularly during rainstorms. Deposited silt and grit are removed regularly.
- Runoff from areas without potential sources of contamination is minimized by reducing the area of impermeable surfaces and using vegetated swales and retention ponds to reduce the peak discharge rate.
- Oil-water separators and grease traps are constructed and maintained as appropriate at refueling facilities, workshops, parking areas, fuel storage, and containment areas.
- The location of the discharge point for treated sewage effluent into surface water is not confirmed based on the existing project design, but it will be located where there is adequate assimilative capacity of the surface waters.

8.8.2 Monitoring of Sewage Treatment System Water Quality

At Base Camp, we treated sewage discharge water using a bio-filter and collected it in a concrete tank. This water is now repurposed for watering the plants and controlling dust by spraying it on the ground.

During the month of July 2024, we collected water samples from the bio-filter treated system and sent them to ALARM and ISO Tech lab for testing. We monitored a total of eleven parameters and discovered that the results are under the NEQEG guideline.

The monitoring results are presented in Table - 22: Bio-filter outlet water quality monitoring (Sewage Treatment System).

Table 22: Bio-filter Outlet Water Quality Monitoring (Sewage Treatment System)

No	Quality Parameter	Units	Results (Jan 2023)	Results (Jul 2023)	Results (Jan 2024)	Results (Jul 2024)	NEQEG (2015)
1	BOD_5	mg/l	20	62	12	32	50
2	COD	mg/l	31	107	21	56	250
3	Oil and Grease	mg/l	5	7	6	5	10
4	pH	S.U	8.08	7.7	7.5	7.6	6-9
5	Total Coliform Bacteria	MPN/100ml	>1100	>1100	>1100	80	400
6	Total Nitrogen	mg/l	18.2	2.4	3.2	3	-
7	Total Phosphorous	mg/l	<1.5	3.2	1.4	<0.3	2
8	Total Suspended Solids (TSS)	mg/l	2	9	8	3	50
9	Turbidity	FNU	-	-	<5	8	-
10	Electrical Conductivity	µs	-	-	0.9	0.957	-
11	Dissolved Oxygen	mg/l	-	-	4.07	2.82	-

8.8.3 Hydro-test Water and Domestic Water

At the Mann field warehouse, the team previously conducted hydro tests on tubing in a designated pressure test area. However, the field team has since minimized water usage by implementing a recycling system that uses zero discharge recycled water for these tests.

Figure 44: Warehouse Tubular Section

8.8.4 Monitoring of Discharge Water from Warehouse (Tubular Section)

Figure 45: Warehouse Zero Discharge Tank

The hydro-test water monitoring schedule was carried out during the month of July 2024. The monitoring results revealed that all parameters complied with the NEQEG guidelines.

The monitoring results are presented in Table – 23: Monitoring of Discharge Water from Warehouse (Tubular Section).

Table 23: Discharge Water from Warehouse (Tubular Section)

No	Quality Parameter	Units	Results (Jan 2023)	Results (Jul 2023)	Results (Jan 2024)	Results (Jul 2024)	NEQEG (2015)
1	BOD_5	mg/l	34	64	13	21	25
2	Arsenic	mg/l	0	0.005	0.005	0.01	-
3	Cadmium	mg/l	ND	0.01	ND	ND	-
4	COD	mg/l	27	110	20	32	125
5	Chromium (Hexavalent)	mg/l	0.07	0.109	<0.02	<0.02	-
6	Copper	mg/l	0.1	ND	ND	ND	-
7	TSS	mg/l	42	33	22	35	35
8	Chloride	mg/l	88	141	15	20.32	600
9	Lead	mg/l	-0.031	ND	0.15	ND	-
10	Mercury	mg/l	0.001	-	0.006	0.006	-
11	Nickel	mg/l	<0.2	ND	ND	0.2	-
12	pH	S.U	7.93	7.2	7.5	7.7	6-9
13	Phenols	mg/l	<0.1	<0.1	<0.1	<0.1	0.5
14	Silver	mg/l	≤0.002	≤0.002	-	-	-
15	Sulfide	mg/l	<0.04	<0.04	0.04	0.04	1
16	Zinc	mg/l	<0.02	<0.02	<0.02	<0.02	-
17	Vanadium	mg/l	≤0.002	≤0.002	-	-	-

Down-hole Workshop: Down-hole tools servicing, cleaning, inspection, pressure testing and the cleaning process with steam are carried out in the Down-hole Workshop. The used water is disposed of at the zero discharge pits to preserve the environment.

8.8.5 Monitoring of Discharge Water from Down-Hole Workshop

During the monitoring period from April 2024 to September 2024, water quality monitoring was conducted for the discharge of water from the equipment maintenance workshop (Down-hole Workshop) into the ZERO Discharge Tank. In July 2024, we monitored a total of twenty-nine parameters, and all of them complied with the NEQEG, except for total phosphorous, total suspended solids, and total coliform bacteria. The types of activities conducted in the workshop can have a significant impact on water quality. Reasons for high total phosphorous value may be the use of detergents and cleaning agents,

Figure 46: Down-hole Workshop

incorporating lubricants, grease, and oil, corrosion inhibitors and additives, etc. Total suspended solids value may be high due to particles from equipment cleaning, poor filtration or settling efficiency, dirt or dust from workshop operations, corrosion and wear of metal parts, etc.

The water used in the daily operation of the down-hole workshop was collected in a concrete tank via a drain line and reused for recycling, thus avoiding discharge to the environment.

The monitoring results are described in the following Table – 24: Discharge Water from Equipment Maintenance Workshop (Down-hole Workshop).

Table 24: Discharge Water from Down-hole Workshop

No	Quality Parameter	Units	Results (Jan 2023)	Results (Jul 2023)	Results (Jan 2024)	Results (Jul 2024)	NEQEG (2015)
1	BOD_5	mg/l	24	112	14	37	50
2	Ammonia	mg/l	0.8	36	0.2	3	10
3	Arsenic	mg/l	0.011	0.005	0.01	0.01	0.1
4	Cadmium	mg/l	ND	ND	ND	ND	0.1
5	COD	mg/l	68	180	25	65	250
6	Chlorine (Total Residual)	mg/l	<0.02	<0.02	<0.02	<0.02	0.2
7	Chromium (Hexavalent)	mg/l	<0.02	0.1	<0.02	<0.02	0.1
8	Chromium (Total)	mg/l	≤0.002	≤0.002	-	-	0.5
9	Copper	mg/l	0.2	ND	ND	ND	0.5
10	Cyanide (Free)	mg/l	<0.002	<0.002	<0.01	<0.01	0.1
11	Cyanide (Total)	mg/l	<0.002	0.002	-	-	1
12	Fluoride	mg/l	0	0	0	0	20
13	Heavy Metals (Total)	mg/l	-	-	-	-	10
14	Iron	mg/l	3.5	0.46	0.35	0.36	3.5
15	Lead	mg/l	0.038	ND	0.2	ND	0.1
16	Mercury	mg/l	0.01	-	0.006	0.002	0.01
17	Nickel	mg/l	<0.2	ND	ND	ND	0.5
18	Oil and Grease	mg/l	9	21	7	8	10
19	pH	S.U	7.9	7.5	7.5	7.6	6-9
20	Phenols	mg/l	<0.1	<0.1	0.1	<0.1	0.5

No	Quality Parameter	Units	Results (Jan 2023)	Results (Jul 2023)	Results (Jan 2024)	Results (Jul 2024)	NEQEG (2015)
21	Selenium	mg/l	≤0.010	≤0.010	-	-	0.1
22	Silver	mg/l	≤0.002	≤0.002	-	-	0.5
23	Sulfide	mg/l	<0.04	<0.04	<0.04	<0.04	1
24	Temperature increase	mg/l	27	26.8	25	26.2	<3
25	Total coliform bacteria	MPN/100 ml	>1100	>1100	>1100	40	400
26	Total Phosphorous	mg/l	<1.5	0.8	1.1	2.6	2
27	Total Suspended Solids	mg/l	12	26	35	156	50
28	Zinc	mg/l	<0.02	0.03	<0.02	<0.02	2
29	Vanadium	mg/l	≤0.002	≤0.002	-	-	-

Mechanical Workshop: pulling units, workover rigs, trucks, bulldozers, backhoes, tractors and pumps are serviced in the workshop, and large amounts of water are used in car washes and general cleaning. Water reclamation systems are employed in the workshop.

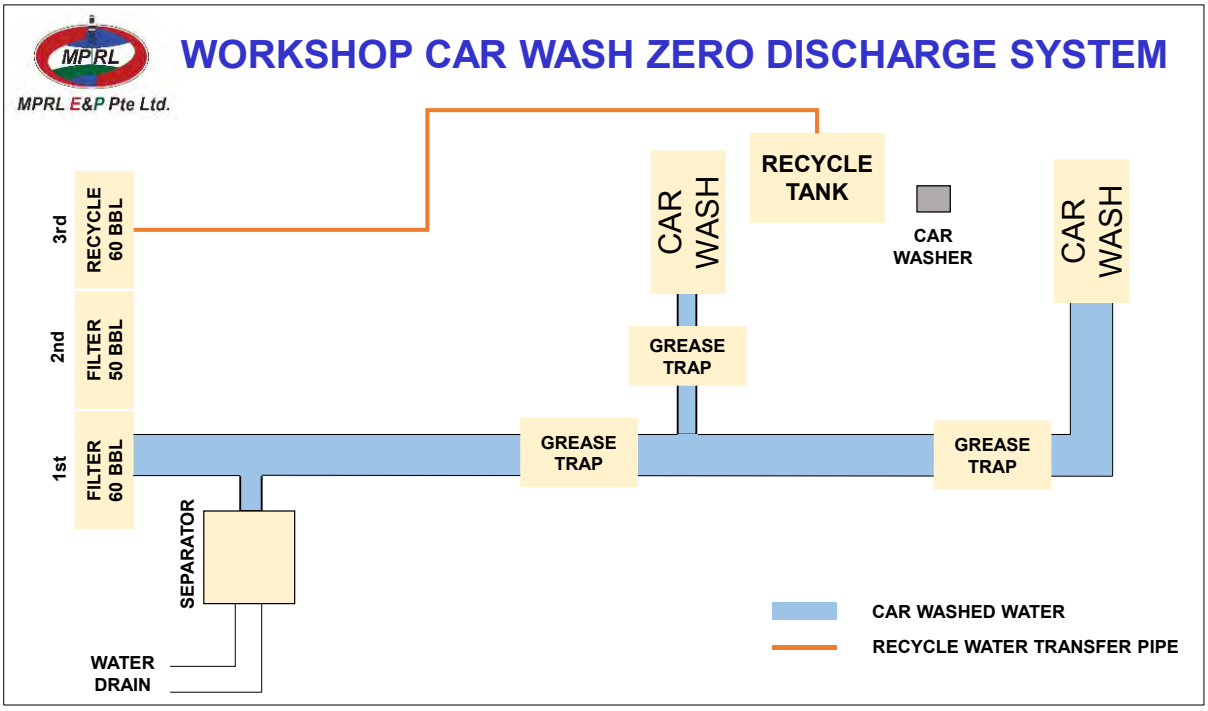

Figure 47: Recycle Water Usage System with Zero Discharge at Mechanical Workshop

8.8.6 Monitoring of Discharge Water from Mechanical Workshop

Vehicles and machine parts undergo maintenance and repair work at the mechanical workshop, and the water used in the workshop's daily operation is collected in a concrete tank and reused.

Monitoring for the domestic water quality from the equipment maintenance workshop (Mechanical Workshop) of the Zero Discharge Tank was conducted in July 2024. A total of 29 parameters were monitored, and among them, lead parameter only exceeded the guideline values a little.

It may be many reasons for higher value of lead such as handling of lead containing materials such as leaded gasoline, lead-based paints, automotive maintenance and repair, metal working process, recycling of lead containing materials, etc.

The tested results of the monitoring are presented in Table – 25: Discharge water from Equipment Maintenance Workshop (Mechanical Workshop).

Table 25: Discharge Water from Mechanical Workshop

No	Quality Parameter	Units	Results (Jan 2023)	Results (Jul 2023)	Results (Jan 2024)	Results (Jul 2024)	NEQEG (2015)
1	BOD_5	mg/l	18	43	26	28	50
2	Ammonia	mg/l	0.5	14	0.2	0.3	10
3	Arsenic	mg/l	0	0.005	0.005	0.005	0.1
4	Cadmium	mg/l	ND	ND	0.01	ND	0.1
5	COD	mg/l	59	96	34	53	250
6	Chlorine (Total Residual)	mg/l	<0.02	<0.02	<0.02	<0.02	0.2
7	Chromium (Hexavalent)	mg/l	<0.02	0.08	<0.02	<0.02	0.1
8	Chromium (Total)	mg/l	≤0.002	≤0.002	-	-	0.5
9	Copper	mg/l	0.1	0.03	ND	ND	0.5
10	Cyanide (Free)	mg/l	<0.002	<0.002	<0.01	<0.01	0.1
11	Cyanide (Total)	mg/l	<0.002	0.008	-	-	1
12	Fluoride	mg/l	0	0	0	0	20
13	Heavy Metals (Total)	mg/l	-	-	-	-	10
14	Iron	mg/l	1.087	0.31	0.32	0.32	3.5
15	Lead	mg/l	0.001	ND	0.12	0.15	0.1
16	Mercury	mg/l	0.001	-	0.006	0.001	0.01

No	Quality Parameter	Units	Results (Jan 2023)	Results (Jul 2023)	Results (Jan 2024)	Results (Jul 2024)	NEQEG (2015)
17	Nickel	mg/l	<0.2	ND	ND	ND	0.5
18	Oil and Grease	mg/l	4	8	6	6	10
19	pH	S.U	7.87	7	7.7	8.3	6-9
20	Phenols	mg/l	<0.1	<0.1	<0.1	<0.1	0.5
21	Selenium	mg/l	≤0.010	≤0.010	-	-	0.1
22	Silver	mg/l	≤0.002	≤0.002	-	-	0.5
23	Sulfide	mg/l	<0.04	<0.04	<0.04	<0.04	1
24	Temperature increase	mg/l	26	26.8	24.9	25	<3
25	Total coliform bacteria	MPN/100 ml	>1100	>1100	460	30	400
26	Total Phosphorous	mg/l	<1.5	1.2	1.6	0.2	2
27	Total Suspended Solids	mg/l	6	3	<0.02	28	50
28	Zinc	mg/l	<0.02	0.02	<0.02	<0.02	2
29	Vanadium	mg/l	≤0.002	≤0.002	-	-	-

8.9 Use of Chemicals for EOR

During the EOR operation, chemicals will be injected into the wells to alter the property of oil for enhanced recovery in the EIA report. The chemicals that may be used for the Project included alkaline and polymers. The injection of chemicals into the well may cause groundwater contamination and indirectly affecting community health.

In Mann Field, MPRL E&P applied the GreenZyme® to inject to the formation that does not expose nor discharge to the environment. There is no environmental issue since the injection project had been conducted according to the standard operating procedure by protecting not to spill to the environment. According to the work program, MPRL E&P did not conduct the GreenZyme® treatment operation during this fiscal year 2024-25 and observing the result of previous year GreenZyme® treatment wells' result.

GreenZyme® is a biological liquid enzyme which is a kind of environmental friendly fluid. It is a protein-based non-living catalyst, which facilitates the completion of biological reactions, to enhance crude oil recovery from most oil wells, both onshore and offshore. EOR GreenZyme® is produced by a proprietary process, which involves impregnating a high protein nutrient soup, with the DNA of selectively cultured microbes. The final product contains enzymes associated with the oil-eating microbe's DNA. Nearly all-living microbes are made inert at the end of the manufacturing process.

8.10 Monitoring of Camp Water Quality (Drinking Water Quality)

Figure 48: Collection of Drinking Water Sample from RO Drinking Water System

Access to safe drinking water is crucial for everyone's wellbeing, which is why a Reverse Osmosis (RO) drinking water system has been installed in the base camp. This system ensures that there is sufficient purified water available for staff members to use for drinking water and food preparation. To maintain the quality of water, the team conducts quarterly water quality monitoring, and the site doctor and HSE team perform hygiene inspections and audits according to the planned schedule. Regular service and maintenance are also scheduled and implemented to ensure that the RO system continues to function properly.

Monitoring Results of Drinking Water Quality

In July 2024, the drinking water quality of Mann Field Base Camp was tested at ALARM and ISO Tech labs. The results indicate that all parameters were below the Drinking Water Quality Standard (DWQS) 2019 and confirm that the water is safe to drink. However, taste and odor parameters were not available in the lab.

The results of the purified drinking water quality from RO system are described in Table 26: Drinking Water Quality Monitoring from MPRL E&P Base Camp (RO Outlet).

Table 26: Drinking Water Quality Monitoring from MPRL E&P Base Camp (RO Outlet)

No	Quality Parameter	Units	Results (Jan 2023)	Results (Jul 2023)	Results (Jan 2024)	Results (Jul 2024)	DWQS (2019)
1	pH	S.U	7.18	7.3	8.2	7	6.5-8.5
2	Turbidity	NTU	0	<5	<5	<5	5
3	Colour	TCU	1	0	1	0	15
4	Hardness	mg/l as $CaCO_3$	8	6	41.77	12.8	500
5	Arsenic	mg/l	0.003	0.005	0.005	0	0.05
6	Chloride	mg/l	24.2	44	5	32	250
7	Lead	mg/l	ND	ND	ND	ND	0.01
8	Total Dissolved Solids (TDS)	mg/l	0.032	17	10	3	1000
9	Iron	mg/l	0.014	0.21	0.05	0.12	1
10	Sulphate	mg/l	7.7	6.5	<2	19.4	250
11	Manganese	mg/l	-0.002	0.1	0.3	<0.2	0.4
12	Nitrate	mg/l	<0.5	≤0.067	<0.5	0.25	50
13	Total Coliform Count	MPN/100ml	0	0	0	0	0
14	Total Fecal Coliform Count	MPN/100ml	0	0	0	0	0
15	Odor	Acceptable	1	1	NA	NA	-

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8.11 Monitoring of Ground Water Quality Near the Injection Well

MPRL E&P did not perform the chemical flooding or injection processes on the wells, but instead initiated the enhanced oil recovery project by injecting produced water into the shut-in wells using injection pumps to maintain reservoir pressure.

As part of the Environmental monitoring plan, groundwater near the injection well was monitored bi-annually to assess any contamination or impact on the groundwater. There were two tube wells near shut-in well 132, named Ko Win Maung and Ma Nyein wells. Due to flooding in recent periods there, we have no chance to get water sample from Ko Win Maung place. The monitoring was conducted according to our self-monitoring plan, and the samples were tested at ALARM lab in July 2024. However, taste and odor parameters could not be tested due to the unavailability of labs. The monitoring results are presented in Tables 27 and 28.

Table 27: Groundwater Quality Monitoring near Injection Well 132 (Ko Win Maung)

No	Quality Parameter	Units	Results (Jan 2023)	Results (Jul 2023)	Results (Jan 2024)	Results (Jul 2024)	DWQS (2019)
1	pH	S.U	7.99	7.4	7.3	NA	6.5-8.5
2	Turbidity	FAU/NTU	3.9	<5	<5	NA	5
3	Colour	HU	4	42	1	NA	15
4	Hardness	mg/l as CaCO3	18	210	42.53	NA	500
5	TDS	mg/l	1	1320	910	NA	≤1000
6	Chloride	mg/l	9.2	141	43	NA	250
7	Total Coliforms	MPN/100ml	0	>1100	9	NA	0
8	Total Faecal Coliforms	MPN/100ml	0	93	0	NA	0
9	Arsenic	mg/l	0.006	0.005	0.005	NA	0.05
10	Iron	mg/l	0.1	0.36	0.31	NA	1
11	Lead	mg/l	0.004	ND	ND	NA	0.01
12	Manganese	mg/l	0.02	0.5	1.8	NA	0.4
13	Sulfate	mg/l	706	837	449	NA	250
14	Nitrate	mg/l	47.2	0.493	2.1	NA	50
15	Odor	Acceptable	1	1	NA	NA	-

Table 28: Groundwater Quality Monitoring near Injection Well 132 (Ma Nyein)

No	Quality Parameter	Units	Results (Jan 2023)	Results (Jul 2023)	Results (Jan 2024)	Results (Jul 2024)	DWQS (2019)
1	pH	S.U	7.93	7.4	8	7.7	6.5-8.5
2	Turbidity	FAU/NTU	0.41	<5	<5	<5	5
3	Colour	HU	2	6	2	0	15
4	Hardness	mg/l as $CaCO_3$	39	39	40.72	0.051	500
5	TDS	mg/l	1.14	1230	560	582	≤1000
6	Chloride	mg/l	61	111	58	28.3	250
7	Total Coliforms	MPN/100ml	9	0	0	3	0
8	Total Faecal Coliforms	MPN/100ml	0	0	0	0	0
9	Arsenic	mg/l	0.007	0.005	0.005	0.005	0.05
10	Iron	mg/l	0.622	0.26	0.21	0.31	1
11	Lead	mg/l	ND	ND	0.1	ND	0.01

No	Quality Parameter	Units	Results (Jan 2023)	Results (Jul 2023)	Results (Jan 2024)	Results (Jul 2024)	DWQS (2019)
12	Manganese	mg/l	0.042	0.3	2.3	<0.2	0.4
13	Sulfate	mg/l	516	348	399	84.1	250
14	Nitrate	mg/l	12.5	0.938	2.4	0.31	50
15	Odor	Acceptable	1	1	NA	NA	-

At the Ma Nyein Well, all the results were shown to be under the Drinking Water Quality Standard (2019), except for total coliforms. The presence of total coliforms in tube well water analysis can be a sign of contamination, which could stem from various factors. Coliform bacteria are generally not harmful themselves, but their presence indicates that the water may be contaminated by pathogens, making it unsafe for consumption. Those may be contamination from surface water due to recent flooding, proximity to contamination sources, animal contamination, natural occurrence in the environment, etc.

Figure 49: Tube Well of Ko Win Maung

Figure 50: Tube Well of Ma Nyein

8.12 Monitoring on Gas Venting

In accordance with the gas venting monitoring program, MPRL E&P's technical team utilizes an Echo Meter to monitor and measure gas volume. If the recorded gas volume substantially exceeds the previous measurement, an orifice meter is employed to validate the volume within a 24-hour timeframe. Once the gas volume is confirmed to be sufficient, the team connects to the gas line and channels the collected gas to the existing facility supplying gas lines to the LPG plant. Continuous monitoring indicates a reduction in well counts and vent gas volume. The team has effectively minimized the venting gas volume, achieving successful mitigation. See Figure 51.

As per the planned monitoring program, the team randomly selected the six wells and measured by using an orifice meter on the wells as follows;

Location of the Gas Venting Wells

As per the planned monitoring program, the team randomly selected the six wells and measured by using an orifice meter on the wells as follows;

Table 29: Selected Gas Venting Wells Locations

Well No	Location	Gas Volume	Date
M 223	N 20°13'25.12" E 94°51'18.71"	0 - MMCFD	24 Apr 2024
M 16	N 20°13'24.62" E 94°51'14.43"	0 - MMCFD	17 May 2024
M 633	N 20°13'2.46" E 94°51'14.41"	0 - MMCFD	14 Jun 2024
M 264	N 20°12'48.93" E 94°51'21.40"	0 - MMCFD	12 Jul 2024
M 513	N 20°12'20.88" E 94°51'28.98"	0 - MMCFD	09 Aug 2024
M 218	N 20°13'9.35" E 94°51'29.39"	0 - MMCFD	13 Sep 2024

Gas Volume Measurement (Orifice Meter) Well-223

Date: 24 April 2024, Gas Volume – 0 MMCFD

Gas Volume Measurement (Orifice Meter) Well-16

Date: 17 May 2024, Gas Volume – 0 MMCFD

Gas Volume Measurement (Orifice Meter) Well-633

Date: 14 June 2024, Gas Volume – 0 MMCFD

Gas Volume Measurement (Orifice Meter) Well-264

Date: 12 July 2024, Gas Volume – 0 MMCFD

Gas Volume Measurement (Orifice Meter) Well-513

Date: 09 August 2024, Gas Volume – 0 MMCFD

Gas Volume Measurement (Orifice Meter) Well-218

Date: 13 September 2024, Gas Volume – 0 MMCFD

Figure 51: Gas-Vented Wells and Vented Gas Volume Measurement Record

8.12.1 Monitoring of Hydrogen Sulphide (H_2S)

In accordance with our Environmental and Social Monitoring program and self-monitoring schedule, our HSE Officers monitored Hydrogen Sulphide (H_2S) levels on a monthly basis at randomly selected potential gas venting wells. From among these wells, we have provided detailed results for six (6) wells in Table 30.

Table 30: Monitoring Results of the Hydrogen Sulphide (H_2S)

Sr. No:	Location	Date	Measured Time Duration	H_2S (PPM)	CO (PPM)	O_2 %	LEL %
1	M-226	02 June 2024	30 sec	0	0	20.9	0
2	M-449	16 July 2024	30 sec	0	0	20.9	0
3	M-174	11 August 2024	30 sec	0	0	20.9	0
4	M-247	26 August 2024	30 sec	0	0	20.9	0
5	M-68	2 September 2024	30 sec	0	0	20.9	0
6	M-634	9 September 2024	30 sec	0	0	20.9	0

H_2S levels are monitored using an in-house portable gas detector (VENTIS MX4 Gas Detector), which has been calibrated periodically as per plan. This equipment can monitor four (4) parameters. As a result of monitoring, no H_2S was detected, and the results for each well are listed in the above Table 30.

M-68 (Beside Public Road)

M-174 (Beside Public Road)

M- 226 (Beside Public Main Road and near Mann Kyoe Village)

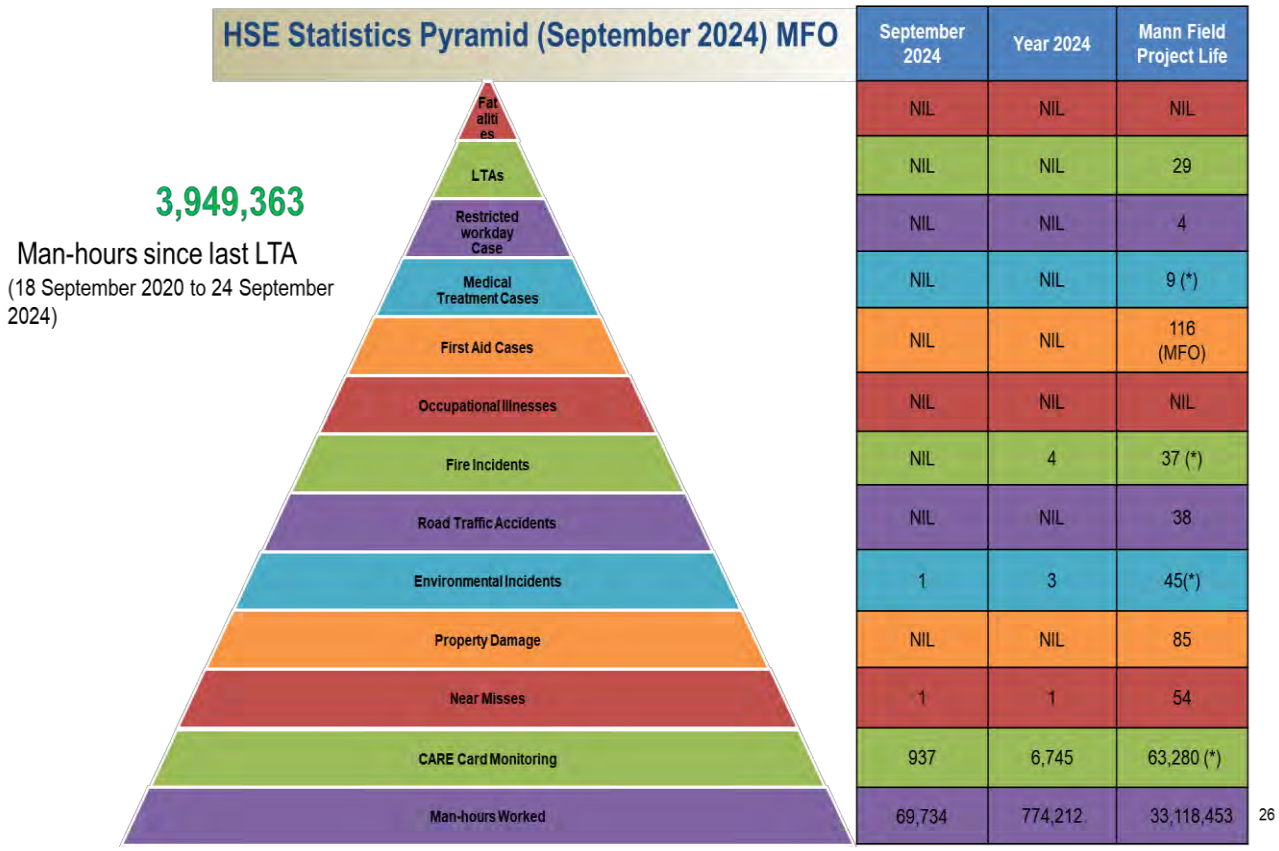
Figure 52: H2S Monitoring Activities

9. Occupational Health and Safety Performance

Occupational Health and Safety System Framework

As a leading oil and gas exploration and production company, MPRL E&P is committed to prioritizing the health and safety of its staff while minimizing its environmental impact. The company ensures that its health and safety management aligns with international standards such as Health and Safety Guideline 65 and ISO 45001:2018, as well as relevant local regulations, international standards, and industry best practices, including API requirements. These efforts are consistently monitored and enhanced to maintain high performance and compliance.

9.1 HSE Statistics Pyramid

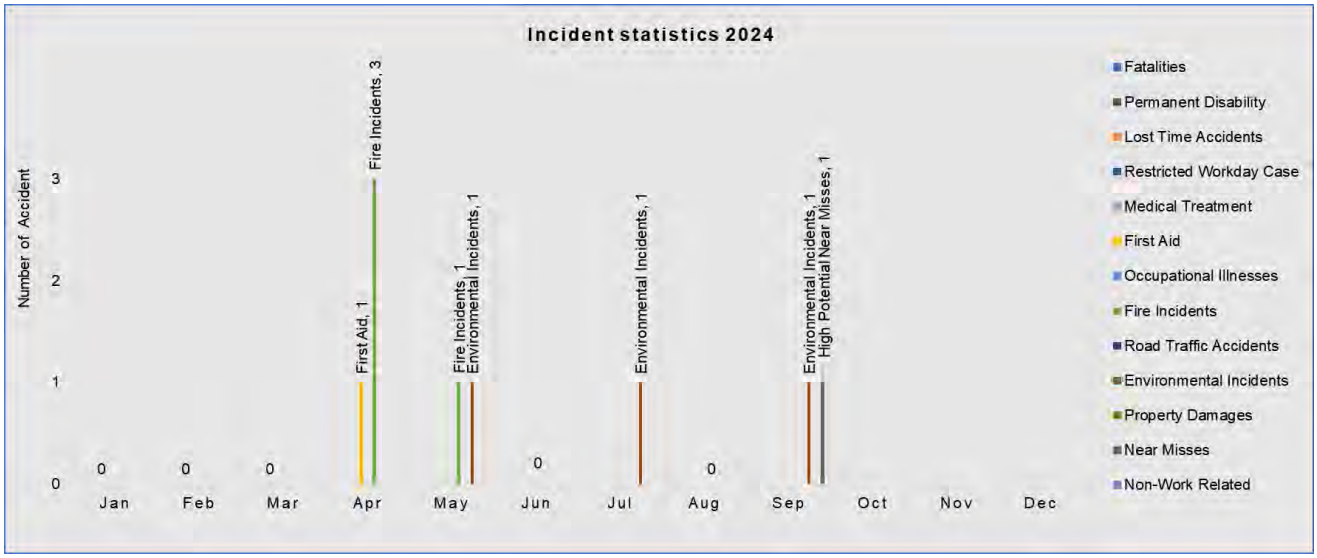


September 2024	Year 2024	Mann Field Project Life
NIL	NIL	NIL
NIL	NIL	29
NIL	NIL	4
NIL	NIL	9 (*)
NIL	NIL	116 (MFO)
NIL	NIL	NIL
NIL	4	37 (*)
NIL	NIL	38
1	3	45(*)
NIL	NIL	85
1	1	54
937	6,745	63,280 (*)
69,734	774,212	33,118,453

Figure 53: HSE Statistics Pyramid up to 25 September 2024 Status

9.2 Incidents Status

In the fiscal year 2024-2025, from April to September 2024, there were a total of 9 incidents in Mann Field operations. These incidents included 1 first aid case, 4 fire incidents, 3 spill incidents, and a near-miss case respectively. The number of total recordable cases still meets the KPI Target for 2024-2025.



9.3 HSE Audits & Inspection

Regular surprise alcohol tests are conducted continuously at Mann Field to reinforce the commitment to maintaining a dry field and ensuring that workers are not under the influence of alcohol while on duty. The primary objective of these surprise tests is to safeguard the well-being of employees, prevent incidents, and uphold safe and efficient oil field operations.

Regular Permit to Work (PTW) audits are conducted utilizing a detailed checklist to ensure that all hazardous work is managed safely adheres to established procedures and that safety measures are thoroughly documented and implemented.

Weekly Cross-Inspections and Bi-Weekly Hazards Hunt Inspections are routinely conducted, covering Pulling Unit operations, GOCS stations, workshops, and warehouse areas. These inspections utilize checklists and are part of our proactive approach to ensure adherence to HSE standards and practices across these critical operational domains. This underscores our commitment to maintaining a safe and environmentally responsible work environment.

In alignment with the Field HSE plan, the HSE team successfully conducted a Tri-annual Inspection of all portable ladders, emergency ladders at GOCSs, platform ladders at the pulling units, well site tank ladders, and movable ladders at the Workshop and Downhole. This inspection aims to ensure the integrity and safety of all ladders in use across operational sites.

Bi-annual earthling resistance tests were conducted at the Workshop, Warehouse, GOCS-2, Welding Shop at Special Project, and Base Camp to ensure compliance with electrical safety standards and maintain system integrity across these key facilities.

A bi-annual vehicle safety inspection was conducted at Mann Field, to ensure the safety and operational readiness of the fleet under established safety protocols.

To prevent incidents and ensure the reliability of lifting operations, a thorough inspection of all lifting gear, hoisting, and handling equipment was carried out.

The Hoisting Equipment CAT IV Inspection was performed for the Pulling Unit Crown Block, following the API RP 8B procedures for inspection, maintenance, repair, and remanufacture of hoisting equipment.

Figure 54: Hazard Hunt Inspections

Figure 55: Ladders Inspections

Figure 56: Bi-annual Earthing Resistance Test at Mann Field

Figure 57: Bi-annual Vehicle Safety Inspection at Mann Field

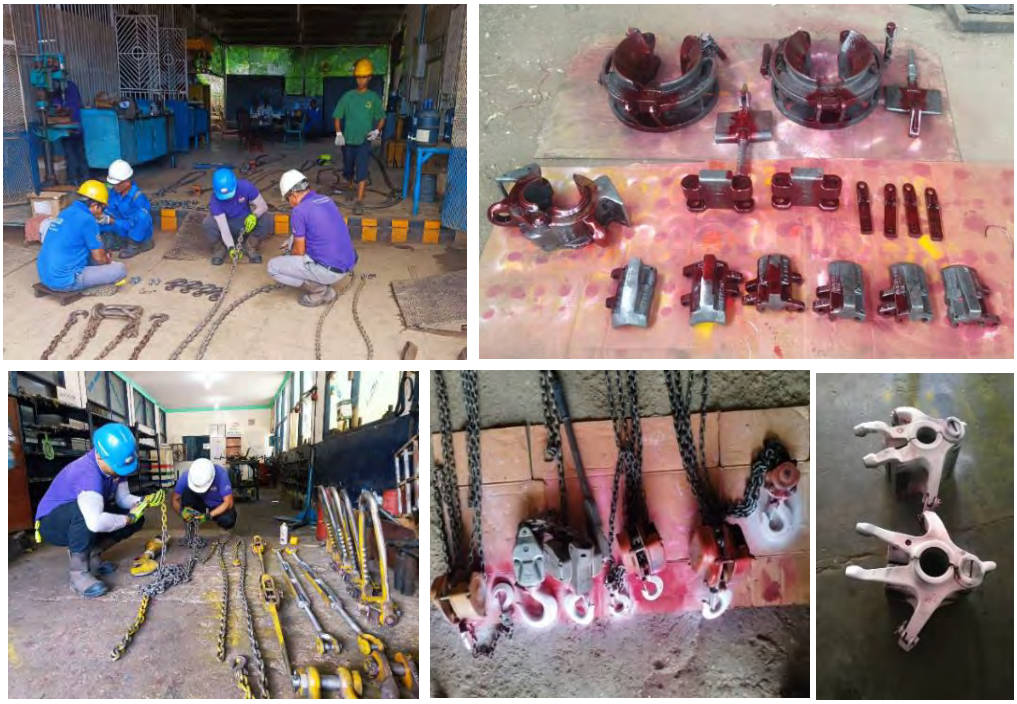


Figure 58: Lifting Gear, Hoisting & Handling Equipment

Figure 59: Hoisting Equipment CAT IV Inspection for Pulling Units

Figure 60: PPE Inspection

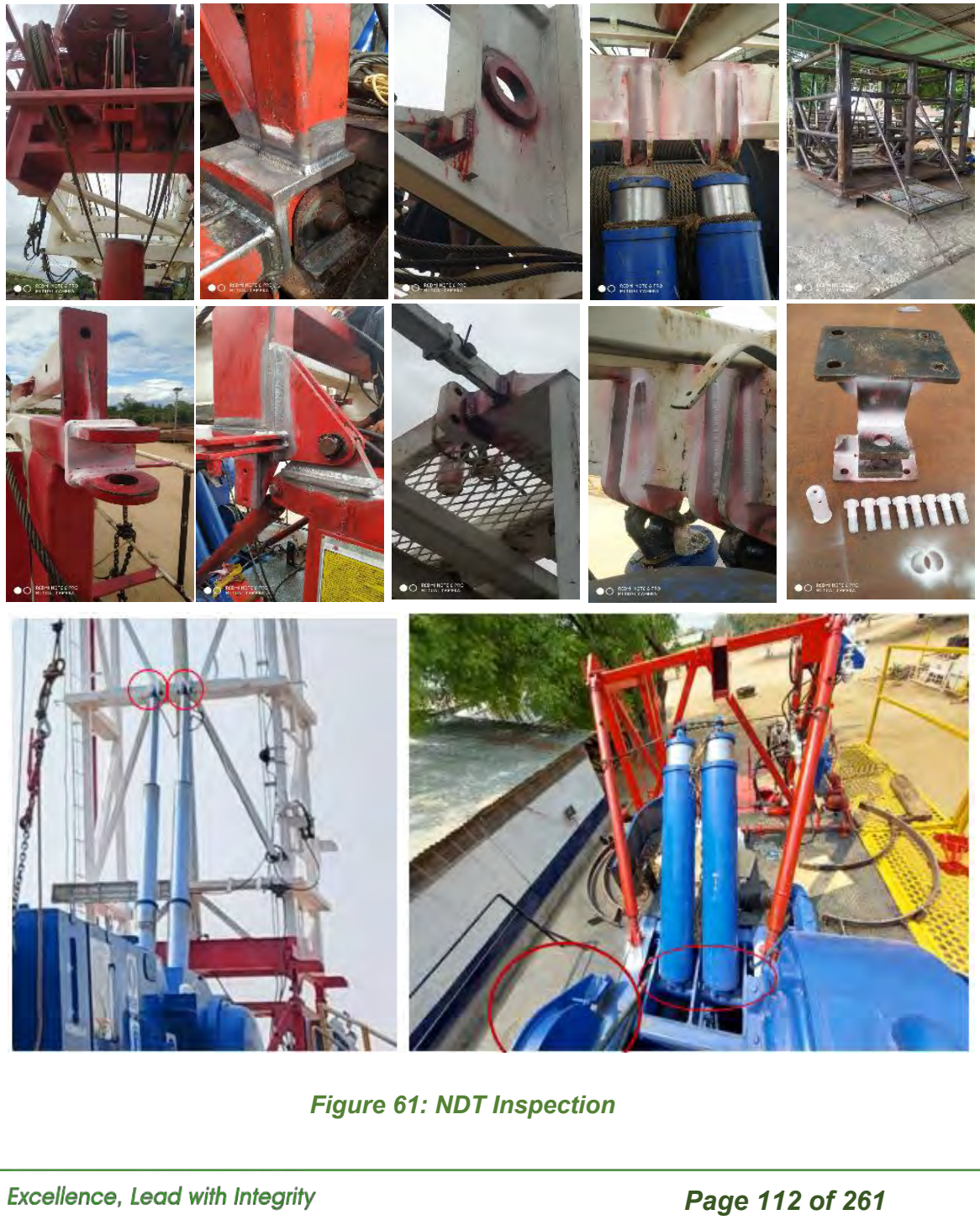


Figure 61: NDT Inspection

9.4 HSE Training

To ensure the safety of personnel, environmental protection, and the financial sustainability of the accelerated operations, HSE training has become a strategic necessity. As operational activity intensifies, the frequency and focus of HSE training have increased proportionally.

Numerous internal HSE knowledge-sharing sessions are conducted to foster a strong safety culture, improve operational efficiency, and ensure the HSE team is prepared to address the challenges of a dynamic and safety-critical environment.

Targeted training sessions were conducted to ensure workers' competencies align with operational needs. These included "Safe Handling of Chemical and Gas Cylinders," "Electrical Safety Awareness," "Quantitative Risk Assessment," "Complacency Awareness," "HSE Risk Register Awareness," and "Hazard Identification & Risk Assessment Methodologies," all aimed at enhancing safety knowledge and operational efficiency.

To ensure compliance with safety regulations and guidelines, “Alcohol & Substance Abuse Policy Awareness” and “Passenger Safety” training sessions were conducted.

For compliance and follow the safety regulations and guidelines, Alcohol & Substance Abuse Policy Awareness and Passenger Safety training are conducted.

For health awareness, Basic First Aid Refresher training sessions were conducted to reinforce essential first aid skills and knowledge, ensuring that workers are well-prepared to respond to medical emergencies in the workplace.

An internal knowledge-sharing session was held covering Train the Trainer (Module 1) & (Module 2), Safety Professional Code of Ethics, the Global Harmonized System (GHS), and Safety Data Sheets (SDS) to enhance instructional skills and ensure safety standards are well understood.

In observance of World Environment Day 2024 under the theme "Our Land, Our Future," an environmental awareness training session was conducted to promote sustainable practices and environmental stewardship.

To promote health awareness in line with current trends, various onsite trainings were conducted, including COVID-19 and Liver Cancer Awareness, Cholera Awareness, Hypertension and Diabetes Awareness, Shingles Disease Awareness, Appendicitis & Diverticulitis Awareness, Stress Management in the Workplace, Mpox Awareness, and Managing Fatigue and Sleep Deprivation.

To enhance food safety awareness in the workplace and during food preparation, a Catering with Care: Food and Workplace Safety Essential Awareness training was conducted, led by a specialist trainer.

During the fiscal year 2024-2025, a total of 2,768 HSE training hours were achieved. Most sessions were led internally by the HSE department, with additional health awareness training conducted by external trainers, including Pan Hlaing Hospital and MMDoc.

Year 2024 – 2025 (April 2024 ~ September 2024) HSE training as per follow

1. Safe Handling of Chemical and Gas Cylinders
2. Alcohol & Substance Abuse Policy Awareness
3. Introduction to Quantitative Risk Assessment
4. Passenger Safety
5. Basic First Aid Refresher
6. Electrical Safety Awareness On-sites Training
7. Train The Trainer (Module 1)
8. Train The Trainer (Module 2)
9. Safety Professional Code of Ethics, Global Harmonized System, and Safety Data Sheets
10. World Environment Day 2024 (Our Land, Our Future)
11. COVID-19 and Liver Cancer Awareness
12. Complacency
13. Cholera Awareness Training
14. Introduction to Hazard Identification & Risk Assessment Methodologies
15. Hypertensions and Diabetes Awareness Onsite Training
16. Shingles Disease Awareness
17. Appendicitis & Diverticulitis Awareness
18. Stress Management in Workplace
19. Mpox Awareness
20. Managing Fatigue and Sleep Deprivation
21. Catering with Care: Food and Workplace Safety Essential Awareness
22. HSE Risk Register Awareness

Title of Health Awareness Free Webinars hosted by Pun Hlaing Hospital for employees are as follow.

1. Healthy Alternative to Office Snacks
2. Workplace Wellness
3. Sexually Transmitted Truths
4. Hepatitis
5. Steady Wins the Race: The Benefits of Regular Physical Activity
6. Rainy Season Health Guide: Identifying and Preventing Common Illnesses
7. Are You Ready for Flu Season?" Health Awareness Training

Figure 62: Safe Handling of Chemical and Gas Cylinders

Figure 63: Alcohol & Substance Abuse Policy Awareness

Figure 64: Introduction to Quantitative Risk Assessment

Figure 65: Passenger Safety Awareness Training

Figure 66: Basic First Aid Refresher Trainings

Figure 67: Electrical Safety Awareness On-site Trainings

Figure 68: Train the Trainer (Module 1)

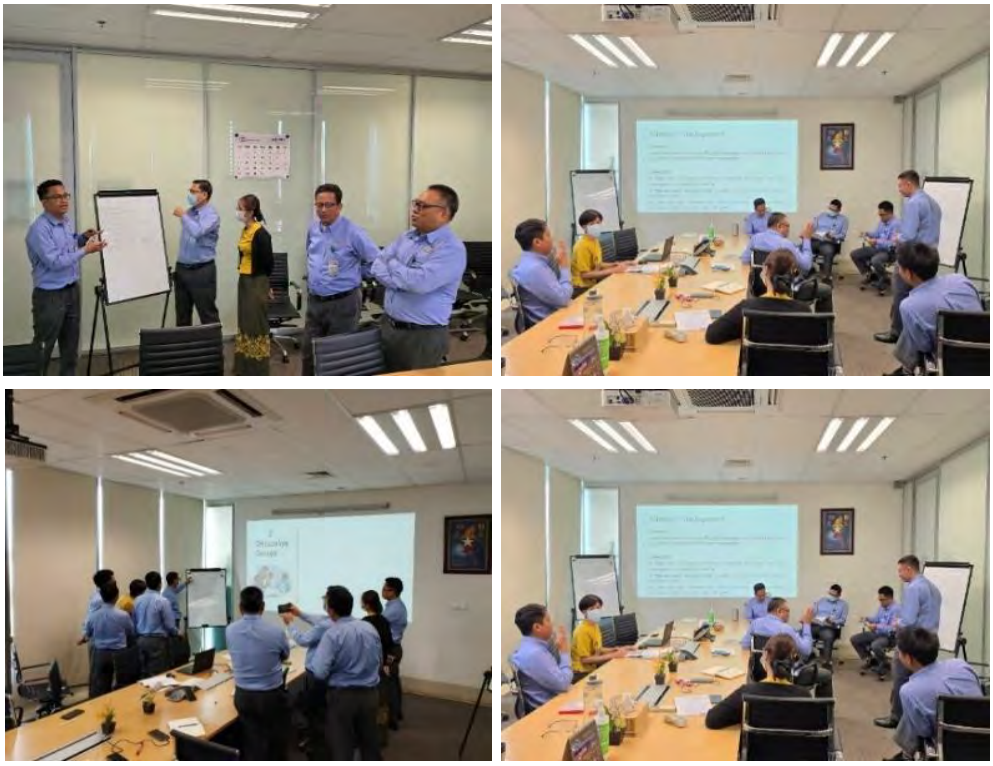


Figure 69: Train the Trainer (Module 2)

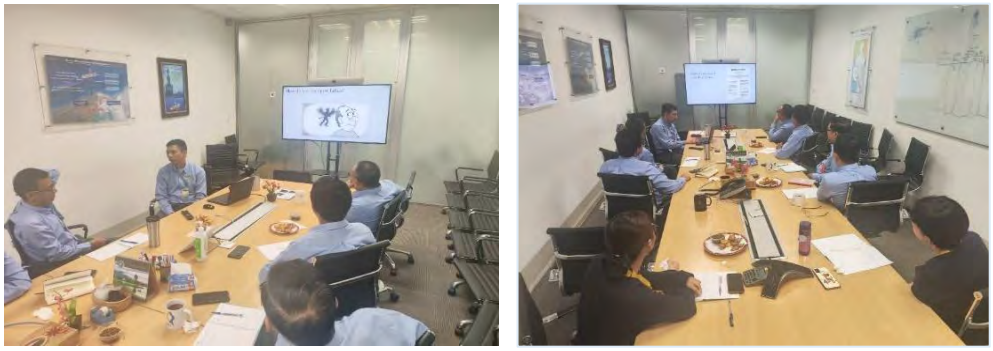


Figure 70: HSE Knowledge Sharing Training about Safety Professional Code of Ethics, Global Harmonized System, and Safety Data Sheets

Figure 71: World Environment Day 2024 (Our Land, Our Future)

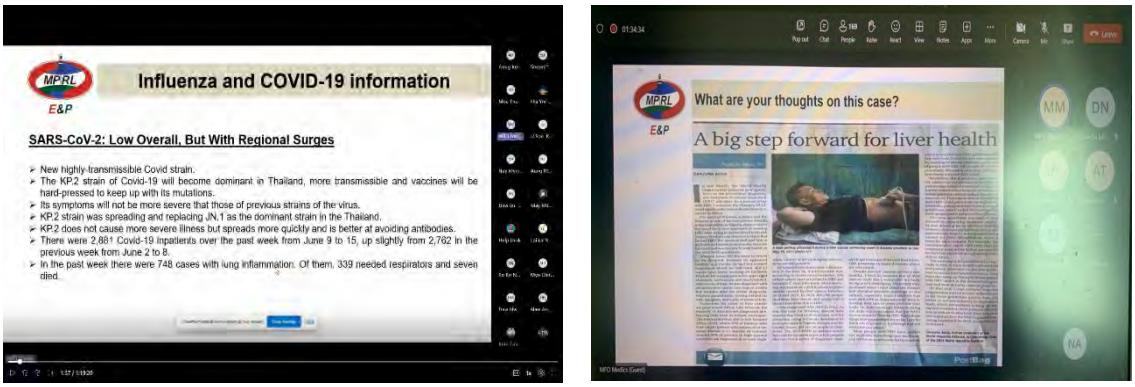


Figure 72: COVID-19 and Liver Cancer Awareness

Figure 73: Complacency in HSE Knowledge Sharing Session

Figure 74: Cholera HSE Knowledge Sharing Session

Figure 75: Introduction to Hazard Identification Risk Assessment Methodologies

Figure 76: Hypertensions and Diabetes Awareness

Figure 77: Shingles Disease Awareness

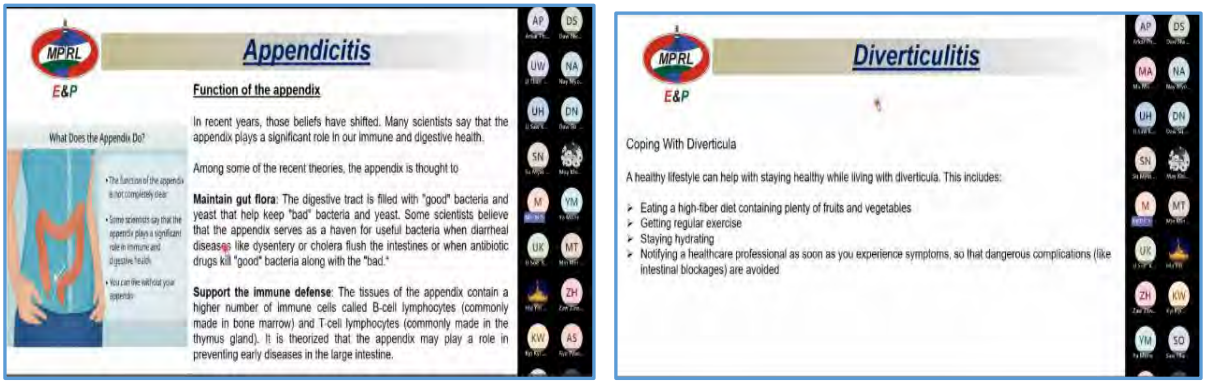


Figure 78: Appendicitis & Diverticulitis Awareness

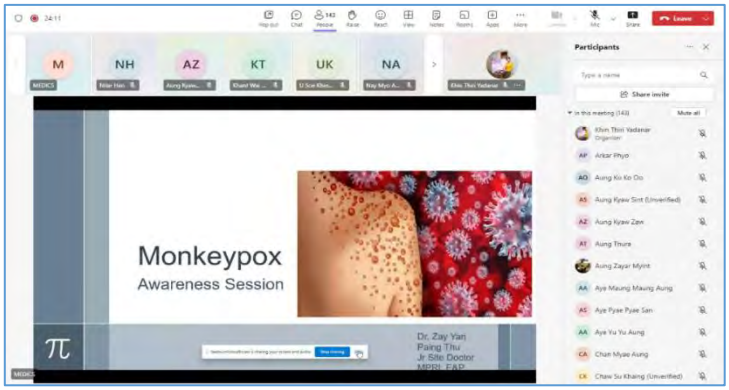


Figure 79: Monkeypox Awareness

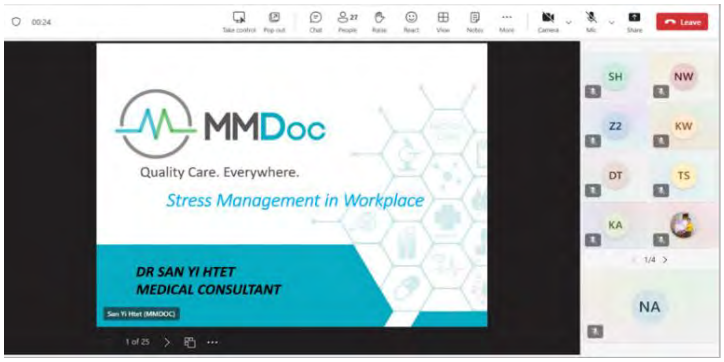


Figure 80: Stress Management Awareness

Figure 81: Managing Fatigue and Sleep Deprivation Trainings

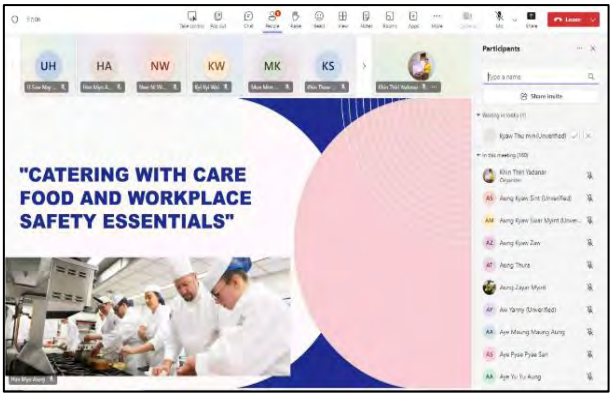


Figure 82: Catering with Care: Food and Workplace Safety Essentials Training

Figure 83: HSE Risk Register Training

Figure 84: Workplace Wellness

Figure 85: Healthy Alternative to Office Snacks

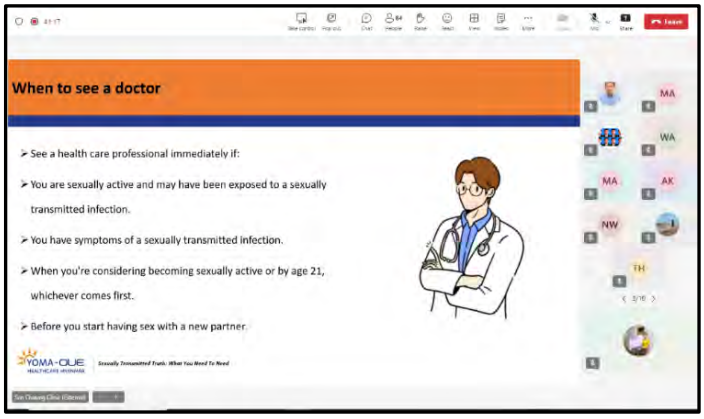


Figure 86: Sexually Transmitted Truths

Figure 87: Hepatitis 101: What You Need to Know

Figure 88: Steady Wins the Race: The Benefits of Regular Physical Activity

Figure 89: Rainy Season Health Guide: Identifying and Preventing Common Illnesses

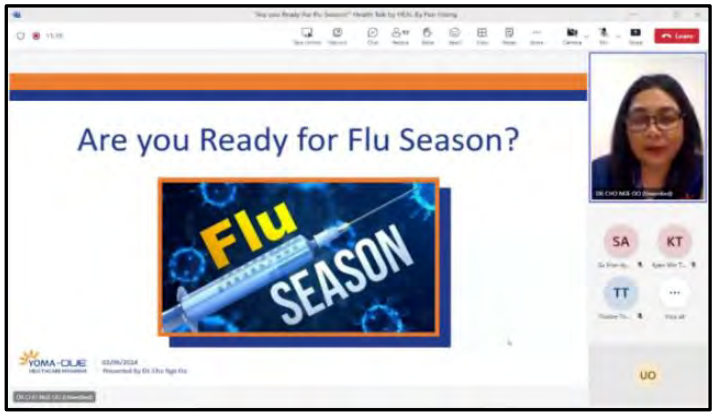


Figure 90: Are You Ready for Flu Season?

9.5 Effective Worker's Participation Towards HSE

MPRL E&P has fostered a strong safety culture by encouraging employees to report unsafe conditions or actions in the workplace. This proactive approach helps prevent accidents, reduce downtime, and lower costs through early intervention.

In recognition of outstanding safety participation, the 'Best Quality CARE Card Award' was presented to both MPRL E&P and MOGE staff on a quarterly basis at Mann Field and MYO. This initiative highlights the company's commitment to continuous safety improvement.

Additionally, to acknowledge safety-conscious employees for their dedication to health, safety, and environmental initiatives, "Contribution Awards in HSE Activity" were presented to deserving individuals, reinforcing the importance of safety in all operations.

Figure 91: Best CARE Card Awarding

Figure 92: Outstanding Performer

Figure 93: Best CARE Card Awarding (MPRL E&P and M&AS)

Figure 94: Best CARE Card Awarding (MOGE & CEC)

M.O.G.E.

MPRL E&P

Social Performance Report

April 2024 - September 2024

10. Corporate Social Responsibility

10.1 Overview

At MPRL E&P, we have invested in Corporate Social Responsibility (CSR) initiatives at Mann Field since 2012, aimed at securing a social license to operate and creating shared value for 14 surrounding villages. As a key player in Myanmar's energy sector, we uphold high standards in governance, social, and environmental responsibility, reflecting our commitment to stakeholders, including the government, employees, and local communities.

CSR remains a core value, guiding the company's efforts to improve the quality of life in project-affected areas through infrastructure, education, health, livelihood support, and capacity-building initiatives, all governed by principles of transparency, inclusiveness, and compliance with national laws.

This report highlights the achievements of our CSR Program during the first half of the Fiscal Year 2024-2025 (April 2024 - September 2024). Throughout this reporting period, we have made significant strides in infrastructure development, education, healthcare, environmental awareness, capacity building and partnerships. These initiatives have not only uplifted local communities but also solidified our commitment to social responsibility and sustainable development.

In this reporting period, the development of community infrastructure remained a key focus, highlighted by the completion of a new access road to Auk Kyaung Pagoda and Monastery, improving connectivity to this important cultural site. We also maintained water filtration systems at schools in Mann Field, ensuring access to safe drinking water. Regular inspections, testing, and upgrades were carried out, and clean water was provided to schools with inadequate systems. In support of education, essential school furniture and supplies were distributed to schools in Let Pan Ta Pin, Makyee Chaung, Chin Taung, and Let Pa Taw, reinforcing our commitment to enhancing the learning environment and fostering community development.

Our CSR Program continued to prioritize agriculture and livestock support. By collecting data on sunflower and chickpea harvests, we enabled local farmers in Mann Field to gain valuable insights into their crop yields. We also provided tomato seed packages and plastic mulches to promote sustainable farming in Mann Field. To improve livestock health and local breeding productivity, I-2 eye drop vaccines for chicken were distributed in the collaboration of Livestock Breeding Veterinary Department (Minbu).

We remained committed to empowering youth by providing scholarship supports under the educational partnership program. A total of 21 youths from Mann Field Communities received scholarships to pursue education at institutions such as the No.5 Industrial Training Center (Magway), Government Technical High School (Magway), State Agriculture and Livestock Institute (Pwint Phyu), and University of Medicine (Magway). Specialized training at the Noble Lamp Pharmacist Aide and Nurse Aide Training Centre (Magway) was also supported. Our continuous academic progress monitoring ensured that scholarship recipients achieved significant advancements in their respective fields.

During the reporting period, our CSR Program made a significant impact on fostering creativity and enhancing the educational development of children in the Mann Field Communities. Over the summer holiday, we organized both basic and advanced Summer Art Classes to encourage artistic expression. Additionally, with support from the CSR Program, primary school students received training in Basic Computer Skills and English Grammar, preparing them for participation in the Online English Learning Program (OELP). As of this period, a total of 45 children (Grades 2-4) are actively learning online English at the community centers in Mann Field.

Raising community awareness on environmental sustainability has remained a key focus of our CSR efforts. Since 2017, we have consistently supported community-led waste management and cleanup initiatives. In this Fiscal Year, in partnership with the Environmental Conservation Department (ECD Magway), we marked World Environment Day 2024, with a focus on themes such as ‘Land Restoration, Desertification and Drought Resilience.’ As part of our environmental awareness efforts, we organized essay and painting competitions, community talks, and awareness campaigns, underscoring our commitment to environmental conservation and leadership in sustainability.

With the commitment to enhancing healthcare for vulnerable populations, our Mobile Clinic Program continued to provide free healthcare services, treating 17,290 patients through 587 clinic sessions. In collaboration with the Trachoma Control and Prevention of Blindness Program (Minbu), we organized an eye health program for seniors in the Mann Field Communities. The event, held at Auk Kyaung Pagoda, attracted 314 attendees for health talks and eye screenings. Of the participants, 266 received comprehensive eye exams, leading to the results of cataract surgeries, eyeglass prescriptions, and other treatments. Eyeglasses and eye drops have been distributed, with cataract surgeries scheduled to begin in October 2024.

During the first half of this Fiscal Year, we successfully resolved eight cases through our Operational Grievance Mechanism (OGM), raising the total number of resolved cases to 182 since the mechanism's launch in 2014. This initiative underscores our dedication to promptly and effectively addressing community concerns, thereby fostering trust and collaboration with local stakeholders.

We placed a strong emphasis on transparency and engagement through consistent communication with local stakeholders and government officials. Key stakeholder meetings were convened to discuss community investments and to provide updates on the progress of our CSR initiatives. Significant documents, including the Sustainability Report 2023 and the UNGC Communication on Progress (CoP) report, were disseminated to stakeholders. Furthermore, updates to the company's website and publications, such as the newsletters Insight! and Doh Mann Myay, further exemplified our commitment to ensuring that stakeholders remain well-informed.

In addition to infrastructure and healthcare, we actively supported local cultural events, including the Magway and Minbu District Thingyan Festivals. Our CSR contributions extended to educational initiatives, such as the 'Development of School Libraries and Promoting Reading Habit' event. We also made a significant donation of essential endotracheal tubes to the Intensive Care Unit at Yangon Children Hospital.

In this Fiscal Year 2024-2025, MPRL E&P introduced an extensive CSR Program aimed at supporting MOGE employees and their families. In partnership with MOGE, MPRL E&P provided essential supplies and contributed to religious events. By placing employees at the center of our efforts, we ensure that the well-being of MOGE employees and their families is effectively prioritized.

In conclusion, we believe that our strategic investments in infrastructure, education, healthcare, and environmental sustainability have made a lasting positive impact on local communities. These achievements not only demonstrate our commitment to enhancing lives but also underscore our leadership in promoting sustainable development. MPRL E&P remains a dedicated partner in building stronger, healthier, and more empowered communities.

10.2 Our Approach & Objectives

We recognize our business interacts with a range of material sustainability issue areas and governance of our approach to managing our potential and actual impacts is key to operating more sustainably. Building on strong foundations, we aspire to create social value for society that is purposeful, proactive, mutually beneficial and respectful. We commit to a number of sustainability frameworks, standards and initiatives and we disclose data both as required by law and according to the requirements of those frameworks, standards and initiatives.

Our social investment strategy prioritizes the areas where we believe our investments will have the biggest potential to multiply our impact and achieve sustainable results for the 14 communities living near our operations in Mann Field. Our social investment themes have been:

- Community infrastructure
- Education, sanitation and basic health
- Livelihood development and economic empowerment
- Capacity building and partnerships
- Critical human needs and disaster response

In this regard, we continue to apply the community-led approach to our community initiatives in Mann Field in order promote inclusive and participatory decision-making, transparent and accountable village development, and strengthen grassroots level governance capacity.

At the department level, we are working to achieve the following goals which are ultimately tied to a set of Corporate Goals with regard to our Mann Field asset:

- Maintain a social license to operate from all key project stakeholders including community and regional government.
- Meet all legal requirements in compliance with the Myanmar EIA Procedures in Mann Field.
- Proactively build on our brand as a leading Myanmar national led upstream energy company to ensure both the government and general public are informed about the value we create as a business.

Our sustainability strategy is aligned with the UN Sustainable Development Goals, and we have an important role to play in supporting these ambitions. We can make the greatest contribution to six goals: Decent work and economic growth (Goal 8), Responsible consumption and production (Goal 12), Climate action (Goal 13), Life below water (Goal 14), Peace, justice and strong institutions (Goal 16) and Partnerships for the goals (Goal 17).

10.3 CSR Implementation Mechanism

MPRL E&P collaborates with key stakeholders to ensure responsible and sustainable business practices that foster partnerships to collectively address challenges. Our interventions are implemented through a combination of direct engagement and the active involvement of communities, as well as local and regional organizations, both private and public. Each year, we conduct multi-stakeholder needs assessments in Mann Field to inform the development of our CSR Work Program.

Our CSR Work Program outlines specific goals, rationales, timelines, and measurable parameters for each initiative. Each intervention includes a set of key performance indicators to evaluate its effectiveness. Pilot projects are designed and implemented to ensure community involvement, capacity development, and sustainability. Additionally, we promote technical knowledge transfer whenever possible, alongside support aimed at transforming subsistence agriculture and livestock practices into more modern, productive systems.

For the Fiscal Year 2024-2025, we have allocated USD 243,835.00 to fund CSR initiatives in Mann Field. As of the end of August 2024, we have spent USD 71,701.59 on our CSR Program.

10.4 Community Investment Infographic for Fiscal Year 2024-2025

10.5 Key Performance Highlights

The following are the key performance highlights for the first half of Fiscal Year 2024-2025, covering the period from April 2024 to September 2024.

Key Highlights for the Month of April 2024

- Installed donor plaques for ceiling projects at Nan U and Mann Kyoe Community Centers.
- Prepared for the Summer Art Class Program at Aye Mya, Nan U, and Mann Kyoe Community Centers.
- Distributed I-2 eye drop vaccines from the Livestock Breeding and Veterinary Department (Minbu) to animal breeders in Mann Field.
- Awarded scholarships to five community youths for Batch-12 at No.5 ITC (Magway).
- Offered free healthcare services to 14,490 patients across 481 clinic sessions.
- Organized regular waste collection services and Trash Hero Minbu's cleanups in Mann Field.
- Received two OGM cases in the month of April 2024.
- Distributed Doh Mann Myay Newsletters to Village Administrators, Village Development Committees, Seed Bank Committee Members, Community Volunteers, libraries, and Doh Mann Myay boxes in Mann Field Communities.
- Announced the online release of the CSR-related reports: Inaugural Report on the Voluntary Principles on Security and Human Rights (VPSHR), Self-Assessment Against ISO 26000 Social Responsibility and Novitiation (Shinpyu) Ceremony Report.
- Donated MMK 550,000 for Patthana Pali at Mann Dhammayone.
- Contributed MMK 500,000 for Magway Region Thingyan Festival and MMK 200,000 for Minbu District Thingyan Festival.
- Monitored and updated MPRL E&P's website as the key communication channel.

Key Highlights for the Month of May 2024

- Enrolled five Mann Field youths at No.5 ITC (Magway) for the Academic Year 2024-2025.
- Collected data on sunflower and chickpea harvests in Mei Bayt Kone Village.
- Organized basic and advanced Summer Art Classes at Mann Field Communities.
- Conducted the Second Biannual CSR Progress Update and Review Meeting for FY 2023-2024 at Mann Field Communities.
- Escorted Director of ECD (Magway) and his team to CSR project sites during their Mann Field visit.
- Collaborated with ECD (Magway) for World Environment Day 2024 celebration in Mann Field.
- Arranged 'Health Talks on Benefits and Risks of Drugs' before Mobile Clinics sessions.
- Offered free healthcare services to 15,024 patients during 502 clinic sessions.
- Supported five cleanup activities of Trash Hero Minbu in Mann Field Communities.
- Received one OGM case in the month of May 2024.
- Met with stakeholders for community investment initiatives of the CSR Program.
- Distributed photo gifts to the community members from community photo shoot and Novitiation (Shinpyu) Ceremony.
- Released the Sustainability Report 2023 and shared it across all communication channels.
- Monitored and updated MPRL E&P's website as the key communication channel.

Key Highlights for the Month of June 2024

- Completed the construction of the approach road at Auk Kyaung Pagoda.
- Organized the World Environment Day 2024 celebration in Mann Field Communities.
- Conducted the Second Biannual CSR Progress Review Meeting for FY 2023-2024 with MOGE in Nay Pyi Taw.
- Delivered Basic Computer and English Grammar Training at Aye Mya, Mann Kyoe, and Nan U Community Centers.
- Presented 'Health Talks on Benefits and Risks of Drugs' prior to Mobile Clinics sessions.
- Provided free healthcare services to 15,473 patients through 522 clinic sessions under the Mobile Clinic Program.
- Conducted a survey on eye health patients for the post-treatment process.
- Organized regular waste collection services and Trash Hero Minbu cleanups in Mann Field.
- Addressed three OGM cases in June 2024.
- Donated essential endotracheal tubes to the Intensive Care Unit (ICU) at Yangon Children Hospital (YCH).
- Published the Insight! Newsletter (Issue-39) and Doh Mann Myay Newsletter (Issue-13).
- Submitted the 2024 Communication on Progress (CoP) report to the United Nations Global Compact (UNGC).
- Monitored and updated MPRL E&P's website as a key communication channel.

Key Highlights for the Month of July 2024

- Conducted a donation ceremony for the approach road connecting Auk Kyaung Pagoda and Monastery.
- Supervised the regular maintenance of water filtration units at schools in Mann Field.
- Inspected the condition of handwashing stations at schools in Mann Field.
- Supported Seed Bank Committee in purchasing and distributing tomato seed packages and plastic mulches to farmers in Mann Field.
- Organized Basic Computer Skills and English Grammar Training for primary school students in Grades 2 to 4 at Mann Kyoe, Aye Mya, and Nan U Community Centers.
- Provided free healthcare services to 16,065 patients through (545) clinic sessions under the Mobile Clinic Program.
- Announced an eye health program for elders aged 50 and above in Mann Field.
- Displayed cholera awareness posters in Mann Field Communities.
- Organized regular waste collection services and Trash Hero Minbu cleanups in Mann Field.
- Distributed Insight! newsletters, Doh Mann Myay newsletters, and the quarterly CSR progress reports to the Magway Regional Government and local stakeholders.
- Submitted M&E Report for the first quarter of FY 2024-2025.
- Monitored and updated MPRL E&P's website as a key communication channel.

Key Highlights for the Month of August 2024

- Collected drinking water samples from water filtration units at nine schools in Mann Field, delivered them to ISO Tech Laboratory for testing, and informed the annual water quality results to the respective school principals.
- Monitored the regular cleaning of water filtration units and inspected the condition of handwashing stations at schools.
- Provided scholarships to five youths for a three-month Basic Nurse Aide Training and Pharmacist Aide Training at Noble Lamp Training Centre in Magway.
- Organized the entrance exam for the Online English Learning Program (OELP) at Mann Kyoe and Aye Mya Community Centers, as well as the quarterly exam at Nan U Community Center.
- Conducted refresher training on Basic Computer Skills for new CSR Support Team members.
- Introduced new members of the CSR Team to Village Administrators, Village Development Committees, and Community Volunteers.
- Organized the eye health program for seniors aged 50 and above in the Mann Field Communities.
- Provided free healthcare services to 16,701 patients through 566 sessions as part of the Mobile Clinic Program.
- Coordinated regular waste collection services and Trash Hero Minbu cleanup events in Mann Field.
- Offered Waso robes to monks and served coconut noodle soup as a sabbath meal for guests and worshipers at MOGE (Mann) Damayone with total contribution of MMK 1,750,000.
- Contributed MMK 2,000,000 to the ‘Development of School Libraries and Promoting Reading Habit’ event, jointly organized by the Information and Public Relations Department and the Basic Education Department.
- Monitored and updated MPRL E&P’s website as a key communication channel.

Key Highlights for the Month of September 2024

- Renovated community noticeboards, OGM boxes and Doh Mann Myay Newsletter boxes.
- Provided school furniture and essential supplies to Let Pan Ta Pin, Makyee Chaung, Chin Taung, and Let Pa Taw Schools.
- Supplied clean water to Auk Kyaung and Kyar Kan Schools, where the water remains muddy even after filtration.
- Announced a three-month Motorcycle Mechanic Course at No.5 ITC (Magway) and invited scholarship applications from 16 Mann Field Communities and MOGE (Mann) families.
- Continued to offer scholarships to youths from Mann Field Communities, tracking their training progress.
- Resumed Online English Learning Program (OELP) sessions at Aye Mya and Mann Kyoe Community Centers.
- Delivered free healthcare services to 17,290 patients through 587 Mobile Clinic Program sessions.
- Completed comprehensive eye exams for 138 elders which 98 elders required cataract surgery, 1 needed glaucoma surgery, 2 needed corneal scraping, 25 needed eyeglasses, 8 needed both eyeglasses and eye drops, 3 needed both eye drops and medicines and 1 was prescribed eye drops.
- Organized a ‘Maternal & Childcare and Nutrition’ health talk for pregnant women, breastfeeding mothers, and mothers of children under 5 years old.
- Continued to monitor regular waste collection services and supported Trash Hero Minbu cleanup events in Mann Field.
- Engaged with the Township Officer of the Department of Agriculture (Minbu) to discuss the agricultural knowledge sharing session.
- Published Insight! Newsletter (Issue-40) and Doh Mann Myay Newsletter (Issue-14).
- Received one OGM case in the month of September 2024.
- Contributed MMK 2,000,000 to the ‘Development of School Libraries and Promoting Reading Habit’ event, jointly organized by the Information and Public Relations Department and the Basic Education Department.
- Transferred MMK 30,000,000 to Mann GM to support MOGE (Mann) employees with rice and cooking oil as part of the MOGE Employee-centered CSR Program.
- Monitored and updated MPRL E&P’s website as a key communication channel.

10.6 Social Performance Progress (April 2024 – September 2024)

10.6.1 Community Infrastructure Development

MPRL E&P is committed to providing community infrastructure in Mann Field Communities at suitable locations, addressing current needs, and adapting to the evolving community requirements. The company's approach to community infrastructure development emphasizes enhancing local capacity through community involvement. This includes improving the efficiency of infrastructure planning, design, implementation, and maintenance, while also utilizing locally available resources whenever possible.

Completed Activities (April 2024 – September 2024)

In April 2024, MPRL E&P's CSR Program made significant steps in repurposing libraries into multifunctional community centers. Following the success in Aye Mya Village, two more libraries in Nan U and Mann Kyoe Villages were converted into operational community centers. These centers are now hosting Summer Art Classes and Online English Learning Program. Additionally, donor plaques were installed at both centers as part of the ceiling installation projects. The CSR Team also collaborated with the Special Project Team to assess the Auk Kyaung Monastery Road construction project and monitored the installation of an electric line at the Mann Kyoe Community Center.

In May 2024, the CSR Team worked closely with the Special Project Team to review and update the expense estimates for the Auk Kyaung Pagoda Road construction project.

In June 2024, the CSR Program successfully completed a 420-foot-long concrete approach road connecting Samudagiri Myazadi Pagoda to the Monastery in Auk Kyaung Village. MPRL E&P contributed MMK 2,881,100 to this effort. The Team also conducted routine monitoring of water filtration units in Mann Field schools to ensure proper maintenance.

In July 2024, the CSR Team organized a donation ceremony for the newly completed concrete approach road in Auk Kyaung Village. The Team also oversaw routine maintenance of water filtration units and inspected handwashing stations at schools in Mann Field Communities. Additionally, the Team also worked with Community Volunteers to monitor the status of fire extinguishers previously provided to Mann Field Communities, planning to replace expired units under warranty.

In August 2024, drinking water samples from filtration units at nine schools in Mann Field were collected and sent to ISO Tech Laboratory for testing. The results were shared with the respective school principals. The CSR Team also initiated conversations regarding the provision of school furniture and supplies for Fiscal Year 2024-2025. Regular inspections of handwashing stations and maintenance of water filtration units continued throughout the month.

In September 2024, MPRL E&P's CSR Program contributed MMK 8,475,500 worth of school furniture and supplies to Let Pan Ta Pin, Makyee Chaung, Chin Taung, and Let Pa Taw schools. Key contributions included:

- Let Pan Ta Pin School: Two bag shelves and a podium
- Ma Kyee Chaung School: Three whiteboards and two cabinets
- Chin Taung School: Two cabinets and two bookshelves
- Let Pa Taw School: Two cabinets.

Additionally, clean water was supplied to Auk Kyaung and Kyar Kan Schools, where water contamination from river floods during the rainy season persisted, resulting in muddy water even after filtration treatments.

Figure 95: Constructing Approach Road Linking the Auk Kyaung Pagoda and Monastery

Figure 96: Organizing Donation Ceremony of Approach Road Connecting the Auk Kyaung Pagoda and Monastery

Figure 97: Providing School Furniture and Supplies to Let Pan Ta Pin, Makyee Chaung, Chin Taung, and Let Pa Taw Schools

Figure 98: Monitoring Regular Maintenance of Water Filtration Units at Schools in Mann Field

Figure 99: Monitoring Conditions of Handwashing Stations at Schools in Mann Field

Figure 100: Collecting Drinking Water Samples from Filtration Units at Schools in Mann Field

Figure 101: Informing Water Test Results to Schools Principals in Mann Field

Figure 102: Setting up Donor Plaques for Ceiling Installation Projects at Nan U and Mann Kyoe Community Centers

Figure 103: Monitoring Status of Fire Extinguishers in Mann Field Communities

10.6.2 Community Livelihood Development

MPRL E&P is committed towards improving the life of the Mann Field Communities and helping them achieve self-reliance. In addition, we conduct regular follow-up and support activities to ensure the goal is achieved. MPRL E&P's CSR Program undertakes focused interventions in agriculture, horticulture and livestock management. Such interventions have been designed to support the rural communities' livelihoods through increased agricultural and livestock production, improving household food security, alleviating poverty through better market participation as well as to improving farmers' access to resources, technologies, information and markets by characterizing and strengthening crop and livestock value chains.

Completed Activities (April 2024 – September 2024)

In April 2024, the CSR Team conducted extensive data collection on sunflower and chickpea cultivation and harvesting across seven villages, including Mann Kyoe, Chin Taung, Kywe Cha, Mei Bayt Kone, Pauk Kone, Kyar Kan, and Auk Kyaung. Additionally, the Team received I-2 eye drop vaccines from the Livestock Breeding and Veterinary Department (LBVD-Minbu) and facilitated the vaccination of 395 chickens in Mann Field Communities, supporting local breeders in improving poultry health.

In May 2024, the CSR Team continued to support the Seed Bank Committees in Mei Bayt Kone Village by collecting post-harvest data on sunflowers and chickpeas from local farmers. This data was crucial for assessing crop yield and guiding future agricultural activities.

In June 2024, the CSR Team had completed the data collection on the sunflower and chickpea harvests in Mei Bayt Kone Village. In collaboration with the Seed Bank Committees, the Team gathered information on the tomato seed packages and plastic mulches needed for the upcoming farming seasons, assisting local farmers in their preparation for future agricultural endeavors.

In July 2024, the CSR Team further supported the Seed Bank Committees by coordinating the purchase and distribution of agricultural inputs for the upcoming farming season. A total of 53 plastic mulches and 71 tomato seed packages were distributed to 13 farmers from Mann Kyoe, Kywe Cha, Let Pa Taw, and Chin Taung Villages.

In September 2024, the CSR Team held discussions with the Township Officer from the Department of Agriculture (DoA-Minbu) regarding agricultural knowledge sharing for Mann Field Communities.

Figure 104: Facilitating in 1-2 Eye Drop Vaccination on Chickens in Mann Field

Figure 105: Collecting Post-harvest Data on Sunflower and Chickpea under Seed Bank Program

Figure 106: Facilitating Seed Bank Committees for Purchase and Distribution of Tomato Seed Packages and Plastic Mulches

10.6.3 Educational Partnership Program

MPRL E&P's CSR Program partners with governmental entities and training institutions to enhance technical and vocational skills in Mann Field Communities. MPRL E&P provides financial aid and support to disadvantaged students pursuing higher education, and as well as technical and vocational education and training (TVET). This support aims to improve employment prospects and empower youth to enter the job market or start businesses. The program includes formal agreements with TVET institutions for proper supervision and skill development, and emphasizes the importance of education and job training for community thriving.

Completed Activities (April 2024 – September 2024)

In April 2024, the CSR Team received ten applications for Batch-12 at No.5 Industrial Training Center (ITC), Magway, and assisted the applicants throughout their submission process and the entrance exam. After the exam, five out of the ten youths were awarded scholarships, and the list of recipients was posted on community noticeboards. Scholarship agreements were signed by the awardees in the presence of Village Administration.

In May 2024, with support from MPRL E&P's CSR Program, five youths from Mann Field Communities began a one-year academic training at No.5 ITC (Magway). Four students enrolled in Automobile Maintenance, while one pursued Computer-aided Design (CAD) and Computer-aided Manufacturing (CAM).

In June 2024, the CSR Team also announced a scholarship opportunity for Basic Nurse Aide and Pharmacist Aide Course at the Noble Lamp Pharmacist Aide and Nurse Aide Training Centre in Magway. Applications opened on 25 June 2024 and closed on 15 July 2024. The courses, set to begin on 19 August 2024, aimed to train five selected youths from Mann Field Communities.

In July 2024, the CSR Team received 11 applicants for Basic Nurse Aide and Pharmacist Aide Training courses. These applicants were notified about an interview session, during which they were evaluated by a review panel. The panel comprised Village Administrators, Community Volunteers, and the Branch Manager of the training center.

In August 2024, the CSR Program awarded scholarships to five youths for the Basic Nurse Aide and Pharmacist Aide Training courses at the Noble Lamp Training Centre (Magway). The selected trainees began their three-month course on 19 August 2024, formalized by scholarship agreements signed between the trainees, their parents, and Village Administrators.

In September 2024, the CSR Team announced a new three-month Motorcycle Mechanic Course at No.5 ITC (Magway) and invited scholarship applications from 16 Mann Field Communities and MOGE (Mann) families. The course is scheduled to begin on November 2024 and will continue through February 2025.

As part of the ongoing commitment to education, the CSR Program provided scholarship support to 21 Mann Field youths from various educational institutions including:

- Five students from No.5 Industrial Training Center (Magway)
- Two students from Government Technical High School (Magway)
- Seven students from State Agriculture and Livestock Institute (Pwint Phyu)
- One student from University of Medicine (Magway)

- Five students from Basic Nurse Aide and Pharmacist Aide Training Courses at Noble Lamp Training Centre (Magway)
- One student from Basic Education High School (Mei Bayt Kone).

Throughout this reporting time, the CSR Team regularly monitored the progress of the scholarship recipients from Mann Field Communities. The scholarship recipients have demonstrated promising progress.

Figure 107: Accompanying Mann Field Youths for Entrance Exam of Batch-12 at No.5 ITC (Magway)

Figure 108: Announcing No.5 ITC (Magway) Scholarship Trainee List on Community Noticeboards in Mann Field

Figure 109: Enrolling Mann Field Youths at Batch-12 of No.5 ITC (Magway)

Figure 110: Signing Agreements with Scholarship Trainees, Parents, and Village Administrators

Figure 111: Conducting Interview Session for Basic Nurse Aide and Pharmacist Aide Training

Figure 112: Monitoring Basic Nurse Aide and Pharmacist Aide Trainees' Progress at Noble Lamp Training Centre (Magway)

Figure 113: Providing Scholarship Support to Youths in Mann Field Communities

Case Study

Investing in the Future: The Transformative Power of Education Funding and Project-based Learning

Education funding is crucial for the progress of society, directly affecting the quality of education and the opportunities available to students. Traditional education is evolving, with innovative methods like Project-based Learning (PBL) becoming more prominent. PBL focuses on real-world applications, critical thinking, and collaboration. It allows students to explore subjects deeply, engage in hands-on experiences, and develop essential skills through meaningful projects.

Recognizing this, MPRL E&P's CSR Program has taken a major step by supporting a groundbreaking PBL initiative at the State Agriculture and Livestock Institute (SALI - Pwint Phyu). In December 2023, the CSR Program funded a PBL initiative focused on "Study on Growth Performance of Different Feed Rations Effect on Poultry (Broiler)".

Naw May Pale Htoo, Junior CSR Officer at MPRL E&P's CSR Program, said, "SALI (Pwint Phyu) is one of four training schools partnered with our CSR Program. Currently, seven students from Mann Field are enrolled with our support. In 2023, we donated five laptops to enhance their learning experience and funded a PBL initiative focused on studying different feed rations for poultry growth. This funding allows students to conduct research without financial constraints and serves as a revolving fund for future projects. Such support greatly benefits the students, strengthening our educational partnership with SALI (Pwint Phyu)."

With the CSR Program's funding support, the institute embarked on a journey to monitor and analyze the growth performance of poultry through various feed rations. The project, which ran from 02 January to 15 February 2024, involved four student groups, each with 35 students and a total of 500 poultry. This project was not just an academic exercise; it was a collaborative effort to enrich educational resources and provide tangible learning and research opportunities for final-year students at SALI (Pwint Phyu).

Chit Hnin Phyu, one of the scholarship trainees, said, "In this PBL, male students monitored the chickens overnight, ensuring they were fed and the temperature was regulated, while female students took over during the day. We fed and gave water to the chickens, wrote daily reports, and weighed the chickens every Friday to track their growth. We were also responsible for the weekly progress report and the presentation data. After this project, we gained practical experience in evaluating the best feed rations for optimal growth and understanding the cost-benefit analysis of dietary choices. We learned valuable skills that go beyond theoretical knowledge."

Animal Husbandry Practices at the PBL of SALI (Pwint Phyu):

Breeding and Selection: Students applied selective breeding techniques to optimize growth rates and feed efficiency.

Feeding Programs: Various feed rations (CP, Dehus, Sunjin, and local) were tested to identify the most effective diet for broiler growth.

Housing and Healthcare Management: Ensuring chickens have proper shelter and living conditions. Regular health checks and vaccinations were conducted to maintain poultry health.

Livestock Outcomes at the PBL of SALI (Pwint Phyu):

Poultry Production: 500 broilers were raised, yielding 867.82 visses of poultry.

Economic Impact: The project generated MMK 5,987,958 in returns and a net profit of MMK 1,019,058 after expenses, demonstrating the financial viability of effective livestock management.

The project culminated in a presentation on 08 March 2024, attended by 350 participants, including teachers, students, and MPRL E&P's CSR Team. This event was a testament to the initiative's success in advancing research, education, and practical knowledge in agriculture and livestock management.

Ma Wai Wai Lin from Kyar Kan Village shared her PBL and presentation experience, "We were the first batch to conduct research on broiler breeding through Project-based Learning (PBL) at SALI (Pwint Phyu). It was also my first time presenting about the project in front of hundreds of people, including the principal, teachers, schoolmates, and MPRL E&P representatives, so I was very excited. Despite being tired due to the consecutive presentation session after the final exam, the presentation deepened my understanding of the project and was a valuable experience for my future career."

Since November 2022, MPRL E&P's CSR Program has provided scholarships to seven youths from Mann Field, supporting them through their three-year course at SALI (Pwint Phyu). The CSR Team closely monitors their academic and extracurricular progress. Zay Linn Aung from Mei Bayt Kone Village shared his thoughts on the scholarship support from MPRL E&P's CSR Program. He said, "Over the three years, MPRL E&P's CSR Program has supported us with essentials such as enrollment fees, monthly stipends, meal allowances, school supplies, etc. This support has enabled us to focus on our studies without financial burdens. At SALI, we learn both theory and practical skills, including social skills. The hands-on experience makes us more knowledgeable. We gain a deep understanding of farmers' real lives through practical learning. Therefore, we do appreciate the continuous support of MPRL E&P."

MPRL E&P's CSR Program allocates approximately MMK 7 million annually for seven students at SALI (Pwint Phyu). Including support for No.5 Industrial Training Center (ITC - Magway), Government Technical High School (GTHS - Magway), and the University of Medicine (Magway), total annual scholarship funding amounts to around MMK 18 million.

Saw Eh Hsar Blute Htoo, Senior CSR Officer at MPRL E&P's CSR Program, said, "Our educational partnership with SALI (Pwint Phyu) remains robust, thanks to the strong working relationships we have developed with the principal, vice principal, and teachers. This Fiscal Year, we plan to provide additional Grant-in-Aid support. We take great pride in our scholarship students, who excel in the research project presentation and consistently rank in the top 10 in their mid-term and end-term exams. Next October, our trainees are finishing their three-year diploma course at SALI (Pwint Phyu) and will get their Diploma in Agriculture. Our CSR Program will help them find jobs, especially those who want to work on improving agriculture in the Mann Field Communities. We will also keep supporting those who pass the SALI diploma exam with top grades and get accepted to pursue a bachelor's degree at Yezin Agricultural University."

MPRL E&P's CSR Program has invested in the future, fostering an environment where education involves real-world experiences and contributions. As students continue their journey, they carry forward the lessons learned and the knowledge that their education was supported by a commitment to funding and innovative learning approaches. The success of this PBL initiative at SALI (Pwint Phyu) signals a brighter future for education and society at large.

10.6.4 Community Capacity Building







Capacity building and knowledge sharing sessions are essential components of MPRL E&P's CSR Program, aimed at fostering community mobilization of local resources and ensuring the successful and sustainable implementation of development projects. The key beneficiaries of these capacity building activities include Community Volunteers, Village Administrators, Village Development Committees, households, and schools. The focus of Community Capacity Building is to empower all community members to develop skills and competencies, enabling them to take greater control of their lives and contribute to inclusive local development. This approach not only promotes cohesion within communities but also enhances their resilience and ability to address economic and social challenges effectively.

Completed Activities (April 2024 – September 2024)

In April 2024, the CSR Team announced the trainee list and schedule for the Summer Art Class Program in Mann Field Communities, enrolling 69 trainees in both Basic and Advanced Art Classes. These classes were held at Aye Mya, Nan U, and Mann Kyoe Community Centers from 29 April 2024 to 24 May 2024, aiming to nurture creativity and foster a love for art among local children.

In May 2024, the CSR Program successfully conducted a four-week Summer Art Class for 66 children, including three basic art classes for ages 6-12 and one advanced class for former trainees. The program concluded with a closing ceremony at Nan U Village Community Center, attended by 236 participants, including trainees, trainers, parents, Village Administrators, and community members. Awards were given to top-performing trainees, with eight prizes for first, second, and third places in both basic and advanced art categories, along with a People's Choice Award.

In May 2024, the CSR Team announced basic computer skills training for primary school students at Mann Kyoe and Aye Mya Community Centers as part of the Online English Learning Program (OELP). Students were assessed for their potential participation in the program.

In June 2024, in collaboration with the Environmental Conservation Department (ECD-Magway), the CSR Program organized events for World Environment Day 2024. The activities, themed around 'Land Restoration, Desertification and Drought Resilience,' included vinyl poster installations, essay and painting competitions, and a talk show. These events engaged the community, with awareness posters displayed in Kyar Kan, Nan U, and Mann Kyoe-Chin Taung Junction, and 24 students from Basic Education Primary School in Auk Kyaung participating in the essay competition. A talk show held at Mann Kyoe Monastery drew 201 participants, while 14 students took part in the painting competition at Aye Mya Community Center. The top three participants in each competition category were recognized in an award ceremony on 5 June 2024 at MPRL E&P's Mann Field Office.

In July 2024, the CSR Team continued the Basic Computer Skills and English Grammar course for 45 students at Aye Mya and Mann Kyoe Community Centers and facilitated the OELP at Nan U Community Center using the mangoSTEEMS Universe platform. A total of 11 students participated in the ongoing OELP at Nan U Community Center.

In August 2024, the CSR Team organized entrance exams for the OELP at Mann Kyoe and Aye Mya Community Centers, along with a quarterly exam at Nan U Community Center. The Tea, monitored the preparation of weekly lesson plans and teaching materials by Community Education Facilitators (CEFs) and conducted refresher training on Basic Computer Skills for new CSR Support Team members.

In September 2024, following the entrance exams, the CSR Team announced the selected OELP students for Aye Mya and Mann Kyoe Community Centers. The OELP for primary school students (Grades 2-4) commenced on 22 September 2024, with the first batch at Mann Kyoe and the second batch at Aye Mya. However, VPN access challenges in Myanmar occasionally disrupted access to the mangoSTEEMS Universe platform used for online lessons.

Figure 114: Organizing Basic and Advanced Summer Art Classes in Mann Field Communities

Figure 115: Organizing Closing Ceremony for Summer Art Class Program

Figure 116: First, Second, Third and People's Choice Award Winners and Watercolor Paintings of Advanced Art Class

Figure 117: First, Second, Third and People's Choice Award Winners and Paintings of Basic Art Class

Figure 118: Installing World Environment Day Awareness Vinyl Posters in Mann Field

Figure 119: Organizing World Environment Day Essay Competition at Auk Kyaung School

Figure 120: Organizing World Environment Day Painting Competition at Aye Mya Community Center

Figure 121: Organizing World Environment Day Talk Show at Mann Kyoe Monastery

Figure 122: Awarding Winners of Essay and Painting Competitions at World Environment Day 2024

Figure 123: Organizing Basic Computer Skills and English Grammar Training at Aye Mya and Mann Kyoe Community Centers

Figure 124: Organizing Online English Learning Sessions at Nan U Community Center

Figure 125: Organizing Quarterly Exam for Online English Learning Program at Nan U Community Centers

Figure 126: Organizing Entrance Exams for Online English Learning Program at Aye Mya and Mann Kyoe Community Centers

Figure 127: Presenting Completion Certificates to the First Batch of Students from Online English Learning Program at Aye Mya Community Center

Case Study

Summer Art Class: An Oasis for Children amid Myanmar's Scorching Heat

To provide a constructive outlet during the summer holidays, MPRL E&P's CSR Program organized a four-week Summer Art Class Program for children in the Mann Field Communities from 29 April 2024 to 24 May 2024. The classes were held at Mann Kyoe, Aye Mya, and Nan U Community Centers. These classes, part of the Community Capacity Building Program, aimed to foster a love for art and nurture creativity among local youth.

A total of 66 children participated in three basic art classes for ages 6-12 and one advanced art class for last year's trainees. The program's success from the previous year, which helped children elevate their hobby to an advanced level, encouraged its continuation into the Fiscal Year 2024-2025.

While the basic class focused on drawing with pencils and colored pencils, the advanced class introduced watercolor techniques. The advanced watercolor painting course, designed for students who completed last year's basic class, highlighted the program's progression. Senior CSR Officer Saw Eh Hsar Blute Htoo emphasized the program's goal to develop children's imagination, creativity, fine motor skills, and appreciation of nature.

Trainer U Myint Hlaing Min reflected, "Teaching art to young children involves fostering a love for creativity. Initially, they need guidance, but with the right support and instruction, all children can learn art easily. Each child's unique imagination and creativity influence their progress." The trainers were pleased with the children's dedication and progress throughout the program.

Pann Ei Thwin, an advanced art class student, shared her journey, "Drawing, using a brush, and coloring bring me so much joy. I particularly enjoy creating serene artwork. Reflecting on my progress, I am proud of mastering watercolor painting and colored pencil drawing. In this training completion ceremony, I am very pleased to win the first prize. Thank you MPRL E&P for this art class opportunity!"

Daw Sein Wai Lwin, the mother of Han Ni Soe Oo from advanced art class, noted the remarkable improvement in her child's painting skills. She expressed pride in her daughter winning the second prize in the advanced art class and the People's Choice Award. She remarked, "This year's creations are livelier and more beautiful. The art class provided a valuable and enriching summer activity."

Shwe Wai Phyo from the basic art class reflected, "Learning various techniques in the class was invaluable. I particularly enjoy drawing with pencils and using rulers for precision. I am very pleased to win the People's Choice Award in the basic art class. I am eager to enroll in advanced art classes again and would also appreciate opportunities to participate in English language and computer courses."

Trainer U Aung Maung commented, "We are very pleased that MPRL E&P's CSR Program has launched the second Summer Art Class for children in the Mann Field Communities. This year, the summer was extremely hot, and these art classes were perfect for the children to stay indoors and learn something fun and creative instead of playing outside in the heat or on their mobile phones. Also, this year's program was more organized and received increased interest and support from local parents. Throughout the Summer Art Class, there was strong collaboration among the company, the community, and the Community Education Facilitators (CEFs)."

On 24 May 2024, the closing ceremony for the Summer Art Class Program was held at Nan U Village Community Center. The event was attended by 236 participants, including trainees, trainers, parents, relatives, Village Administrators, community members, the MPRL E&P Field Operations Team, and the CSR Team. Eight prizes were awarded in the basic and advanced art classes, recognizing first, second, and third place, as well as the People's Choice Award.

Additionally, in collaboration with MPRL E&P and the Environmental Conservation Department (ECD-Magway), essay and art competitions were held to celebrate World Environment Day 2024. Advanced art class trainees participated in this competition. Through the painting competition commemorating World Environment Day, participants gained a deeper understanding of the importance of knowing climate change, preserving the environment, and minimizing harm.

Looking ahead, Saw Eh Hsar Blute Htoo concluded, "MPRL E&P's CSR Program will continue to support trainees in advanced studies and offer art classes next summer. We hope our community children enjoy happy learning experiences and have wonderful summer holidays."

Collaborative Environmental Management: The Role of Government, Company, and Community

In the quest for environmentally and socially sustainable development in our post-pandemic society, stakeholder collaboration is essential. Proactive engagement between governments, businesses, and local communities can lead to impactful and lasting solutions, recognizing that sustainability is not just a compliance issue but a shared goal requiring concerted efforts from all stakeholders.

Maintaining a collaborative relationship with environmental regulators and local communities is a key pillar of a company's commitment to environmental stewardship. This cooperation strengthens the company's social license to operate—gaining the trust and acceptance of local communities and the general public. This approach is particularly crucial as environmental regulations become more dynamic, changing in response to new scientific findings, political shifts, or public pressure. Ongoing cooperation allows companies to stay informed about potential regulatory changes and adapt their practices accordingly.

The Power of Collaboration: Leveraging Collective Strengths

Collaborative partnerships bring together diverse perspectives, expertise, and resources to tackle complex environmental challenges such as waste, biodiversity and carbon emissions, which no single entity can solve alone. Businesses, government agencies, and local communities each bring unique strengths to the table:

Businesses:

- **Innovation and Resources:** Businesses drive sustainable practices and technologies across industries. They can implement sustainability measures within their operations, supply chains, and products/services, driving positive environmental and social impacts while realizing long-term business benefits.

Government:

- **Regulatory Frameworks and Support:** Governments enact policies, regulations, and incentives that shape sustainable practices. They establish frameworks for environmental protection, set emissions targets, and provide funding and support for sustainability initiatives. Government involvement is crucial for creating an enabling environment for sustainable development and ensuring that collective efforts align with broader societal goals.

Communities:

- **Local Knowledge and Participation:** Communities contribute to the effectiveness and sustainability of environmental efforts through local knowledge, fostering participation, and building partnerships. They engage in educational activities to build capacity and knowledge about environmental issues, fostering a culture of sustainability.

MPRL E&P's Environmental Collaborative Partnerships in Action

MPRL E&P exemplifies this collaborative approach by working closely with the Environmental Conservation Department (Magway Region) under the Ministry of Natural Resources and Environmental Conservation. The company integrates environmental considerations into its core strategies and operations, shifting from minimal environmental efforts to comprehensive, strategic practices.

In this process, MPRL E&P has intensified its cooperation with the ECD by:

Ensuring Ongoing Compliance

An Environmental Compliance Certificate (ECC) ensures regulatory adherence, environmental protection, and sustainable operations while enhancing corporate reputation and stakeholder trust. They require companies to implement measures that minimize their environmental footprint, including pollution control, waste management, and resource conservation.

MPRL E&P submitted an official request to extend the ECC for the Mann Field Enhanced Oil Recovery Project ahead of the official expiry date. By seeking a timely extension of the ECC, MPRL E&P demonstrates its commitment to meeting environmental standards and ensuring sustainable operations in Mann Field.

Transparent Oversight

Facilitating inspection tours and providing comprehensive environmental monitoring reports to the ECD ensures transparent oversight and continuous improvement in environmental management. Inspection tours by ECD officials in Mann Field included both environmental management sites and CSR projects implemented within the surrounding communities, as well as meetings with village leaders in an open manner. These tours help ensure that environmental and social management practices are effectively implemented and maintained.

Furthermore, MPRL E&P's bi-annual Environmental Monitoring Reports, which track progress, identify areas for improvement, and demonstrate accountability, are publicly available on the company's website, ensuring transparent communication of the company's environmental performance and outcomes.

Engaging the Community

Engaging the community is a cornerstone of effective and sustainable environmental management. By involving local communities in environmental initiatives, both government and corporate entities can enhance the reach, impact, and sustainability of their efforts.

To mark the World Environment Day on 5 June 2024, MPRL E&P, in collaboration with the Environmental Conservation Department (ECD) and local community, undertook a series of activities aimed at promoting environmental awareness and education. The highlight of this initiative was the erection of signposts in Mann Field, which serve as reminders and educational tools for environmental protection. Additionally, an essay competition titled "Land Restoration, Desertification, and Drought Resilience" was organized, targeting the local community, especially students. The essay competition

aims to educate participants about environmental issues and encourage them to come up with innovative ideas and solutions.

Through these initiatives, MPRL E&P not only complies with regulatory requirements but also fosters a culture of sustainability and proactive environmental management. This comprehensive approach demonstrates the company's dedication to environmental stewardship and its role as a responsible corporate citizen.

Challenges and Opportunities

While collaborative partnerships offer immense potential for driving sustainability outcomes, they also present challenges in terms of resource constraints and the complexity of environmental challenges that need addressing. By strategically engaging all stakeholders and leveraging their collective strengths, collaborative environmental management can effectively address the complex challenges of sustainability through robust governance structures, clear communications, and adaptive management approaches, leading to more resilient and sustainable development for both businesses and society.

10.6.5 Community Healthcare Program

MPRL E&P's CSR Program launched the Mobile Clinic Program in September 2018 to offer primary healthcare to children, senior residents and disadvantaged individuals in Mann Field. MPRL E&P's two Camp Doctors volunteered their time to manage the clinic alongside a healthcare assistant and community volunteers. Despite a temporary closure in April 2020 due to the COVID-19 outbreak, the program resumed in February 2022 after a community survey, and expanded to five weekly clinic sessions across six central villages in July 2022. The program aims to enhance access to essential healthcare services and provide health education to underserved individuals in the Mann Field Communities.

Completed Activities (April 2024 – September 2024)

In May 2024, the CSR Team organized Health Talks on the 'Benefits and Risks of Drugs' at Mobile Clinic sites to enhance community health and raise awareness. A total of seven sessions were conducted, with 48 community members attending.

In June 2024, building on the success of May's sessions, the CSR Team expanded the health talks to ten sessions, reaching a larger audience of 113 participants. Additionally, the CSR Team met with Dr. Ei Ei Aung, an ophthalmologist from Minbu Hospital, to plan an eye health program for August 2024. This program, in partnership with the Trachoma Control and Prevention of Blindness Program (Minbu), focused on seniors aged 50 and above in Mann Field Communities. The CSR Team also conducted a survey on patients who received cataract operations, eyeglasses, and eye drop treatments through the CSR Program last year.

In July 2024, in efforts to promote public health awareness, cholera awareness posters were displayed at six Mobile Clinic locations within Mann Field Communities, educating the public about cholera prevention and hygiene practices.

In August 2024, the CSR Program, in collaboration with the Trachoma Control and Prevention of Blindness Program, hosted a major eye health event at Auk Kyaung Pagoda for seniors aged 50 and above in Mann Field Communities. The event attracted 314 community members and began with a health talk on 'Diabetic Eye Diseases and Prevention' delivered by Dr. Ei Ei Aung. The CSR Team also arranged transportation and breakfast for participants.

Following the health talk, the Health Assistant Team, supervised by Dr. Ei Ei Aung and supported by CSR Team members, Village Administrators, and Community Volunteers, conducted preliminary eye screenings for 266 seniors. The screenings revealed:

- 102 cataract cases
- 1 glaucoma case
- 37 individuals needing eyeglasses
- Other eye-related conditions.

In September 2024, based on the results of the preliminary eye screenings conducted in August, the CSR Team facilitated comprehensive eye examinations for 138 elders at Minbu Hospital's Eye Care Center. The following outcomes were identified:

- 98 elders required cataract surgery
- 1 needed glaucoma surgery
- 2 needed corneal scraping
- 25 needed eyeglasses
- 8 needed both eyeglasses and eye drops
- 3 needed both eye drops and medicines
- 1 was prescribed eye drops.

All eyeglasses and eye drops have been distributed, and the eye surgeries will be performed in batches starting in October 2024.

In 25 September 2024, the CSR Program organized a health talk on 'Maternal & Childcare and Nutrition' at Auk Kyaung Pagoda. The session, led by Dr. Kyaw Ye Htut, the Site Doctor of MPRL E&P, was attended by 189 participants, including pregnant women, breastfeeding mothers, and mothers with children under five years old. This session aimed to improve knowledge on maternal health, nutrition, and child care in the community.

During this reporting period, the CSR Program delivered free healthcare and home visit treatments to Mann Field Communities through the Mobile Clinic Program, which operated five days a week. The CSR Team played a crucial role in supporting and monitoring the program's daily activities across six clinic locations. Since the program's recommencement in February 2022, the Mobile Clinic had provided free healthcare services to 17,290 patients through 587 clinic sessions as of 23 September 2024.

Figure 128: Mobile Clinic Program in Mann Field Communities

Number of Patients (21 February 2022 – 23 September 2024)

Village	Session	Male	Female	Total
Kyar Kan	121	757	2,963	3,720
Kywe Cha	120	973	2,635	3,608
Lay Eain Tan	121	865	2,872	3,737
Let Pan Ta Pin	123	736	2,639	3,375
Aye Mya	52	421	1,240	1,661
Nan U/ Auk Kyaung	50	291	898	1,189
Total	**587**	**4,043**	**13,247**	**17,290**

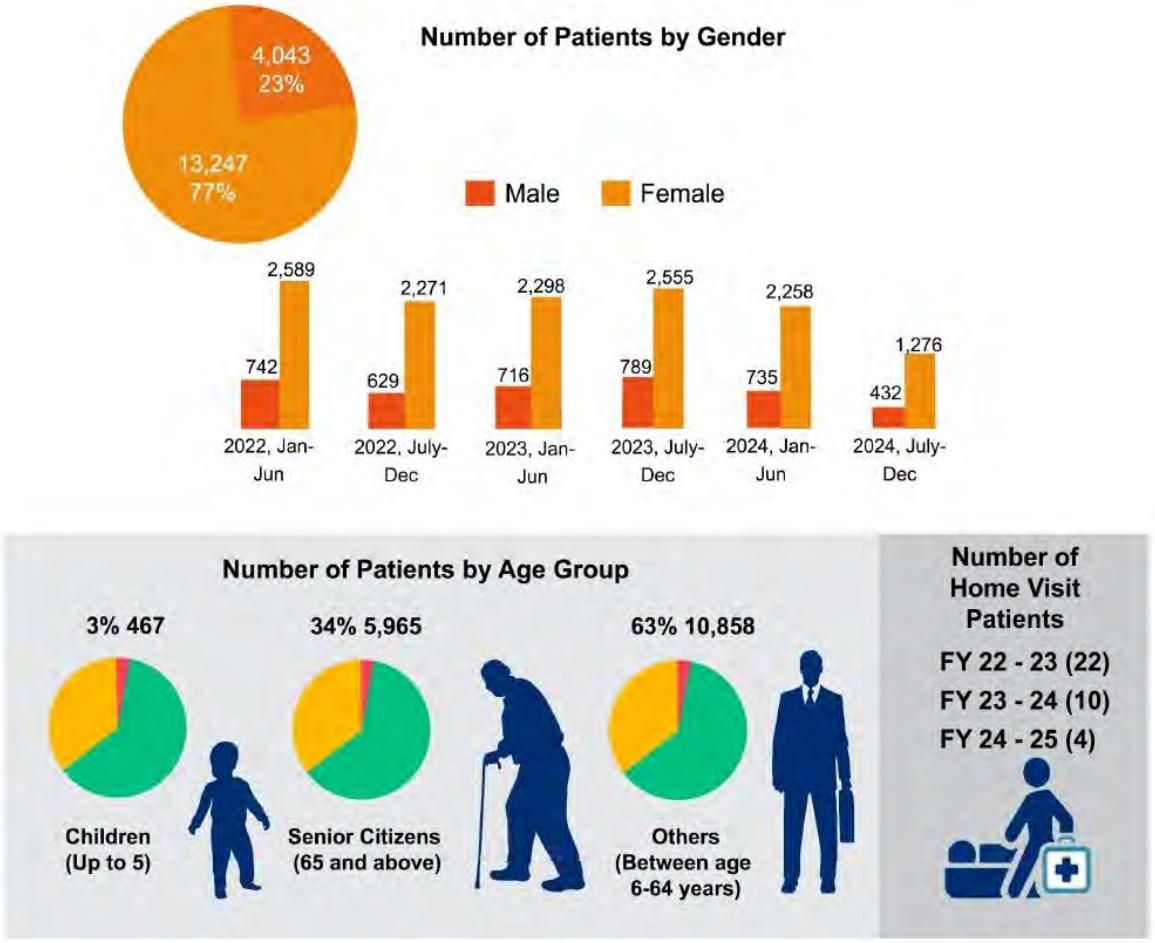


Figure 129: Statistics of Patients' Visit to Mobile Clinics around Mann Field

Figure 130: Organizing Health Talks on the 'Benefits and Risks of Drugs' in Mann Field

Figure 131: Organizing Health Talk on the 'Maternal & Childcare and Nutrition' in Mann Field

Figure 132: Displaying Cholera Awareness Posters in Mann Field Communities

Figure 133: Conducting Survey on Eye Health Patients for Post-treatment Process

Figure 134: Announcing Eye Health Program in Mann Field Communities

Figure 135: Organizing Eye Health Program for the Seniors Aged 50 and above in Mann Field

Figure 136: Organizing Comprehensive Eye Examinations for Elders at Minbu Hospital

Case Study

Promoting Fair Access to Eye Care: MPRL E&P's Second Round of Eye Health Program

Ensuring good vision is more than just clear sight; it's a cornerstone of overall health and well-being. Recognizing this, MPRL E&P has committed to advancing eye health program as part of its corporate social responsibility (CSR) initiatives. This feature explores the global and local context of eye health, highlights MPRL E&P's efforts in Mann Field, and illustrates how these initiatives align with broader health objectives. From tackling eye health challenges to implementing eye health program, MPRL E&P is dedicated to making a meaningful impact on the Mann Field Communities it serves.

Global Eye Health at a Glance

According to estimates by the World Health Organization (WHO), about 2.2 billion people worldwide suffer from eyesight problems due to presbyopia (farsightedness) and myopia (nearsightedness) in 2023. Notably, 90% of these individuals are from developing countries, and 80% of visual impairments can be prevented or treated. Additionally, 85 to 95 percent of diabetic patients have Type 2 Diabetes Mellitus, and people with diabetes are 25 times more likely to lose their sight than those without the disease. Therefore, even in developed countries, diabetes remains a leading cause of blindness.

Eye Health Challenges in Myanmar

Among preventable eye diseases in Myanmar, trachoma, which was a major issue in the past, will no longer be a public health concern as of 2022, according to the Trachoma Elimination in Myanmar announcement made in September. Additionally,

during a meeting held at the Ministry of Health on 29 May 2024, the increasing need for eye healthcare was highlighted, noting that cataracts, glaucoma, the need for glasses, injuries, diabetes, and hypertension are now the leading causes of blindness. Therefore, in collaboration with the Ministry of Health, as well as international and regional organizations, it is essential to cautiously prevent cataracts and other related diseases such as diabetes and hypertension.

Aligning with Myanmar Health Vision 2030

Recognizing the critical role of quality healthcare and accessibility in Myanmar Health Vision 2030, which aims to achieve "Quality Healthcare and Access for Everyone," MPRL E&P has actively contributed through its Community Healthcare Program, operating Mobile Clinics in Mann Field since 2018. Additionally, adhering to the Ministry of Health's guidelines to prevent avoidable blindness and visual impairment across Myanmar and acknowledging the specific eye care needs of Mann Field Communities, MPRL E&P's CSR Program has been committed to expanding primary eye healthcare through effective treatments and health education initiatives led by eye health professionals starting from early 2023.

Clear Eyesight for Happy Life!

As part of its shared value initiatives, MPRL E&P's CSR Program launched the "Clear Eyesight for a Happy Life!" program to provide eye healthcare to senior residents aged 60 and above during its first phase, and to teachers and students from 11 local schools in Mann Field during its second phase in the Fiscal Year 2022-2023. This initiative, in partnership with the Trachoma Control and Prevention of Blindness Program and the Department of Public Health (Minbu), conducted general eye screenings for 1,921 individuals, including 74 teachers and 1,847 students, and provided additional screenings for 210 elderly local patients. Furthermore, through its facilitation assistance, MPRL E&P's CSR Program successfully funded cataract surgeries for 100 patients at Minbu Hospital, as well as glasses for 20 individuals and eye drops and supplements for 10 people, all supported by a total CSR budget of MMK 20,879,200.

Second Round of Eye Health Program for Mann Field Communities

MPRL E&P's CSR Program is set to broaden eye healthcare coverage in Mann Field for the Fiscal Year 2024-2025. Starting in June 2024, the initiative, developed through consultations with the Ophthalmologist Dr. Ei Ei Aung from the Trachoma Control and Prevention of Blindness Program, Department of Public Health (Minbu), aims to reach targeted groups within the Mann Field Communities. The Field CSR Team has followed up with patients who received eye treatment in the previous phases to assess their progress and identify new target groups for general eye screenings in July and August 2024.

On 14 August, as part of the program, Ophthalmologist Dr. Ei Ei Aung delivered a health talk on “Diabetic Eye Disease and Prevention” to 314 community members. MPRL E&P’s CSR Team also arranged transportation and provided breakfast for all attendees. Following the health talk, healthcare providers, with support from CSR Team members, Village Administrators, and Community Volunteers, conducted general eye screenings for 266 people aged 50 and above at Auk Kyaung Pagoda in Mann Field.

Daw Myint Myint Maw, a health assistant at the Trachoma Control and Prevention of Blindness Program, Department of Public Health (Minbu), said, “Under the leadership of our ophthalmologist, Dr. Ei Ei Aung, a team of 10 health officials—including four health assistants, two field staff, and two dressers—participated in the recent MPRL E&P eye health program held in Auk Kyaung Village. Cataracts are common, especially among elderly people, but they can also affect children, either from birth or due to eye injuries. For those whose vision is gradually declining but can still perceive light, surgery is often an option. However, if they lose the ability to see light entirely, surgery may no longer be viable, leading to permanent vision loss. In rural areas, many residents hesitate to undergo surgery due to financial constraints and a lack of health awareness. Our approach begins with educating people about the benefits and safety of surgery, while also providing them with access to free healthcare. This support ensures they have the chance to receive the necessary surgery. The MPRL E&P’s eye health program for Mann Field Communities has seen effective collaboration between the CSR Team, Village Administrators, and Community Volunteers. In this phase, we prioritized providing general eye screenings for individuals aged 50 and above from 14 communities in Mann Field, ensuring effective identification of cataracts and other eye conditions. I’m pleased to participate in the company’s CSR Program, as it addresses a critical health need for Mann Field Communities.”

Additionally, 72-year-old U Win Shein, a resident of Mei Bayt Kone Village and a retired member of the Fire Department after serving 36 years at Myanma Oil and Gas Enterprise (Mann Field), said, “I underwent surgical treatment on one of my eyes in 2020, and now, the vision in my remaining eye is significantly impaired. After a general eye screening and health talk session conducted by MPRL E&P’s eye health program at Auk Kyaung Village, the health assistant advised that the remaining eye would also need surgery due to a mature cataract. As we all know, eyes are incredibly important, so I am deeply grateful for the essential care and proper treatment provided by the CSR Program. I especially want to express my sincere thanks for the care given to us pensioners through the company’s ongoing CSR efforts.”

In addition, U Win Shein remarked, “After my retirement, I’m pleased to contribute to social activities in my village. As a member of the Mei Bayt Kone Village Development Committee, I have been involved in the company’s CSR Program and various development initiatives for our village for several years. Currently, around 25 residents of our village are receiving eye treatment alongside me, and they are very thankful for the relief from the eye issues they have been enduring. During these challenging times, having access to free healthcare is invaluable. On behalf of the communities of Mei Bayt Kone and Mann Field, I want to express our gratitude for alleviating some of the social anxiety faced by our families.”

Strengthening Eye Health for a Brighter Future

Eye health extends beyond maintaining good vision; it is essential for overall well-being and quality of life. The WHO’s “Towards Universal Eye Health” strategy aims to reduce vision impairment and enhance access to rehabilitation, while the United Nations’ Sustainable Development Goals (SDGs) highlight eye health as a vital aspect of basic healthcare. In Myanmar, the Ministry of Health is developing the National Eye Health Plan (2025-2030) to align with both the WHO’s strategy and the UN’s SDGs. Achieving these goals requires comprehensive support from ministries and partner organizations to deliver high-quality eye healthcare to communities. MPRL E&P’s eye health program aligns with the National Eye Health Plan and demonstrates the company’s commitment to addressing health challenges in Mann Field Communities. As an active UN Global Compact member, the “Clear Eyesight for Happy Life!” eye health program reflects MPRL E&P’s dedication to sustainable development and enhancing eye care through effective collaboration with the Department of Public Health and Mann Field Communities.

10.6.6 Community-led Waste Management Program






MPRL E&P supported the implementation of a community-led waste management initiative using a three-wheeled cargo bike in the Fiscal Year 2019-2020 in Mann Field Communities. The program involved community volunteers and village leaders to address the lack of access to municipal waste services in Mann Field. In the Fiscal Year 2020-2021, MPRL E&P's CSR Program upgraded the cargo bike to a larger waste collection vehicle to accommodate more villages and increased waste volumes. The present waste management program emphasizes regular operations and community participation for sustainability and aims to raise awareness and motivate collective actions for proper waste management and sustainable development.

Completed Activities (April 2024 – September 2024)

Throughout this reporting period, the CSR Team actively monitored waste collection services across Mann Field Communities, working in partnership with the Trash Hero Minbu Chapter. The Team facilitated and tracked cleanup events, ensuring the long-term sustainability of the waste management program.

As of 24 September 2024, the CSR Program had supported Trash Hero Minbu's efforts, which have conducted 358 cleanup sessions involving 7,143 heroes, and collected 12,355 kg of trash since the program's launch in September 2017.

The CSR Team also continued to back the Trash Hero Minbu's Cleanup Challenge Awards Program, where individuals received recognition for their participation in cleanup activities. Participants who completed 10 cleanups earned T-shirt awards, while those completing 20 cleanups received Trash Hero Caps. As of August 2024, a total of 136 individuals had been awarded for participating in 10 cleanups, and 25 individuals had earned recognition for completing 20 cleanups. The program's objective was to inspire and motivate participants, particularly children, to engage in environmental cleanup efforts actively.

Figure 137: Monitoring Waste Collection Services in Mann Field Communities

Figure 138: Organizing Trash Hero Minbu's Cleanup Activities in Mann Field

Figure 139: Organizing Trash Hero Minbu's Cleanup Challenge Awards Program

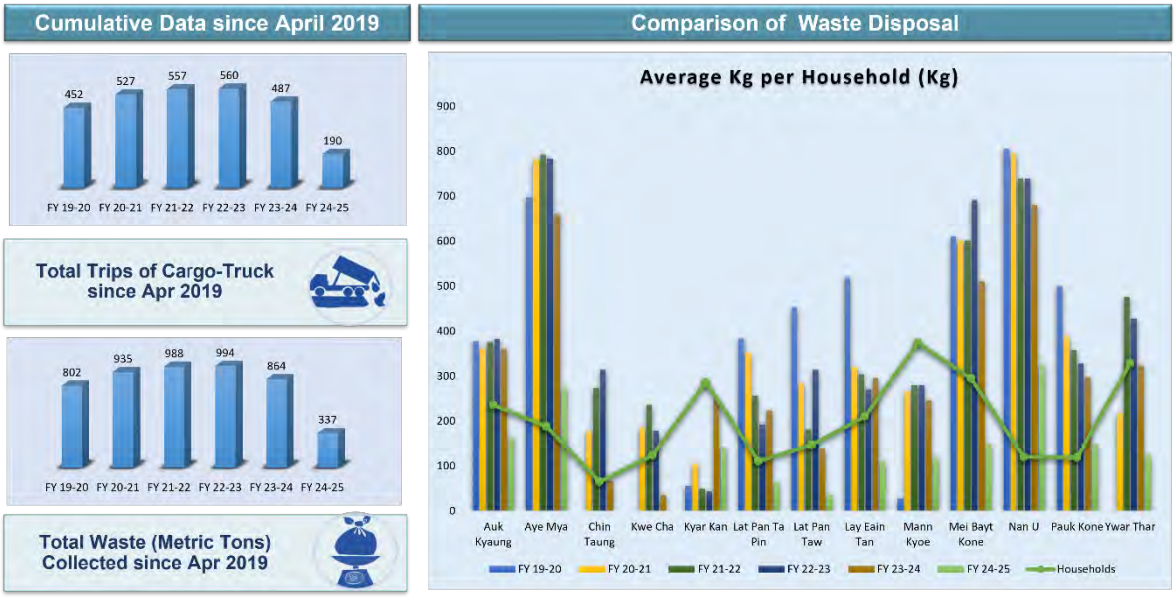


Figure 140: Comparing Community Waste Disposal (Quarterly)

10.6.7 Operational Grievance Mechanism (OGM)

MPRL E&P prioritizes host communities by fostering transparent information sharing and two-way communication channels to build trust and maintain a social license to operate. We have adopted a multi-stakeholder approach to create the Operational Grievance Mechanism (OGM) in Mann Field. This initiative, led by MPRL E&P, the host communities, and Myanma Oil and Gas Enterprise (MOGE), represents the first of its kind in Myanmar. The OGM is a vital component that complements the Mann Field Social Management Plan.

Completed Activities (April 2024 – September 2024)

During the first half of FY 2024-2025, eight OGM cases were received and successfully resolved. This brings the total number of OGM cases handled since the OGM's inception in September 2014 to 182. Each case was thoroughly investigated and addressed through the collaborative efforts of MPRL E&P's Field Operations Team and MOGE's Construction Department. The CSR Team effectively closed these cases, ensuring that all key performance indicators (KPIs) were met.

Addressed Grievance Cases

- On 09 April 2024, U Tin Thaung from Mei Bayt Kone Village reported an OGM case related to the unused pipeline that is connecting well #49 and well #24 in his farmland causing difficulties in cultivating. He requested to inspect and remove it. The community volunteer reported the case to the CSR Field Coordinator. The CSR Field Coordinator informed the case to MPRL E&P Field Operations Team. After inspecting the case, MPRL E&P Field Operations Team removed the unused old pipeline. The case was closed on 10 April 2024 and the complainant was satisfied with the process and the outcomes.

- On 10 April 2024, U Sein Maung from Mei Bayt Kone Village reported an OGM case related to the unused pipeline that is connecting well #49 and well #24 in his farmland causing difficulties in cultivating. He requested to inspect and remove it. The community volunteer reported the case to the CSR Field Coordinator. The CSR Field Coordinator informed the case to MPRL E&P Field Operations Team. After inspecting the case, MPRL E&P Field Operations Team removed the unused old pipeline. The case was closed on 11 April 2024 and the complainant was satisfied with the process and the outcomes.

- On 03 May 2024, U Han Thaung from Kyar Kan Village reported an OGM case related to removing an unused pipeline and large stones in his farmland causing difficulties in cultivating. He requested to inspect and remove them. The CSR Field Coordinator reported the case to MPRL E&P's Field Operations Team. After inspecting the case, the Field Operations Team identified the pipeline as a gas pipeline and could not remove it. They explained the situation to the complainant. For the removal of large concrete blocks, the MOGE's Construction Department visited the site and the vehicles needed for stone removal were currently unavailable due to new well construction. They assured that the concrete blocks would be removed once the construction was completed. The complainant was satisfied with the result and outcome.

- On 29 May 2024, U Pan Nyo from Kyar Kan Village reported an OGM case related to the unused pipeline from Well #294 in his farmland causing difficulties in cultivating. The Community Volunteer reported the case to the CSR Field

Coordinator. The CSR Field Coordinator informed the case to MPRL E&P's Field Operations Team, and the Team inspected the case and removed the pipeline. The complainant was satisfied with the result and outcome.

- On 30 May 2024, Daw Yin Mar Aye from Auk Kyaung Village reported an OGM case related to the repair water pipeline/ water supply. There was a leakage in the water pipeline that connects GOCS 2 to the Boiler in her farmland, resulting in difficulties in cultivating. The Community Volunteer reported the case to the CSR Field Coordinator. The CSR Field Coordinator informed the case to MPRL E&P's Field Operations Team, and the Team inspected the case and removed the pipeline. The complainant was satisfied with the result and outcome.

- On 31 May 2024, U Kyaw Min from Makyee Chaung village reported that trees and fruits from AD (1) falling onto his farmland, resulting in cultivation challenges. The Community Volunteer reported the case to the CSR Field Coordinator. The CSR Field Coordinator informed the case to MPRL E&P's Field Operations Team and MOGE. MOGE's Construction Department inspected the case and cut down the trees. The complainant was satisfied with the result and outcome.

- On 05 September 2024, Daw Yinn Mar Aye from Auk Kyaung Village reported an OGM case related to the repair water pipeline/ water supply. A leakage in the water pipeline connects GIP to the fire water pump in her farmland, resulting in difficulties in cultivating. She requested to inspect and repair it. The community volunteer reported the case to PA-01. PA-01 informed the case to MPRL E&P's Field Operations Team and MOGE. Following an inspection by MOGE's Engineering Department, it was determined that there was no leakage in the water pipelines. The water found on the complainant's farmland was attributed to heavy rainfall rather than pipeline leakage. Both MOGE's Engineering Department and MPRL E&P's Operations Team explained the findings to the complainant. The case was closed on 06 September 2024. The complainant was satisfied with the process and the outcome.

- On 23 September 2024, U Aung San from Mei Bayt Kone village reported an OGM case where the PVC pipe supplying water to his farm was damaged by an oil tank truck that drove over it. U Aung San requested a replacement for the damaged pipe. The community volunteer reported the case to PA-02, who then notified MPRL E&P's Field Operations Team. The Team met with the farmer and agreed to replace the damaged pipe. The complaint was satisfied with the process and the outcome. The complainant was satisfied with the result and the outcome.

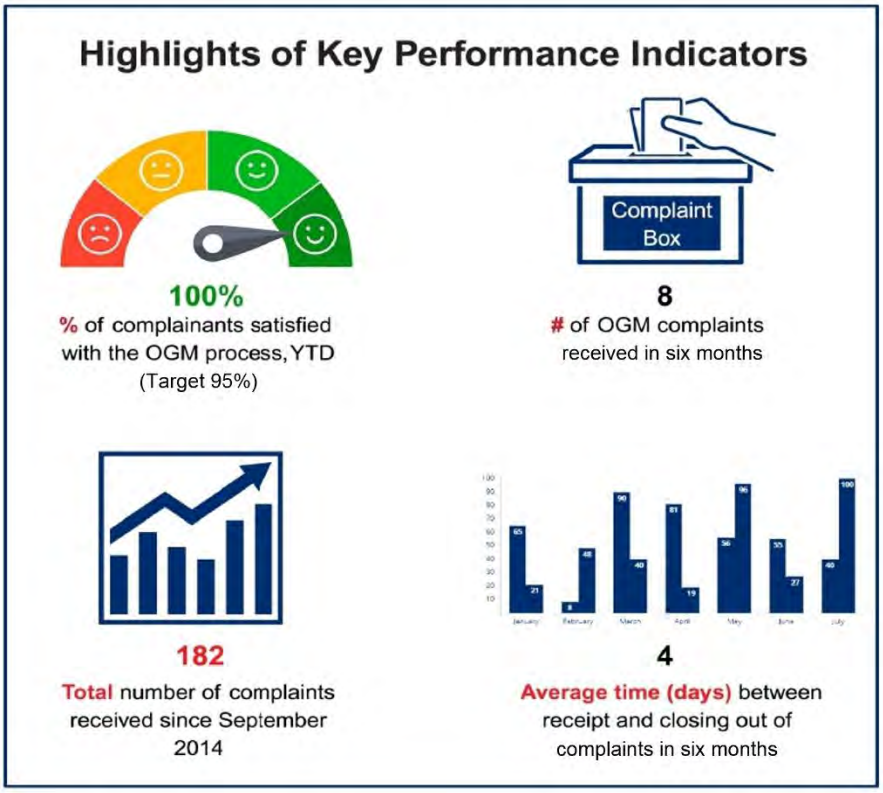


Figure 141: Key Performance Indicators of OGM

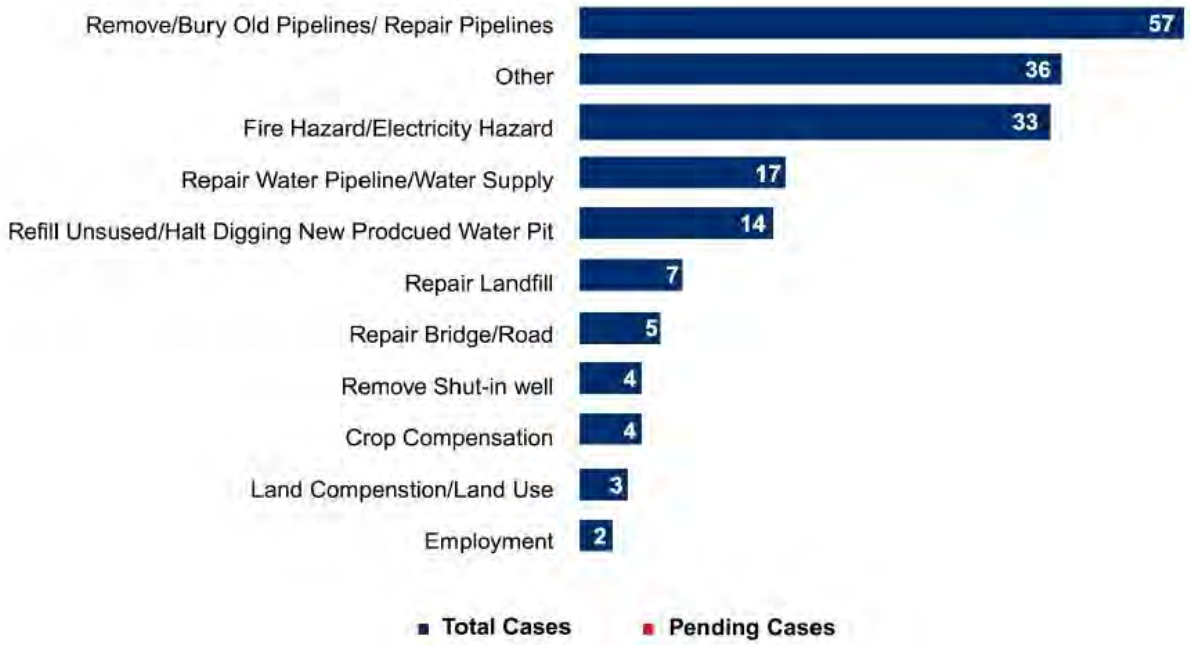


Figure 142: Received and Closed Cases, by Quarter, 2014-to-date

Figure 143: Addressing Two OGM Cases in Mei Bayt Kone Village

Figure 144: Addressing OGM Case in Kyar Kan Village

Figure 145: Addressing OGM Cases in Auk Kyaung and Mei Bayt Kone Villages

10.6.8 Stakeholder Engagement and Information Disclosure






At MPRL E&P, engaging stakeholders and disclosing information are vital components of our commitment to upholding human rights and providing access to remedies. Timely and consistent engagement with our key stakeholders forms the foundation of our CSR initiatives in Mann Field. We actively involve stakeholders at various levels, including field, community, local, and regional levels, to establish a robust two-way communication channel.

Completed Activities (April 2024 – September 2024)

In April 2024, the CSR & Communications Department published two key corporate reports: the 'Voluntary Principles on Security and Human Rights' and the 'Self-assessment Against ISO 26000 Social Responsibility.' A report on the Novitiation (Shinpyu) Ceremony at Mann Field was also released. Doh Mann Myay Newsletters were distributed to Village Administrators, Village Development Committees, Seed Bank Committee Members, Community Volunteers, local libraries, and placed in Doh Mann Myay boxes within the communities.

In May 2024, the CSR Team welcomed the Director of the Environmental Conservation Department (ECD Magway), alongside with Mann GM and Mann Field Operations Management. Their visit included tours of the Mobile Clinic in Kyar Kan Village, an observation of the art class at Nan U Community Center, and a meeting with Village Administrators. The CSR Team provided an in-depth overview of MPRL E&P's CSR activities. Discussions the following day focused on planning for World Environment Day 2024. On 6 May 2024, the CSR Team published the Sustainability Report (2023) on the MPRL E&P's website. The CSR Team followed up by distributing photo gifts to community members who participated in the community photo shoot and Novitiation Ceremony.

In May 2024, the CSR Team organized the Second Biannual CSR Progress Update Meeting for FY 2023-2024 at Mann Field. This included a reflection workshop with local communities and a presentation from the Health, Safety, and Environment (HSE) Team. Held at Auk Kyaung Monastery, the event was attended by 38 participants, including Village Administrators, Village Development Committees, and volunteers.

In June 2024, the Second Biannual CSR Progress Review Meeting for FY 2023-2024 with MOGE took place in Nay Pyi Taw, gathering 17 participants. Books on 'Rainwater Dams' by U Kyaw Oo were distributed to Village Administrators and community centers. Additionally, the Sustainability Report 2023 was submitted as the Communication on Progress (CoP) 2024 report to the UN Global Compact.

In July 2024, the CSR Team submitted weekly activity reports, the FY 2024-2025 CSR work program, and budget plans to Mann GM. The Team also collaborated with the ophthalmologist Dr. Ei Ei Aung from Minbu Hospital to finalize materials for the eye health program, coordinated patient data collection with healthcare assistants, and received registration forms. Additionally, the CSR Team continued training Community Volunteers from villages on the Operational Grievance Mechanism (OGM) and worked with Village Administrators to update the list of flooded households from 14 villages.

In August 2024, stakeholder engagement continued with health talk planning for Mann Field Communities. The CSR Team collaborated with a cartoonist on the OGM 10th Year Storybook, discussed health talk plans with the camp doctor, and introduced new CSR Team members to Village Administrators, Village Development Committees, and Community Volunteers.

In this reporting period, the CSR & Communications Department completed and distributed the periodic reports and publications to the respective stakeholders.

- CSR Monthly Progress Reports
- First and Second Quarter CSR Progress Reports
- First and Second Quarter Monitoring & Evaluation (M&E) Reports
- First and Second Quarter Operational Grievance Mechanism (OGM) Reports
- First Biannual CSR Progress Report
- Social Management Updates for the 9th Environmental Monitoring Report
- Insight! Newsletters (Issue-39) and (Issue-40)
- Doh Mann Myay Newsletters (Issue-13) and (Issue-14).

Figure 146: Organizing Second Biannual CSR Progress Review Meeting for FY 2023-2024 with MOGE in Nay Pyi Taw

Figure 147: Organizing Second Biannual CSR Progress Update Meeting for FY 2023-2024 at Mann Field

Figure 148: Escorting Director of ECD (Magway) and Mann GM to CSR Project Sites during Mann Field Visit

Figure 149: Meeting with Stakeholders for Community Investment Initiatives in Mann Field

Figure 150: Distributing 'Rainwater Dam' Books to Village Administrators and Community Centers

Figure 151: Distributing Photo Gifts to Stakeholders from Community Photo Shoot

Figure 152: Distributing Doh Mann Myay Newsletters to Stakeholders in Mann Field

Figure 153: Publishing Novitiation (Shinpyu) Ceremony Report

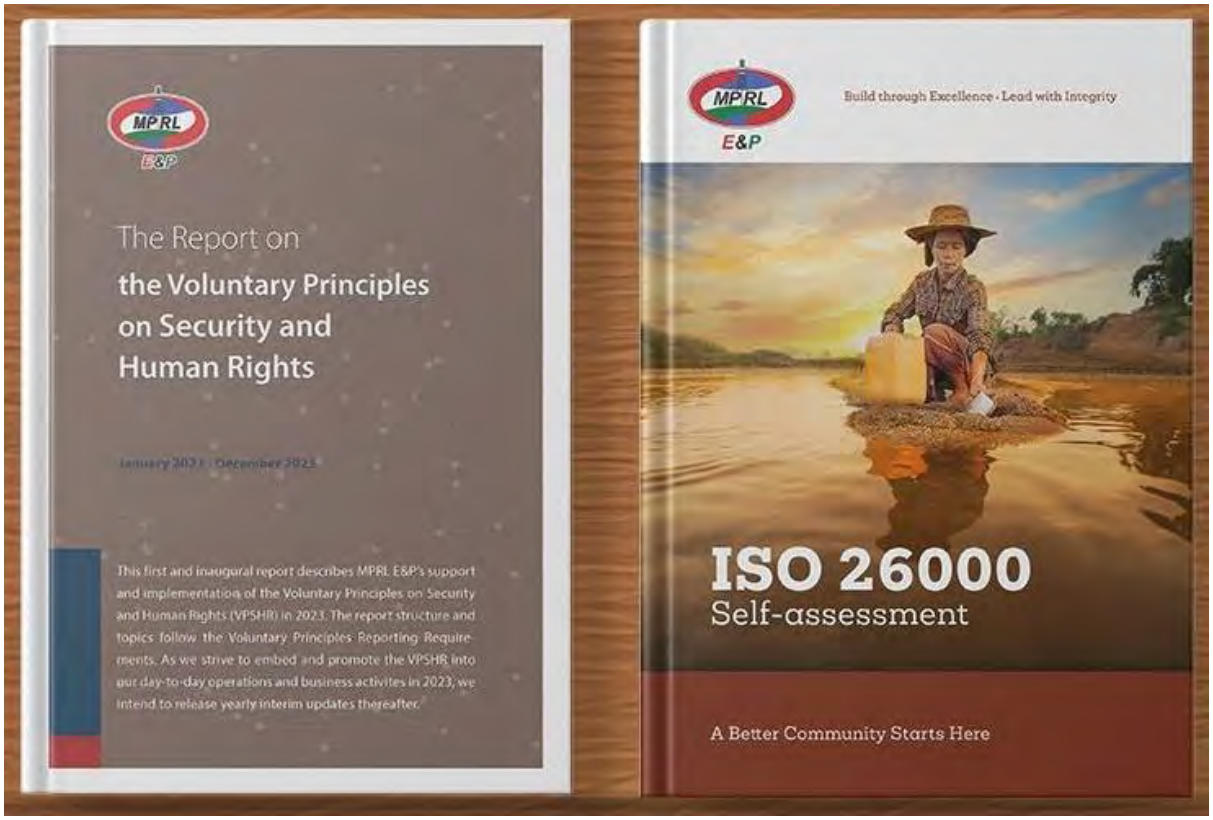


Figure 154: Publishing Voluntary Principles on Security and Human Rights Report and Self-assessment Against ISO 26000 Social Responsibility Report

Figure 155: Publishing Sustainability Report 2023

Figure 156: Publishing and Distributing Insight Newsletters (Issue-39) and (Issue-40)

Figure 157: Publishing and Distributing Doh Mann Myay Newsletters (Issue-13) and (Issue-14)

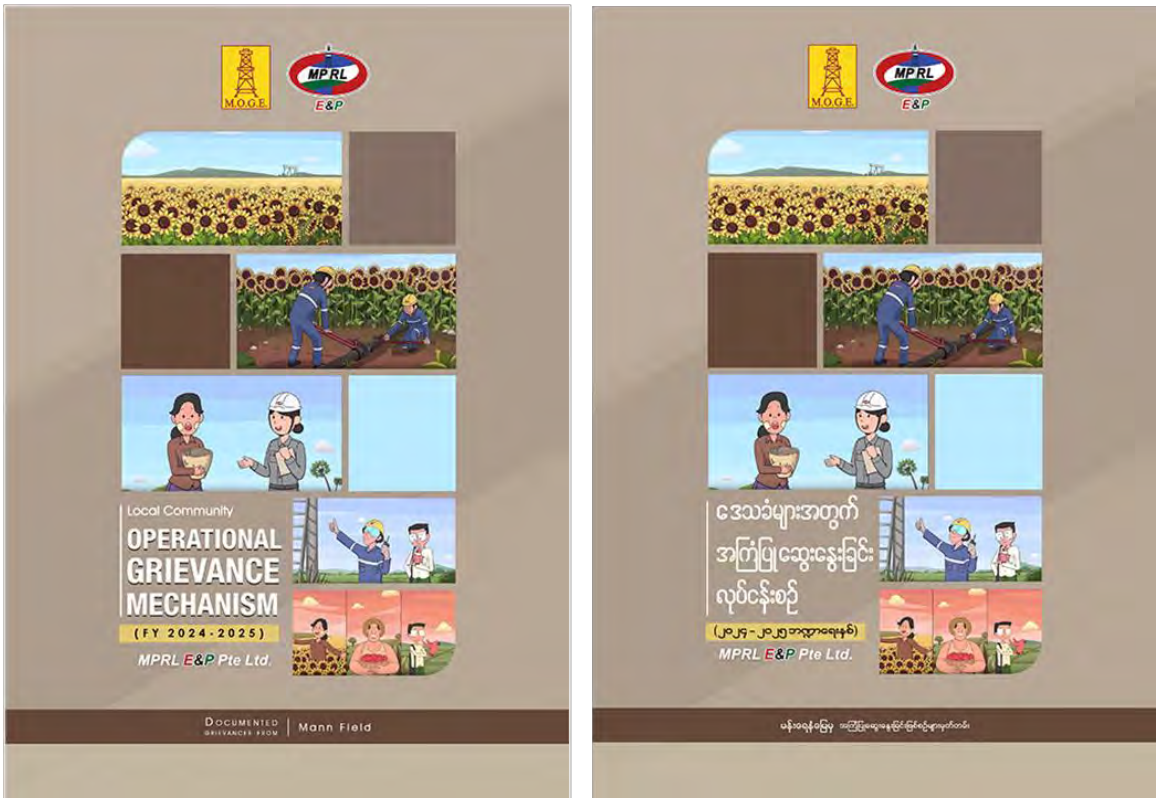


Figure 158: Publishing Quarterly Operational Grievance Mechanism (OGM) Reports

Figure 159: Submitting Quarterly CSR Progress Reports to Respective Stakeholders

10.6.9 Corporate Philanthropy

MPRL E&P recognizes the importance of corporate responsibility and actively engages in philanthropic endeavors to benefit our communities. Our philanthropic efforts are targeted to create a significant and positive impact in the areas we operate. These include charitable donations, community contributions, employee volunteering initiatives, disaster relief programs, and other strategic partnerships focused on supporting social causes.

Completed Activities (April 2024 – September 2024)

In April 2024, the CSR Program donated MMK 500,000 for the Thingyan Festival in the Magway Region and MMK 200,000 for the festival in Minbu District.

In June 2024, the CSR Team facilitated a donation of essential endotracheal tubes to the Intensive Care Unit (ICU) at Yangon Children Hospital (YCH) on behalf of MPRL E&P. Additionally, the CSR Program contributed MMK 300,000 to the Waso robe donation event organized by the General Administration Department of Minbu District, in collaboration with MOGE (Mann Field).

In August 2024, MPRL E&P's CSR Program contributed MMK 2,000,000 to the 'Development of School Libraries and Promoting Reading Habit' event, jointly organized by the Information and Public Relations Department (IPRD) and the Basic Education Department at No.1 Basic Education High School (Minbu). MOGE and MPRL E&P jointly set up and managed the Mann Field booth at the event.

Figure 160: Donating Essential Endotracheal Tubes for Intensive Care Unit (ICU) at Yangon Children Hospital

Figure 161: Participating in 'Development of School Libraries and Promoting Reading Habit' Event at No.1 Basic Education High School (Minbu)

Case Study

MPRL E&P Donates Endotracheal Tubes to YCH's Pediatric ICU

In June 2024, as part of its ongoing corporate donation initiatives, MPRL E&P's CSR program made a significant contribution to the Pediatric Intensive Care Unit at Yangon Children Hospital (YCH), a major referral center with a 1,000-bed capacity that is crucial for pediatric care in Myanmar. The donation of endotracheal tubes is intended to support the hospital in providing high-quality intensive care to children in need.

Endotracheal tubes are vital for emergency airway management, allowing direct access to the lungs for oxygen and medications during emergency breathing and anesthesia. These tubes are selected based on the patient's age and specific medical condition.

The donated endotracheal tubes, imported from Thailand, include 1,970 cuffed tubes and 530 uncuffed tubes with inner diameters ranging from 3 mm to 5.5 mm, valued at THB 73,710, with a total donation cost of THB 95,858.00 (USD 2,611.65), including logistical fees from Thailand to Myanmar.

Commenting on the donation, U Ko Ko Naing, Material & Logistics Manager of MPRL E&P, shared, "Recognizing the urgent need for endotracheal tubes in the ICU at YCH, our CEO, U Moe Myint, kindly guided us to work with medical equipment suppliers from Bangkok to help provide the necessary supplies during this critical time."

On behalf of the CEO of MPRL E&P, Dr. Su Myat Soe, Head of Corporate Sustainability Daw Wit Hmone Tin Latt, and Material & Logistics Manager U Ko Ko Naing officially handed over the donation to Dr. Soe Soe Maw, Senior Consultant Pediatrician at the ICU, on 26 June 2024. Dr. Aung Tun Oo, the Senior Medical Superintendent of YCH, expressed his gratitude and provided a donation certificate to the representatives of MPRL E&P.

10.6.10 MOGE Employee-centered CSR Program






In the Fiscal Year 2024-2025, MPRL E&P has launched a comprehensive CSR Program focused on supporting MOGE employees and their families. This initiative reflects our commitment to responsible investment and community development, going beyond mere contractual obligations. The program includes a range of activities aimed at enhancing the well-being of MOGE employees, such as renovating school infrastructure for their children, providing essential educational materials, offering medical support, and facilitating vocational training. Additionally, the program supports the local community through contributions to cultural and religious events, including donations of food and essential supplies. This employee-centered approach ensures that the needs of MOGE employees and their families are prioritized and addressed effectively.

Completed Activities (April 2024 – September 2024)

MPRL E&P, in collaboration with MOGE's General Manager at Mann Field, reinforced our commitment to employee-centered CSR initiatives by supporting MOGE employees and addressing their specific needs.

In April 2024, the CSR Program donated MMK 550,000 for Patthana Pali at MOGE (Mann) Dhammayone.

In August 2024, MPRL E&P contributed to the Waso robe donation event held at the MOGE (Mann) Dhammayone, providing coconut noodle soup as a sabbath meal for guests and worshippers. The company donated MMK 1,750,000 to support the event, reflecting our strong engagement in community and religious activities.

In September 2024, MPRL E&P made a donation of MMK 30,000,000 (MMK 30 million) to assist MOGE's employees at Mann Field. The contribution was aimed at providing essential supplies such as rice and cooking oil to employees and their families. During a formal ceremony at MPRL E&P's Field Operations Department, U Myo Win, Field Operations Manager, presented the donation to U Khun Myo Thant, General Manager of MOGE at Mann Field.

Figure 162: Contributing to Waso Robe Donation Event at MOGE (Mann) Dhammayone

Figure 163: Contributing MMK 30 Million to MOGE Employees as Part of Employee-centered CSR Program

Case Study

MPRL E&P Contributes MMK 30 Million to MOGE Employees as Part of Employee-centered CSR Program

MPRL E&P contributed MMK 30 million to support employees of Myanma Oil and Gas Enterprise (MOGE) at Mann Field as part of its employee-centered corporate social responsibility (CSR) initiatives. The donation, aimed at providing essential supplies such as rice and cooking oil, was officially handed over on 15 September 2024.

U Myo Win, Field Operations Manager at MPRL E&P, presented the contribution to U Khun Myo Thant, General Manager (Mann Field) of MOGE, during a ceremony at MPRL E&P's Field Operations Department. In collaboration with MOGE's General Manager (Mann Field), MPRL E&P's CSR Program will target support for areas where MOGE employees have specific needs, reflecting its ongoing dedication to employee-centered CSR initiatives.

11. Conclusion

The first extension for the Mann Field ECC was achieved from ECD and extends to 2029 March. This report will be the first in our Mann Field's ECC first extension period and this milestone follows the issuance of the Environmental Compliance Certificate (ECC) in March 2019.

So, the ninth Environmental Monitoring Report for the Mann Field EOR Project has been successfully finalized, covering field activities and self-environmental monitoring over the six-month period from April 2024 to September 2024.

Throughout this period, rigorous self-environmental monitoring was conducted, encompassing Air & Noise Quality Monitoring at Z3AQN & Z4AQN, Soil Quality Monitoring at Z3S1, Z3S2, Z4S1, and Z4S2, as well as water quality monitoring at Z3SW1, Z3SW2, Z3GW1, Z3GW2, Z4SW1, Z4SW2, and Z4GW2, in designated assessment areas. For the locations initially established for baseline monitoring, we plan to conduct Air, Noise, Soil, surface water, and groundwater quality monitoring once conditions become more favorable.

In the course of our operations at Mann Field, we encountered a spectrum of opportunities and challenges. While heightened security measures necessitated daytime operations only, they also introduced operational risks. Addressing concerns such as oil reserve depletion, disruptions due to pilfering, and logistical hurdles remained paramount, all while upholding our steadfast environmental commitment.

We maintained a vigilant watch over environmental impacts, actively participated in Corporate Social Responsibility (CSR) and Health, Safety, and Environment (HSE) initiatives, and fostered a culture in harmony with our organizational ethos. Our unwavering dedication to fulfilling Environmental Compliance Certificate (ECC) obligations underscores our adherence to regulatory standards, achievement of objectives, and continual enhancement.

12. Annex

Annex – 1 Laboratory Results

Annex – 2 Waste Disposal Certificate

Annex – 1 Laboratory Results

Analysis Report

Ministry of Natural Resources and Environmental Conservation

Environmental Conservation Department

Magway Region

Customer Name : MPRL E & P Pte Ltd.

Sample Name : Z3AQN (Air Quality Analysis)

Sampling Date : 25-7-2024 to 26-7-2024 (24 Hours)

Reporting Date : 1-8-2024

Equipment Name : Haz-Scanner (920246) USA

No.	Parameter	Unit	Result	National Environmental Quality (Emission) Guidelines အပိုဒ်(၁.၁)	Remark
1	Carbon Monoxide (CO)	ppm	0.00014	-	
2	Carbon Dioxide (CO_2)	ppm	622.88	-	
3	Hydrogen Sufide(H_2S)	ppb	0	-	
4	Nitrogen Oxide (NO)	µg/ m^3	43.89	200	
5	Nitrogen Dioxide (NO_2)	ppb	7.48	-	
6	Particulate Matter (PM_{10})	µg/ m^3	7.46	50	
7	Relative Humidity (RH%)	-	60.93	-	
8	Sulphur Dioxide (SO_2)	µg/ m^3	0	20	

This report is only valid for the sample received.

Not a certificate of conformance
စံချိန်စံညွှန်းကိုက်ညီကြောင်း ထောက်ခံချက်မဟုတ်ပါ

Analysis By

Signature:
Name: (ခင်တင့်တင့်အောင်)
Designation: လက်ထောက်ညွှန်ကြားရေးမှူး
ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန

Reviewed By

Signature:
Name: (သီသီမိုးမင်း)
Designation: ဒုတိယညွှန်ကြားရေးမှူး
ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန

Approved By

Signature:
Name: (စောမိုး)
Designation: ညွှန်ကြားရေးမှူး
ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန

Analysis Report

Ministry of Natural Resources and Environmental Conservation

Environmental Conservation Department

Magway Region

Customer Name : MPRL E & P Pte Ltd.

Sample Name : Z3AQN (20°13'21.73"N 94°51'19.72"E)(Noise)

Analytical Date : 25-7-2024

Reporting Date : 1-8-2024

Equipment Name : Sound Meter(EXTECH-SDL600)

Receptor	One Hour LAeq(dBA)*	
	Day Time 07:00- 22:00 (10:00- 22:00 for Public holidays)	Night Time 22:00- 07:00 (22:00-10:00 for Public holidays)
Residential	55	45
Industrial	70	70
Average Test Result	43.3	43.1

This report Is only valid for the sample received.

Not a certificate of conformance
စံချိန်စံညွှန်းကိုက်ညီကြောင်း ထောက်ခံချက်မဟုတ်ပါ

Analysis By

Signature: (ခင်တင့်တင့်အောင်)
Name: လက်ထောက်ညွှန်ကြားရေးမှူး
Designation: ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန

Reviewed By

Signature:
Name: (သီသီစိုးမင်း)
Designation: ဒုတိယညွှန်ကြားရေးမှူး
ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန

Approved By

Signature:
Name: (စော်မိုး)
Designation: ညွှန်ကြားရေးမှူး
ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန

Analysis Report

Ministry of Natural Resources and Environmental Conservation

Environmental Conservation Department

Magway Region

Customer Name	:	MPRL E & P Pte Ltd.
Sample Name	:	Z4AQN (Air Quality Analysis)
Sampling Date	:	24-7-2024 to 25-7-2024 (24 Hours)
Reporting Date	:	1-8-2024
Equipment Name	:	Haz-Scanner (920246) USA

No.	Parameter	Unit	Result	National Environmental Quality (Emission) Guidelines အပိုဒ်(၁.၁)	Remark
1	Carbon Monoxide (CO)	ppm	0.0096	-	
2	Carbon Dioxide (CO_2)	ppm	716.40	-	
3	Hydrogen Sufide(H_2S)	ppb	0	-	
4	Nitrogen Oxide (NO)	µg/ m³	46.56	200	
5	Nitrogen Dioxide (NO_2)	ppb	7.13	-	
6	Particulate Matter (PM_{10})	µg/ m³	10.16	50	
7	Relative Humidity (RH%)	-	52.80	-	
8	Sulphur Dioxide (SO_2)	µg/ m³	72.57	20	

This report is only valid for the sample received.

Not a certificate of conformance
[illegible]

Analysis By

Signature:
Name:
Designation:

Reviewed By

Signature:
Name:
Designation:

Approved By

Signature:
Name:
Designation:

Analysis Report

Ministry of Natural Resources and Environmental Conservation

Environmental Conservation Department

Magway Region

Customer Name : MPRL E & P Pte Ltd.

Sample Name : Z4AQN (20°13'21.73"N, 94°51'19.72"E)(Noise)

Analytical Date : 24-7-2024

Reporting Date : 1-8-2024

Equipment Name : Sound Meter(EXTECH-SDL600)

Receptor	One Hour LAeq(dBA)[a]	
	Day Time 07:00- 22:00 (10:00- 22:00 for Public holidays)	Night Time 22:00- 07:00 (22:00-10:00 for Public holidays)
Residential	55	45
Industrial	70	70
Average Test Result	40.8	41.0

This report is only valid for the sample received.

Not a certificate of conformance
ကိုက်ညီကြောင်း ထောက်ခံချက်မဟုတ်ပါ

Analysis By

Signature:
Name: (ခင်တင့်တင့်အောင်)
Designation: လက်ထောက်ညွှန်ကြားရေးမှူး
ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန

Reviewed By

Signature:
Name: (သီသီမင်း)
Designation: ဒုတိယညွှန်ကြားရေးမှူး
ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန

Approved By

Signature:
Name: (ဇော်မိုး)
Designation: ညွှန်ကြားရေးမှူး
ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန

Analysis Report

Ministry of Natural Resources and Environmental Conservation

Environmental Conservation Department

Magway Region

Customer Name : MPRL E & P Pte Ltd.

Sample Name : Z3S1 (Soil Sample)

Sampling Date : 12-6-2024

Receiving Date : 12-6-2024

Analytical Date : 2-7-2024 to 4-7-2024

Reporting Date : 17-7-2024

Equipment Name : Arsenic Test Kit, Palintest (SKW500), AAS (Atomic Absorbtion Spectrophotometer)

No.	Parameter	Unit	Result	Remark
1	PH	-	7.20	
2	Arsenic	mg/kg	0.004	
3	Lead(pb)	mg/kg	817.8	
4	Cadmium (Cd)	mg/kg	8.546	
5	Copper (Cu)	mg/kg	334.3	
6	Zinc (Zn)	mg/kg	270.4	
7	Manganese (Mn)	mg/kg	8806	
8	Iron (Fe)	mg/kg	48630	

This report is only valid for the sample received.

Not a certificate of conformance

Analysis By

Signature:

Name:

Designation:

Reviewed By

Signature:

Name:

Designation:

Approved By

Signature:

Name:

Designation:

Analysis Report

Ministry of Natural Resources and Environmental Conservation

Environmental Conservation Department

Magway Region

Customer Name : MPRL E & P Pte Ltd.

Sample Name : Z3S2 (Soil Sample)

Sampling Date : 12-6-2024

Receiving Date : 12-6-2024

Analytical Date : 2-7-2024 to 4-7-2024

Reporting Date : 17-7-2024

Equipment Name : Arsenic Test Kit, Palintest (SKW500), AAS (Atomic Absorbtion Spectrophotometer),

No.	Parameter	Unit	Result	Remark
1	PH	-	7.34	
2	Arsenic	mg/kg	0.009	
3	Lead(pb)	mg/kg	739.6	
4	Cadmium (Cd)	mg/kg	8.992	
5	Copper (Cu)	mg/kg	370.4	
6	Zinc (Zn)	mg/kg	230.4	
7	Manganese (Mn)	mg/kg	9770	
8	Iron (Fe)	mg/kg	48830	

This report is only valid for the sample received.

Not a certificate of conformance

Analysis By

Signature: ....

Name: (ဝင်းတင့်အောင်)

Designation: လက်ထောက်ညွှန်ကြားရေးမှူး ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန

Reviewed By

Signature: ....

Name: (အိအိမိုးဝင်း)

Designation: ဒုတိယညွှန်ကြားရေးမှူး ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန

Approved By

Signature: ....

Name: (ဇော်မိုး)

Designation: ညွှန်ကြားရေးမှူး ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန

Analysis Report

Ministry of Natural Resources and Environmental Conservation

Environmental Conservation Department

Magway Region

Customer Name : MPRL E & P Pte Ltd.

Sample Name : Z4S1 (Soil Sample)

Sampling Date : 12-6-2024

Receiving Date : 12-6-2024

Analytical Date : 2-7-2024 to 4-7-2024

Reporting Date : 17-7-2024

Equipment Name : Arsenic Test Kit, Palintest (SKW500), AAS (Atomic Absorbtion Spectrophotometer),

No.	Parameter	Unit	Result	Remark
1	PH	-	7.23	
2	Arsenic	mg/kg	0.008	
3	Lead(pb)	mg/kg	830.7	
4	Cadmium (cd)	mg/kg	7.400	
5	Copper (Cu)	mg/kg	798.3	
6	Zinc (Zn)	mg/kg	845.7	
7	Manganese (Mn)	mg/kg	11340	
8	Iron (Fe)	mg/kg	50900	

This report is only valid for the sample received.

Not a certificate of conformance

Analysis By

Signature: .....

Name: (စစ်ဆေးသူ)

Designation:

Reviewed By

Signature: .....

Name: (သိမ်းဆည်းသူ)

Designation:

Approved By

Signature: .....

Name: (ဌာနမှူး)

Designation:

Analysis Report

Ministry of Natural Resources and Environmental Conservation

Environmental Conservation Department

Magway Region

Customer Name	:	MPRL E & P Pte Ltd.
Sample Name	:	Z4S2 (Soil Sample)
Sampling Date	:	12-6-2024
Receiving Date	:	12-6-2024
Analytical Date	:	2-7-2024 to 4-7-2024
Reporting Date	:	17-7-2024
Equipment Name	:	Arsenic Test Kit, Palintest (SKW500), AAS (Atomic Absorbtion Spectrophotometer)

No.	Parameter	Unit	Result	Remark
1	PH	-	7.27	
2	Arsenic	mg/kg	0.008	
3	Lead(pb)	mg/kg	910.1	
4	Cadmium (cd)	mg/kg	7.365	
5	Copper (Cu)	mg/kg	903.1	
6	Zinc (Zn)	mg/kg	911.0	
7	Manganese (Mn)	mg/kg	13440	
8	Iron (Fe)	mg/kg	51530	

This report is only valid for the sample received.

Not a certificate of conformance

Analysis By

Signature: ------- (signed)

Name:

Designation:

Reviewed By

Signature: ------- (signed)

Name:

Designation:

Approved By

Signature: ------- (signed)

Name:

Designation:

ALARM Ecological Laboratory

Water Testing Result Report

Report Number: EL-WR-24-03591 Date: August 22, 2024

Client Information

Client Name	:	MPRL E & P Pte Ltd
Organization	:	-
Client ID	:	
Registration Date & Time	:	26.7.2024 11:30 AM
Contact	:	09-5177819
Testing Purpose	:	For Monitoring
Email	:	han.m.aung@mprlexp.com

Sample Information

Sample ID	:	11558
Sample Name	:	Z35W1
Sample Type / Source	:	Surface Water
Sampling Date & Time	:	25.7.2024 12:25 PM
Sample Location	:	Minbu Township
Latitude	:	-
Longitude	:	-

Testing Results

This laboratory analysis report is based solely on the sample submitted by the client unless client took our sampling service.
This report shall not be reproduced except in full, without written approval of the laboratory.

Sr.	Quality Parameters	Results	Units	Drinking Standards	Remarks
1	pH	7.4	S.U	6.5 – 8.5	Normal
2	Temperature	24.5	°C		
3	Colour	153	HU	≤15	Above the limit
4	Turbidity	40	FAU	≤5	Turbid
5	TSS	12	mg/L	-	-
6	Conductivity	0.292	mS/cm	≤2.5	Normal
7	Hardness	38	mg/L	≤500	Normal
8	Dissolved Oxygen	4.7	mg/L	-	-
9	BOD_5	4.8	mg/L	-	-
10	COD	<15	mg/L	-	-
11	Total Phosphorus	1.8	mg/L	-	-
12	Arsenic	0.005	mg/L	≤0.05	Normal
13	Alkalinity	<8	mg/L	-	-
14	Boron	0.9	mg/L	≤2.4	Normal
15	Fluoride	0	mg/L	≤1.5	Normal
16	Oil & Grease	6	mg/L		-
17	Total Nitrogen	1.8	mg/L		-
18	Chromium(Hexavalent)	0.15	mg/L	≤0.05	Above the limit

"ND" = Not Detected "LOD" = Lower limit of detection - = No Reference Standard

Tested by	Checked by	Approved by

No.237,Corner of Shu Khin Thar Street & 7 Street, (3) Block, South Oakkalapa Township,Yangon.
Tel: 09-402496028, Email: aclab.2022@gmail.com

ISO TECH LABORATORY

Laboratory Technical Consultant: U Saw Christopher Maung
B.Sc.Engg (Civil), Dip.S.E(Delft) Lecturer of YIT (Retd), Consultant (YCDC), LWSB 001
Former Member (UNICEF Water quality monitoring & Surveillance System)

WTL-RE-001
Issue Date - 01-1-2016
Effective Date - 01-1-2016
Issue No - 1.0/Page 1 of 1

M0724 053

WATER QUALITY TEST (MICROBIOLOGY) RESULTS FORM

Client: MPRL E & P PTE Ltd.

Nature of Water: Surface Water

Location: Z3SW1

Date and Time of collection: 25.7.2024 (12:25 PM)

Date and Time of arrival at Laboratory: 26.7.2024

Date and Time of commencing examination: 26.7.2024

Date and Time of completing: 27.7.2024

Results of Water Analysis

WHO Drinking Water Guideline (Geneva - 1993)

Total Coliform Count	20	CFU/100ml	Not detected
Thermotolerant (fecal) Coliform Count	4	CFU/100ml	Not detected
pH	7.7		6.5 - 8.5
Turbidity	82	NTU	5 NTU
Colour (True)	40	TCU	15 TCU
Free Chlorine	Nil	mg/l	
Total Chlorine	Nil	mg/l	

*Date & Time Sample Collection Error.

Remark : Unsatisfactory for drinking purpose.

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

: < - Less than

Tested by

Signature:

Name:

Approved by

Signature:

Name: Thinzar Theint Theint
B.E (Civil)
Assistant Technical Officer
ISO Tech Laboratory

(a division of WEG Co., Ltd.)

No.18, Lanthit Road, Nanthargone Quarter, Insein Township, Yangon, Myanmar.
Ph: 01 640955, 09-880100172, 09-880100173, 01-644506, E-mail: isotechlaboratory@gmail.com, Website: weg-myanmar.com

ALARM Ecological Laboratory

Water Testing Result Report

Report Number: EL-WR-24-03592 | Date: August 22, 2024

Client Information

Client Name	:	MPRL E & P Pte Ltd
Organization	:	-
Client ID	:	-
Registration Date & Time	:	26.7.2024 11:30 AM
Contact	:	09-5177819
Testing Purpose	:	For Monitoring
Email	:	han.m.aung@mprlexp.com

Sample Information

Sample ID	:	11559
Sample Name	:	Z3SW2
Sample Type / Source	:	Surface Water
Sampling Date & Time	:	25.7.2024 12:35 PM
Sample Location	:	Minbu Township
Latitude	:	-
Longitude	:	-

Testing Results

This laboratory analysis report is based solely on the sample submitted by the client unless client took our sampling service.

This report shall not be reproduced except in full, without written approval of the laboratory.

Sr.	Quality Parameters	Results	Units	Drinking Standards	Remarks
1	pH[1]	7.6	S.U	6.5 – 8.5[a]	Normal
2	Temperature[2]	24.6	°C	-	-
3	Colour[1]	12	HU	≤15[a]	Normal
4	Turbidity[2]	28	FAU	≤5[c]	Turbid
5	TSS[1]	35	mg/L	-	-
6	Conductivity[2]	0.310	mS/cm	≤1.5[b]	Normal
7	Hardness[1]	48	mg/L	≤500[c]	Normal
8	Dissolved Oxygen[2]	4.8	mg/L	-	-
9	BOD_5[2]	3.8	mg/L	-	
10	COD[2]	<15	mg/L	-	-
11	Total Phosphorous[1]	1.8	mg/L	-	-
12	Arsenic[4]	0.005	mg/L	≤0.05[d]	Normal
13	Alkalinity[2]	<5	mg/L	-	-
14	Boron[2]	0.6	mg/L	≤2.4[c]	Normal
15	Fluoride[1]	0	mg/L	≤1.5[c]	Normal
16	Oil & Grease[1]	4	mg/L	-	-
17	Total Nitrogen[1]	1.1	mg/L	-	-
18	Chromium(Hexavalent)[2]	0.18	mg/L	≤0.05[d]	Above the limit

"ND" = Not Detected | "LOD" = Lower limit of detection | " - " = No Reference Standard

Tested by	Checked by	Approved by

ISO TECH LABORATORY

Laboratory Technical Consultant: U Saw Christopher Maung
B.E. (Civil) ... Consultant ... WASH
Former Member UNICEF Water quality monitoring & Surveillance Myanmar

M0724 059

WATER QUALITY TEST (MICROBIOLOGY) RESULTS FORM

Client: MPRL E & P PTE Ltd.
Nature of Water: Surface Water
Location: Z3SW2
Date and Time of collection: 25.7.2024 (12.35 PM)
Date and Time of arrival at Laboratory: 26.7.2024
Date and Time of commencing examination: 26.7.2024
Date and Time of completing: 27.7.2024

Results of Water Analysis

WHO Drinking Water Guideline (Geneva - 1993)

Total Coliform Count	20	CFU/100ml	Not detected
Thermotolerant (fecal) Coliform Count	4	CFU/100ml	Not detected
pH	7.7		6.5 - 8.5
Turbidity	77	NTU	5 NTU
Colour (True)	80	TCU	15 TCU
Free Chlorine	Nil	mg/l	
Total Chlorine	Nil	mg/l	

*Date & Time Sample Collection Error.

Remark : Unsatisfactory for drinking purpose.

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

: < - Less than

Tested by

Signature:

Name:

Approved by

Signature:

Name: Thinzar Theint Theint
B.E. (Civil)
Assistant Technical Officer
ISO Tech Laboratory

(a division of WEG Co., Ltd.)
No.15, Larthit Road, Nanthargone Quarter, Insein Township, Yangon, Myanmar
Ph: 01-640... E mail: isotechlaboratory@gmail.com

ALARM Ecological Laboratory

Water Testing Result Report

Report Number: EL-WR-24-03589 | Date: August 22, 2024

Client Information

Client Name	:	MPRL E & P Pte Ltd
Organization	:	-
Client ID	:	-
Registration Date & Time	:	26.7.2024 ; 11:30 AM
Contact	:	09-5177819
Testing Purpose	:	For Monitoring
Email	:	han.m.aung@mprlexp.com

Sample Information

Sample ID	:	11556
Sample Name	:	Z45W1
Sample Type / Source	:	Surface Water
Sampling Date & Time	:	25.7.2024 ; 3:00 PM
Sample Location	:	Minbu Township
Latitude	:	-
Longitude	:	-

Testing Results

This laboratory analysis report is based solely on the sample submitted by the client unless client took our sampling service.
This report shall not be reproduced except in full, without written approval of the laboratory.

Sr.	Quality Parameters	Results	Units	Drinking Standards	Remarks
1	pH	7.4	S.U	6.5 - 8.5	Normal
2	Temperature	25	°C	-	
3	Color	294	HU	≤15	Above the limit
4	Turbidity	38	FAU	≤5	Turbid
5	TSS	18	mg/L	-	-
6	Conductivity	0.159	mS/cm	≤2.5	Normal
7	Hardness	25.6	mg/L	≤500	Normal
8	Dissolved Oxygen	5.5	mg/L	-	-
9	BOD₅	5.1	mg/L	-	-
10	COD	18	mg/L	-	-
11	Total Phosphorous	1.2	mg/L	-	-
12	Arsenic	0.005	mg/L	≤0.05	Normal
13	Alkalinity	9	mg/L	-	
14	Boron	2.1	mg/L	≤2.4	Normal
15	Fluoride	0	mg/L	≤1.5	Normal
16	Oil & Grease	4	mg/L		-
17	Total Nitrogen	1.2	mg/L	-	-
18	Chromium (Hexavalent)	0.12	mg/L	≤0.05	Above the limit

"ND" = Not Detected | "LOD" = Lower limit of detection | " - " = No Reference Standard

Tested by	Checked by	Approved by
[illegible]	[illegible]	

No.257, Corner of Sau Khin Thar Street & 7 Street, (3) Block, South Okkalapa Township, Yangon.
Tel: 09-[illegible], Email: [illegible]@gmail.com

ISO TECH LABORATORY

WTL-RE-001
Issue Date - 01-1-2016
Effective Date - 01-1-2016
Issue No 1.0/Page 1 of 1

M0724 051

WATER QUALITY TEST (MICROBIOLOGY) RESULTS FORM

Client	MPRL E & P PTE Ltd.
Nature of Water	Surface Water
Location	Z4SW1
Date and Time of collection	25.7.2024 (3:00 PM)
Date and Time of arrival at Laboratory	26.7.2024
Date and Time of commencing examination	26.7.2024
Date and Time of completing	27.7.2024

Results of Water Analysis

			WHO Drinking Water Guideline (Geneva - 1993)
Total Coliform Count	30	CFU/100ml	Not detected
Thermotolerant (fecal) Coliform Count	6	CFU/100ml	Not detected
pH	7.6		6.5 - 8.5
Turbidity	280	NTU	5 NTU
Colour (True)	120	TCU	15 TCU
Free Chlorine	Nil	mg/l	
Total Chlorine	Nil	mg/l	

*Date & Time Sample Collection Error.

Remark : Unsatisfactory for drinking purpose.

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

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Tested by

Signature:

Name:

Approved by

Signature:

Name: Thinzar Theint Theint
B.Sc(Chem)
Assistant Technical Officer
ISO Tech Laboratory

(a division of WEG Co. Ltd.)
No.18, Lanthit Road, Nanthargone Quarter, Insein Township, Yangon, Myanmar.
Ph: 01-649655, 09-880100172, 09-880100173, 01-644500, E-mail: isotechlaboratory@gmail.com, Website: wegmyanmar.com

ALARM Ecological Laboratory

Water Testing Result Report

Report Number: EL-WR-24-03590 Date: August 22, 2024

Client Information

Client Name	: MPRL E & P Pte Ltd		
Organization	: -		
Client ID	: -	Sample Type / Source	: Surface Water
Registration Date & Time	: 26.7.2024 11:30 AM	Sampling Date & Time	: 25.7.2024 3:15 PM
Contact	: 09-5177819	Sample Location	: Minbu Township
Testing Purpose	: For Monitoring	Latitude	: -
Email	: han.m.aung@mprlexp.com	Longitude	: -

Sample Information

Sample ID : 11557
Sample Name : Z4SW2

Testing Results

The laboratory analysis report is based solely on the sample submitted by the client unless client took our sampling service.
This report shall not be reproduced except in full, without written approval of the laboratory.

Sr.	Quality Parameters	Results	Units	Drinking Standards	Remarks
1	pH[1]	7.4	S.U	6.5 – 8.5[1]	Normal
2	Temperature[1]	24.9	°C	-	-
3	Colour[1]	239	HU	≤15[1]	Above the limit
4	Turbidity[1]	63	FAU	≤5[1]	Turbid
5	TSS[1]	25	mg/L	-	-
6	Conductivity[1]	0.169	mS/cm	≤2.5[1]	Normal
7	Hardness[1]	16	mg/L	≤500[1]	Normal
8	Dissolved Oxygen[1]	5	mg/L		
9	BOD_5[1]	4.3	mg/L	-	-
10	COD[1]	<15	mg/L		-
11	Total Phosphorous[1]	1.6	mg/L	-	-
12	Arsenic[1]	0.005	mg/L	≤0.05[1]	Normal
13	Alkalinity[1]	9	mg/L	-	-
14	Boron[1]	0.18	mg/L	≤2.4[1]	Normal
15	Fluoride[1]	0	mg/L	≤1.5[1]	Normal
16	Oil & Grease[1]	4	mg/L	-	-
17	Total Nitrogen[1]	1.5	mg/L	-	-
18	Chromium (Hexavalent)[1]	0.16	mg/L	≤0.05[1]	Above the limit

"ND" = Not Detected | "LOD" = Lower limit of detection | "-" = No Reference Standard

Tested by	Checked by	Approved by

No.237,Corner of Shu Khin That Street & 7 Street, (3) Block, South Dakkalapa Township,Yangon.
Tel: 09-437496028, Email: aelab.2022@gmail.com

ISO TECH LABORATORY

Laboratory Technical Consultant: U Saw Christopher Maung
B.Sc Engg (Civil), Dip.S.E(Delft) Lecturer of YTU (Retd), Consultant (YCDC) LAASE 001
Former Member (LM)CEE Water quality monitoring & Surveillance Myanmar

ISO 9001:2015 Cert. No.

WYL-RE-001
Issue Date - 01-1-2013
Effective Date - 01-1-2013
Issue No - 1.0/Page 1 of 1

M0724 050

WATER QUALITY TEST (MICROBIOLOGY) RESULTS FORM

Client: MPRL E & P PTE Ltd.
Nature of Water: Surface Water
Location: Z4SW2
Date and Time of collection: 25.7.2024 (3:15 PM)
Date and Time of arrival at Laboratory: 26.7.2024
Date and Time of commencing examination: 26.7.2024
Date and Time of completing: 27.7.2024

Results of Water Analysis — **WHO Drinking Water Guideline (Geneva - 1993)**

Total Coliform Count	30	CFU/100ml	Not detected
Thermotolerant (fecal) Coliform Count	8	CFU/100ml	Not detected
pH	7.4		6.5 - 8.5
Turbidity	320	NTU	5 NTU
Colour (True)	140	TCU	15 TCU
Free Chlorine	Nil	mg/l	
Total Chlorine	Nil	mg/l	

*Date & Time Sample Collection Error.

Remark : Unsatisfactory for drinking purpose.

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

: < - Less than

Tested by

Signature:

Name:

Approved by

Signature:

Name: Thinzar Theint Theint
Assistant Technical Officer
ISO Tech Laboratory

(a division of WES Co., Ltd.)

No.15, Lanthit Road, Nanthargone Quarter, Insein Township, Yangon, Myanmar.
Ph: 01-640955, 09-8801003172, 09-8801003173, 01-644506, E-mail: isotechlaboratory@gmail.com, Website: wes-myanmar.com

ALARM Ecological Laboratory

Water Testing Result Report

Report Number: EL-WR-24-03593 Date: August 22, 2024

Client Information

Client Name	:	MPRL E & P Pte Ltd
Organization	:	–
Client ID	:	–
Registration Date & Time	:	26.7.2024 11:30 AM
Contact	:	09-5177819
Testing Purpose	:	For Monitoring
Email	:	han.m.aung@mprlexp.com

Sample Information

Sample ID	:	11560
Sample Name	:	Z3GW1
Sample Type / Source	:	Surface Water
Sampling Date & Time	:	25.7.2024 12:15 PM
Sample Location	:	Minbu Township
Latitude	:	–
Longitude	:	–

Testing Results

This laboratory analysis report is based solely on the sample submitted by the client unless client took our sampling service.
This report shall not be reproduced except in full, without written approval of the laboratory.

Sr.	Quality Parameters	Results	Units	Drinking Standards	Remarks
1	pH[1]	7.7	S.U	6.5 – 8.5[5]	Normal
2	Temperature[1]	25	°C	–	
3	Color[1]	0	HU	≤15[5]	Normal
4	Turbidity[1]	<5	FAU	≤5[5]	Clear
5	TSS[1]	0	mg/L	–	–
6	Conductivity[1]	1.9	mS/cm	≤2.5[5]	Normal
7	Hardness[1]	41	mg/L	≤500[5]	Normal
8	Dissolved Oxygen[1]	2.64	mg/L	–	–
9	BOD_5[1]	3.4	mg/L	–	–
10	COD[1]	<15	mg/L	–	–
11	Total Phosphorous[2]	1.3	mg/L	–	
12	Arsenic[3]	0.006	mg/L	≤0.05[5]	Normal
13	Alkalinity[2]	<5	mg/L	–	
14	Boron[2]	0.2	mg/L	≤2.4[5]	Normal
15	Fluoride[2]	0	mg/L	≤1.5[5]	Normal
16	Oil & Grease[3]	3	mg/L	–	–
17	Total Nitrogen[2]	1.2	mg/L	–	–
18	Lead(Hexavalent)[3]	0.11	mg/L	≤0.05[5]	Above the limit

"ND" Not Detected "LOD" = Lower limit of detection "–" = No Reference Standard

Tested by	Checked by	Approved by

No.237,Corner of Sin Khin Thar Street & 7 Street, (3) Block, South Okkalapa Township,Yangon.
Tel: 09-421196078, Email: aelab.2122@gmail.com

ISO TECH LABORATORY

Laboratory Technical Consultant: U Saw Christopher Maung
B.Sc Engg (Civil), Dip S.E(Delft) Lecturer of YIT (Retd), Consultant (WASH) ...
Former Member (UNICEF Water Quality ... Myanmar)

WTL-RE-001
Issue Date - 01-1-2016
Effective Date - 01-1-2016
Issue No - 1.0/Page 1 of 1

M0724 057

WATER QUALITY TEST (MICROBIOLOGY) RESULTS FORM

Client: MPRL E & P PTE Ltd.

Nature of Water: Ground Water

Location: Z3GW1

Date and Time of collection: 25.7.2024 (12:15 PM)

Date and Time of arrival at Laboratory: 26.7.2024

Date and Time of commencing examination: 26.7.2024

Date and Time of completing: 27.7.2024

Results of Water Analysis

WHO Drinking Water Guideline (Geneva - 1993)

Total Coliform Count	4	CFU/100ml	Not detected
Thermotolerant (fecal) Coliform Count	Not detected (<1)	CFU/100ml	Not detected
pH	7.9		6.5 - 8.5
Turbidity	4	NTU	5 NTU
Colour (True)	Nil	TCU	15 TCU
Free Chlorine	Nil	mg/l	
Total Chlorine	Nil	mg/l	

*Date & Time Sample Collection Error.

Remark : Unsatisfactory for drinking purpose.

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

: < - Less than

Tested by

Signature:

Name:

Approved by

Signature:

Name: Thinzar Theint Theint
B.E (Civil)
Assistant Technical Officer
ISO Tech Laboratory

(a division of WPG Co., Ltd.)

No.18, Lanthit Road, Nantthargone Quarter, Insein Township, Yangon, Myanmar.
Ph: 01-640355, 09-880100172, 09-880100173, 01 644506, E-mail: isotechlaboratory@gmail.com, Website: wpg-myanmar.com

ALARM Ecological Laboratory

Water Testing Result Report

Report Number: EL-WR-24-03594 — Date: August 22, 2024

Client Information			Sample Information		
Client Name	:	MPRL E & P Pte Ltd	Sample ID	:	11561
Organization	:	-	Sample Name	:	Z3GW2
Client ID	:	-	Sample Type / Source	:	Surface Water
Registration Date & Time	:	26.7.2024 11:30 AM	Sampling Date & Time	:	25.7.2024 12:05 PM
Contact	:	09-5177819	Sample Location	:	Minbu Township
Testing Purpose	:	For Monitoring	Latitude	:	-
Email	:	han.m.aung@mprlexp.com	Longitude	:	-

Testing Results

This laboratory analysis report is based solely on the sample submitted by the client unless client took our sampling service.

This report shall not be reproduced except in full, without written approval of the laboratory.

Sr.	Quality Parameters	Results	Units	Drinking Standards	Remarks
1	pH	7.7	S.U	6.5 - 8.5	Normal
2	Temperature	25	°C	-	-
3	Colour	0	HU	≤15	Normal
4	Turbidity	<5	FAU	≤5	Clear
5	TSS	0	mg/L	-	-
6	Conductivity	0.480	mS/cm	≤2.5	Normal
7	Hardness	49	mg/L	≤500	Normal
8	Dissolved Oxygen	2.9	mg/L	-	-
9	BOD_5	3.1	mg/L	-	-
10	COD	<15	mg/L	-	-
11	Total Phosphorous	1.8	mg/L	-	-
12	Arsenic	0.005	mg/L	≤0.05	Normal
13	Alkalinity	12	mg/L	-	-
14	Boron	0.5	mg/L	≤2.4	Normal
15	Fluoride	0	mg/L	≤1.5	Normal
16	Oil & Grease	3	mg/L	-	-
17	Total Nitrogen	0.8	mg/L	-	-
18	Chromium(Hexavalent)	0.14	mg/L	≤0.05	Above the limit

"ND" = Not Detected — "LOD" = Lower limit of detection — " - " = No Reference Standard

Tested by	Checked by	Approved by

No.237,Corner of Shu Khin Thar Street & 7 Street, (3) Block, South Okkalapa Township,Yangon.
Tel: 09-404496078, Email: aelab.2022@gmail.com

ISO TECH LABORATORY

Laboratory Technical Consultant, U Saw Christopher Maung
B.E. (Civil), Dip S.E. [illegible] Lecturer of YIT (Retd) [illegible]
[illegible] (UNICEF Water Quality Monitoring & Surveillance Myanmar)

ISO 9001:2015 [illegible]

WTL-RE-001
Issue Date - [illegible]-2016
Effective Date - [illegible]-2016
Issue No - 1.0/Page 1 of 1

M0724 058

WATER QUALITY TEST (MICROBIOLOGY) RESULTS FORM

Client	MPRL E & P PTE Ltd.
Nature of Water	Ground Water
Location	23GW2
Date and Time of collection	25.7.2024 (12:05 PM)
Date and Time of arrival at Laboratory	26.7.2024
Date and Time of commencing examination	26.7.2024
Date and Time of completing	27.7.2024

Results of Water Analysis

WHO Drinking Water Guideline (Geneva - 1993)

Total Coliform Count	5	CFU/100ml	Not detected
Thermotolerant (fecal) Coliform Count	Not detected (<1)	CFU/100ml	Not detected
pH	7.4		6.5 - 8.5
Turbidity	9	NTU	5 NTU
Colour (True)	5	TCU	15 TCU
Free Chlorine	Nil	mg/l	
Total Chlorine	Nil	mg/l	

*Date & Time Sample Collection Error.

Remark : Unsatisfactory for drinking purpose.

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

: < - Less than

Tested by

Signature:

Name:

Approved by

Signature:

Name: Thinzar Theint Theint
B.E. (Civil)
Assistant Technical Officer
ISO Tech Laboratory

(a division of WEG Co., Ltd.)

No.7 & Lanthit Road, Nanthargone Quarter, Insein Township, Yangon, Myanmar.
Ph: 01-640953, 09-860100173, 09 860100173, 01-644508, E-mail: isotechlaboratory@gmail.com, Website: weg-myanmar.com

ALARM Ecological Laboratory

Water Testing Result Report

Report Number: EL-WR-24-03595 Date: August 22, 2024

Client Information

Client Name	:	MPRL E & P Pte Ltd
Organization	:	–
Client ID	:	–
Registration Date & Time	:	26.7.2024 11:30 AM
Contact	:	09-5177819
Testing Purpose	:	For Monitoring
Email	:	han.m.aung@mprlexp.com

Sample Information

Sample ID	:	11562
Sample Name	:	Z4GW2
Sample Type / Source	:	Surface Water
Sampling Date & Time	:	25.7.2024 3:40 PM
Sample Location	:	Minbu Township
Latitude	:	–
Longitude	:	–

Testing Results

This laboratory analysis report is based solely on the sample submitted by the client unless client took our sampling service.
This report shall not be reproduced except in full, without written approval of the laboratory.

Sr.	Quality Parameters	Results	Units	Drinking Standards	Remarks
1	pH[1]	7.6	S.U	6.5 - 8.5[1]	Normal
2	Temperature[2]	25.1	°C	–	–
3	Colour[2]	0	HU	5-15[1]	Normal
4	Turbidity[2]	<5	FAU	5[1]	Clear
5	TSS[2]	0	mg/L	–	–
6	Conductivity[2]	1.3	mS/cm	≤2.5[b]	Normal
7	Hardness[2]	448.72	mg/L	<500[1]	Normal
8	Dissolved Oxygen[2]	4.72	mg/L	–	–
9	BOD_5[2]	3.2	mg/L	–	–
10	COD[2]	<15	mg/L	–	–
11	Total Phosphorous[2]	1.6	mg/L	–	–
12	Arsenic[4]	0.005	mg/L	≤0.05[1]	Normal
13	Alkalinity[4]	8	mg/L	–	–
14	Boron[2]	0.7	mg/L	≤2.4[1]	Normal
15	Fluoride[4]	0	mg/L	<1.5[1]	Normal
16	Oil & Grease[3]	3	mg/L	–	–
17	Total Nitrogen[3]	3.7	mg/L	–	–
18	Chromium Hexavalent[2]	0.16	mg/L	≤0.05[1]	Above the limit

"ND" = Not Detected "LOD" = Lower limit of detection "–" = No Reference Standard

Tested by	Checked by	Approved by

No.217,Corner of Shu Khin Thar Street & 7 Street, (3) Block, South Okkalapa Township,Yangon.
Tel: 09-4074900/8, Email: aclab.2022@gmail.com

ISO TECH LABORATORY

Laboratory Technical Consultant: U Saw Christopher Maung
B.Sc (Engg) (Civil), Dip.S.E.(Delft), Lecturer of YTU (Retd), Consultant (YCDC), IWSF ...
Former Member (UNICEF) Water quality monitoring & Surveillance Myanmar)

WTL-RE-001
Issue Date - 01-1-2015
Effective Date - 01-1-2015
Issue No 1.0/Page 1 of 1

M0724 056

WATER QUALITY TEST (MICROBIOLOGY) RESULTS FORM

Client	MPRL E & P PTE Ltd.
Nature of Water	Ground Water
Location	Z4GW2
Date and Time of collection	25.7.2024 (3:40 PM)
Date and Time of arrival at Laboratory	26.7.2024
Date and Time of commencing examination	26.7.2024
Date and Time of completing	27.7.2024

Results of Water Analysis — **WHO Drinking Water Guideline (Geneva - 1993)**

Total Coliform Count	2	CFU/100ml	Not detected
Thermotolerant (fecal) Coliform Count	Not detected (<1)	CFU/100ml	Not detected
pH	8.0		6.5 - 8.5
Turbidity	3	NTU	5 NTU
Colour (True)	Nil	TCU	15 TCU
Free Chlorine	Nil	mg/l	
Total Chlorine	Nil	mg/l	

*Date & Time Sample Collection Error.

Remark : Unsatisfactory for drinking purpose.

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

: < - Less than

Tested by

Signature:

Name:

Approved by

Signature:

Name: Thinzar Thein Theint
Assistant Technical Officer
ISO Tech Laboratory

(a division of WEG Co., Ltd.)

No.19, Lanthit Road, Nanthargone Quarter, Insein Township, Yangon, Myanmar.
Ph: 01-643955, 09-880100172, 09-880100173, 01-644006 E-mail: isotechlabmyanmar@gmail.com, Website: weg-myanmar.com

ALARM Ecological Laboratory

Water Testing Result Report

Report Number: EL-WR-24-03598 | Date: August 22, 2024

Client Information			Sample Information		
Client Name	:	MPRL E&P Ptd Ltd	Sample ID	:	11565
Organization	:	–	Sample Name	:	Bio-filter Outlet
Client ID	:	–	Sample Type / Source	:	Treated
Registration Date & Time	:	26.7.2024; 11:15 AM	Sampling Date & Time	:	25.7.2024; 2:10 PM
Contact	:	09-5177819	Sample Location	:	Minbu Tsp
Testing Purpose	:	For Monitoring	Latitude	:	–
Email	:	han.m.aung@mprlexp.com	Longitude	:	–

Testing Results

This laboratory analysis report is based solely on the sample submitted by the client unless client took our sampling service.
This report shall not be reproduced except in full, without written approval of the laboratory.

Sr.	Quality Parameters	Results	Units	Emission Standards	Remarks
1	pH[1]	7.6	S.U	6.0 – 9.0[4]	Normal
2	Turbidity[4]	8	FAU	–	–
3	TSS[3]	9	mg/L	<50[5]	Normal
4	Conductivity[1]	0.957	mS/cm	–	–
5	Dissolved Oxygen[3]	2.82	mg/L	–	–
6	BOD_5[4]	32	mg/L	≤ 50[4]	Normal
7	COD[3]	56	mg/L	≤ 250[4]	Normal
8	Total Phosphorous[2]	<0.3	mg/L	≤2[4]	Normal
9	Oil & Grease[3]	5	mg/L	≤ 10[4]	Normal
10	Total Nitrogen[5]	3	mg/L	–	–

"ND" = Not Detected "LOD" = Lower limit of detection " – " = No Reference Standard

Tested by	Checked by	Approved by

No.237,Corner of Shu Khin Thar Street & 7 Street, (3) Block, South Oakkalapa Township,Yangon.
Tel: 09-407496078, Email: aelab.2022@gmail.com

ISO TECH LABORATORY

WTL-RE-001
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Effective Date - 01-4-2016
Issue No 1.0/Page 1 of 1

M0724 054

WATER QUALITY TEST (MICROBIOLOGY) RESULTS FORM

Client	MPRL E & P PTE Ltd.
Nature of Water	Treated Sewage Water
Location	Bio-Filter Outlet
Date and Time of collection	25.7.2024 (2:10 PM)
Date and Time of arrival at Laboratory	26.7.2024
Date and Time of commencing examination	26.7.2024
Date and Time of completing	27.7.2024

Results of Water Analysis — **WHO Drinking Water Guideline (Geneva - 1993)**

Total Coliform Count	80	CFU/100ml	Not detected
Thermotolerant (fecal) Coliform Count	12	CFU/100ml	Not detected
pH	7.6		6.5 - 8.5
Turbidity	310	NTU	5 NTU
Colour (True)	100	TCU	15 TCU
Free Chlorine	Nil	mg/l	
Total Chlorine	Nil	mg/l	

*Date & Time Sample Collection Error.

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

: < - Less than

Tested by

Signature:

Name:

Approved by

Signature:

Name: Thinzar Theint Thein
B.E (Civil)
Assistant Technical Officer
ISO Tech Laboratory

(a division of WEG Co., Ltd.)
No.19 Lenght Road, Nanthargone Quarter, Insein Township, Yangon, Myanmar.
PH: 01-642955, 09 880100172, 09-880100173, 01-644506 E-mail: isotechlaboratory@gmail.com, Website: weg-myanmar.com

ALARM Ecological Laboratory

Water Testing Result Report

Report Number: EL-WR-24-03599 Date: August 22, 2024

Client Information

Client Name	:	MPRL E&P Pte Ltd
Organization	:	–
Client ID	:	–
Registration Date & Time	:	26.7.2024; 11:15 AM
Contact	:	09-5177819
Testing Purpose	:	For Monitoring
Email	:	han.m.aung@mprlexp.com

Sample Information

Sample ID	:	11566
Sample Name	:	Hydro Test Water
Sample Type / Source	:	Warehouse
Sampling Date & Time	:	25.7.2024; 1:45 PM
Sample Location	:	Minbu Tsp
Latitude	:	–
Longitude	:	–

Testing Results

This laboratory analysis report is based solely on the sample submitted by the client unless client took our sampling service.
This report shall not be reproduced except in full, without written approval of the laboratory.

Sr.	Quality Parameters	Results	Units	Emission Standards	Remarks
1	pH[1]	7.7	S.U	6.0 – 9.0[5]	Normal
2	TSS[2]	35	mg/L	≤50[5]	Normal
3	Chloride[3]	20.32	mg/L	–	–
4	BOD_5[4]	21	mg/L	≤ 50[5]	Normal
5	COD[2]	32	mg/L	≤ 250[5]	Normal
6	Arsenic[6]	0.03	mg/L	≤ 0.1[1]	Normal
7	Cadmium[7]	ND	mg/L	≤ 0.1[5]	LOD = 0.01 mg/L
8	Copper[1]	ND	mg/L	≤ 0.5[5]	LOD = 0.02 mg/L
9	Lead[7]	ND	mg/L	≤ 0.1[5]	LOD = 0.1 mg/L
10	Zinc[1]	< 0.02	mg/L	≤ 2[5]	Normal
11	Nickel[1]	0.2	mg/L	≤ 0.5[5]	Normal
12	Sulfide[1]	0.04	mg/L	≤ 1[1]	Normal
13	Phenol[1]	< 0.1	mg/L	≤ 0.5[5]	Normal
14	Chromium (Hexavalent)[1]	< 0.02	mg/L	≤ 0.5[5]	Normal
15	Mercury	0.006	mg/L	≤ 0.05[5]	Normal

"N.D" = Not Detected "LOD" = Lower limit of detection "–" = No Reference Standard

Tested by	Checked by	Approved by
Daw May Myat Khine	Daw [illegible]	

No.237,Corner of Shu Khin Thar Street & 7 Street, (3) Block, South Okkalapa Township,Yangon.
Tel: 09-407498078, Email: aelab.2022@gmail.com

ALARM Ecological Laboratory

Water Testing Result Report

Report Number: EL-WR-24-03597 Date: August 22, 2024

Client Information

Client Name	:	MPRL E&P Ptd Ltd
Organization	:	–
Client ID	:	–
Registration Date & Time	:	26.7.2024; 11:15 AM
Contact	:	09-5177819
Testing Purpose	:	For Monitoring
Email	:	han.m.aung@mprlexp.com

Sample Information

Sample ID	:	L1564
Sample Name	:	Down-hole Workshop
Sample Type / Source	:	Domestic Water
Sampling Date & Time	:	25.7.2024; 1:55 PM
Sample Location	:	Minbu Tsp
Latitude	:	–
Longitude	:	–

Testing Results

This laboratory analysis report is based solely on the sample submitted by the client unless client took our sampling service.
This report shall not be reproduced except in full, without written approval of the laboratory.

Sr.	Quality Parameters		Results	Units	Emission Standards	Remarks
1	pH[1]	–	7.6	S.U	6.0 – 9.0[4]	Normal
2	Temperature[2]	–	28.2	°C	≤3[4]	–
3	TSS[3]	✓	156	mg/l	≤50[4]	Above the limit
4	Ammonia[3]	✓	3	mg/L	≤ 10[4]	Normal
5	BOD[3]	✓	37	mg/L	≤ 50[4]	Normal
6	COD[3]	✓	65	mg/L	≤ 250[4]	Normal
7	Total Chlorine[3]	✓	< 0.02	mg/L	–	–
8	Cyanide[3]	✓	< 0.01	mg/L	≤ 0.1[4]	Normal
9	Total Phosphorous[3]	✓	2.6	mg/L	≤2[4]	Above the limit
10	Arsenic[3]	✓	0.01	mg/L	≤ 0.2[4]	Normal
11	Cadmium[3]	✓	ND	mg/L	≤ 0.1[4]	LOD = 0.01 mg/L
12	Copper[3]	✓	ND	mg/L	≤ 0.5[4]	LOD = 0.01 mg/L
13	Iron[3]	✓	0.36	mg/L	≤ 2.5[4]	Normal
14	Lead[3]	✓	ND	mg/L	≤ 0.1[4]	LOD = 0.1 mg/L
15	Zinc[3]	✓	< 0.02	mg/L	≤ 2[4]	Normal
16	Nickel[3]	✓	ND	mg/L	≤ 0.5[4]	LOD = 0.2 mg/L
17	Sulfide[3]	✓	< 0.04	mg/	≤ 1[4]	Normal
18	Phenol[3]	✓	< 0.1	mg/L	≤ 0.5[4]	Normal
19	Fluoride[3]	✓	0	mg/L	≤ 20[4]	Normal
20	Oil & Grease[3]	✓	8	mg/L	≤ 10[4]	Normal
21	Chromium (Hexavalent)[3]	✓	< 0.02	mg/L	≤ 0.1	Normal
22	Mercury	✓	0.002	mg/L	≤ 0.01[4]	Normal

"ND" = Not Detected "LOD" = Lower limit of detection "–" = No Reference Standard

Tested by	Checked by	Approved by
[illegible] Laboratory	[illegible]	[illegible]

No.247,Corner of Shin Khin Thar Street & 7 Street, (3) Block, South Okkalapa Township,Yangon.
Tel: 09-407496178, Email: elab.2022@gmail.com

ISO TECH
LABORATORY

Laboratory Technical Consultant: U Saw Christopher Maung
B.Sc Engg (Civil) Dip E.E(Delft) Lecturer of YIT (Retd), Consultant (WSS) CE, JWSL OCT
Former Member (U.A.CEF Water quality monitoring & S...) (Myanmar)

ISO 9001:2015 Cert. No.

WTL-RE-001
Issue Date - 01-1-2016
Effective Date - 01-1-2018
Issue No - 1.0/Page 1 of 1

M0724 052

WATER QUALITY TEST (MICROBIOLOGY) RESULTS FORM

Client	MPRL E & P PTE Ltd
Nature of Water	Domestic Wastewater
Location	Downhole Workshop
Date and Time of collection	25.7.2024 (1:55 PM)
Date and Time of arrival at Laboratory	26.7.2024
Date and Time of commencing examination	26.7.2024
Date and Time of completing	27.7.2024

Results of Water Analysis — **WHO Drinking Water Guideline (Geneva - 1993)**

Total Coliform Count	40	CFU/100ml	Not detected
Thermotolerant (fecal) Coliform Count	10	CFU/100ml	Not detected
pH	7.6		6.5 - 8.5
Turbidity	300	NTU	5 NTU
Colour (True)	180	TCU	15 TCU
Free Chlorine	Nil	mg/l	
Total Chlorine	Nil	mg/l	

*Date & Time Sample Collection Error.

: This certificate is issued only for the receipt of the test sample.
: < - Less than

Tested by
Signature:
Name:

Approved by
Signature:
Name: Thinzar Theint Theint
B.E (Civil)
Assistant Technical Officer
ISO Tech Laboratory

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No.18 Lanthit Road, Nandhargone Quarter, Insein Township, Yangon, Myanmar.
Ph: 01 640955, 09-650100172, 09-650100173, 01-644506. E-mail: isotechlaboratory@gmail.com, Website: weg-myanmar.com

ALARM Ecological Laboratory

Water Testing Result Report

Report Number: EL-WR-24-03596 | Date: August 22, 2024

Client Information			Sample Information		
Client Name	:	MPRL E&P Pte Ltd	Sample ID	:	11563
Organization	:	-	Sample Name	:	Mechanical Workshop
Client ID	:	-	Sample Type / Source	:	Domestic Water
Registration Date & Time	:	26.7.2024; 11:15 AM	Sampling Date & Time	:	25.7.2024; 14:35 PM
Contact	:	09-5177819	Sample Location	:	Minbu Tsp
Testing Purpose	:	For Monitoring	Latitude	:	-
Email	:	han.m.aung@mprlexp.com	Longitude	:	-

Testing Results

This laboratory analysis report is based solely on the sample submitted by the client unless client took our sampling services.
This report shall not be reproduced except in full without written approval of the laboratory.

Sr.	Quality Parameters	Results	Units	Emission Standards	Remarks
1	pH[1]	8.3	S.U	6.0 - 9.0[d]	Normal
2	Temperature[2]	25	°C	<3[d]	-
3	TSS[4]	28	mg/L	≤50[d]	Normal
4	Ammonia[2]	0.3	mg/L	≤ 10[d]	Normal
5	BOD_5[4]	28	mg/L	≤ 50[d]	Normal
6	COD[2]	53	mg/L	≤ 250[d]	Normal
7	Total Chlorine[c]	< 0.02	mg/L		
8	Cyanide[2]	< 0.01	mg/L	≤ 0.1[c]	Normal
9	Total Phosphorous[1]	0.2	mg/L	≤2[d]	Normal
10	Arsenic[c]	0.005	mg/L	≤ 0.1[c]	Normal
11	Cadmium[2]	ND	mg/L	≤ 0.1[c]	LOD = 0.01 mg/L
12	Copper[2]	ND	mg/L	≤ 0.5[c]	LOD = 0.02 mg/L
13	Iron[2]	0.32	mg/L	≤ 3.5[c]	Normal
14	Lead[2]	0.15	mg/L	≤ 0.1[c]	Above the limit
15	Zinc[c]	< 0.02	mg/L	≤ 2[c]	Normal
16	Nickel[c]	ND	mg/L	≤ 0.5[c]	LOD = 0.2 mg/L
17	Sulfide[c]	< 0.04	mg/L	≤ 1[c]	Normal
18	Phenol[2]	< 0.1	mg/L	≤ 0.5[d]	Normal
19	Fluoride[2]	0	mg/L	≤ 20[d]	Normal
20	Oil & Grease[2]	6	mg/L	≤ 10[d]	Normal
21	Chromium (Hexavalent)[4]	< 0.01	mg/L	≤ 0.1	Normal
22	Mercury	0.001	mg/L	≤ 0.01[d]	Normal

"ND" = Not Detected | "LOD" = Lower limit of detection | "-" = No Reference Standard

Tested by	Checked by	Approved by
Hnin Moe Myat Khaing Lab. Technician II Ecological Laboratory ALARM	Lab. Technician I Ecological Laboratory ALARM	

No.237, Corner of Shu Khin Thar Street & 7 Street, (3) Block, South Okkalapa Township, Yangon.
Tel: 09-407496078, Email: eclab.2022@gmail.com

ISO TECH LABORATORY

Laboratory Technical Consultant: U Saw Christopher Maung
B.Sc.Engg (Civil), Dip S.E.(Delft), Lecturer of YIT (Retd), Consultant (Y.C.D.C), DWSE (?)
Former Member (UNICEF Water quality monitoring & Surveillance Myanmar)

WTL-RE-001
Issue Date - 01-1-2016
Effective Date - 01-1-2016
Issue No - 1.0/Page 1 of 1

M0724 055

WATER QUALITY TEST (MICROBIOLOGY) RESULTS FORM

Client	MPRL E & P PTE Ltd.
Nature of Water	Domestic Wastewater
Location	Mechanical Workshop
Date and Time of collection	25.7.2024 (2:35 PM)
Date and Time of arrival at Laboratory	26.7.2024
Date and Time of commencing examination	26.7.2024
Date and Time of completing	27.7.2024

Results of Water Analysis | **WHO Drinking Water Guideline (Geneva - 1993)**

Total Coliform Count	30	CFU/100ml	Not detected
Thermotolerant (fecal) Coliform Count	4	CFU/100ml	Not detected
pH	7.8		6.5 - 8.5
Turbidity	88	NTU	5 NTU
Colour (True)	40	TCU	15 TCU
Free Chlorine	Nil	mg/l	
Total Chlorine	Nil	mg/l	

***Date & Time Sample Collection Error.**

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

: < - Less than

Tested by

Signature:

Name:

Approved by

Signature:

Name: Thinzar Theint Theint
B.E (Civil)
Assistant Technical Officer
ISO Tech Laboratory

(a division of WEG Co., Ltd.)

No. 8, Lanthit Road, Nanthargone Quarter, Insein Township, Yangon, Myanmar.
Ph: 01-640956, 09-880100172, 09-880100173, 01 644506, E-mail: isotechlaboratory@gmail.com, Website: weg-myanmar.com

ALARM Ecological Laboratory

Water Testing Result Report

Report Number: EL-WR-24-03601 Date: August 22, 2024

Client Information

Client Name	:	MPRL E&P Ptd Ltd
Organization	:	-
Client ID	:	
Registration Date & Time	:	26.7.2024; 11:15 AM
Contact	:	-
Testing Purpose	:	-
Email	:	-

Sample Information

Sample ID	:	11568
Sample Name	:	R.O Drinking Water
Sample Type / Source	:	Treated Water
Sampling Date & Time	:	25.7.2024; 2:20 PM
Sample Location	:	Minbu Tsp
Latitude	:	-
Longitude	:	-

Testing Results

This laboratory analysis report is based solely on the sample submitted by the client unless client took our sampling service.
This report shall not be reproduced except in full, without written approval of the laboratory.

Sr.	Quality Parameters	Results	Units	Drinking Standards	Remarks
1	pH[1]	7	S.U	5.0 – 9.0[4]	Normal
2	Colour[1]	0	HU	-	-
3	Turbidity[2]	< 5	FAU	-	-
4	TDS[1]	3	mg/L	≤2000[4]	Normal
5	Hardness[3]	12.8	mg/L	-	-
6	Chloride[4]	32	mg/L	-	-
7	Nitrate[5]	0.25	mg/L	≤ 25[4]	Normal
8	Arsenic[6]	0	mg/L	≤ 0.1[4]	Normal
9	Iron[3]	0.12	mg/L	≤ 3.5[4]	Normal
10	Lead[6]	ND	mg/L	≤ 0.1[4]	LOD = 0.1 mg/L
11	Manganese[3]	<0.2	mg/L	≤ 2[4]	Normal
12	Sulfate[2]	18.4	mg/L	-	-

"ND" = Not Detected "LOD" – Lower limit of detection "-" – No Reference Standard

Tested by	Checked by	Approved by

No.237,Corner of Shu Khin Thar Street & 7 Street, (3) Block, South Okkalapa Township,Yangon
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ISO TECH LABORATORY

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ISO 9001:2015 Cert. No.

WTL-RE-001
Issue Date - 01-1-2016
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Issue No - 1.0/Page 1 of 1

M0724 049

WATER QUALITY TEST (MICROBIOLOGY) RESULTS FORM

Client	MPRL E & P PTE Ltd.
Nature of Water	Treated Water
Location	RODW
Date and Time of collection	25.7.2024 (2:20 PM)
Date and Time of arrival at Laboratory	26.7.2024
Date and Time of commencing examination	26.7.2024
Date and Time of completing	27.7.2024

Results of Water Analysis

WHO Drinking Water Guideline (Geneva - 1993)

Total Coliform Count	Not detected (<1)	CFU/100ml	Not detected
Thermotolerant (fecal) Coliform Count	Not detected (<1)	CFU/100ml	Not detected
pH	7.3		6.5 - 8.5
Turbidity	1	NTU	5 NTU
Colour (True)	Nil	TCU	15 TCU
Free Chlorine	Nil	mg/l	
Total Chlorine	Nil	mg/l	

*Date & Time Sample Collection Error.

Remark : Satisfactory for drinking purpose.

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

: < - Less than

Tested by

Signature:

Name:

Approved by

Signature:

Name: Thinzar Theint Theint
Assistant Technical Officer
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ALARM Ecological Laboratory

Water Testing Result Report

Report Number: EL-WR-24-03600 Date: August 22, 2024

Client Information

Client Name	:	MPRL E&P Ptd Ltd
Organization	:	-
Client ID	:	-
Registration Date & Time	:	26.7.2024; 11:15 AM
Contact	:	09-5177819
Testing Purpose	:	For Monitoring
Email	:	han.m.aung@mprlexp.com

Sample Information

Sample ID	:	11567
Sample Name	:	Ma Nyein
Sample Type / Source	:	Tube Well
Sampling Date & Time	:	25.7.2024; 1:25 PM
Sample Location	:	Minbu Tsp
Latitude	:	-
Longitude	:	-

Testing Results

This laboratory analysis report is based solely on the sample submitted by the client, unless client has no sampling service.
This report shall not be reproduced except in full, without written approval of the laboratory.

Sr.	Quality Parameters	Results	Units	Drinking Standards	Remarks
1	pH[1]	7.7	S.U	6.5 - 9.0[2]	Normal
2	Colour[1]	0	HU	-	-
3	Turbidity[1]	<5	FAU	-	
4	TDS[1]	582	ppm	≤2000[2]	Normal
5	Hardness[1]	0.051	mg/L	-	
6	Chloride[1]	28.3	mg/L	-	-
7	Nitrate[1]	0.31	mg/L	≤ 45[2]	Normal
8	Arsenic[1]	0.005	mg/L	≤ 0.1[2]	Normal
9	Iron[1]	0.31	mg/L	≤ 0.3[2]	Normal
10	Lead[1]	ND	mg/L	≤ 0.1[2]	LOD - 0.1 mg/L
11	Manganese[1]	<0.2	mg/L	≤ 0.2[2]	Normal
12	Sulfate[1]	84.1	mg/L	-	-

"ND" = Not Detected "LOD" = Lower limit of detection [1], [2] = No Reference Standard

Tested by	Checked by	Approved by

No.237,Corner of Sint Khin That Street & 7 Street, (3) Block, South Okkalapa Township,Yangon.
Tel: 09-43706078, Email: aclab.2022@gmail.com

ISO TECH LABORATORY

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ISO 9001:2015 Cert. Registration

WTL-RE-001
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Issue No : 1.0/Page 1 of 1

M0724 060

WATER QUALITY TEST (MICROBIOLOGY) RESULTS FORM

Client	MPRL E & P PTE Ltd
Nature of Water	Tube Well Water
Location	Ma Nyein
Date and Time of collection	25.7.2024 (1:25 PM)
Date and Time of arrival at Laboratory	26.7.2024
Date and Time of commencing examination	26.7.2024
Date and Time of completing	27.7.2024

Results of Water Analysis — **WHO Drinking Water Guideline (Geneva - 1993)**

Total Coliform Count	3	CFU/100ml	Not detected
Thermotolerant (fecal) Coliform Count	Not detected (<1)	CFU/100ml	Not detected
pH	7.8		6.5 - 8.5
Turbidity	3	NTU	5 NTU
Colour (True)	Nil	TCU	15 TCU
Free Chlorine	Nil	mg/l	
Total Chlorine	Nil	mg/l	

*Date & Time Sample Collection Error.

Remark : Unsatisfactory for drinking purpose.

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

: < - Less than

Tested by

Signature:

Name:

Approved by

Signature:

Name: Thinzar Theint Theint
B.E. (Civil)
Assistant Technical Officer
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Annex – 2 Waste Disposal Certificate

THE REPUBLIC OF THE UNION OF MYANMAR

YANGON REGION GOVERNMENT

YANGON CITY DEVELOPMENT COMMITTEE

URBAN ENVIRONMENTAL CONSERVATION AND CLEANSING DEPARTMENT

ENDORSEMENT FOR ACCOMPLISHMENT OF THE ACTIVITY

Date : 12.9.2024

To:

MPRL E&P Pte Ltd

Our Urban Environmental Conservation and Cleansing Department is so glad to hear that your company proposed for systematic disposal of safety shoes, V-Belts and rubber washers. Now your proposed 3.39 Tons of safety shoes, V-Belts and rubber washers are incinerated at Yangon Waste to Energy Plant which accomplished well. So our department would like to give you the endorsement for accomplishment of the activity.

In future, we hope that you will collaborate with our authority for systematic disposal of waste discharged from your company.

No.

Date

Dr. Khin Shin Aye

Director

Urban Environmental Conservation and Cleansing Department

Yangon City Development Committee

Address : 3rd Floor, YCDC 12-storied Building, Merchant Road between Thein Phyu Road and Bo Myat Tun Street, Botahtaung Township, Yangon, Myanmar.

MPRL E&P Pte Ltd.

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