

NAY SHWE LIN COMPANY LIMITED

Environmental Management Plan

Manufacturing of Garments on (CMP basis)



Myanwei Environmental Solutions Co., Ltd.

10/15/2021

Date: 15, 10, 2021

Attention: Dear Director

Environmental Conservation Department

Subject: Environmental Management Plan (EMP) Report in respect of the Manufacturing of Garment by NAY SHWE LIN CO., LTD.

EMP report describes the environmental condition of a project, including significant impact, formulation of mitigation measures and preparation of institutional requirements and environmental monitoring.

Myanwei Environmental Solutions Company Limited has prepared this report with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporating our General Terms and Conditions of Business and taking into account of the resources devoted to it by agreement with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

We strongly commit that this report was prepared in compliance with Myanmar Environmental Laws and Regulations.

A circular blue ink stamp from MYANWEI ENVIRONMENTAL SOLUTIONS COMPANY LIMITED. The outer ring contains the company name. The inner circle has two fields: "No....." and "Date.....".
A handwritten signature in blue ink, appearing to read "Lin Htet Sein".

LIN HTEI SEIN
DIRECTOR
MYANWEI ENVIRONMENTAL SOLUTIONS
COMPANY LIMITED.

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Date: 15, 10, 2021

Dear: Director
Environmental Conservation Department
Nay Pyi Taw

Subject: Environmental Management Plan (EMP) Report in respect of the Manufacturing of Garment

We refer to the captioned EMP report, which has been prepared by Myanwei Environmental Solutions Co., Ltd. (Third Party Consultant) in compliance with EIA procedure (2015) and other related laws/rules.

We believe, to the best of our knowledge at the time of writing, that;

- The EMP report is accurate and complete
- The EMP report has been prepared in strict compliance with all applicable laws, rules, regulations and procedures in force.

NAY SHWE LIN Co., Ltd. will at all times comply fully with all commitment and obligations in the EMP report.

We acknowledge and understand that



Ms. Chan Wai Kam Monica

Director

NAY SHWE LIN CO., LTD.

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Abbreviation

1. CEMP = Construction Environmental Management Plan
2. CMP = Contract Manufacturing Process
3. CSR = Corporate Social Responsibility
4. ECC = Environmental Compliance Certificate
5. ECD = Environmental Conservation Department
6. EIA = Environmental Impact Assessment
7. EMoP = Environmental Monitoring Plan
8. EMP = Environmental Management Plan
9. GIIP = Good International Industry Practices
10. HSE = Health, Safety and Environment
11. IEE = Initial Environmental Examination
12. IFC = International Finance Corporation
13. NEQG = National Environmental Quality (Emission) Guidelines
14. MIC = Myanmar Investment Commission
15. MOECFAF = Ministry of Environmental Conservation and Forestry
16. MONREC = Ministry of Natural Resources and Environmental Conservation
17. OEMP = Operation Environmental Management Plan
18. OSHA = Occupational Safety and Health Administration
19. PPE = Personal Protective Equipment
20. WHO = World Health Organization
21. YCDC = Yangon City Development Committee
22. YESB = Yangon City Electricity Supply Board

အစီရင်ခံစာအကျဉ်းချုပ်

နိဒါန်း

အဆိုပြုလုပ်ငန်းသည် CMP စနစ်ဖြင့် အဝတ်အထည်အမျိုးမျိုး ချုပ်လုပ်ခြင်းလုပ်ငန်း အတွက် ရင်းနှီးမြှုပ်နှံသော ကုမ္ပဏီဖြစ်ပါသည်။ ရင်းနှီးမြှုပ်နှံမှုလိုင်စင်ကို ၂၀၂၀ ပြည့်နှစ်၊ မတ်လ ၁၈ ရက်နေ့တွင် (အတည်ပြုမိန့်အမှတ် ရကတ-၃၇၃/၂၀၂၀)ဖြင့် ရန်ကုန်တိုင်းဒေသကြီး ရင်းနှီးမြှုပ်နှံမှုကော်မတီမှ ရရှိပြီးဖြစ်ပါသည်။ လုပ်ငန်းလည်ပတ်ရန်အတွက် မြန်မာနိုင်ငံသယံဇာတနှင့် သဘာဝပတ်ဝန်းကျင် ထိန်းသိမ်းရေးဝန်ကြီးဌာန (MONREC) ၏ အတည်ပြုချက်ရယူရန် လိုအပ်ကြောင်း ကော်မရှင်မှ မှာကြားခဲ့ပါသည်။

ထို့ကြောင့် မြန်မာနိုင်ငံ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေး ဥပဒေ (၂၀၁၂)အရ ၊ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် (EMP) ပြုလုပ်ရန်လိုအပ်ကြောင်း ၂၀၂၀ ပြည့်နှစ်၊ ဩဂုတ်လ ၅ ရက်နေ့တွင် (စာအမှတ်၊ ရက-၁/၃/၄ (အီးအိုင်အေ) (၂၂၂၅/၂၀၂၀) ဖြင့် ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန ရန်ကုန်တိုင်းဒေသကြီးမှ သဘောထားမှတ်ချက် ရရှိပြီးဖြစ်ပါသည်။ ထို့ကြောင့် EMP အစီအရင်ခံစာရေးဆွဲရန် တတိယအဖွဲ့အစည်းဖြစ်သော MYANWEI ENVIRONMENTAL SOLUTIONS CO.,LTD. မှ တာဝန်ယူရေးဆွဲခဲ့ပါသည်။

EMP အစီအစဉ်တွင် NAY SHWE LIN CO., LTD ခြင်းစီမံကိန်းအတွက် MYANWEI ENVIRONMENTAL SOLUTIONS CO.,LTD. မှရေးသားပြုစုထားသော ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီရင်ခံစာဖြစ်ပါသည်။ အဆိုပါ လေ့လာဆန်းစစ်ခြင်း၏ ရည်ရွယ်ချက်များမှာ-

- ✓ သဘာဝပတ်ဝန်းကျင်နှင့် လူမှုစီးပွားပတ်ဝန်းကျင်အပေါ် စီမံကိန်းဆောင်ရွက်ချက်များကြောင့် ထိခိုက်မှုများကိုလေ့လာရန်။
- ✓ ထိုထိခိုက်မှုများကို လျော့ချနိုင်ရန် လျော့နည်းစေမည့်နည်းလမ်းများကို ဖော်ပြရန်။
- ✓ စီမံကိန်းအတွက် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်ကို ပြင်ဆင်ရန်နှင့် အကောင်အထည်ဖော်ရန်။
- ✓ စီမံကိန်းအတွက် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် အစီရင်ခံစာ လုပ်ဆောင်ရာတွင် လုံလောက်မှုရှိစေရန်။
- ✓ ဒေသခံများ၏ လူမှုရေးသက်သာချောင်ချိမှုများ တိုးမြှင့်ရန် နှင့် ဒေသအတွင်း ဖွံ့ဖြိုးတိုးတက်မှုများ အတွက် မရှိမဖြစ် အရေးပါသော လူမှုစီးပွားတာဝန်ယူမှု အစီအစဉ်အား အကောင်အထည်ဖော်ရန်တို့ ဖြစ်ပါသည်။

အဆိုပြုထားသော စီမံကိန်း၏ ရည်ရွယ်ချက်သည် CMP စနစ် (ဖြတ်-လုပ်-ထုတ်) စနစ်ကို အသုံးပြု၍ အဝတ်အထည်အမျိုးမျိုးကို ထုတ်လုပ်ပီး နိုင်ငံခြားသို့ ၁၀၀ % တင်ပို့ရန်ဖြစ်ပါသည်။

Environmental Management Plan

ဥပဒေနှင့် မူဝါဒဆိုင်ရာ အချက်အလက်များ

EMP ရေးဆွဲခြင်း၏ရည်ရွယ်ချက်မှာ နိုင်ငံတော်နှင့် နိုင်ငံတကာမှ ချမှတ်ထားသော ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးအစီအစဉ်များ၊ စည်းမျဉ်းစည်းကမ်းများ၊ ဥပဒေနှင့် နည်းဥပဒေများကို လိုက်နာပြီး ပတ်ဝန်းကျင်နှင့် လိုက်ရောညီထွေမှုရှိသော ထိခိုက်မှု လျော့ချရေး အစီအစဉ်များ ပြုလုပ်ရန်ဖြစ်ပါသည်။ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် အစီရင်ခံစာ ရေးသားပြုစုသူများ၏ ကျွမ်းကျင်မှု နယ်ပယ်ဆိုင်ရာ ဖော်ပြချက်များကို ရေးသားဖော်ပြထားပါသည်။ ဥပဒေနှင့် နည်းဥပဒေ အခန်းတွင် MONREC မှ ထုတ်ပြန်ထားသည့် ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်းများ၊ အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များအပြင်စက်ရုံနှင့် ဆက်စပ်သက်ဆိုင်နေပြီး လိုက်နာရမည့် ဥပဒေနှင့် နည်းဥပဒေများ၊ ဒေသတွင်း သို့မဟုတ် အပြည်ပြည်ဆိုင်ရာ သဘာဝပတ်ဝန်းကျင်နှင့် လူမှုပတ်ဝန်းကျင်ဆိုင်ရာ မူဝါဒများ၊ ဆက်စပ်နေသည့် နိုင်ငံတကာသဘောတူချက်များကို အကျဉ်းချုပ်ရေးသားဖော်ပြထားပါသည်။ စက်ရုံအတွင်းလိုက်နာ ဆောင်ရွက်ရမည့် စည်းမျဉ်းစည်းကမ်းများ၊ လုပ်ငန်းခွင် အန္တရာယ်ကင်းရှင်းရေးနှင့် ကျန်းမာရေးဆိုင်ရာ အခြေခံစည်းမျဉ်းစည်း ကမ်းများလည်း ထည့်သွင်းဖော်ပြထားပါသည်။ NAY SHWE LIN CO., LTD ၏ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဆိုင်ရာ ကတိကဝတ်များအပြင် ပတ်ဝန်းကျင်ထိခိုက်မှုလျော့ချရေး မူဝါဒများကိုလဲ ထည့်သွင်းဖော်ပြထားပါသည်။

1. The Constitution Law, 2008
2. The Environmental Conversation Law, 2012
3. The Environmental Conversation Rule, 2014
4. Environmental Impact Assessment Procedure, 2015
5. National Environmental Quality (Emission) Guideline, 2015
6. National Myanmar Environmental Policy, 2019
7. Foreign Investment Law, 2012
8. Foreign Investment Rule, 2013
9. Myanmar Investment Rule, 2017
10. Myanmar Insurance Law, 1993
11. Payment of Wages Law, 2016
12. The Payment of Wages Act, 1936
13. Yangon City Development Committee Law, 2018
14. The Amended Law for Factories Act, 1951 (2016)

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15. The Private Industrial Enterprise Law
16. The Export and Import Law, 2012
17. The Prevention of Hazard from Chemical and Related Substances Law, 2013
18. The Underground Water Act
19. Myanmar Fire Brigade Law, 2015
20. Fire Safety Procedure
21. The Electricity Law, 2014
22. Boiler Law, 2015
23. Labor Dispute Settlement Law, 2012
24. The Law Amending the Settlement of Labor Dispute Law, 2019
25. The Social Security Law, 2012
26. The Employment and Skill Development, 2013
27. The Worker’s Compensation Act, 1923
28. The Leave and Holidays Act (1951, partially reused in 2014)
29. The Minimum Wage Law, 2013
30. Public Health Law, 1972
31. Prevention and Control of Communicable Disease Law (1995 Amendment in 2011)
32. Occupational Safety and Health Law, 2019
33. The Law on Standardization
34. လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတက်သော ဝတ္ထုပစ္စည်းများဆိုင်ရာ ဥပဒေ (2018)
35. The Motor Vehicles Law, 2015
36. The Conversation of Water Resources and River Law, 2006
37. The Commercial Tax Law (1990 Amended 2014)

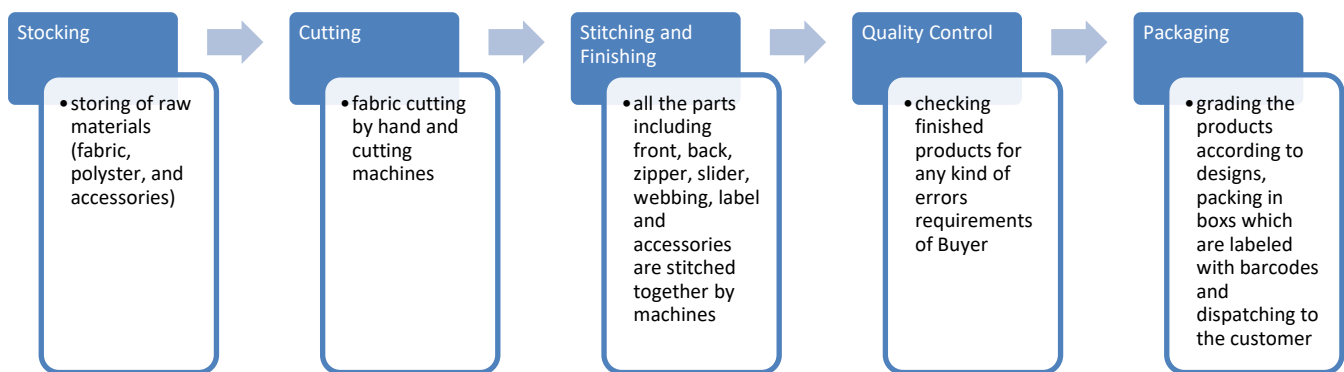
စီမံကိန်းဆိုင်ရာအချက်အလက်

အဆိုပြုထားသော စီမံကိန်း	CMP စနစ်ဖြင့်အဝတ်အထည်ချုပ်လုပ်ခြင်းလုပ်ငန်း
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ရင်းနှီးမြုပ်နှံမှုပုံစံ	၁၀၀ % နိုင်ငံခြားသားရင်းနှီးမြုပ်နှံမှု
ကုမ္ပဏီအမည်	NAY SHWE LIN CO., LTD
အဆိုပြုရင်းနှီးမြုပ်နှံမှုကာလ	၂၅ နှစ်
စုစုပေါင်းမြေကွက်ဧရိယာ	၂.၄၄၆ ဧက (၉၈၉၈.၆၁၀) စတုရန်းမီတာ
မြေနေရာပုံစံ	စက်မှုဇုန်မြေ
တည်ဆောက်မှုကာလ	၂ နှစ်
စီမံကိန်း တည်နေရာ	မြေကွက်အမှတ် (၃)၊ မြေတိုင်းရပ်ကွက် အမှတ် ၄၅၊ ဝါးတစ်ရာစက်မှုဇုန် ၊ ရွှေပြည်သာမြို့နယ် ၊ ရန်ကုန်တိုင်းဒေသကြီး။
ဆက်သွယ်ရန် ဖုန်းနံပါတ်	ကိုကိုဖော် ၀၉-၄၂၁၀၈၆၀၁၀

အဆိုပြုလုပ်ငန်းအတွက် တည်နေရာနှင့် စက်ရုံအတွင်းပါရှိသည့် အဆောင်များ၊ စားသောက်ဆောင်၊ စတိုး၊ ပြုပြင်ထိမ်းသေးရေးအခန်း၊ မီးဖိုချောင် အစရှိသည်တို့ကိုသီးခြားဖော်ပြထားပါသည်။ ထို့အပြင် ထုတ်လုပ်မှုနည်းလမ်းများ၊ လိုအပ်သည့်ကုန်ကြမ်းများ၊ နှစ်စဉ်ထွက်ကုန်များ နှင့် စက်ပစ္စည်းများအား ဖော်ပြထားပါသည်။ အဆိုပြုလုပ်ငန်းအတွက်လိုအပ်သည့် စွမ်းအင်နှင့် အသုံးပြုသည့်ပမာဏများကိုလဲ ထည့်သွင်းဖော်ပြထားပါသည်။ ကျန်လုပ်ငန်းသုံးယာဉ်နှင့် ရုံးသုံးပစ္စည်းများကို ပြည်တွင်းမှ ဝယ်ယူအသုံးပြုပါသည်။ ကုန်ထုတ်လုပ်ခြင်းလုပ်ငန်းမှာ automatic machine နှင့် လူစွမ်းအားကို အသုံးပြုသော လုပ်ငန်းမျိုးဖြစ်ပါသည်။ ထုတ်လုပ်ပုံအဆင့်ဆင့်ကို အောက်ဖော်ပြပါ ပုံပြဇယားဖြင့် ဖော်ပြထားပါသည်။



လုပ်ငန်းမှ ပထမနှစ်မှ ၁၀ နှစ်အတွင်း အထည်အရေအတွက် (၂,၄၅၀,၀၀၀) မှ (၂,၇၀၀,၀၀၀)အထိ တိုးမြှင့်ထုတ်လုပ်သွားမည်ဖြစ်သည်။ နိုင်ငံခြားသားလုပ်သား (၇)ဦး နှင့် နိုင်ငံသား (ပြည်တွင်း)လုပ်သား (၁၄၀၈) ဦးဖြင့် ဆောင်ရွက်သွားမည်ဖြစ်သည်။

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အနီးပတ်ဝန်းကျင် အခြေအနေ

ကနဦးစစ်တမ်းကောက်ယူခြင်းနှင့် ဒေသဆိုင်ရာမှအချက်အလက်များရယူခြင်းသည် အလွန်အရေးကြီးပါသည်။ ပတ်ဝန်းကျင်အရည်အသွေး တိုင်းတာခြင်းကဲ့သို့သော ကနဦးစစ်တမ်းကောက်ယူခြင်းသည် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီရင်ခံစာတွင် အရေးပါသောအခန်းအဖြစ် တည်ရှိနေသည်။ ထို့အတွက် စီမံကိန်းဒေသသို့ ကွင်းဆင်းလေ့လာမှုများကို ၂၄ ရက်၊ ဇူလိုင်လ ၊ ၂၀၂၀ တွင် လက်တွေ့ကွင်းဆင်းလေ့လာခဲ့ပြီး လိုအပ်သည့် လေအရည်အသွေး၊ ဆူညံမှု၊ အလင်း၊ အပူချိန်နှင့် စိုထိုင်းမှု အစရှိသည့် အချက်အလက်များကို ရယူခဲ့ပါသည်။ ကွင်းဆင်းလေ့လာထားသည့် အချက်အလက်များကို သက်ဆိုင်ရာခေါင်းစဉ်အလိုက် အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များနှင့် နှိုင်းယှဉ်၍ ဖော်ပြထားပါသည်။ ထိုနည်းတူ လျှော့ချရမည့်နည်းလမ်းများကိုလဲ ထည့်သွင်းဖော်ပြထားပါသည်။ စီမံကိန်းတည်ရှိရာဒေသရှိ ရာသီဥတု၊ မိုးရေချိန်၊ လူမှုစီးပွားရေးဆိုင်ရာအချက်အလက်များကိုလဲ ထည့်သွင်းဖော်ပြထားပါသည်။

ပတ်ဝန်းကျင်ထိခိုက်မှုနှင့် လျှော့ချရေး အစီအစဉ်

စီမံကိန်းဆောင်ရွက်ချက်များကြောင့် ပတ်ဝန်းကျင်ဆိုင်ရာအရင်းအမြစ်များ၊ ဂေဟဆိုင်ရာ အရင်းအမြစ်များ၊ လူ့စွမ်းအားအရင်းအမြစ်များ နှင့် စွန့်ပစ်ပစ္စည်းများစွန့်ပစ်ခြင်း စသည့်ဖြစ်လာနိုင်သည့် ထိခိုက်မှုများကို ခွဲခြားသတ်မှတ်ပြီး ၎င်းတို့၏ ရလဒ်များကို ထိခိုက်မှုဆန်းစစ်သည့် နည်းလမ်းများကို အသုံးပြု၍ သတ်မှတ်ခဲ့ပါသည်။ စီမံကိန်းအား ထိခိုက်မှုများကို အပိုင်းသုံးပိုင်းခွဲ၍ သတ်မှတ်ထားသည်။ အမျိုးအစားမှာ တည်ဆောက်သည့်ကာလ၊ လုပ်ငန်းလည်ပတ်သည့်ကာလ နှင့် လုပ်ငန်းဖျက်သိမ်းသည့်ကာလ များဖြစ်ပါသည်။ ပတ်ဝန်းကျင်ထိခိုက်မှု လျော့ပါးစေရေး နည်းလမ်းများကိုလဲထည့်သွင်းဖော်ပြထားပါသည်။

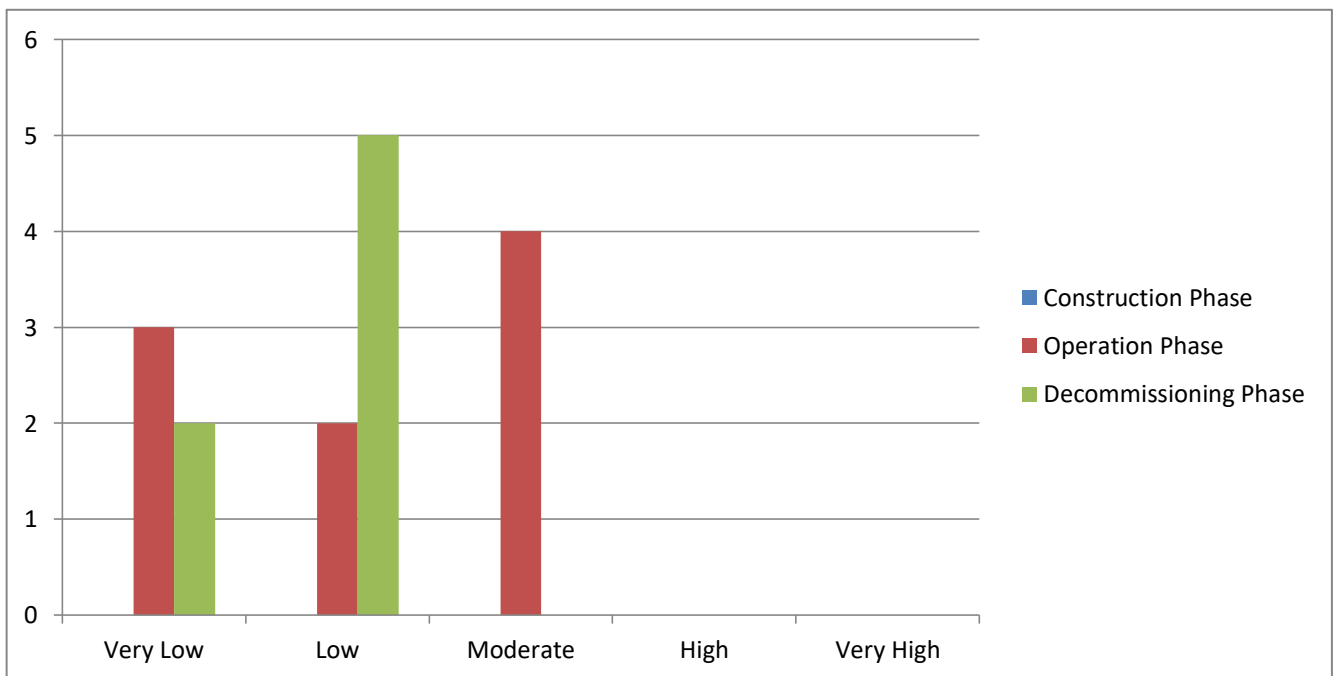
ပတ်ဝန်းကျင် လက္ခဏာ	လုပ်ငန်းလုပ်ဆောင်မှု	ထိခိုက်မှုအဆင့်	လျှော့ချရေးနှင့် ထိန်းချုပ်မှု
တည်ဆောက်ရေးကာလ ။ ပတ်ဝန်းကျင်ထိခိုက်မှုလေ့လာချိန်တွင် စက်ရုံတည်ဆောက်ပြီး လုပ်ငန်းလည်ပတ်နေချိန်ဖြစ်သော်ကြောင့် ဤကာလကိုထည့်သွင်း မစဉ်းစားတော့ပါ။			
လုပ်ငန်းလည်ပတ်ခြင်းကာလ			
လေထုညစ်ညမ်းမှု	<ul style="list-style-type: none"> • သယ်ယူပို့ဆောင်ရေးသုံး မော်တော်ယာဉ်တို့ကြောင့် ဖုန်မှုန့် နှင့် ဖန်လုံအိမ်ဓာတ်ငွေ့ ထွက်ခြင်း • လုပ်ငန်းခွင်အတွင်းဖုန်မှုန့်ထွက်ခြင်း • မီးဖိုနှင့် ရေနွေးငွေ့ ဘွိုင်လာတို့မှ မီးခိုးထွက်ခြင်း • အရေးပေါ်သုံးမီးစက်မှ စွန့်ထုတ် အခိုးအငွေ့ ထွက်ခြင်း 	အနည်းငယ်	<ul style="list-style-type: none"> • ဘွိုင်လာနှင့်မီးစက် တို့တွင် မီးခိုးခေါင်းတိုင် တပ်ဆင်ခြင်းဖြင့် အခိုးအငွေ့ ကြောင့် ပတ်ဝန်းကျင် ထိခိုက်မှုကို လျှော့ချခြင်း၊ • စက်ရုံအတွင်းနှင့် အနီးအနားတွင် သစ်ပင်ပန်းမံ စိုက်ပျိုးခြင်းဖြင့် carbon ထွက်ရှိမှုကို လျှော့ချပေးခြင်း၊ • NOx ထွက်ရှိမှုနည်း သော နည်းပညာဖြင့် စက်ပစ္စည်းများသုံးခြင်း၊ • စက်ပစ္စည်းများကို ပုံမှန်ပြုပြင်ထိန်းသိမ်းပေးခြင်း။

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ရေ	<ul style="list-style-type: none"> မိလ္လာစွန့်ထုတ်ရေ စက်ပစ္စည်း၊ မော်တော်ယာဉ်များ မှ ဆီယိုဖိတ်ခြင်း 	အနည်းငယ်	<ul style="list-style-type: none"> လက်ရှိရေဆိုးစွန့်ပစ်မှုပုံစံဖြစ်သော မိလ္လာစနစ်ကို ပုံမှန်စစ်ဆေးပေးခြင်း။ မိလ္လာကန်နှင့် မိလ္လာ စနစ်ကိုလူဦးရေနှင့် သင့်တင့်သည့် ပမာဏ ရှိရန် စီစဉ်ထားခြင်း။ ပုံမှန်သန့်ရှင်းရေးပြုလုပ်ပေးခြင်း။ စက်ပစ္စည်းများကိုပုံမှန်ပြုပြင်ထိန်းသိမ်းပေးခြင်း
မြေဆီလွှာညစ်ညမ်းမှု	<ul style="list-style-type: none"> မတော်တဆ စက်ပစ္စည်း၊ မော်တော်ယာဉ်များ မှ ဆီယိုဖိတ်ခြင်း 	အလွန်နည်း	<ul style="list-style-type: none"> စက်ပစ္စည်းများကို ပုံမှန်ပြုပြင်ထိန်းသိမ်းပေးခြင်း။ မတော်တဆမှု မဖြစ်စေရန် ထိန်းသိမ်းခြင်း။
ဆူညံသံ	<ul style="list-style-type: none"> မီးစက်၊ လေမှုတ်စက် နှင့် မော်တော် ယာဉ် အသုံးပြုမှုကြောင့် ပတ်ဝန်းကျင် ဆူညံမှု 	အလွန်နည်း	<ul style="list-style-type: none"> ဆူညံသံထွက်သောနေရာများကို အကာအကွယ် ဖြင့်ထားရှိခြင်း စက်ပစ္စည်းများကို ပုံမှန်ပြုပြင်ပေးခြင်း
မီးဘေးအန္တရာယ်	<ul style="list-style-type: none"> ကုန်ကြမ်းသိုလှောင်မှု နှင့် လျှပ်စစ်သုံးစွဲ ပေါ့လျော့မှု 	အသင့်တင့်	<ul style="list-style-type: none"> ကုန်ကြမ်းများအား သီးသန့်ထားရှိခြင်း လျှပ်စစ်သုံးစွဲမှုများအား စနစ်တကျ အသုံးပြုစေခြင်း
စွန့်ပစ်အမှိုက်	<ul style="list-style-type: none"> ထုတ်လုပ်ရာတွင် ကျန်ရှိသော ပိတ်စ အပိုင်းအစများ။ မီးဖိုချောင်နှင့် ရုံးတွင်းစွန့်ပစ်ပစ္စည်းများ 	အသင့်တင့်	<ul style="list-style-type: none"> စွန့်ပစ်အမှိုက်များအား ပြန်လည်သုံးစွဲရန် နှင့် စွန့်ပစ်ရန် အဖြစ်သတ်မှတ်ပီး သီးခြားစွန့်ပစ်စေခြင်း
စွန့်ပစ်အရည်	<ul style="list-style-type: none"> နေအိမ်၊ စားသောက်ဆောင် တို့မှစွန့်ထုတ်ရေ။ မိလ္လာကန်စနစ်။ 	အသင့်တင့်	<ul style="list-style-type: none"> စွန့်ပစ်အမှိုက်များအား ပြန်လည်သုံးစွဲရန် နှင့် စွန့်ပစ်ရန် အဖြစ်သတ်မှတ်ပီး သီးခြားစွန့်ပစ်စေခြင်း
အန္တရာယ်ရှိအမှိုက်	<ul style="list-style-type: none"> စက်များမှ ဆီယိုဖိတ်မှုများ၊ မော်တော်ယာဉ်များ ပြုပြင်ထိန်းသိမ်းမှုမှ ထွက်ရှိသည့် အမှိုက်များ။ 	အလွန်နည်း	<ul style="list-style-type: none"> စက်သုံးဆီများအားစနစ်တကျ အသုံးပြုစေခြင်း၊ စနစ်တကျသိုလှောင်ခြင်း နှင့် အန္တရာယ်ရှိပစ္စည်းများအား စနစ်တကျထားရှိစေခြင်း
လူမှုစီးပွားဘဝ	<ul style="list-style-type: none"> ဒေသခံပြည်သူများအတွက် အလုပ်အကိုင်အခွင့်အလမ်းများ ရရှိစေခြင်း 	အသင့်တင့်	
လုပ်ငန်းပိတ်သိမ်းခြင်းကာလ			
လေထုညစ်ညမ်းမှု	<ul style="list-style-type: none"> အဆောက်အဦများ ဖြိုချမှုများ ဖြိုချပစ္စည်းများ သယ်ယူမှုများ 	အနည်းငယ်	<ul style="list-style-type: none"> NOxထွက်ရှိမှုနည်းသော နည်းပညာဖြင့် စက်ပစ္စည်း များသုံးခြင်း။ စက်ပစ္စည်းများကို

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			ပုံမှန်ပြုပြင်ထိန်းသိမ်းပေးခြင်း။
ရေ	<ul style="list-style-type: none"> ဖြိုချပစ္စည်းများနှင့် မိလ္လာဖျက်ဆီးမှုများ 	အနည်းငယ်	<ul style="list-style-type: none"> ပုံမှန်သန့်ရှင်းရေးပြုလုပ်ပေးခြင်း။ စက်ပစ္စည်းများကို ပုံမှန်ပြုပြင်ထိန်းသိမ်းပေးခြင်း။
မြေဆီလွှာညစ်ညမ်းမှု	<ul style="list-style-type: none"> အဆောက်အဦးနှင့် ဆက်စပ်ပစ္စည်းများ ဖြိုချပစ္စည်းများ သယ်ယူမှုများ 	အနည်းငယ်	<ul style="list-style-type: none"> မတော်တမူ မဖြစ်စေရန် ထိန်းသိမ်းခြင်း။
အမှိုက်စွန့်ပစ်မှု	<ul style="list-style-type: none"> အဆောက်အဦးများ ဖြိုချပစ္စည်းများ သယ်ယူမှုများ 	အလွန်နည်း	<ul style="list-style-type: none"> စွန့်ပစ်အမှိုက်များအား ပြန်လည်သုံးစွဲရန် နှင့် စွန့်ပစ်ရန် အဖြစ်သတ်မှတ်ပီး သီးခြားစွန့်ပစ်စေခြင်း
အန္တရာယ်ရှိအမှိုက်	<ul style="list-style-type: none"> စက်များမှ ဆီယိုစိမ့်မှုများ၊ မော်တော်ယာဉ် များ ပြုပြင်ထိန်းသိမ်းမှု မှ ထွက်ရှိသည့်အမှိုက်များ ဖြိုချပစ္စည်းများ သယ်ယူမှုများ 	အလွန်နည်း	<ul style="list-style-type: none"> စက်သုံးဆီများအားစနစ်တကျ အသုံးပြုစေခြင်း၊ စနစ်တကျသိုလှောင်ခြင်း နှင့် အန္တရာယ်ရှိပစ္စည်းများအား စနစ်တကျထားရှိစေခြင်း
မတော်တမံ ထိခိုက်မှုများ	<ul style="list-style-type: none"> အဆောက်အဦးများ ဖြိုချမှုများ ဖြိုချပစ္စည်းများ သယ်ယူမှုများ 	အနည်းငယ်	<ul style="list-style-type: none"> မတော်တမူ မဖြစ်စေရန် ထိန်းသိမ်းခြင်း။
လူမှုစီးပွားဘဝ	<ul style="list-style-type: none"> ဒေသခံပြည်သူများအတွက်အလုပ်အကိုင် ခေတ္တရရှိခြင်း 		



ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှု အစီအစဉ်

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အဆိုပြုလုပ်ငန်း၏ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်အတွက် Environmental Management System (EMS) စက်ဝိုင်းဖြင့် အစီစဉ်တကျ ပြုလုပ်သွားမည်ဖြစ်ပါသည်။ အစီအစဉ်တွင် စက်ရုံကြောင့် ဖြစ်ပေါ်စေနိုင်သော ပတ်ဝန်းကျင်နှင့် လူမှုဘဝအပေါ် ဆိုးကျိုးသက်ရောက်မှုများကို လျော့ချရေး၊ စီမံခန့်ခွဲရေးနှင့် စောင့်ကြပ်ကြည့်ရှုရေး အစရှိသည့် အစီအစဉ်များ ပါဝင်ပါသည်။ ၎င်း EMP အစီအစဉ်များကို အကောင်အထည်ဖော်ရန်အတွက် သည် စက်ရုံတွင် ကျန်းမားရေး၊ ဘေးအန္တရာယ်ကင်းရှင်းရေးနှင့် ပတ်ဝန်းကျင်ဆိုင်ရာ အဖွဲ့အစည်းတစ်ခုထားရှိပြီး လျော့ချရေး၊ စီမံခန့်ခွဲရေးနှင့် စောင့်ကြပ်ကြည့်ရှုရေး အစီအစဉ်များကို အကောင်အထည်ဖော်သွားမည်ဖြစ်ပါသည်။ အဆိုပါစက်ရုံ၏ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်ကို ရေရှည်ဖွံ့ဖြိုးတိုးတက်ကောင်းမွန်သော ပတ်ဝန်းကျင် အဖြစ် အကောင်အထည်ဖော်ဆောင်ရွက်ရန် ပတ်ဝန်းကျင်ဆိုင်ရာ ဆိုးကျိုးသက်ရောက်မှုများကို လျော့နည်းစေရန် စီမံခန့်ခွဲမှုအစီအစဉ်များနှင့် စောင့်ကြပ်ကြည့်ရှုမည့်အစီအစဉ်များကို အောက်ပါအတိုင်းပတ်ဝန်းကျင်ဆိုင်ရာ အကြောင်းအရာတစ်ခုချင်းစီအလိုက် ခွဲခြားထားပါသည်။

၁။ လေထုညစ်ညမ်းမှုနှင့် ဖုန်မှုန့်ဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်

- စက်ရုံတွင် ကာဗွန် နှင့် လေထုညစ်ညမ်းမှု လျော့ချရန် သစ်ပင်ပန်းပင်များ စိုက်ပျိုးထားရှိခြင်း၊
- စက်ရုံအတွင်း မည်သည့် စွန့်ပစ်အမှိုက်များကို မီးရှို့ဖျက်စီးခြင်းအား မပြုလုပ်စေခြင်း၊
- အမှုန်များသောနေရာများတွင် လုပ်ငန်းလုပ်ဆောင်ရမည့် လုပ်သားများကို မျက်နှာအုပ် (Mask) များတပ်ဆင်စေခြင်း။

၂။ ရေသုံးစွဲမှုဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်

- ရေအသုံးပြုမှု အတွက် ရေအသုံးပြုမှု ထိန်းချုပ်သည့် ပစ္စည်း တပ်ဆင်ထားရှိစေခြင်း
- ရေအသုံးပြုသည့် နေရာများ ၊ အိမ်သာများတွင် ရေကို သင့်လျော်သော နည်းလမ်းနှင့် အသုံးပြုခြင်း နှင့် ထိန်းသိမ်းစောင့်ရှောက်ခြင်း ဆိုင်ရာ နည်းလမ်းများ သိရှိစေခြင်းနှင့် သင်တန်းပို့ချခြင်း

၃။ ရေဆိုးစွန့်ပစ်မှုဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်

- စက်ရုံ၏ မိလ္လာစနစ်နှင့် ရေစီးကြောင်းများ နှင့် အနီးဝန်းကျင်ရှိ ရေမြောင်းစနစ်များကို ရေလုံစေခြင်းနှင့် လုံလောက်သော အရွယ်အစား ထားရှိစေခြင်း
- မိလ္လာလိုအပ်ချက်များကို ပုံမှန်စစ်ဆေးပေးခြင်းနှင့် ပြုပြင်ထိန်းသိမ်းခြင်း

၄။ အမှိုက်စွန့်ပစ်မှုဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်

- စက်ရုံအတွင်း မည်သည့်စွန့်ပစ်ပစ္စည်းများကို မြစ်၊ ချောင်း၊ အင်းအိုင် အတွင်းသို့ မစွန့်ပစ်ရ၊
- စွန့်ပစ်ပစ္စည်းများအား ပြန်လည်အသုံးပြုရန်နှင့် အန္တရာယ်ရှိစွန့်ပစ်ပစ္စည်းအဖြစ် ခွဲခြားစွန့်ပစ်စေခြင်း၊
- အစိုင်အခဲစွန့်ပစ်ပစ္စည်းများ(အဝတ်အစုတ်စ၊ ညှပ်စ)အား ပြည်တွင်းဝယ်ယူသူများထံ ပြန်လည်ရောင်းချစေခြင်း၊

Environmental Management Plan

- အိမ်သုံးစွန့်ပစ်အမှိုက်နှင့် လုပ်သားစွန့်ပစ် အမှိုက်များကို YCDC နှင့် နေ့စဉ် စွန့်ပစ်ခြင်း
- အမှိုက်စွန့်ပစ်ခြင်းနှင့် ပတ်သက်၍ သင်တန်းပို့ချပေးခြင်း

၅။ ဆူညံမှုထိန်းခြင်းဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်

- မီးစက်အသုံးပြုမှုအတွက် အသံလုံခန်းများဆောက်လုပ်ထားရှိခြင်း၊
- လုပ်ငန်းသုံးပြုသည့်ယာဉ်များကို သတ်မှတ်အရှိန်ထက် ကျော်လွန်၍ မမောင်းနှင်စေခြင်း
- လုပ်ငန်းခွင်အတွင်း လုပ်သားများအတွက် တစ်ကိုယ်ရေသုံး ကာကွယ်ရေးပစ္စည်း (PPE) များလုံလောက်စွာ ထားရှိပေးခြင်း
- လုပ်သားများကို PPE အသုံးပြုမှုနှင့် ပတ်သက်၍ သင်တန်းပို့ချပေးခြင်းနှင့် ဆူညံသံများသော နေရာတွင် အလုပ်လုပ်စဉ်တွင် PPE များကိုသေချာစွာ အသုံးပြုစေခြင်း

၆။ အရေးပေါ်တုန့်ပြန်ရေး အစီအစဉ်

- မီးသတ်ကိရိယာများနှင့် မီးသတ်နည်းစနစ်များကို လုပ်ငန်းဆောင်ရွက်သည့် နေရာတိုင်းတွင် ထားရှိပေးခြင်းနှင့် သိရှိစေခြင်း
- မီးဘေးကာကွယ်ရေး လမ်းကြောင်းမြေပုံ အသေးစိတ်ကို ပြုလုပ်ထားရှိရန်နှင့် လုပ်သားများကို အသိပေးထားခြင်း
- လုပ်သားများကို ငလျင်လှုပ် လျှင် လုပ်ဆောင်ရမည့် အချက်များကို အသိပေးထားခြင်း
- စက်ရုံ၏ ဆေးဘက်ဆိုင်ရာ အဖွဲ့အစည်းမှ ရှေးဦးသူနာပြုစုနည်းများ အတွက် ပြင်ဆင်ထားရှိခြင်း
- မီးသတ်တပ်ဖွဲ့ ၊ ကယ်ဆယ်ရေးအဖွဲ့များ ဖြင့် လုံခြုံရေးကော်မတီ ဖွဲ့စည်းခြင်း၊ ကော်မတီမှ လုံခြုံရေး စီမံခန့်ခွဲရေး နှင့် ပတ်သက်သည်များ ဆွေးနွေးရန် လစဉ် အစည်းအဝေးများ ပြုလုပ်စေခြင်း

၇။ စောင့်ကြပ်ကြည့်ရှုရေး အစီအစဉ်

၈။ လူမှုအကျိုးတူ ပူးပေါင်းပါဝင်မှု အစီအစဉ် CSR Plan

၉။ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်အတွက် ငွေကြေးလျာထားမှု

၁၀။ မကြေနပ်မှု ဖြေရှင်းခြင်း နည်းလမ်း

အဆိုပြုလုပ်ငန်း၏ လူထုအကျိုးတူပူးပေါင်းပါဝင်မှုများအဖြစ် အကျိုးအမြတ်၏ ၂% ကို ကျန်းမာရေး၊ ပညာရေးနှင့် နယ်ပယ်ဖွံ့ဖြိုးတိုးတက်ရေးများတွင် ထည့်ဝင်လှူတန်းသွားမည်ဖြစ်ပါသည်။ အဆိုပြုလုပ်ငန်း၏ ပတ်ဝန်းကျင်စောင့်ကြပ်ကြည့်ရှုရေးလုပ်ဆောင်ရမည့် လုပ်ငန်းစဉ်များနှင့် ဖြေရှင်းရမည့်နည်းလမ်းများကိုလဲ ထည့်သွင်းဖော်ပြထားပါသည်။

Environmental Management Plan

သက်ဆိုင်သူများနှင့် တွေ့ဆုံဆွေးနွေးခြင်း

သက်ဆိုင်သူများနှင့် တွေ့ဆုံဆွေးနွေးခြင်း အစီအစဉ်ကို ၂၁ ရက်၊ ဩဂုတ်လ၊ ၂၀၂၀ ပြည့်နှစ်တွင် စက်မှုဇုန်စီမံခန့်ခွဲရေးဇုန်ကော်မတီရုံး (၁)၊ ရွှေပြည်သာမြို့နယ် တွင် ပြုလုပ်ခဲ့ပါသည်။ တွေ့ဆုံပွဲ အစည်းဝေးတွင် သက်ဆိုင်ရာ အစိုးရအဖွဲ့ရုံး၏ တာဝန်ရှိပုဂ္ဂိုလ်များ၊ စက်မှုဇုန်စီမံခန့်ခွဲမှုကော်မတီ၏ တာဝန်ရှိပုဂ္ဂိုလ်များမှ လိုအပ်သည်များကို အကြံပေးခြင်း၊ စီမံကိန်း၏ အစီရင်ခံစာတွင် လိုအပ်သည်များကို ဖြည့်စွက်ပေးရန် အကြံပြုချက်များပေးခဲ့ပါသည်။ ပြုလုပ်ခဲ့သည့် အစီအစဉ်အကျဉ်းကိုပါ ထည့်သွင်းဖော်ပြထားပါသည်။

အချိန်	၂၁ရက်၊ ဩဂုတ်လ၊ ၂၀၂၀ ပြည့်နှစ်။ နံနက် ၁၀:၃၀ - နံနက် ၁၂:၃၀ အထိ
နေရာ	စက်မှုဇုန်စီမံခန့်ခွဲရေးဇုန်ကော်မတီရုံး (၁)။ ရွှေပြည်သာမြို့နယ်။ရန်ကုန်တိုင်းဒေသကြီး။
အစီအစဉ်အကျဉ်း	<ul style="list-style-type: none"> • စက်ရုံနောက်ခံအကြောင်း • စက်ရုံလုပ်ငန်းအကြောင်း • ပတ်ဝန်းကျင်ထိခိုက်မှုနှင့် လျော့ချရေးအစီအစဉ် • ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်နှင့် စောင့်ကြပ်ကြည့်ရှုမှုအစီအစဉ် • အမေးအဖြေကဏ္ဍ

နိဂုံး

နိဂုံးချုပ်အားဖြင့် ယခုစီမံကိန်းသည် ဆောက်လုပ်ရေးကာလ၊ လုပ်ငန်းလည်ပတ်သည့်ကာလနှင့် လုပ်ငန်းဖျက်သိမ်းသည့် ကာလသုံးခုလုံးတွင် ဒေသခံပြည်သူများကိုအလုပ်အကိုင် အခွင့်အလမ်းများ ဖန်တီးပေးနိုင်သည်။ ကာလသုံးခုလုံးတွင် ဖြစ်ပေါ်လာနိုင်သော ထိခိုက်မှုများကို လျော့ချနိုင်မည့် နည်းလမ်းများနှင့် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်အား အကောင်အထည်ဖော်ခြင်းဖြင့် လျော့ချနိုင်သည်။ ပတ်ဝန်းကျင်စောင့်ကြပ်ကြည့်ရှုမှု အစီအစဉ်အား စီမံကိန်း၏ ပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေးကို စောင့်ကြပ်ကြည့်ရှုရန် မဖြစ်မနေ အကောင်အထည်ဖော်ပေးရမည်။ စီမံကိန်းကောင်အထည်ဖော်သူသည် ပတ်ဝန်းကျင်ထိခိုက်သိမ်းဆီးရေးဦးစီးဌာနမှ ယခုအစီရင်ခံစာအား စစ်ဆေးပေးရန် ပြန်လည်ပေးပို့လာသော သဘောထားမှတ်ချက်နှင့် အကြံပြုချက်များကိုလိုက်နာရမည်။ ထို့ပြင် စီမံကိန်းအကောင်အထည်ဖော်သူသည် မြန်မာနိုင်ငံ၏ ပတ်ဝန်းကျင်နှင့် သက်ဆိုင်သောမူဝါဒများ၊ ဥပဒေများ၊ နည်းဥပဒေများ၊ သတ်မှတ်ချက်များကို လိုက်နာရန်လိုအပ်ပါသည်။

EXECUTIVE SUMMARY

Introduction

Environmental Management Plan is required for ensuring sustainable development. It should not affect the surrounding environment adversely. The management plan presented in this chapter needs to be implemented by the proposed expansion of NAY SHWE LIN CO., LTD. The Environmental Management Plan (EMP) aims at controlling pollution at source with available and affordable technology followed by treatment measures. Waste minimization and waste recycling measures are emphasized. In addition to the Industry specific control measures, the proposed industry should adopt following guidelines.

The project is new investment for manufacturing of garment by Contract Manufacturing Process (CMP) basic company from China. The project is issued by the Yangon Region Investment Committee (YRIC) on 18 March 2020 with the Endorsement No. (YGN- 373/2020). YRIC notified for the environmental approval and comments of the Ministry of the Natural Resources and Environmental Conservation (MONREC) on the proposed project and had approved the proposal for investment in Manufacturing of garment on CMP basis under the name of NAY SHWE LIN CO., LTD as a solely owned foreign investment from the China.

According to the Myanmar Environmental Conservation Law (2012), it requires that the proponents of every development project in the country submit either an Initial Environmental Examination (IEE) or an Environmental Impact Assessment (EIA) to Ministry of Natural Resources and Environmental Conservation (MONREC). As per the comments of Environmental Conservation Department (ECD), said project requires an Environmental Management Plan (EMP) to meet the environmental assessment requirements of Notification No. Yaka- 1/3/4 (EIA) (2225/2020) on 5 August 2020. Therefore, NAY SHWE LIN CO., LTD commissioned MYANWEI ENVIRONMENTAL SOLUTIONS CO.,LTD. for EMP report study. The specific objectives of this study are;

- ✓ Identify the major impacts that are may arise from the activities of the proposed project on natural environmental and socio-economic environment of the project area
- ✓ Describe the mitigation measures to minimize these impacts
- ✓ Prepare and implement Environmental Management Plan for the project
- ✓ Make sure that EMP is developed sufficiently and sound for the proposed project and
- ✓ Corporate Social Responsibility Plan (CSR Plan) plays an essential part for the improvement of the social welfare of community as well as development of the region.

The proposed project aims to manufacturing sort of bag under CMP system and 100% export to foreign country.

The main purpose of this EMP report is to obey the rule and regulation of Local and International Environmental Protection programs and harmonize with the environmental and also describes the responsible person and his responsibility.

Policy, Legal and Institutional Framework

National Laws and Regulations, international guidelines are referred for Environmental Management Plan of the proposed project.

Environmental Management Plan

1. The Constitution Law, 2008
2. The Environmental Conversation Law, 2012
3. The Environmental Conversation Rule, 2014
4. Environmental Impact Assessment Procedure, 2015
5. National Environmental Quality (Emission) Guideline, 2015
6. National Myanmar Environmental Policy, 2019
7. Foreign Investment Law, 2012
8. Foreign Investment Rule, 2013
9. Myanmar Investment Rule, 2017
10. Myanmar Insurance Law, 1993
11. Payment of Wages Law, 2016
12. The Payment of Wages Act, 1936
13. Yangon City Development Committee Law, 2018
14. The Amended Law for Factories Act, 1951 (2016)
15. The Private Industrial Enterprise Law
16. The Export and Import Law, 2012
17. The Prevention of Hazard from Chemical and Related Substances Law, 2013
18. The Underground Water Act
19. Myanmar Fire Brigade Law, 2015
20. Fire Safety Procedure
21. The Electricity Law, 2014
22. Boiler Law, 2015
23. Labor Dispute Settlement Law, 2012
24. The Law Amending the Settlement of Labor Dispute Law, 2019
25. The Social Security Law, 2012

Environmental Management Plan

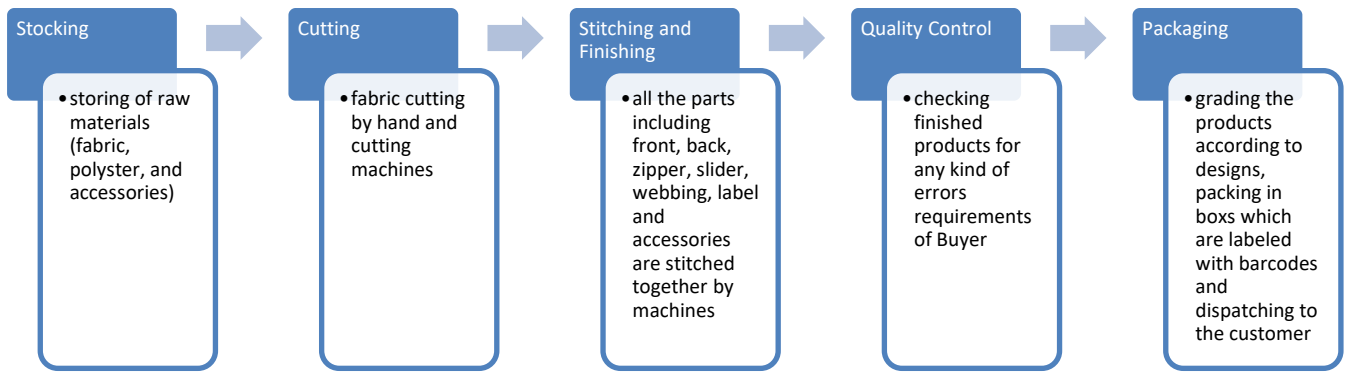
- 26. The Employment and Skill Development, 2013
- 27. The Worker’s Compensation Act, 1923
- 28. The Leave and Holidays Act (1951, partially reused in 2014)
- 29. The Minimum Wage Law, 2013
- 30. Public Health Law, 1972
- 31. Prevention and Control of Communicable Disease Law (1995 Amendment in 2011)
- 32. Occupational Safety and Health Law, 2019
- 33. The Law on Standardization
- 34. လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတက်သော ဝတ္ထုပစ္စည်းများဆိုင်ရာ ဥပဒေ (2018)
- 35. The Motor Vehicles Law, 2015
- 36. The Conversation of Water Resources and River Law, 2006
- 37. The Commercial Tax Law (1990 Amended 2014)

Project Description

Type of Proposed Business	Manufacturing of Garment on CMP Basis
Type of investment	100% Foreign Investment
Name of Company	NAY SHWE LIN CO., LTD
Land lease year	25 years
Total land area	2.446 acres (9898.610 sq-m)
Type of land	Industrial Land
Construction Period	2 year
Address of Proposed Project	Plot No. (3), Myay Taing Block No.49, War Tayar Industrial Zone, Shwe Pyi Thar Township, Yangon Region.
Contact Person	Ko Ko Zaw 09-421086010

The proposed project is located at Yangon region. The total area of project site is 2.446 acres (9898.610 sq-m). Main structure is designed into production area for one building. Transformer room and generator room are separated by main factory building structure. The factory layout plan which is also can be seen in this report. The main product of the NAY SHWE LIN CO., LTD is various kinds of garment. The Utilities for proposed factory include electrical power, fuel oil for emergency used generator and water for domestic use. Electric power is used for the purpose of to provide lighting.

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Production Process of the Factory

Production rate of the factory is produced between first year of operation and ten-years operation as 2,450,000 to 2,700,000 pieces annually. It is required of work force (7) foreigners technician and (1408) local employees for first year operation to 10 years operation.

Brief Description of Surrounding Environment

Primary data and secondary data collections are very imported to assess environmental impacts. Primary data collections (environmental quality measurements and monitoring) play an important role for conducting EMP. Therefore, MYANWEI ENVIRONMENTAL SOLUTIONS CO.,LTD. conducted air quality, temperature and humidity, noise level measurement and light pollution measurement on 24 July 2020 and compared with the National Environmental Quality (Emission) Guidelines and also described how to reduce the impact and how to maintain the pollutions. Also described the weather conditions, rainfalls and socio-economic component of the proposed project.

Potential Environmental Impact and Mitigation Measure

Possible effects, such as impacts on environmental resources, ecological resources, human and waste disposal due to construction, operation and decommissioning processes. Potential impacts for the proposed projects are normally differentiated into three main categories, viz, Construction phase, Operation phase and Decommissioning phase.

The relative importance of each impact is assessed based on the understanding that general mitigation measures will be integrated into the baseline project. Therefore, when the general mitigation measures reduce impacts to the point of rendering them negligible they are excluded from further analysis. Once the significance of the impact is established as more than negligible, it is described and additional, specific mitigation measures may be proposed to allow optimal integration of the project into the environment.

Evaluation and Perdition of Significant Impacts

Environmental Impact	Project Activities	Significant of Potential Impacts					Impact Significance
		M	D	E	P	SP	
Construction Phase; It is not assessed in this phase, because of construction is already completed during EMP preparation.							
Operation Phase							

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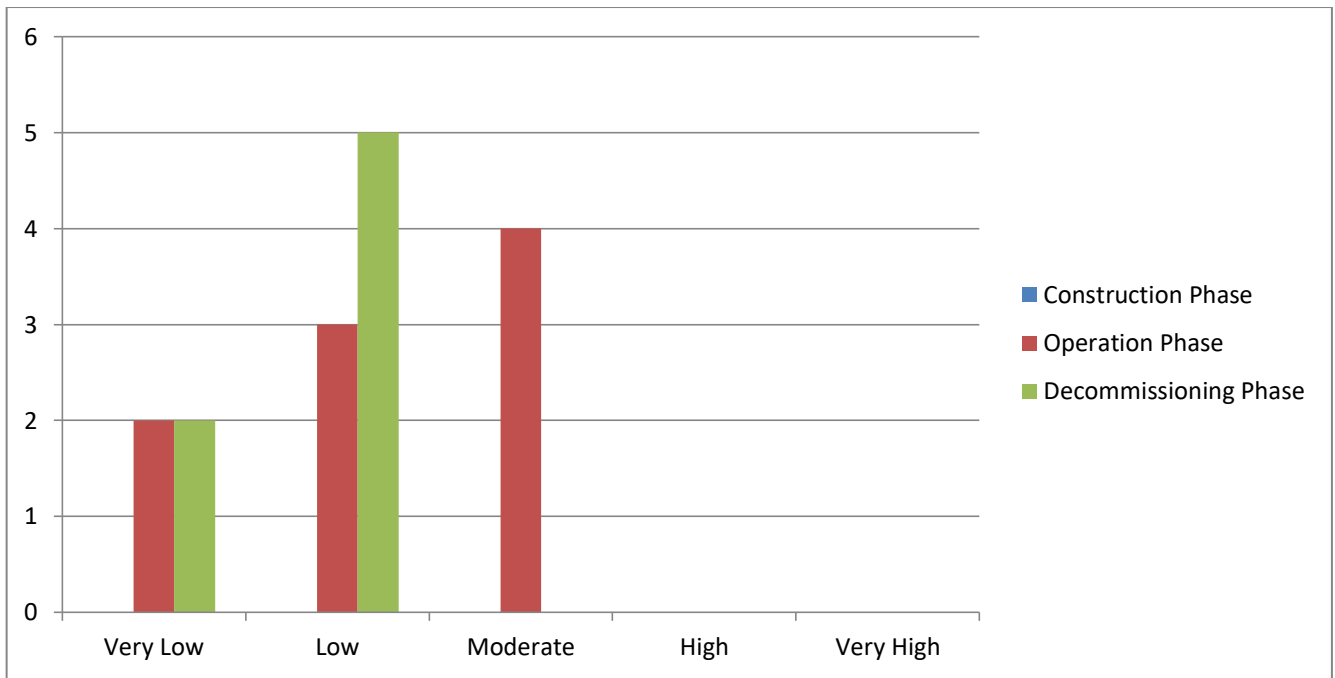
Environmental Impact	Project Activities	Significant of Potential Impacts					Impact Significance
		M	D	E	P	SP	
Air pollution	<ul style="list-style-type: none"> Dust and GHGs emission from vehicles used for transporting raw materials and final products Particulate matters emission from the activities of production process Emission of smoke from steam boiler (rice briquettes) and kitchen Emission from emergency diesel generator 	2	4	2	2	16	Low
Water pollution	<ul style="list-style-type: none"> Sewage disposed of from the toilets Oil spill and grease leaks from transporting vehicles and machinery equipment used in operation phase 	2	4	2	2	16	Low
Soil Contamination	<ul style="list-style-type: none"> Accidental spillage of oil used by vehicles operating 	1	1	1	2	6	Very Low
Noise Pollution	<ul style="list-style-type: none"> Generating noise from the production machinery Noise from the generating of the emergency generators 	2	4	1	2	14	Very Low
Fire Hazard	<ul style="list-style-type: none"> Poor electrical installations waste disposed area Raw materials storage 	3	5	2	3	30	Moderate
Solid waste	<ul style="list-style-type: none"> residual pieces of fabric scraps from the production lines Waste from packaging materials Waste from kitchen, dormitory and office. 	3	4	1	4	32	Moderate
Liquid waste	<ul style="list-style-type: none"> Septic system and sewage. Domestic liquid waste disposal from office, kitchen and dormitory. 	2	4	2	4	32	Moderate
Hazardous waste	<ul style="list-style-type: none"> Engine oil leaks, spills at diesel storage and during fuel refueling. Used oil and lubricant discharged from the maintenance of vehicles and machines. 	2	4	1	2	14	Very Low
Occupational Health and Safety (Accidents, Injuries)	<ul style="list-style-type: none"> Accidental cases cause by operating machines. Electricity and emergency diesel generators. Unloading, mixing, cutting, pressing and packaging activities. Accidental cases of thermic fluid heater 	3	4	1	4	32	Moderate
Social-economic Condition	<ul style="list-style-type: none"> Job opportunities for local people 	-	-	-	-	-	Positive Impact
Decommissioning Phase							
Air pollution	<ul style="list-style-type: none"> Decommissioning of buildings and related materials Transportation of demolished 	3	1	1	4	20	Low

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Environmental Impact	Project Activities	Significant of Potential Impacts					Impact Significance
		M	D	E	P	SP	
	materials						
Water pollution	<ul style="list-style-type: none"> • Sewage form decommissioning workers • Demolition machinery equipment 	3	1	1	3	15	Low
Soil Contamination	<ul style="list-style-type: none"> • Decommissioning of buildings and related materials • Transportation of demolished materials 	3	1	1	3	15	Low
Noise Pollution	<ul style="list-style-type: none"> • Decommission activities • Transportation of demolished materials 	3	1	1	3	15	Low
Waste disposal	<ul style="list-style-type: none"> • Sewage system • Demolished debris such as bricks, concrete materials 	2	1	1	3	12	Very Low
Hazardous waste	<ul style="list-style-type: none"> • Used lubricants from decommissioning vehicles and machines 	2	1	1	3	12	Very Low
Occupational Health and Safety (Accidents, Injuries)	<ul style="list-style-type: none"> • Decommissioning activities • Transportation of demolished materials 	3	1	2	3	18	Low
Social-economic Condition	<ul style="list-style-type: none"> • Temporary job opportunities for local people 	-	-	-	-	-	Positive Impact

According to the result of analysis, it can be concluded that most of the project activities have low significance on environment, in all phases. Project activities that can produce solid waste and liquid waste are moderate significance. Moreover, project activities that emit dust and GHGs and accidental cases are moderately significant. Fire hazard potential of the proposed project and noise pollution are highly significant. But this can be prevented or mitigated by using the following mitigation measures. The following figure shows the impact significance of the proposed project.

Environmental Management Plan



Impact Significance of the Proposed Project

Environment Management Program

The proposed project of environmental management plan, which need to made the Environmental Management System (EMS). In that plan, it includes not only reducing to the environmental and social-economic impact but also includes the environmental management plan and the monitoring plan. In this EMP to implement the health, safety and occupational for the industry, they need to create a team and to must be implemented that. The EMP for NAY SHWE LIN CO., LTD has been prepared to address potential issues based upon discussion with factory management, workers, local community’s view, stakeholder consultation and from the site visit of experts. The EMP is additional to and compliments the factory’s safety management system. The following environmental issues that require environmental management plans based upon the potential impacts of activities by for NAY SHWE LIN CO., LTD are as follows:

1. Air pollution/Dust Management plan
2. Water Consumption Management Plan
3. Wastewater Management Plan
4. Solid Waste Management plan
5. Noise Management
6. Emergency Response plan
7. Environmental Monitoring and Reporting
8. Corporate Social Responsible (CSR) Plan
9. Budget Plan
10. Grievance Redress Mechanism

Public Consulting

This chapter presents results of public consultation and information disclosure conducted for the NAY SHWE LIN CO., LTD. Public participation can consider as the required element of the EMP process. In this study various stakeholder participation were made. Public consultation during

Environmental Management Plan

preparation of EMP report was conducted on August 21, 2020, following the EIA procedure. The project's stakeholders in this category are key officials or representatives of the regional and local authorities who have direct responsibilities for the administration of the EMP process for environmental and social clearance and issuing operation permits for proposed development projects. For this factory, relevant key offices at the national level are Environmental Conservation Department (ECD) and Industry Supervision and Inspection Department. Relevant key office at the regional level is Yangon City Development Committee (YCDC), General Administrative Department, Fire Department, Factories and General Labor Law Inspection Department, Public Health Department, Industrial Supervision and Inspection Department.

Time and Date	21 August 2020 10:30AM-12:30PM
Venue	Industrial Zone Committee (1), Shwe Pyi Thar Township, Yangon.
Agenda	Presentation on the Background Information of Project, Project Description, Impact Assessment, Environmental Mitigation Environmental Management Plan and Monitoring Plan Received and Answer from feedback of participants

Conclusion & Recommendation

In Conclusion, the environmental management practices, procedures and responsibilities are defined here in to get full compliance with the existing environmental policy, laws, rules and instructions of the Republic of the Union of Myanmar. All the feed backs, desired and needs of local public recorded in public consultation meetings are well addressed and incorporated in formulation of EMP. It has been figured out that, the proposed factory is going to generate local employment opportunities and enhance capabilities and working skills of employees. Consequently, their socio-economic standard is expected to be improved and undertaking corporate social responsibilities (CSR) as recommended. The study further concluded that positive impacts will be of immense benefit to the local community and national development as well.

This is recommended that;

- All appropriate environmental management measures detailed in this report, together with any other environmental management commitments should be implemented throughout the entire life of the factory
- Solid wastes and liquid wastes need to dispose according to YCDC rules and regulation
- Workers should be provided proper training and it should be ensured that workers use PPE during factory operation area.
- Daily, monthly and annual action plan shall be formulated based on this EMP and practiced at operation level.
- Keep full records of environmental management activities and present to annual independent third party environment audit.

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- Abide environmental policy, laws, rules and instructions of the Republic of the Union of Myanmar.

Finally, the proponent should follow the comments and suggestions made by ECD after reviewing this EMP report. Once concerned authorities approve EMP, effective implementation of EMP by the project proponent is essential. The proponent should abide environmental policy, laws, rules and instructions of the Republic of the Union of Myanmar.

1. INTRODUCTION

Environment Management Plan is required for ensuring sustainable development. It should not affect the surrounding environment adversely. The management plan presented in this chapter needs to be implemented by the proposed expansion of NAY SHWE LIN CO., LTD. The Environment Management Plan (EMP) aims at controlling pollution at source with available and affordable technology followed by treatment measures. Waste minimization and waste recycling measures are emphasized. In addition to the Industry specific control measures, the proposed industry should adopt following guidelines.

- ✓ Identify the major impacts that are may arise from the activities of the proposed project on natural environmental and socio-economic environment of the project area
- ✓ Describe the mitigation measures to minimize these impacts
- ✓ Prepare and implement Environmental Management Plan for the project
- ✓ Make sure that EMP is developed sufficiently and sound for the proposed project and
- ✓ Corporate Social Responsibility Plan (CSR) plays an essential part for the improvement of the social welfare of community as well as development of the region.

1.1. PROJECT BACKGROUND

The project is new investment for manufacturing of garment by Using on Contract Manufacturing Process (CMP) basic company from China. The Yangon Region Investment Committee (YRIC) issues the project on 18 March 2020 with the Endorsement No. (YGN- 373/2020). YRIC notified for the environmental approval and comments of the Ministry of the Natural Resources and Environmental Conservation (MONREC) on the proposed project and had approved the proposal for investment in manufacturing of garment on Cutting, Sewing and Packaging (CMP) basis under the name of NAY SHWE LIN CO., LTD.

According to the Myanmar Environmental Conservation Law (2012), it requires that the proponents of every development project in the country submit either an Initial Environmental Examination (IEE) or an Environmental Impact Assessment (EIA) to Ministry of Natural Resources and Environmental Conservation (MONREC). As per the comments of Environmental Conservation Department (ECD), said project requires an Environmental Management Plan (EMP) to meet the environmental assessment requirements of Notification No. Yaka- 1/3/4 (EIA) (2225/2020) on 5 August 2020. Therefore, NAY SHWE LIN CO., LTD commissioned MYANWEI ENVIRONMENTAL SOLUTIONS CO., LTD. (Myanwei) for EMP report study.

1.2. PROJECT PROPONENT PROFILE

This is the information of the project proponent from the registration of MIC which is described in below Table 1-1 and Table 1-2. The estimated authorized capital investment is about 2.251 US Dollar. Organization chart of Nay Shwe Lin Co., Ltd. is presented in Table 1-1.

Table 1-1 Project proponent information

Name of Shareholder	Citizenship	Percentage
NAY SHWE LIN CO., LTD;		100%

Environmental Management Plan

Name of Shareholder	Citizenship	Percentage
Representative by U Aung Myint MS. CHAN WAI KAM MONICA	Myanmar Chinese	

Table 1-2 Salient features of the project

Type of Proposed Business	Manufacturing of garment on CMP Basis
Type of investment	100% foreign investment
Type of Share	Ordinary Share
Type of land	Industrial Land
Total land area	2.446 acres (9898.610 sq-m)
Total building area	Two storey factory building (163 x 420 ft)
Land lease year	30 years
Construction period	2 year
Operation starting date	25 years investment permit
Address	Plot No. (3), Myay Taing Block No.49, War Tayar Industrial Zone, Shwe Pyi Thar Township, Yangon Region.
Contact person	Ko Ko Zaw 09-421086010

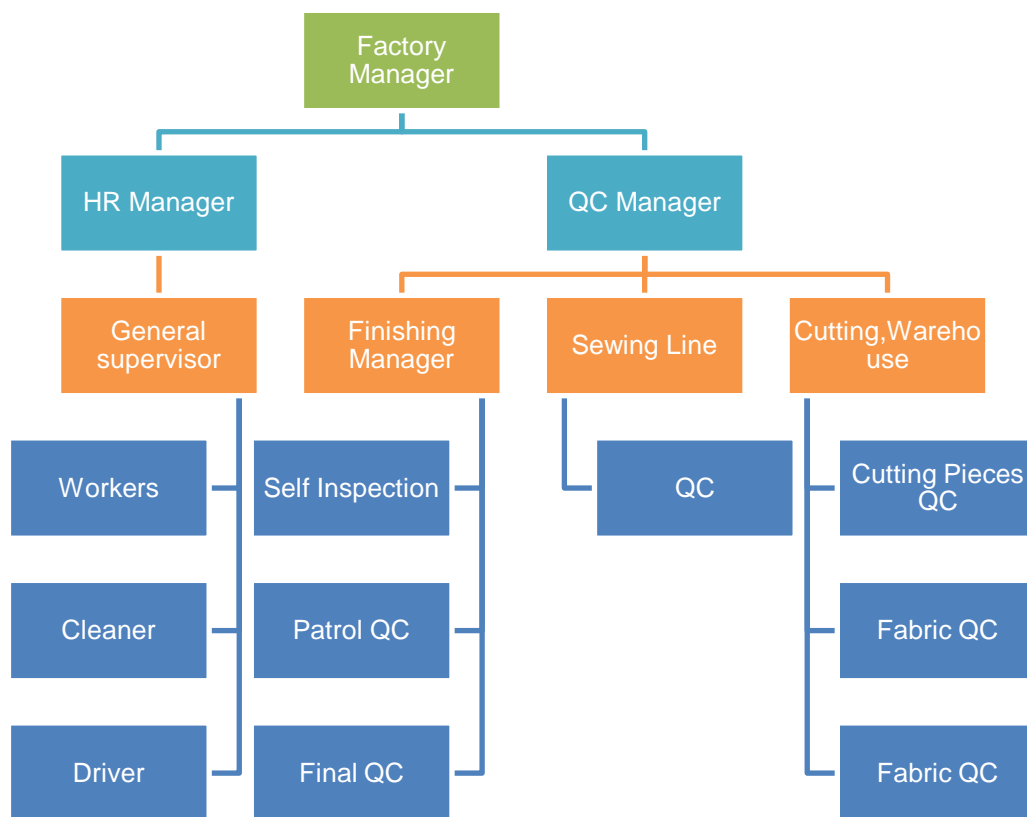


Figure 1-1 Organization Chart of NAY SHWE LIN CO., LTD

Environmental Management Plan**1.3. ENVIRONMENTAL CONSULT PROFILE**

MYANWEI ENVIRONMENTAL SOLUTIONS CO.,LTD. prepares the EMP for the proposed project. The field studies were carried out by Myanwei having experiences in conducting environmental assessments for various types of projects in Myanmar. The Myanwei team conducted field survey, assessment activities, and prepared the report. A reconnaissance study was performed on the proposed project site and baseline environmental data were collected from possible sources using the appropriate measuring devices. Data interpretation and analysis were made based on those collected data for the present and potential future conditions. Suitable measures were proposed for the impacts to be mitigated to reduce to acceptable ones. The environmental study was carried out by the study team and the following is a summary of team member's responsibilities during the study period.

Myanwei Environmental Solutions Company Limited	No. 36-38, 9 th floor (A), Grand Myay Nu Condo, Myay Nu Street, Sanchaung Township, Yangon, Myanmar.	01-501221 env@myanweiconsulting.com www.myanweiconsulting.com.
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Table 1-3 Member of EMP Study Team

Name	Qualification	Responsibility
Myanwei Consulting Group Limited	Transition Consultant Registration Certificate No. 0069	EIA Organization
Dr. Win Aung	M.B, B.S (Yangon), M.P.H (Mahidol University, Thailand)	Public Health and Health Management Expert
Dr. Hein Lynn Aung	M.B, B.S (Yangon), Business Management (International Collage of Management Sydney, Australia)	Project Director, Public Health Consultant, Project Management
Mr. Lin Htet Sein	MSc (Regional Geology) BSc (Hons) Geology Dip in Environmental Science Certificate in Environmental & Social Assessment Certificate in Environmental Stainability TCR No. 0048	Project Director, Environmental Consultant, Project Management
Ms. Wah Wah Zaw	B.E Material and Metallurgy Engineering Diploma in Environmental Planning and Management M.S Environmental Planning and Management	Senior Environmental Consultant, Social and Environmental Research, Quality control, Environmental Planning and Management
Ms. Khin Thu Zar Myint	B.E(Materials and Metallurgy) Dip in Environmental Planning and Management	Senior Environmental Consultant, Social Research, Public consultation, Social Economic Investigation
Mr. Kyaw Win Han	B.E. Chemical Engineering B. Tech Chemical Engineering	Junior Environmental Consultant, Team Leader of Baseline Survey, Monitoring Measure

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Name	Qualification	Responsibility
Mr. Aung Kyaw Moe	B.E. Chemical Engineering B. Tech Chemical Engineering	Junior Environmental Consultant, Monitoring measure, Document Administration
Mr. Saw Yan Naung	B.E. Chemical Engineering B. Tech Chemical Engineering	Junior Environmental Consultant, Monitoring Measure, Document Administration
Mr. Myat Ko Ko	B.Sc (Hons) Geology M.Sc. Geology (Economic and Mining) Certificate of Environment Management Certificate of Geotechnical Engineering (Myanmar Geoscience Society)	Junior Environmental Consultant, Monitoring Measure, Document Administration
Mr. Htoo Nanda Aung	B.Sc (Forestry)	Junior Environmental Consultant, Monitoring Measure, Document Administration
Mr. Si Yan Hein	B.Sc (Geology) Certificate of Geotechnical Engineering (Myanmar Geoscience Society)	Junior Environmental Consultant, Monitoring Measure, Document Administration
Mr. Kaung Sett Lwin	B.Sc (Hons) Geology Certificate of Geotechnical Engineering (Myanmar Geoscience Society)	Junior Environmental Consultant, Monitoring Measure, Document Administration

1.4. OBJECTIVE OF ENVIRONMENTAL MANAGEMENT PLAN

The primary purpose of the EMP is to provide an easily interpreted reference document which ensures that the project environmental commitments, safeguards and mitigation measures from the environmental planning documents, project approvals and project implementation. It aims to minimized impacts associated with the operation of the project. The purpose of operational EMP is to:

- Define details of who, what, where and when environmental management and mitigation measures are to be implemented
- Provide government and their stakeholders better on-site environmental management control over the life of operation
- Ensure that the commitments made as a part of the project's EMP are implemented throughout the project life
- Ensure the environmental management detail is captured and documented at all stages of the project

1.4.1. This EMP documents aims

- ❖ Provide environmental management plans that minimize the environmental impact of the works and identify those responsible for its implementation.
- ❖ Define the monitoring program which assesses the implementation

2. POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK

This section provides a brief summary of relevant national environmental legislations established by the MONREC and overview of current local and international environmental and social policies including related international or regional convention for the proposed project.

2.1. MYANMAR REGULATORY FRAMWORK

Myanmar has 24 ministries under the Office of the President as of May 2016. The leading ministries in-charge of environmental and social considerations is the Environmental Conservation Department (ECD) of the MONREC that was reorganized Ministry of Environmental Conservation and Forestry (MOECAF) in April 2016.

2.1.1. Laws and Regulations Related to Environmental and Social Considerations

Requirements related to environmental (and social) impact management for development projects are described in Table 2-1.

Table 2-1 List of Myanmar’s Law Relating to Environmental Management

Law and Regulation	Description
National Environmental Policy of Myanmar, (Notification No. 26/94 dated 5 December 1994)	To achieve harmony and balance between socioeconomic, natural resources and environment through the integration of environmental considerations into the development process enhancing the quality of the life of all its citizens.
Constitution 2008	
Section 37, (a)	The Union is the ultimate owner of all lands and all-natural resources above and below the ground, above and beneath the water and in atmosphere in the Union.
Section 37, (b)	The Union shall permit citizens rights of private property, right of inheritance, right of private initiative and patent in accord with the laws.
Section 372	The Union guarantees the right to ownership, the use of property and the right to private invention and patent in the conducting of business if it is not contrary to the provisions of this Constitution and the existing laws.
Section 45	The Union shall protect and conserve natural environment.
Section 390, (a), (b), (c), (d)	Every citizen has the duty to assist the Union in preserving and safeguarding the cultural heritage, conserving the environment, striving for the development of human resources, and protecting and preserving the public property.
Environmental Conservation Law, 30 March 2012	
Objectives	to contract a healthy and clean environmental and to conserve natural and cultural heritage for the benefit of present and future generations; to maintain the sustainable development through effective management of natural resources and to enable to promote international, regional and bilateral cooperation in the matters of environmental conversation.
Section 3	c) to enable to emerge a healthy and clean environment and to enable to conserve natural and cultural heritage for the benefit of present and future generations; (d) to reclaim ecosystems as may be possible which are starting to degenerate and disappear; (e) to enable to manage and implement for decrease and loss of natural resources and for enabling the sustainable use beneficially;

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<p>Provisions of Duties and Powers relating to the Environmental Conservation of the Ministry: Section 7</p>	<p>(a) To specify categories and classes of hazardous wastes generated from the production and use of chemicals or other hazardous substances in carrying out industry, agriculture, mineral production, sanitation and other activities;</p> <p>(b) To prescribe categories of hazardous substances that may affect significantly at present or in the long run on the environment;</p> <p>(c) To promote and carry out the establishment of necessary factories and stations for the treatment of solid wastes, effluents and emissions which contain toxic and hazardous substances;</p> <p>(j) To prescribe the terms and conditions relating to effluent treatment in industrial estates and other necessary places and buildings and emissions of machines, vehicles and mechanisms;</p> <p>(m) To lay down and carry out a system of EIA and SIA as to whether or not a project or activity to be undertaken by any Government department, organization or person may cause a significant impact on the environment;</p> <p>(o) To manage to cause the polluter to compensate for environmental impact, cause to contribute fund by the organizations which obtain benefit from the natural environmental service system, cause to contribute a part of the benefit from the businesses which explore, trade and use the natural resources in environmental conservation works.</p>
<p>Chapter VI Environmental Quality Standards: Section10</p>	<p>The Ministry may, with the approval of the Union Government and the Committee, stipulate the following environmental quality standards:</p> <p>(a) suitable surface water quality standards in the usage in rivers, streams, canals, springs, marshes, swamps, lakes, reservoirs and other inland water sources of the public;</p> <p>(b) water quality standards for coastal and estuarine areas;</p> <p>(c) underground water quality standards;</p> <p>(d) atmospheric quality standards;</p> <p>(e) noise and vibration standards;</p> <p>(f) emissions standards;</p> <p>(g) effluent standards;</p> <p>(h) solid wastes standards;</p> <p>(i) other environmental quality standards stipulated by the Union Government.</p>
<p>Section 14</p>	<p>A person causing a point source of pollution shall treat, emit, discharge and deposit the substances which cause pollution in the environment in accord with stipulated environmental quality standards.</p>
<p>Section 15</p>	<p>The owner or occupier of any business, material or place which causes a point source of pollution shall install or use an on-site facility or controlling equipment in order to monitor, control, manage, reduce or eliminate environmental pollution. If it is impracticable, it shall be arranged to dispose the wastes in accord with environmentally sound methods.</p>
<p>Section 16</p>	<p>A person or organization operating business in the industrial estate or business in the SEZ or category of business stipulated by the Ministry:</p> <p>(a) is responsible to carry out by contributing the stipulated cash or kind in the relevant combined scheme for the environmental conservation including the management and treatment of waste;</p> <p>(b) shall contribute the stipulated users' charges or management fees for the environmental conservation according to the relevant industrial estate, SEZ and business organization;</p> <p>(c) shall comply with the directives issued for environmental conservation according to the relevant industrial estate, SEZ or business.</p>
<p>Section 24</p>	<p>The project proponent has to allow relevant governmental organization or</p>

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	department to inspect whether performing is conformity with the terms and condition include in prior permission, stipulated by the ministry, or not.
Section 25	The project proponent has to comply with the terms and conditions include in prior permission.
Section 29	The project proponent has to abide by the stipulations included in the rules, regulations, by-law, order, notification and procedure, which are issued by said law.
Environmental Conservation Rules, 2014	
Rules 58	The Ministry shall form the EIA Report Review Body with the experts from the relevant Government departments, organizations.
Rules 59	The Ministry may assign duty to the Department to scrutinize the report of EIA prepared and submitted by any organization or person relating to EIA and report through the EIA Report Review Body.
Rules 61	The Ministry may approve and reply on the EIA report o IEE or EMP with the guidance of the Committee.
Sub-rule (a) of rule 68	The project proponent has to avoid emit, discharge or dispose the materials which can pollute to environment, or hazardous waste or hazardous material prescribed by notification in the place where directly or indirectly injure to public.
Sub-rule (b) of rule 68	The project proponent has to avoid performing to damage to ecosystem and the environment generated by said ecosystem.
Environmental Impact Assessment Procedure (December 2015)	
Objectives	<p>The project proponent has to be liable for all adverse impacts caused by doing or emitting of project owner or contractor, sub-contractor, officer, employee, representative or consultant who is appointed or hired to perform on behalf of project owner, under sub-paragraph (a) of paragraph 102.</p> <p>The project proponent has to support, after consulting with effected persons by project, relevant government organization, government department and other related persons, to resettlement and rehabilitation for livelihood until the effected persons by the project receiving the stable socio-economy which is not lower than the status in pre-project, under sub-paragraph (b) of paragraph 102</p> <p>The project proponent has to fully implement all commitments of project and conditions included in EMP. Moreover, the project proponent has to be liable for contractor and sub-contractor who perform on behalf of him/her have to fully abide by the relevant laws, rules, this procedure, EMP and all conditions, under paragraph 103.</p> <p>The project proponent has to be liable and fully & effectively implement all requirements included in ECC, relevant laws and rules, this procedure and standards under rule 104.</p> <p>The project proponent has to inform the completed information, after specifying the adverse impacts caused by the project, from time to time, under paragraph 105.</p> <p>The project proponent has to continuously monitor all adverse impacts in the pre-construction phrase, construction phrase, operation phrase, suspension phrase, closure phrase and post-closure phrase, moreover has to implement the EMP with abiding the all conditions included in ECC, relevant laws & rules and this procedure, under paragraph 106.</p> <p>The project proponent has to submit, as soon as possible, the failures of his or her responsibility, other implementation, ECC or EMP. If dangerous impact caused by this failure or failure should be known by the Ministry the project proponent has to submit within 24 hours and other than this situation has to</p>

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	<p>submit within 7 days from knowing it, under paragraph 107.</p> <p>The project proponent has to submit the monitoring report dually or prescribed time by Ministry in line with the schedule of EMP, under paragraph 108.</p> <p>The project proponent has to prepare the monitoring report in accord with the rule 109.</p> <p>The project proponent has to show this monitoring report in public place such as library, hall and website and office of project for the purpose to know this report by public within 10 days from the date which the report is submitted to the Ministry. Moreover, has to give the copy of this report, by email or other way which way agreed with the asked person, to any asked person or organization, under paragraph 110.</p> <p>The project proponent has to allow inspector to enter and inspect in working time and if it is needed by Ministry has to allow inspector to enter and inspect in the office and work-place of project and other work-place related to this project in any time, under paragraph 113.</p> <p>The project proponent has to allow inspector to immediately enter and inspect in any time if it is emergency or failure to implement the requirements related to social or environment or caused to it, under paragraph 115.</p> <p>The project proponent has to allow inspector to inspect the contractor and sub-contractor who implement on behalf of project, under paragraph 117.</p>
Screening: Section 23	<p>a) The project proponent shall submit the Project Proposal to the Ministry for Screening.</p> <p>b) The Ministry will send the Project Proposal to the Environmental Conservation Department to determine the need for environmental assessment.</p> <p>c) Following the preliminary Screening and verification that the Project Proposal contains all required documents and related materials, subject to Articles 8, 9, 10, 11, 26 and 27 the Department shall make a determination in accordance with Annex 1=‘Categorization of Economic Activities for Assessment Purposes’, taking into account Article 25 and the additional factors listed in Article 28 in order to designate the Project as one of the following, and then submit it to the Ministry:</p> <p>i) An EIA Type Project, or</p> <p>ii) An IEE Type Project, or</p> <p>iii) A Non IEE or EIA Type, and therefore not required to</p>
National Environmental Quality (Emission) Guidelines (NEQG) (December 2015)	
Objectives	To provide the basis for regulation and control of noise and vibration, air emissions, and liquid discharges from various sources in order to prevent pollution for purposes of protection of human and ecosystem health.
National Myanmar Environmental Policy (2019)	
National Environmental Policy Vision & mission	<p>Vision</p> <p>A clean environment, with healthy and functioning ecosystem, that ensures includes development and wellbeing for all people in Myanmar.</p> <p>Mission</p> <p>To establish national environmental policy principle for guiding environmental protection and sustainable development and for mainstreaming environmental consideration into all polices, laws, regulation, plans, strategic, programmes and projects in Myanmar.</p>
Foreign Investment Law, 2012	
Section 8	(a) To support the primary objectives of the national economic development plan, and for businesses that cannot yet be run by the State and citizens or businesses that have insufficient funds and technology.

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	<p>(b) Development of employment activities (l) Protection and conservation of the environment. (q) Appearing the required modern services for the Union and citizens.</p>
Section 17	<p>(a) To abide by the existing laws of the Republic of the Union of Myanmar. (b) To carry out the business by forming a company under the existing laws of Myanmar by the investor. (h) To carry out not to cause environmental pollution or damage in accord with existing laws in respect of investment business. (k) To carry out the systematic transfer of high technology relating to the business which are carried out by the investor to the relevant enterprises, departments or organizations in accord with the contract.</p>
Foreign Investment Rule, 2013	
Rule 54	<p>The promoter or investor shall: (a) comply with Environmental Protection Law in dealing with environmental protection matters related to the business; (b) shall carry out socially responsible investment in the interest of the Union and its people; (c) shall co-operate with authorities for occasional or mandatory inspection; (d) shall exercise due diligence to be in conformity and harmony with norms and standards prescribed by relevant Union Ministry in conducting construction of factories, workshops, buildings, and other activities; (e) shall enforce Safety and Health</p>
Myanmar Investment Rules, 2017	
Rule 202	<p>The project proponent has to comply with the conditions of the permit issued by the MIC and applicable laws when making the investment</p>
Rule 203	<p>The project proponent has to fully assist while negotiating with the authority for settling the grievance of the local community which has been affected due to investment</p>
Rule 206.	<p>The project proponent has to submit the passport, expert evidence or document of degree and profile to the MIC office for approval if decide to appoint a foreigner as senior management, technician expert or consultant according to subsection (a) of section 51 of Myanmar Investment Law</p>
Myanmar Insurance Law (1993)	<p>Section 15 - If the project proponent uses the owned vehicles the project owner has to ensure the insurance for the injured person. Section 16 - The project proponent has to ensure insurance to compensate for general damages because the project may cause damages to the environment and injury to the public.</p>
Payment of Wages Law (2016)	
Section 3 & 4	<p>The project proponent has to pay the wages in accord with section 3 and 4 of said law,</p>
Section 5	<p>The project proponent has to submit with the agreements of employees & reasonable ground to the department if it is difficult to pay because of force majeure included in a natural disaster</p>
Section 7-13	<p>The project proponent has to abide by the provisions of section 7 to 13 in the chapter (3) in respect of deduction from wages.</p>
Section 14	<p>The project proponent has to pay the overtime fees, prescribed by law, to the employees who work over working hours</p>

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Yangon City Development Committee Law (2018)	
Section (317)	The proponent shall not block the natural river channel, change the course, and disrupt the water channel, filling with soil within the city boundaries without the consent of the Committee
Section (318)	The project proponent shall not construct buildings, factories, and industries without sewage, toilet, septic tanks, and wastewater treatment system
Section (322)	The project proponent is not allowed to make activities that will produce noise pollution, water pollution, air pollution, and soil pollution to impact the environment within the city's boundaries
The Amended Law for Factories Act, 1951 (2016)	
Hygiene in Working Environment: Section 3	Mentions responsibilities of employer and manager regarding waste disposal, ventilation, extreme temperature, dust and gas generation, minimum space for each worker, lighting, portable drinking water and toilets for employees.
Safety in Working Environment: Section 4	States responsibilities of employer and manager concerning with machine guarding, personal protective equipment, housekeeping, aisles and exits, chemical storage and fire protection system to avoid accident.
The Private Industrial Enterprise Law, 1990	
Basic Principles: Section 3	Private Industrial Enterprises shall be conducted in accordance with the following basic principles: (a) to enhance the higher proportion of the manufacturing value added in the gross national product and value of services, and to increase the production of the respective economic enterprises which are related to the industrial enterprise; (b) to acquire modern technical know-how for raising the efficiency of industrial enterprises and to establish the sale of finished goods produced by the industrial enterprise not only in the local market, but also in the foreign market; (d) to cause narrowing down of the gap between rural development and urban development by causing the development and improvement of industrial enterprises; (e) to cause opening up of more employment opportunities; (f) to cause avoidance of or reduction of the use of technical know-how which cause environmental pollution; (g) to cause the use of energy in the most economical manner.
The Export and Import Law (2012)	
Objectives	The objectives of this law are as follows: a) To enable to implement the economic principles of the State successfully. b) To enable to lay down the policies relating to export and import that supports the development of the State. c) To cause the policies relating to export and import of the State and activities are to be in conformity with the international trade standards. d) To cause to be streamlined and speedy in carrying out the matters relating to export and import.
Prohibitions: Section 5	No persons shall export or import restricted, prohibited and banned goods.
Prohibitions: Section 6	Without obtaining license, no person shall export or import the specified goods which are to obtain permission.
Prohibitions: Section 5	A person who obtained any license shall not violate the conditions contained in the license.

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The Prevention of Hazard from Chemical and Related Substances Law, 2013	
<p>This law was enacted with the objectives of:</p> <ul style="list-style-type: none"> a. To protect from being damaged the natural environment resources and being hazardous any living beings by chemical and related substances; b. To supervise systematically in performing the chemical and related substances business with permission for being safety; c. To perform the system of obtaining information and to perform widely educative and research for using the chemical and related substance systematically; d. To perform the sustainable development for the occupational safety, health and environmental conservation. <p>Regarding the chemical management and storage, currently, regulations governing chemicals management are divided between various Acts, mostly dating from colonial times; hence the legislation is in many respects related to the British framework. The Factory Act and the Public Health Act contain the provisions for chemicals management and storage. Some chemicals are likely to require permits.</p>	
Underground Water Act	
<p>The underground water act enacted on the date of 21st June in 1930 whereas it is expedient to conserve and protect underground sources of water supply in the Union of Burma. This act prohibits sinking of a tube for the purpose of obtaining underground water except under and in accordance with the terms of a license granted by the water officer. Township Officer or sub-divisional officer had power to close a license tube after exercising jurisdiction over the local area concerned and the expense of such closure shall be recoverable from the owner of the tube as if it were an arrear of land-revenue.</p>	
Myanmar Fire Brigade Law (2015)	
<p>The Pyidaungsu Hluttaw enacted this law by Law No.11/2015 on the date of 17th March, 2015 with the following objectives:</p> <ul style="list-style-type: none"> (a) to take precautionary and preventive measures and loss of state own property, private property, cultural heritage and the live and property of public due to fire and other natural disasters (b) to organize fire brigade systemically and to train the fire brigade (c) to prevent from fire and to conduct release work when fire disaster, natural disaster, epidemic disease or any kind of certain danger occurs (d) to educate, organize and inside extensively so as to achieve public corporation (e) to participate if in need for national security, peace for the citizens and law and order 	
Section-8 Fire Safety Procedures	
Rule17	<p>The relevant Government Department or organization shall, for the purpose of precaution and prevention obtain the approval of the Fire Force Department before granting permission for the following cases:</p> <ul style="list-style-type: none"> a. Constructing three-storied and above buildings market and condominium buildings, b. Operating hotel, motel, guest house enterprise c. Constructing factory, workshop, storage facilities and warehouse d. Operating business expose to fire hazard by using in inflammable materials or explosive materials e. Producing and selling fire-extinguishing apparatuses f. Doing transport business, public utility vehicles train, airplane, helicopter, vessel, ship, tonkin tug
Rule18	<p>The relevant government department or organization shall obtain the opinion of the Fire Services Department for the purpose of fire precaution and prevention, when laying down plans for construction for town, village and downtown or village development plans</p>
The Electricity Law (2014)	
<p>In 2014, the new Electricity Law, a comprehensive piece of legislation covering licensing, a new regulatory commission, standards, inspection, tariff, and restrictions, replaced the Electricity Law of 1984. The Electricity</p>	

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<p>Law divides projects into “small” (up to 10 MW), “medium” (between 10 MW to 30 MW) and large (upwards of 30 MW); the states and regions can issue permits for small and medium power plants. In case these plants are not connected to the national grid, the Union Government Ministry is not the primary authority involved. The authorities have a legal right to use land for the purpose of power plants under the Electricity Law, and have the right to expand and maintain their facilities. The law also provides that the authorities can build transmission lines in accordance with existing laws.</p>	
<p>Boiler Law (2015)</p>	
<p>Chapter (2) Objective</p>	<p>The objectives of this law are as follows: (a) To obtain boilers in compliance with Myanmar Standards or International Standards (b) To prevent the country and citizens from hazards caused by boiler accidents (c) To use boilers in compliance with Myanmar Standards or International Standards within the country (d) To develop boiler technology and to produce experts capable of manufacturing, handling, repair, and maintenance of boilers (e) To optimize the use of boilers through effective utilization of fuel energy (f) To reduce the environmental, social and health impacts through long-lasting use of boilers.</p>
<p>Chapter (3) 4. With the permission of the Ministry, the inspector general can:</p>	<p>Notify the inspection methods and instructions according to the national or international standards for safe operations of boilers in line with this law, procedures and instructions Only the results obtained from the prescribed boiler standards and inspection methods will be approved.</p>
<p>Chapter (4). Boiler Registration</p>	<p>5. Anybody who would like to use a boiler in any kind of business should be registered. 6. Boiler should be manufactured according to Myanmar Standards or International Standards. 7. Those who would like to apply for boiler registration according to Section 5 should apply to the inspector with the application, documents and vouchers related to boiler 8. If the application regarding registration of boiler according to Section 7, the Registration Officer should conduct necessary inspection and submit results of the findings to the Inspector General. 9. The Inspector General should assess and inspect the submission of the Registration Officer according to Section 8 and could allow or reject for registration of the boiler. 10. The Inspector General shall define boiler size according to heated surface area in accordance with adopted procedures.</p>
<p>Chapter (13) Prohibitions</p>	<p>59. According to Section 21, nobody must alter, change, deface, deform or make embossed registration unnoticeable illegitimately. 60. Nobody is allowed to repair a boiler without boiler repair certificate. 61. Nobody is allowed to maintain a boiler without boiler maintenance certificate. 62. Nobody must alter safety relief valve in order to exceed the allowable pressure due to his consent or direction given by the owner. 63. Nobody must manufacture boilers against Section 25, Subsection 25 (a) and (b) enacted.</p>
<p>Labor Dispute Settlement Law (28 Mar 2012 replacing 1929 version)</p>	
<p>The Pyidaungsu Hluttaw hereby enacts this Law for safeguarding the right of workers or having good relationship between employer and workers and making peaceful workplace or obtaining the rights fairly, rightfully and quickly by settling the dispute of employer and worker justly.</p>	

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The Social Security Law (2012)	
The Social Security Law, enacted in 2012, was amended the Social Security Act in 1954. It stipulates the formation and implementation of social security systems.	
Section 53(a)	The employers and workers shall co-ordinate with the Social Security Board or insurance agency in respect of keeping plans for safety and health in order to prevent employment injury, contracting disease and decease owing to occupation and in addition to safety and educational work of the workers and accident at the establishment;
Labor Dispute Settlement Law (28 Mar 2012 replacing 1929 version)	
This law was enacted for safeguarding the right of workers or having good relationship between employer and workers and making peaceful workplace or obtaining the rights fairly, rightfully and quickly by settling the dispute of employer and worker justly. It stipulates that employer in which more than 30 workers are employed shall form the workplace coordinating committee consisting of the representatives of workers and the representatives of employer.	
Section 23	A party, employer or worker, may complain individual dispute relating to his grievance to the Conciliation Body and if he is not satisfied with the conciliation of such body in accord with stipulated manners, may apply to the competent court in person or by the legal representative.
Section 24	The relevant Conciliation Body shall, in respect of the collective dispute known or received by the complaint of either party, employer or worker, in respect of the dispute; information sent by the Minister or the Region or State Government or any other means, carry out as follows: (a) conciliating so as to be settled within three days, not including the official holidays, from the day of knowing or receipt of such dispute; (b) concluding mutual agreement if the settlement is reached in conciliating under sub-section (a), before the Conciliation Body.
Section 25	The Conciliation Body shall refer the collective dispute which does not reach settlement to the relevant Arbitration Body and inform the persons relating to the dispute.
Section 38	No employer shall fail to negotiate and coordinate in respect of the complaint within the prescribed period without sufficient cause.
Section 39	No employer shall alter the conditions of service relating to workers concerned in such dispute at the consecutive period before commencing the dispute within the period under investigation of the dispute before the Arbitration Body or Tribunal, to affect the interest of such workers immediately.
Section 40	The project proponent has to not close the work without negotiation, discussion on dispute in accord with this law, decision by Tribunal
Section 51	The project proponent has to pay the compensation decided by Tribunal f violates any act or any emission to omission to damage the interest of labour by reducing of product without efficient cause.
Section 46	Any employer who violates any prohibition contained in sections 38 and 39 shall, on conviction, be punished with a fine for a minimum of one-lakh kyats.
The Employment and Skill Development (2013)	
This law was enacted for safeguarding the right of workers or having skillful of workers and making peaceful workplace or obtaining the rights fairly, rightfully and quickly by settling the dispute of employer and worker justly. Employer shall conduct occupational training to enhance the skills of workers.	
Section 5	The project proponent has to appoint employees with the contract in line with the provision of section 5 of said law.
Section 14	Employer shall conduct occupational training to enhance the skills of workers who are to be employed as well as workers who are presently employed in accordance with the requirements of the enterprise and the policy of the Skills

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	Development Agency.
The Worker's Compensation Act, 1923	It stipulates that employer is required to make payments to employees who become injured or who die in any accidents arising during and in consequence of their employment. Such compensation also must be made for diseases which arise as a direct consequence of employment, such as carpal tunnel syndrome.
The Payment of Wages Act, 1936	The Payment of Wage Act defines the payment obligation to the workers employed in the factories or railway administration. It stipulates the method of payment stating that the payment should be made in cash on a regular payday, and allows legal action against delayed payment or un-agreeable deduction.
The Leave and Holidays Act (1951, partially revised in 2014)	This act has been used as the basic framework for leaves and holidays for workers with minor amendment in 2006 and 2014. This defines the public holidays that every employee shall be granted with full payment. It also defines the rules of leaves for workers including medical leave, earned leave and maternity leave.
The Minimum Wage Law (2013)	The minimum wage law, passed in March 2013, was replaced the 1949 Minimum Wage Act. The law provides a framework for minimum wage determination: the presidential office establishing a tripartite minimum wage committee shall decide minimum wage with industrial variation based on a survey on living costs of workers possibly every two years. This also stipulates equal payment.
Public Health Law (1972)	Chapter 2; Prevention of Public Health
Objectives	To ensure the public health include not only employees but also resident people and cooperation with the authorized person or organization of health department. This law focuses as follows The project owner has to cooperate with the authorized person or organization in line with the section 3 and 5 of said law. The project proponent has to abide by any instruction or stipulation for public health under the section 3 of said law. The project proponent has to allow any inspection, anytime, anywhere if it is needed under the section 5 of said law.
Prevention and Control of Communicable Disease Law 1995 (Amendment in 2011)	
Chapter 2 Prevention	4. When a Principal Epidemic Disease of a Notifiable Disease occurs; Immunization and other necessary measures shall be undertaken by the Department of Health, in order to control the spread thereof; The public shall abide by measures undertaken by the Department of Health under sub-section (a).
Chapter 4 Environmental Sanitation	For prevention of the outbreak of Communicable Disease and effective control of Communicable Disease when it occurs, the public shall under the supervision and guidance of the Health Officer of the relevant area, undertake the responsibility of carrying out the following environmental sanitation measures; Indoor, outdoor sanitation or inside the fence outside the fence sanitation; Well, ponds and drainage sanitation; Proper disposal o refuse and destruction thereof by fire; Construction and use of sanitary latrines; Other necessary environmental sanitation measures.
Occupational Safety and Health Law (2019)	
Purpose:	To effectively implement measures related to safety and health in every industry and to set occupational safety and health standards;

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Section-26 Sub-section (e)	The project proponent has to provide adequate and relevant personal protective equipment to workers free of charge and make them wear it during work so as not to expose workers to any serious occupational diseases or hazards.
Section-26 Sub-section (1)	The project proponent has to arrange and display occupational safety and health instructions, warning signs, notices, posters, and signboards.
Section-30 Sub-section (a)	The worker shall wear or use at all times any protective clothes, equipment and tools provided by the employer for the purpose of safety and health.
Section-30 Sub-section (d)	The worker shall proper and systematic use any equipment and tools, machines, any parts of the machines, vehicles, electricity and other substances being used at the workplace.
Section-30 Sub-section (e)	The worker shall take reasonable care for the safety and health of himself/ herself and of other persons who may be affected by his/ her acts or omissions at work.
The law on Standardization	
Objectives	The Objectives of this Law are as follows: to enable to determine Myanmar Standard to enable to support export promotion by enhancing quality of production organizations and their product, production processes and services to enable to protect the consumers and user by guaranteeing imports and products are not lower than prescribed standard, and safe from health hazards to enable to support protection of environment related to products, production process and services from impact, and conservation of natural resources to enable to protect manufacturing, distributing and importing the disqualified goods which do not meet the prescribed standard and those which are not safe and endangered to the environment to support on establishing the ASEAN Free Trade Area and to enable to reduce technical barriers to trade to facilitate technological transfer and innovation by using the standards for the development of national economic and social activities in accordance with the national development programme.
Chapter 7 Taking Action by Committee No. 19	The committee may, if it is found out that holder of certificate of certification violates any term or condition contained in the relevant recommendation, pass any of the following administrative order: warning suspending the certificate of certification for limited period cancelling the certificate of certification
လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတက်သောဝတ္ထုပစ္စည်းများဆိုင်ရာဥပဒေ (၂၀၁၈)	
ရည်ရွယ်ချက်	လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတက်သော ဝတ္ထုပစ္စည်းများကို စနစ်တကျပြုလုပ်ခြင်း၊ တင်သွင်းခြင်း၊ သယ်ယူခြင်း၊ သိုလှောင်ခြင်းနှင့် သုံးစွဲခြင်းတို့ပြုနိုင်ရန်၊ ယမ်းဘီလူးနှင့် ဆက်စပ်သုံးပစ္စည်းများ အသုံးပြုသည့် လုပ်ငန်းခွင်ဘေးအန္တရာယ် ကင်းရှင်း၍ လုံခြုံမှုရှိစေရန်၊ လုပ်ငန်းခွင်သုံး ပေါက်ကွဲစေတက်သော ဝတ္ထုပစ္စည်းများ ပြုလုပ်သုံးစွဲမှုများကို စနစ်တကျ ကြီးကြပ်နိုင်ရန်။
အခန်း ၇ တားမြစ်ချက်များ	လိုင်စင်ရရှိသူနှင့် ခွင့်ပြုချက်ရရှိသူ မညီသူမျှ စစ်ဆေးရေးအရာရှိချုပ် သို့မဟုတ် စစ်ဆေးရေးအရာရှိ၏ စစ်ဆေးခြင်းကို ခံယူရန် ငြင်းပယ်ခြင်းမပြုရ။

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အမှတ် ၁၈	
အမှတ် ၁၉ (ခ)	ပုဒ်မ ၈ အရ ကာကွယ်ရေးဌာနကောင်စီ အမှုဆောင်အဖွဲ့၏ အတည်ပြုချက်မရရှိဘဲ လုပ်ငန်းခွင် ပေါက်ကွဲစေတက်သော ဝတ္ထုပစ္စည်းများကို ဖျက်ဆီးခြင်းမပြုရ။
အမှတ် ၁၉ (ဂ)	ဤဥပဒေအရ ထုတ်ပြန်သည့် နည်းဥပဒေ၊ စည်းမျဉ်း၊ စည်းကမ်း၊ အမိန့်ကြော်ငြာစာ၊ အမိန့်နှင့် ညွှန်ကြားချက်များနှင့်အညီ ဆောင်ရွက်ရန် ပျက်ကွက်ခြင်း မရှိစေရ။
The Motor Vehicles Law (2015)	
Objectives	When the constructions periods and if it is needed in operation and production period for all vehicles <ul style="list-style-type: none"> The project proponent has to promise to abide by the nearly all provisions of said law and rules, especially the provisions related to air pollution, noise pollution and life safety.
The Conservation of Water Resources and Rivers Law (2006)	
Aims	The aims of this Law are as follows: <ul style="list-style-type: none"> (a) to conserve and protect the water resources and rivers system for beneficial utilization by the public; (b) to smooth and safety waterways navigation along rivers and creeks; (c) to contribute to the development of State economy through improving water resources and river system; (d) to protect environmental impact.
Chapter 5 Prohibitions No. 8	No person shall: <ul style="list-style-type: none"> (a) carry out any act or channel shifting with the aim to ruin the water resources and rivers and creeks. (b) cause the wastage of water resources wilfully.
No. 10	No person shall anchor the vessels where vessels are prohibited from anchoring in the rivers and creeks.
No.11 (a)	No person shall: dispose of engine oil, chemical, poisonous material and other materials which may cause environmental damage, or dispose of explosives from the bank or from a vessel which is plying, vessel which has berthed, anchored, stranded or sunk.
No. 12	No person shall carry out growing of garden, digging, filling, silt trapping, closing pond, dyke building or erecting spur in the river-creek boundary, bank boundary and waterfront boundary without the permission of the relevant government department and organization.
No. 15	No person shall carry out the construction of switchback, dockyard, wet dockyard, water-tight dockyard, building of jetty, pier, landing stage or vessel landing by drainage in the river-creek boundary, bank boundary and waterfront boundary without the permission of the Directorate.
The Commercial Tax Law (1990) Amended 2014	
Chapter 5 Registration and Intimation of Commencement of Enterprise 11 (b)	Any Person who commences operation of a goods production enterprise or service enterprise shall furnish letter of intimation on the commencement of the operation as such to the relevant Township Revenue Officer as stipulated by regulations.
Chapter 6 Monthly Payment of Tax and Sending of Three-Monthly Return	Any person who has taxable proceed of sale or receipt from service within a year, shall pay due monthly tax within ten days after the end of the relevant month. Moreover, a three-monthly return shall be furnished to the relevant Township Revenue Officer within one month after the

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12 (a)	end of relevant three-month.
12 (b)	The Township Revenue Officer may intimate any person to pay due monthly tax and send three-monthly return if there is cause to consider that he has taxable proceed of sale or receipt from service within a year.
12 (c)	If it is failed to pay tax under sub-section (a) or (b), or if there is cause to consider that the tax paid is less than the tax payable, the Township Revenue Officer may, based on the information received, estimate and claim the tax payable or the additional tax payable.
12 (d)	The tax paid under sub-section (a), (b) or (c) shall be set-off from the tax due in the assessment.
12 (e)	The tax payable on goods imported under sub-section (c) of section 4 of the Law shall be collected together with the customs duties by the Customs Department in accord with the manner of collecting customs duties.

2.2. INTERNATIONAL GUIDELINES

Organization's Guidelines, World Bank Safeguard Policies, IFC Performance Standards and National Environmental Quality (Emission) Guidelines (2015) are referred for EMP of the proposed factory project.

2.3. COMMITMENT OF NAY SHWE LIN CO., LTD

NAY SHWE LIN CO., LTD has made the commitments and responsible for the preservation of the environment at and around the area of project site. In addition to this, it shall carry out as per instructions made by Ministry of MONREC in which to conduct an EMP which describe the measure to be taken for preventing, mitigation and monitoring significant environment impacts resulting from the implementation and operation of proposed project or business or activity has to be prepared and submitted and to perform activities in accordance with this EMP and be abided by the environment policy, Environmental Conservation Law and other environmental related rules and procedures.

- a) The accuracy and completeness of the EMP,
- b) That the EMP has been prepared in strict compliance with applicable laws including this Procedure
- c) That the Project will at all times comply fully with the commitments, mitigation measures, and plans in the EMP Report.

NAY SHWE LIN CO., LTD shall be responsible for the environmental assessment of factory development as follows:

- Monitoring the factory area operations according to EMP and Environmental Monitoring Plan (EMoP)
- Submitting environmental monitoring reports to ECD
- Planning and implementation of CSR activities
- To set up welfare plan such as staff medical checkup, training program and Public talk for getting knowledge, risk prevention, bonus and social security service

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- To carry out fire safety assessment and ensure adequate and appropriate fire safety measures for employees.

3. PROJECT DESCRIPTION

3.1. LOCATION OF PROPOSED PROJECT

The proposed project is located at Latitude 16°59'59.72"N and Longitude 96° 3'22.41"E, Plot No. (3), Myay Taing Block No.49, War Tayar Industrial Zone, Shwe Pyi Thar Township, Yangon Region. The location map of the proposed project size is shown in Figure 3-1.

3.1.1. Project implementation

Construction phase; The project identification of construction phase is machinery and equipment installation period. Project proponent was leased the project area from previous owner; this area already constructed the warehouse building. The installation of machinery and equipment started in March 2019. The Installation project is completed as scheduled on the first week of May 2020.

The operation period started in July 2020. Most are local people, who manage the company by their dynamic, enthusiastic, experienced, and cooperative skills. The estimated production rate is about 2,400,000 to 2,700,000 pieces per annually of production rate.

Decommissioning phase; The proposed project investment duration is 25 years and they will close and return to land owner.

3.1.2. Site Description of Proposed project site

The total land area is 2.446 acres and build main factory buildings, warehouse, kitchen, canteen, maintenance house, etc. which were built on its land area. Also, factory layout drawing is able to seen in Figure 3-2 and Figure 3-3.

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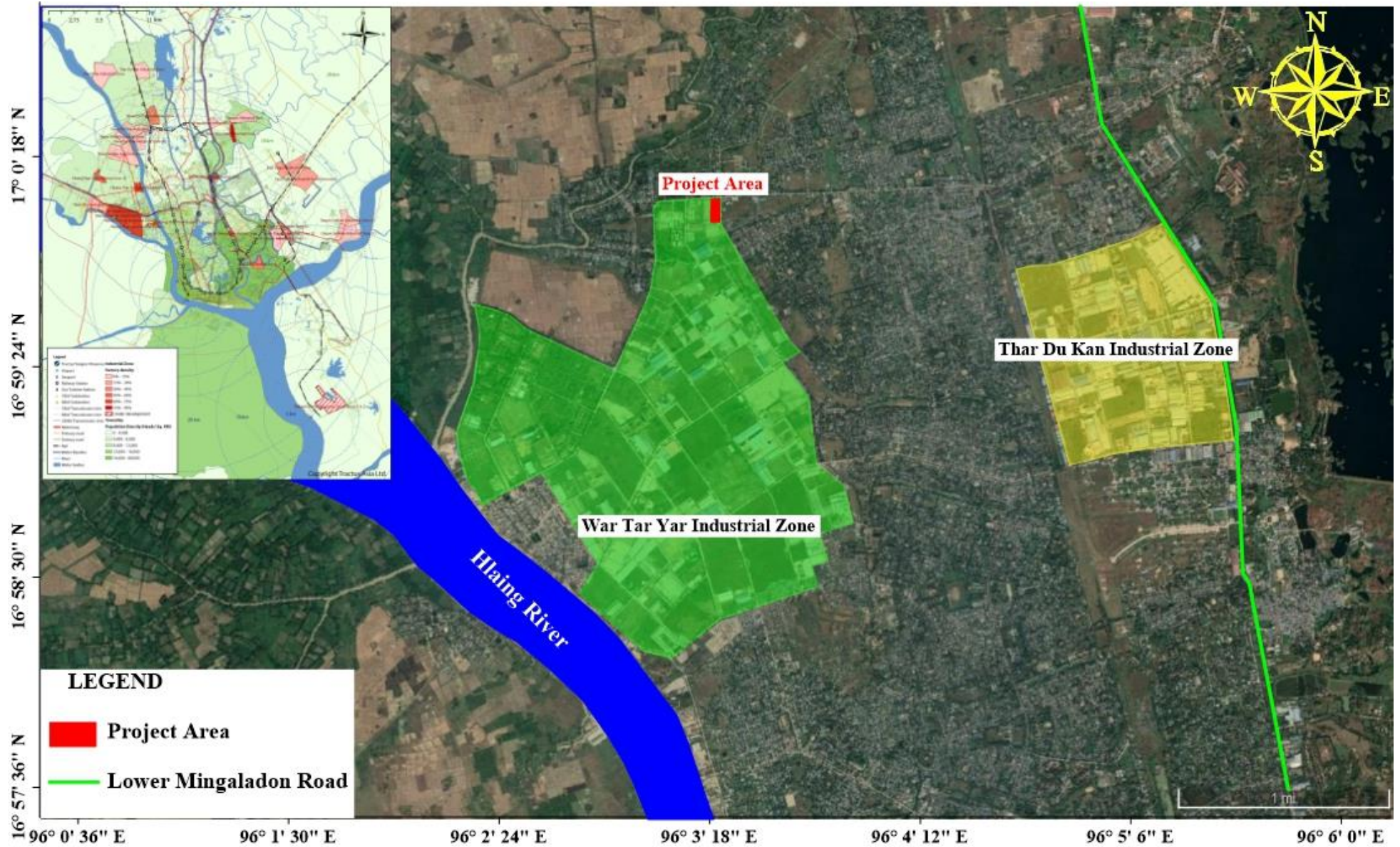


Figure 3-1 Location Map

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Figure 3-2 Factory Aerial Photo

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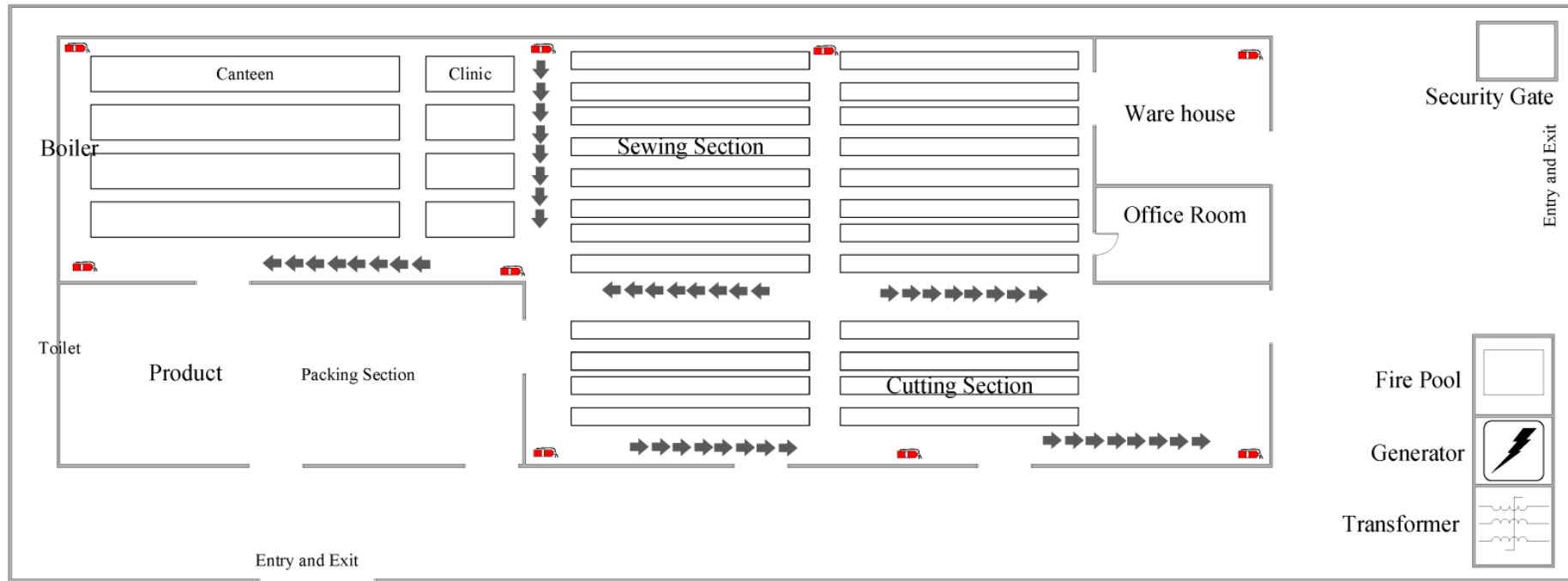


Figure 3-3 Factory Layout Drawing

3.2. PRODUCTION PROCESS

Cutting-Making-Packaging (CMP) is a production system in which raw materials including fixtures are imported and then processed into finished product, packaged and exported. The CMP system is a form of production on consignment in which the main raw materials (fabrics, tape, rub, thread, zip, electrics band, button, string etc.) are provided by overseas buyers and imported free of charge, then cut, sewn and packed in the domestic factories, after which all of the finished products are exported”. The operation of garment factories with CMP system includes production costs covering wages, electricity and diesel, transportation, communication, factory and office rental, maintenance and repair of sewing machines, and administrative expenses. Steps of production process of proposed factory are described in Figure 3-4.

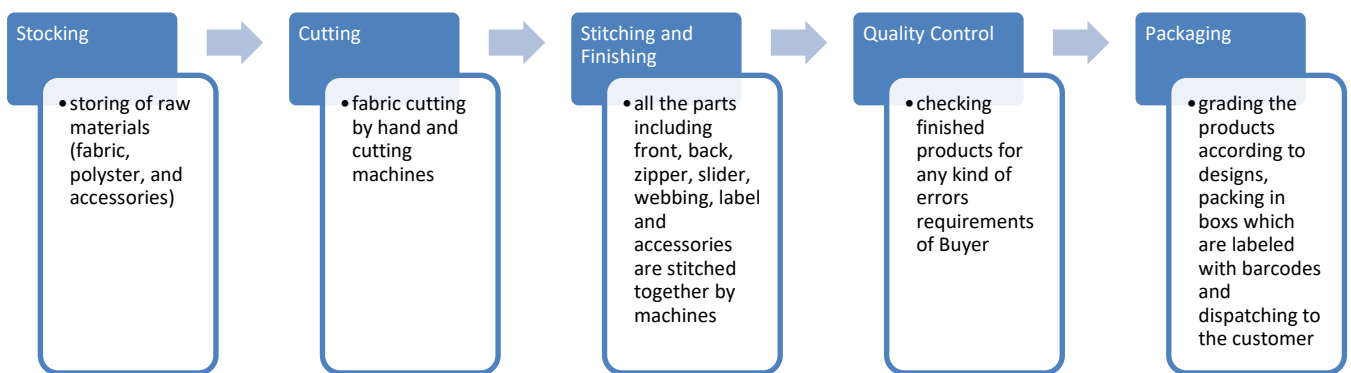


Figure 3-4 Process flow diagram

3.2.1. Description of Production Process

The first stage in the manufacturing of garments is the cutting and for that pattern, making is the base. Once the marker is made, pattern pieces must be cut out of the specified fabric.

The process of sewing involves fastening of fabrics, leather, furs or similar other flexible materials with the help of needle and threads. Stitching is the process of passing threaded needle in and out of a material to make a specific design pattern.

Ironing is a sheet metal forming process that uniformly thins the workplace in a specific area.

After completion of the ironing, quality control (QC) checks for any error. Quality control was done manually.

The QC passed units are sent to packing as a final production process. This step sends packed units for distribution to the customers. These packed units are sent to the countries per customer’s specification. Packing process was done manually by manpower.



Raw Materials



Cutting



Sewing



Ironing



QC



Packing

Figure 3-5 Production Photos

3.2.1. Products

The products of the factory are jackets, blouse, trousers and shirt. Annual production rate is presented in Table 3-1.

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Table 3-1 Annual Production Rate

No.	Particular	Unit	Year					
			1	2	3	4	5	6-10
1	Production (Pcs)		2,450,000	2,450,000	2,450,000	2,700,000	2,700,000	2,700,000
1	Men's/Ladies' Outer Jacket	Pcs	350,000	350,000	350,000	400,000	400,000	400,000
2	Ladies Blouse	Pcs	350,000	350,000	350,000	400,000	400,000	400,000
3	Men/Ladies's trousers	Pcs	700,000	700,000	700,000	750,000	750,000	750,000
4	Ladies dress	Pcs	350,000	350,000	350,000	400,000	400,000	400,000
5	Men/Ladies Shirt	Pcs	700,000	700,000	700,000	750,000	750,000	750,000

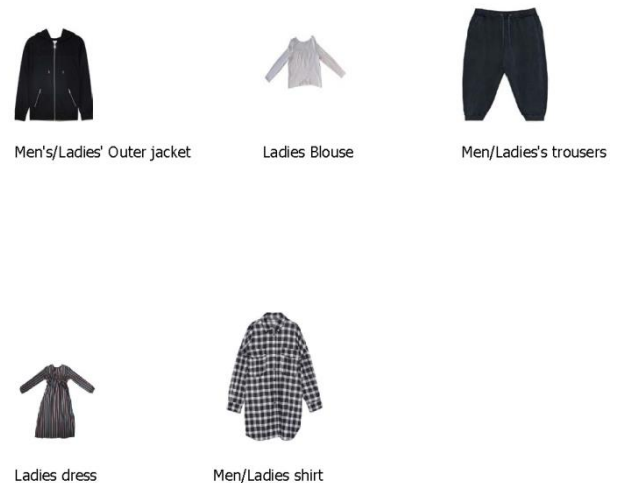


Figure 3-6 Products Photo

3.3. UTILITIES

3.3.1. Raw Material

Raw Materials, which include fabric, Tape, Rib, Thread, Zip, Electrics Band, Button, String are imported from China and carried to the Nay Shwe Lin's Factory by the containers. After quantity verification, these raw materials are stored properly in specified area as per their varieties i.e. cotton and polyester are stored on the shelves; zipper, label and accessories are stored in open cabinets with labels. Annual raw material requires for production process are provided in Table 3-2. Moreover lubricants, paint and glue are also imported and they are stored in designated area called as chemical room.

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Table 3-2 List of Raw Materials Requirement

No	Particular	HS Code	Unit	Year - 1	Year - 2	Year -3	Year -4	Year -5	Year -6-10
1	Shell (Fabric)	5407	Pcs	3,850,000	3,850,000	3,850,000	4,235,000	4,235,000	4,235,000
2	Tape	5906	M	490,000	490,000	490,000	539,000	539,000	539,000
3	Rib	6006	M	70,000	70,000	70,000	77,000	77,000	77,000
4	Thread	5401	M	560,000,000	560,000,000	560,000,000	616,000,000	616,000,000	616,000,000
5	Zip	9607	Pcs	24,500,000	24,500,000	24,500,000	26,950,000	26,950,000	26,950,000
6	Electric Band	8517	M	420,000	420,000	420,000	462,000	462,000	462,000
7	Button	9606	Pcs	8,400,000	8,400,000	8,400,000	9,240,000	9,240,000	9,240,000
8	String	3926	M	630,000	630,000	630,000	693,000	693,000	693,000



Figure 3-7 Raw materials photo

3.3.2. Machinery and Equipment

List of machinery and equipment required for the factory is following in Table 3-3. They are imported from China and 224 days running annually.

Table 3-3 List of Machinery

No.	Description	HS Code	Unit	Quantity	Unit Price (US\$)	Total Price (US\$)
1	Computerized normal sewing machine	8452	Set	500	320	160,000

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No.	Description	HS Code	Unit	Quantity	Unit Price (US\$)	Total Price (US\$)
2	3 needle 5 thread small flatlock machine	8452	Set	12	1,500	18,000
3	3 needle 5 thread big flatlock machine	8452	Set	12	1,100	13,200
4	Four thread overlock machine	8452	Set	70	540	37,800
5	Five thread overlock machine	8452	Set	150	590	88,500
6	Five thread overlock machine	8452	Set	120	330	39,600
7	2-needle lockstitch sewing machine w/ skip needle control	8452	Set	20	1,100	22,000
8	2-needle lockstitch sewing machine	8452	Set	20	1,300	26,000
9	Auto-cut lockstitch machine	8452	Set	40	440	17,600
10	Auto-cut lockstitch machine	8452	Set	15	360	5,400
11	Computerized button-hole machine	8451	Set	10	3,600	36,000
12	Computerized button-hole machine	8451	Set	3	2,500	7,500
13	Computerized eyelet button machine	8452	Set	5	4,700	23,500
14	Computerized button machine	8452	Set	10	2,800	28,000
15	Fusing machine for sleeve	8479	Set	3	3,350	10,050
16	Fusing machine	8452	Set	3	9,000	27,000
17	Sewing machine(collar cutting)	7307	Set	10	350	3,500
18	Sewing machina(collar flip)	8441	Set	10	60	600

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No.	Description	HS Code	Unit	Quantity	Unit Price (US\$)	Total Price (US\$)
19	Hear transfer machine	8510	Set	8	300	2,400
20	Sewing machine(sleeve flip)	8451	Set	3	400	1,200
21	Suction line machine	8451	Set	2	400	800
22	Cutting machine	8451	Set	12	180	2,160
23	Fabric cutting machine	8452	Set	2	1,000	2,000
24	Needle detectors	8452	Set	5	1,000	5,000
25	Fabric inspection machine	8452	Set	2	4,600	9,200
26	Computerized pocketing machine	8452	Set	6	24,500	147,000
27	Sewing machine with stitch	8479	Set	20	1,100	22,000
28	Belt loop machine	8463	Set	4	1,100	4,400
29	Belt loop machine	8451	Set	60	2,100	126,000
30	Computerized bartack machine	9024	Set	25	1,700	42,500
31	Computerized snap button machine	8477	Set	40	200	8,000
32	Mould cutting machine	8479	Set	2	5,200	10,400
33	Digital drawing machine	8463	Set	1	2,100	2,100
34	Loose fabric machine	8451	Set	2	2,200	4,400
35	Tensile tester	9024	Set	1	580	580
36	Thread blowing machine	8477	Set	2	600	1,200

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No.	Description	HS Code	Unit	Quantity	Unit Price (US\$)	Total Price (US\$)
37	Edge sewing machine	8452	Set	20	800	16,000
Total US\$ in millions						0.972

3.3.3. Human Resource

Human resource required by foreign experts/technicians and local persons for administrative and production process are about 1415 persons which are also described in Table 3-4. Ordinary working hour are normally set at 8 hours per day.

Table 3-4 Employment Schedule of NAY SHWE LIN CO., LTD

No	Position	Local Person	Foreign Technicians
1	Factory Manager	1	
2	Financial Manager	1	
3	Financial Staff	2	
4	Shipping Manager	1	
5	Shipping Staff	6	
6	Production Manager	1	
7	Merchandiser	1	1
8	Production Office Staff	5	
9	Human Resources Manager	1	
10	HR Staff	4	
11	Admin Staff	1	
12	IE Manager	1	
13	IE Staff	5	
14	Quality Control Manager	1	
15	QA/QC workers	120	
16	Store Supervisor	1	
17	Store Keeper	20	
18	Cutting Manager	1	
19	Pattern Manager	1	

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No	Position	Local Person	Foreign Technicians
20	Cutter	10	
21	Cutting workers	80	
22	Machanic Manager	1	
23	Machanic workers	10	
24	EP	4	
25	Sample Supervisor	1	
26	Sample maker	10	
27	Sewing supervisor	20	
28	Sewing Skill and Semiskill Workers	800	
29	Sewing unskill workers	150	
30	Finishing Manager	1	
31	Finishing workers	120	
32	Boiler	2	
33	Driver	2	
34	Security Staff	8	
35	Cleaner	8	
36	Nurse	1	
37	Translator	5	
38	Safety and Health Officer	1	
39	General Manager		1
40	Technician		5
Total		1408	7
		1415	

3.3.4. Water Requirement

The main water use in the proposed project is for domestic usage such as for personal washing, food preparation, and washing of utensils. Drinking water provides by outsource of drinking water suppliers. Main source of water supply will be provided by tube well water (ground water 50ft deep) in which ground water is pumped by 4 inches PVC pipe and treated by oxidation tower, chlorine dosing system, de-iron filter (FRP), carbon filter, and cartridge filter (see in photo). The tube well and

Environmental Management Plan

filtration tower are located at between the office building and operation factory building. There are 2 water tanks (raw water tank and firefighting water tank. The factory uses water about 179,200 gallons annually and 21,600 gallons per month for domestic and boiler water.



Figure 3-8 Water Storage Tank and Drinking Water Supply

3.3.5. Electricity and Fuel Requirement

The proposed project intended to get required electricity supply form Yangon City Electricity Supply Board (YESB) and distributed by 500 kVA of Transformer and another sources of energy 100 KVA and 550KVA generators which also be kept as the emergency generator if normal electricity supply could not provide for the proposed project. 500 Liters of diesel are used for these generator.

Environmental Management Plan



Figure 3-9 Electricity Facilities at Factory

3.3.6. Steam Boiler

The steam boiler to be used in steam capacity for garment ironing process and used of fuel for steam boiler is fire wood. General information of boiler process is mentioned in Table 3-5.

Table 3-5 Opeartion of Boiler

Name	Hengyang Yuntian Boiler
Model	D7G1-1.0-M
Accumulate Evaporation	1 Ton/hr
Rated Steam Temperature	184°C
Rated Working Pressure	1.0 MPa
General operation process	Fluidizing>Igniting>Fuel feeding
Water consumption per hour	1 m ³ /hr
Fuel consumption per hour (Fire wood)	0.02 ton /hr
Boiler effluent in drainage	Blow down valve > underground channel > Industrial drriage
Amount of blow down discharge	5.28 gal / hr (20 % of water consumption)

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Bottom ash released per day per usage	18 kg / day (10 % of fuel usage)
---------------------------------------	----------------------------------



Figure 3-10 Steam Boiler

3.4. FACILITIES

3.4.1. Fire hazards protect facility

Fire extinguishers, fire hose reels and fire hydrants are installed in the factory for fire emergency cases. Regular inspection for existing firefighting equipment must be done. In case of fire emergency, water storage tank for fire frightening is also constructed with the capacity of 22,500 gallons at the proposed area. The emergency contact numbers of township and district fire services department must be printed and tagged at easily visible places for fire emergency cases. The emergency fire alarms are installed at the factory for alerting the workers in case of fire. The main entrances and route for emergency cases of the factory must not be blocked with materials or machines for fire emergency cases. In addition, the project proponent has plans to provide trainings on firefighting for the workers by a professional or otherwise by sending to training courses. The plan to install fire alarm system and fire-frightening system are mentioned in Figure 3-11

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Figure 3-11 Firefighting system

3.4.2. Liquid waste control facility

Water discharge from the factory site will be treated by silts track tank before discharging. The factory plan has kitchen, canteen and toilet facilities attached in various buildings of the factory. In the kitchen, separated drainage lines are provided to flow wastewater from the activities washing and cooking, etc. And around the compound area of the project area, drainages are also provided and maintain to flow storm water (rain water, snow and surface water). The compound area of the factory is paved with concrete and the drainages are covered and holes are there to flow the storm water. The existing drainage at the project area can be seen in Figure 3-12.



Figure 3-12 Drainage and Toilet facility

3.4.3. Solid waste management facility

The factory provides separate garbage bins at each building. All of the solid wastes will be collected separately in garbage based on their types and stored in relevant separated waste bin: non-hazardous waste, hazardous waste, re-usable waste and final wastes will be disposed by using YCDC's service and solid waste (recycle waste) such as broken machine parts, paper box, fabric scraps, etc.handover to local waste buyer two time per month.

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Plastic container for garment waste



Temporary garment waste storage area

Temporary Domestic waste storage area

Figure 3-13 Waste storage photo

3.4.4. Medical and Health facility for employments

The factory has a clinic and full-time nurse-aid has been employed to treat employees for minor injuries, sickness and emergency medical care. Medicines and first aid kits are provided in this clinic. Moreover, these medicines and first aid kits are provided for emergency cases of workers. First aid training, safety training, firefighting training or other essential training for machinery handling must be provided for workers. According to the observed light intensity values, the proponent provides sufficient lighting for workers for safe working and reducing optical problems of the workers. Personal Protective Equipment (PPEs) like earmuffs, safety gloves, helmets and goggles are provided for relevant department. To prevent electric shock hazards, electrical maintenance staff (handyman) is to be assigned to do regular inspections and take preventive measures.

Environmental Management Plan



Figure 3-14 First Aids and Medical room Photo

3.4.5. Ventilation System

The factory ventilation systems consist of natural ventilation system and mechanical ventilation system. The mechanical ventilation system is provided in office room, production area, toilet, kitchen and dormitory.

3.5. WASTE GENERATION

The project will be generated solid waste, liquid waste and hazardous waste from the operation of the Nay Shwe Lin's factory. Detail description of waste generation and waste amount are shown in Table 3-6.

Table 3-6 Waste generation and waste amount

Waste		Type of wastes	Estimated waste amount	Source of generation
Solid waste	Re-usable	Residual pieces of fabric scraps	10% a roll of fabric (kg)	Production line and cutting line
		Raw material cutting wastes	1000 kg / month	
	Non re-usable	Disposed packaging materials, paper or plastic wrapping	100 kg / month	Materials store and supply packaging
	Non re-usable	Food residues, domestic waste	551 kg / day*	Canteen, Kitchens, dormitory
Liquid waste		Sanitary discharge water	141.5 m ³ /day*	Toilet facility, kitchen and canteen
Hazardous waste		Residual chemicals, use chemical container		Chemical usage and store area
		Oil leakage and spills	-	Operation of generator and movements of vehicles

* The Yangon City solid waste generation rate as of 2012 is 0.39 kg per person per day (Pollution Control and Cleansing Department, Yangon City Development Committee, 2014).

*The domestic wastewater generation was based on typical wastewater generation rate of 0.1 m3 per person per day (Metcalf & Eddy, 2004)

4. BRIEF DESCRIPTION OF SURROUNDING ENVIRONMENT

The purpose of this Chapter is to predict how environmental and socio-economic conditions will affect because of the implementation of the proposed Project. This requires a sound understanding of the baseline conditions at the project site, which established through desktop study research, site surveys, primary data collection and projections for future developments. Findings provide the current and future characteristics of the project site and the value and vulnerability of the key environmental and socio-economic resources and receptors. The following sections provide a description of the environmental and socio-economic aspects of the project.

4.1. METHODOLOGY FOR DATA COLLECTION AND ANALYSIS

The followings methodologies are used for Environmental Management Plan (EMP) for this report preparation;

- Onsite Measurements and Analysis – Baseline parameters such as Indoor temperature, humidity, operation light conditions, noise and water quality of the project site during operation phase were measured onsite. The analyzed results are mentioned in this chapter.
- Secondary data collection of proposed project site area – Socio economic condition, physical/biological environment, and weather data are collected from official township data of Shwe Pyi Thar Township, Yangon Region.

4.2. ENVIRONMENTAL BASELINE STUDY

The filed observation for determining the environmental baseline of the proposed project area was undertaken during construction period. The survey team consists of the senior consultant and environmental quality team. The baseline data collected regarding the environmental condition of the project area was conducted in the following section.

4.3. PHYSICAL COMPONENT

4.3.1. Topography

Yangon area is the largest; most populated and urbanized area in Myanmar. There are thirty-three townships in Yangon city where located at the convergence on the Yangon and Bago River region about 34 km away from the Gulf of Martaban. The proposed project area is situated at War Tayar Industrial Zone, Shwe Pyi Thar Township, and its topographic condition is flat. The proposed project site is primarily agricultural land, but now is initiated into the industrial zone area.

4.3.2. Geology

In Yangon area mainly composed of Pegu Group, Irrawaddy Formation and Alluvium. Alluvial deposits (Pliocene to Recent), the non-marine fluvial sediments of Irrawaddy formation (Pliocene), and hard, massive sandstone of Pegu series (early-late Miocene) underlie the Yangon area. Alluvial deposits are composed of gravel, clay, silts, sands and laterite which lie upon the eroded surface of the Irrawaddy formation at 3-4.6 m above mean sea level (MSL). The rock type in Yangon is mainly soft rocks, which consist of sandstone, shale, limestones and conglomerate. Geological map of Yangon Regional area is shown in Figure 4-1.

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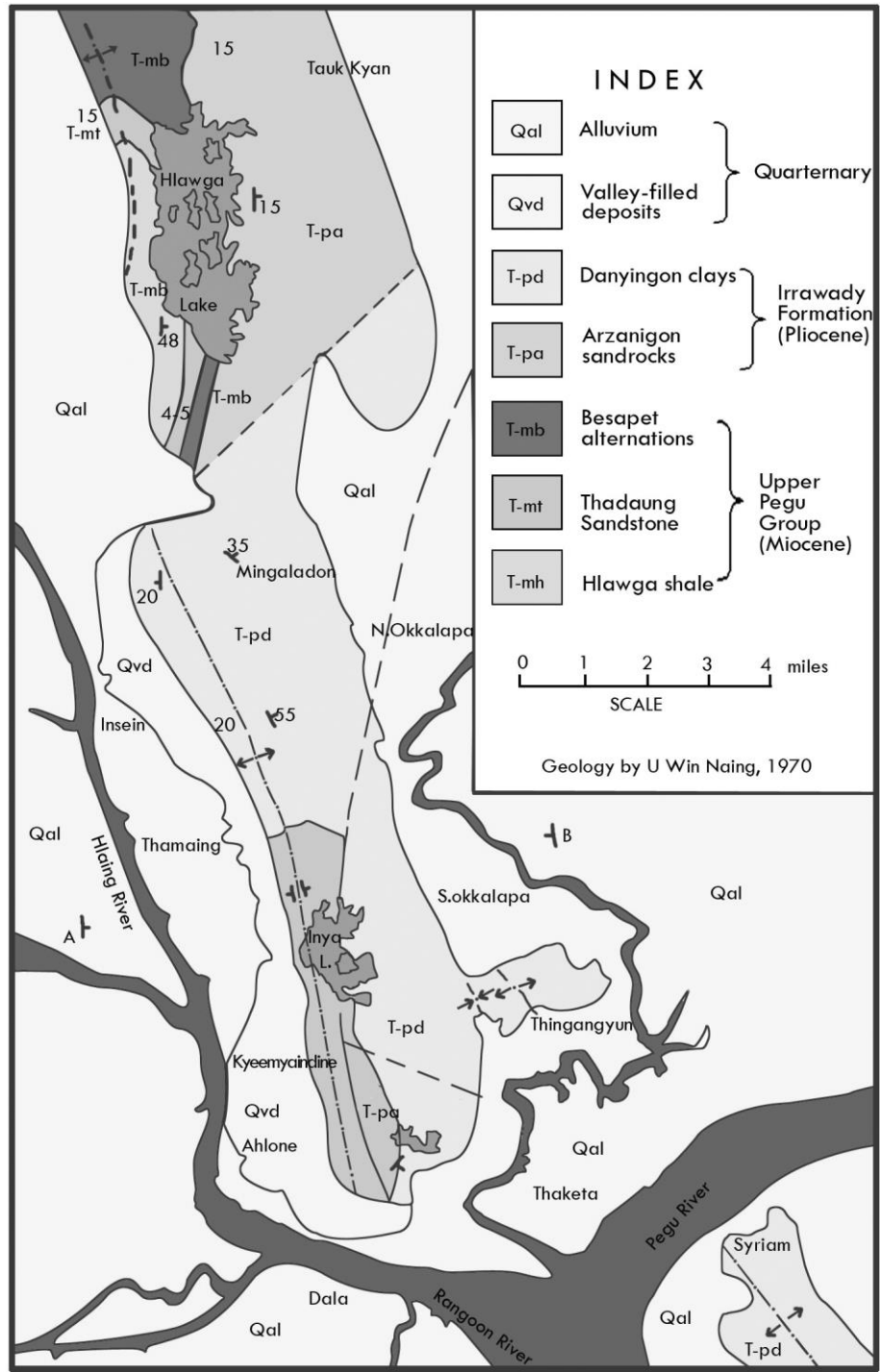


Figure 4-1 Geological Map of Yangon Region

4.3.3. Tectonics

Yangon is situated in the southern part of the Central Lowland which is one of the three major tectonic provinces of Myanmar. The Taungnio Range of the Gyophyu catchments area of Taikkyi District, north of Yangon, through the Thanlyin Ridge, south of Yangon forming a series of isolated hills probably resulted from the progressive deformation of the Upper Miocene rocks as the eastern continuation of the subduction or stretching and compression along the southern part of the Central Basin and regional uplifting of the Pegu Yoma (Aung Lwin 2012).

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4.3.4. Soil

The underlying soil type at the Project Site and its surroundings is characterized as the Meadow and Meadow Alluvial Soil. Meadow Soil is soil which occurs near the river plains exposed to occasional tidal floods, is non-carbonate and usually contains a large amount of salt. Both materials mainly comprise silty clay loam and neutral soil rich in plant nutrient. The upper layers (approximately 0 to 7 m) of the soil at the Project Site comprise largely of cohesive layers with traces of sand and gravel, followed by sand layers with low silt content and trace gravel from 7 to 35 m. The lower layers comprise denser silt layer with traces of sand and gravel from approximately 57 to 70 m. Standard Penetration Test (SPT) results obtained from testing at the Project Site indicate that the soil strength generally increases with depth. The STP results showed that the current soil quality can accommodate the construction of the Project. ^[2]

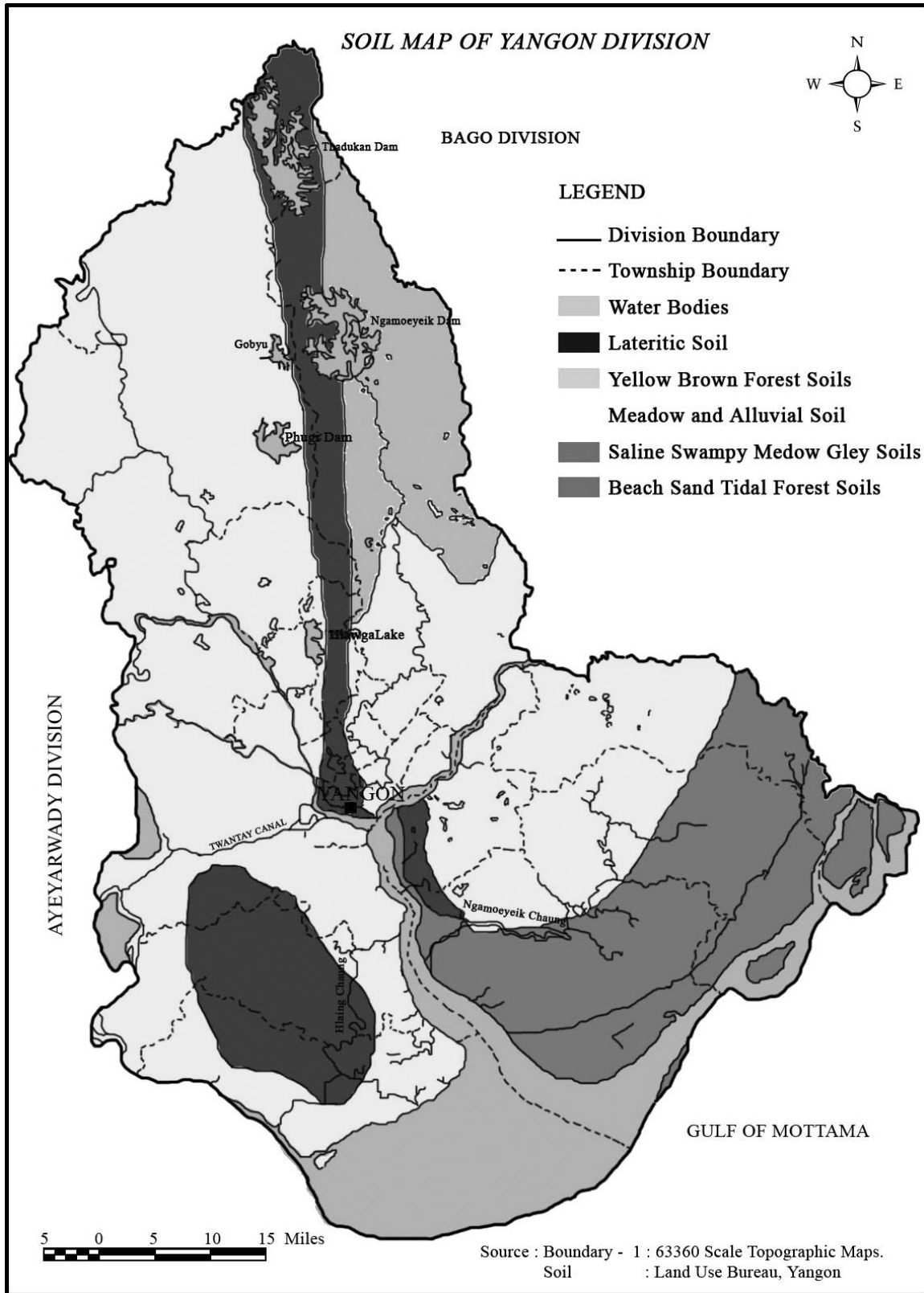


Figure 4-2 Soil map of Yangon (Source: Land use of Bureau of Yangon)

Environmental Management Plan

4.3.5. Hydrogeology

Yangon is rich in groundwater resources conserved by unconsolidated Tertiary-Quaternary deposits. In Yangon, groundwater is mostly extracted from Valley filled deposits and Ayeyarwady sandstones.

Groundwater: Groundwater availability is generally based on the distribution of permeable and relatively impermeable rocks. The nature of openings in the rocks determines permeability of rocks. Based on local geological considerations, potential groundwater source of Yangon can be roughly divided into two sub regions, namely the low potential area and high potential area. Low potential areas are areas with those rock units of Hlawga Shale, Thadugan Sandstones and Basepet Alternation of upper Pegu Group (Miocene epoch) and Danyingon Clays of Irrawaddy rocks. These rocks and formations are a dense, massive and consolidated nature and have impervious characteristic. High potential areas are underlain by Pliocene Series and recent Formations. High potential area covers approximately 85 percent of the Yangon city including Pabedan. Stand pipe piezometers were installed at a depth of up to 30 m from the existing ground level while a pumping well was installed upon completion of the soil investigation works. Based on the results recorded up to the 8th of December 2012, stabilized groundwater level was observed to range between 0.49 m MSL to -1.81 m MSL.

Water Supply: The Yangon City Development Committee (YCDC) has an overall responsibility for the management and distribution of water for Yangon City. Presently, YCDC's water supply is obtained from two main sources: (1) reservoir (Hlawga, Gyobu, Pugyi and Ngameoyeik reservoirs) and, (2) groundwater from YCDC's tube wells. Water from these sources is utilized to varying degrees. Areas not supplied with water from the YCDC rely on shallow surface wells and private boreholes. Water supply for the Project Site will be obtained from onsite borewells for both construction and operations due to the poor reliability of municipal supply. Permitting is part of the Planning Consent Application currently underway. The boreholes will be provided and operated by the Developer.

Hydrology: The Project Site lies along the catchment of the Hlaing River which flows North to South. The Yangon River (also known as the Rangoon River or Hlaing River) is formed by the confluence of the Pegu and Myitmaka rivers and flows into the Gulf of Martaban which is part of the larger Andaman Sea. The river flows along a 40 km stretch flowing from southern Myanmar as an outlet of the Ayeyarwady River into the Ayeyarwady delta. A small portion of the Bago River (the estuary) lies within the Yangon Division. The Pazundaung Creek and Bago River joins the Yangon River and from there, flow towards the Southwestern direction into Andaman Sea. ^[2]

4.3.6. Climate and Meteorology**4.3.6.1. Average Weather in Yangon**

In Yangon, the wet season is oppressive and overcast, the dry season is muggy and partly cloudy, and it is hot year round. Over the course of the year, the temperature typically varies from 67 °F to 97 °F and is rarely below 62 °F or above 101 °F. ^[6]

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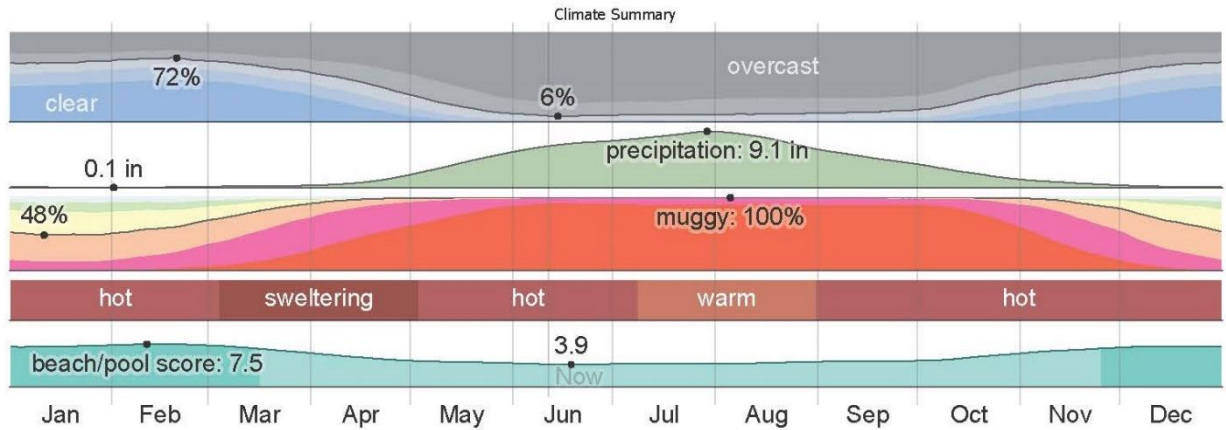


Figure 4-3 Climate Summary of Yangon Region

4.3.6.2. Temperature

The hot season lasts for 2.0 months, from March 2 to May 3, with an average daily high temperature above 95 °F. The hottest day of the year is April 11, with an average high of 97 °F and low of 78 °F.

The cool season lasts for 3.9 months, from June 2 to September 29, with an average daily high temperature below 87 °F. The coldest day of the year is January 10, with an average low of 67 °F and high of 88 °F. ^[6]

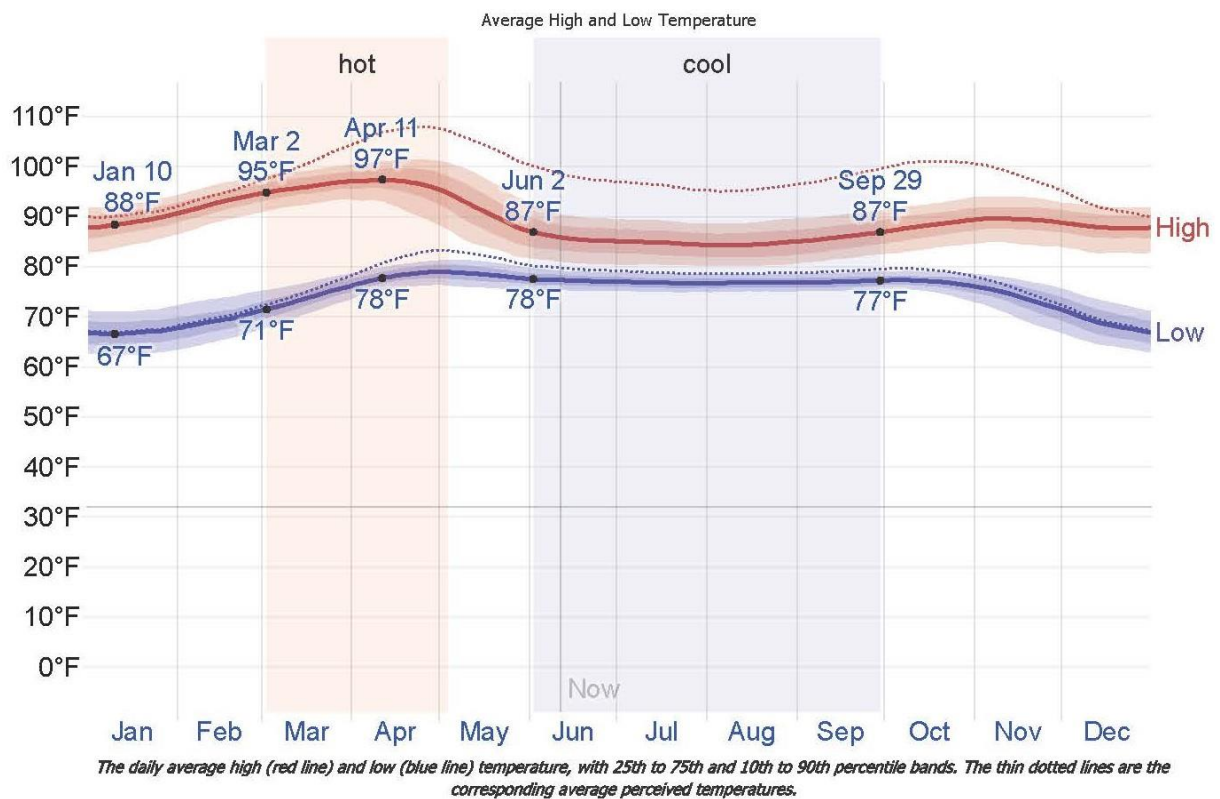


Figure 4-4 Average Temperature of Yangon Region

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4.3.6.3. Clouds

In Yangon, the average percentage of the sky covered by clouds experiences extreme seasonal variation over the course of the year. In clearer part of the year in Yangon begins around November 2 and lasts for 5.6 months, ending around April 22. On February 20, the clearest day of the year, the sky is clear, mostly clear, or partly cloudy 72% of the time, and overcast or mostly cloudy 28% of the time. [6]

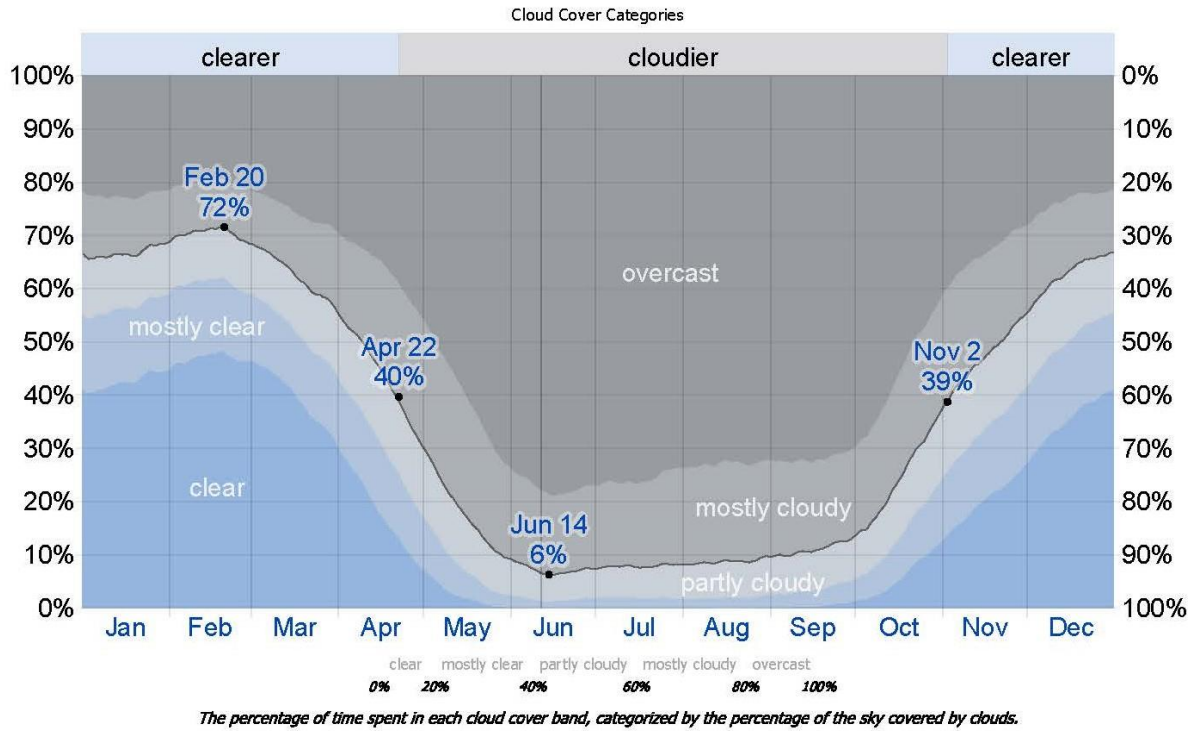


Figure 4-5 Cloud Cover Categories

4.3.6.4. Rainfall

To show variation within the months and not just the monthly totals, we show the rainfall accumulated over a sliding 31-day period centered around each day of the year. Yangon experiences extreme seasonal variation in monthly rainfall. The rainy period of the year lasts for 7.7 months, from April 5 to November 28, with a sliding 31-days rainfall of at least 0.5 inches. The most rain falls during the 31 days centered around July 30, with an average total accumulation of 9.1 inches. The rainless period of the year lasts for 4.3 months, from November 28 to April 5. The least rain falls around February 1, with an average total accumulation of 0.1 inches. [6]

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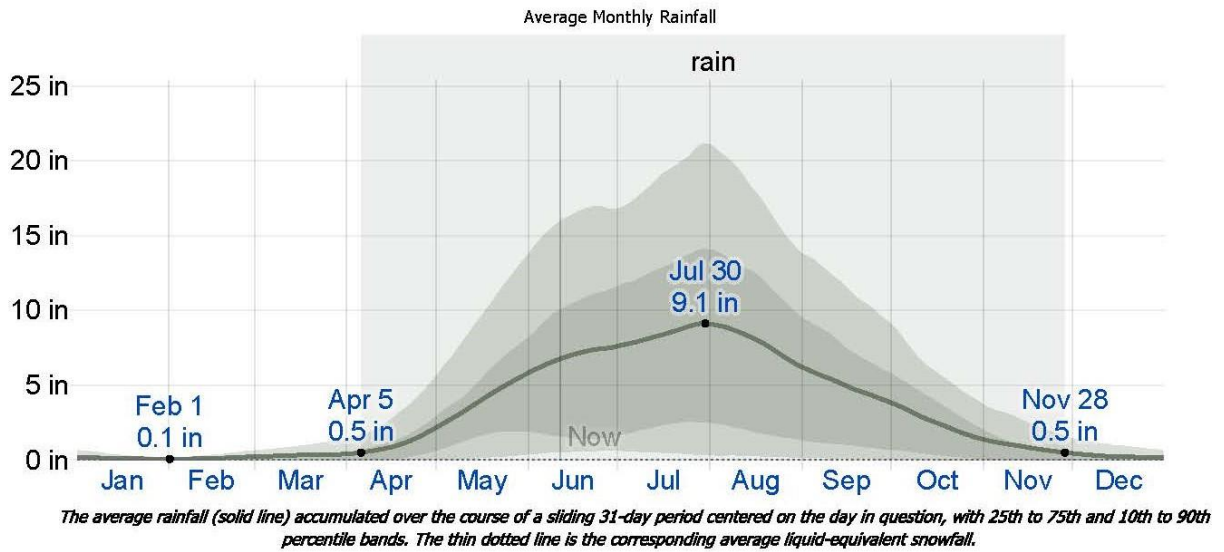


Figure 4-6 Average Monthly Rainfall at Yangon Region

Table 4-1 Auunal Rainfall and Temperature

Year	Rainfall		Temperature	
	Raining day	Rainfall value	Summer season Max (°C)	Winter season Min (°C)
2015-2016	105	84.91	34°C	30°C
2016-2017	116	85.89	34°C	30°C
2017-2017	97	86.70	38°C	30°C
2018-2019	69	1320	41°C	30°C

Source: Department of Administrative Shwe Pyi Thar Township, Regional Data (www.gad.gov.mm)

4.3.6.5. Humidity

We base the humidity comfort level on the dew point, as it determines whether perspiration will evaporate from the skin, thereby cooling the body. Lower dew points feel drier and higher dew points feel more humid. Unlike temperature, which typically varies significantly between night and day, dew point tends to change more slowly, so while the temperature may drop at night, a muggy day is typically followed by a muggy night.

Yangon experiences extreme seasonal variation in the perceived humidity. The muggier period of the year lasts for 10 months, from February 22 to December 23, during which time the comfort level is muggy, oppressive, or miserable at least 61% of the time. The muggiest day of the year is August 5, with muggy conditions 100% of the time. The least muggy day of the year is January 11, with muggy conditions 48% of the time. In May 11, 2020, the weather condition of prosed project is 35.3 °C average temperature and 38.9 % average humidity. ^[6]

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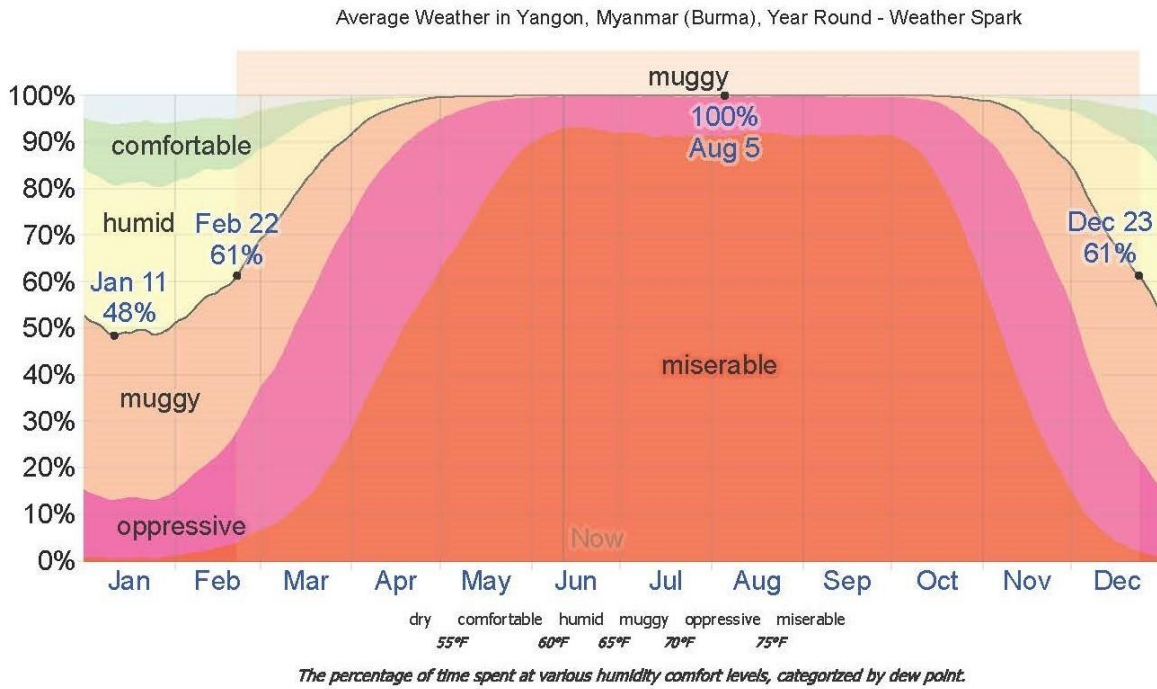


Figure 4-7 Humidity of Yangon

4.3.6.6. Wind

This section discusses the wide-area hourly average wind vector (speed and direction) at 10 meters above the ground. The wind experienced at any given location is highly depended on local topography and other factors, and instantaneous wind speed and direction vary more widely than hourly averages. The average hourly wind speed in Yangon experiences significant seasonal variation over the course of the year. The windier part of the year lasts for 4.1 months, from May 1 to September 4, with average wind speeds of more than 8.2 miles per hour. The windiest day of the year is June 24, with an average hourly wind speed of 10.6 miles per hour. The calmer time of year lasts for 7.9 months, from September 4 to May 1. The calmest day of the year is January 9, with an average hourly wind speed of 5.8 miles per hour. ^[6]

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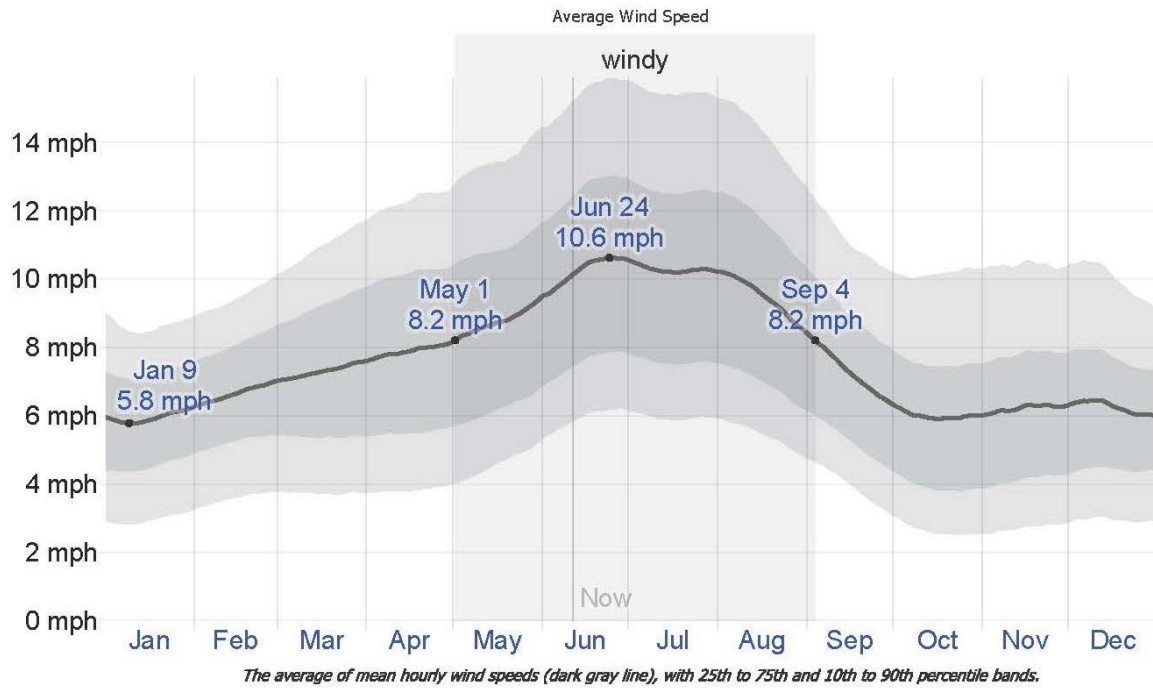


Figure 4-8 Average Wind Speed in Yangon

4.4. BASELINE ENVIRONMENTAL MONITORING

To determine the existing baseline ambient air quality status within the project site on 24 July 2020, 24-hours of working period air pollutants level, which include dust (PM₁₀ and PM_{2.5}). To reveal the existing status of baseline air quality, the average ambient air qualities measured were compared with National Environmental Quality (Emission) Guideline. The measurement location point is situated at latitude 16°59'59.72"N and Longitude 96° 3'22.41"E.

4.4.1. Indoor Temperature and Humidity

Table 4-2 Relative Humidity and Temperature Measure at Proposed Project

Date and Time	Description	Result value	Environmental parameter air station guideline
24 July 2020 (11:00AM to 5:00 PM)	Relative Humidity RH %	69.1 (%)	Present condition
	Temperature	38.7 °C	Present condition

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Figure 4-9 Temperature and Humidity Measurement in Operation Area

4.4.2. Air Quality

To determine the existing baseline ambient air quality status within the project site on 24, July 2020, 24-hours of working period air pollutants level, which include dust (PM₁₀ and PM_{2.5}) and gases (CO, CO₂, SO₂, NO₂) were measured at the selected site using the AQM – 09 and HCHO air monitoring station. To reveal the existing status of baseline air quality, the average ambient air qualities measured were compared with National Environmental Quality (Emission) Guideline. The measurement location point is situated at Latitude 16°59'59.72"N and Longitude 96° 3'22.41"E.

It was observed that the air quality of SO₂, PM₁₀, PM_{2.5}, NO₂, CO, O₃ concentration level are within the limit of National Environmental Quality (Emission) Guideline.

Table 4-3 Observed Air Quality Results

Parameters	Observed Value	Guideline Value	Unit	Organization	Period
Outdoor Air Quality					
PM ₁₀	15.8	50	µg/m ³	NEQG	24 hrs
PM _{2.5}	10.6	25	µg/m ³	NEQG	24 hrs
SO ₂	286.8	500	µg/m ³	NEQG	10 minutes
NO ₂	46.74	200	µg/m ³	NEQG	1 hour
CO	0.3	10	µg/m ³	NEQG	-
O ₃	40.5	100	µg/m ³	NEQG	8 hrs
Indoor Air Quality					
PM ₁₀	41.3	50	µg/m ³	NEQG	24 hrs
PM _{2.5}	22.8	25	µg/m ³	NEQG	24 hrs

NEQG = National Environmental Quality (Emission) Guideline

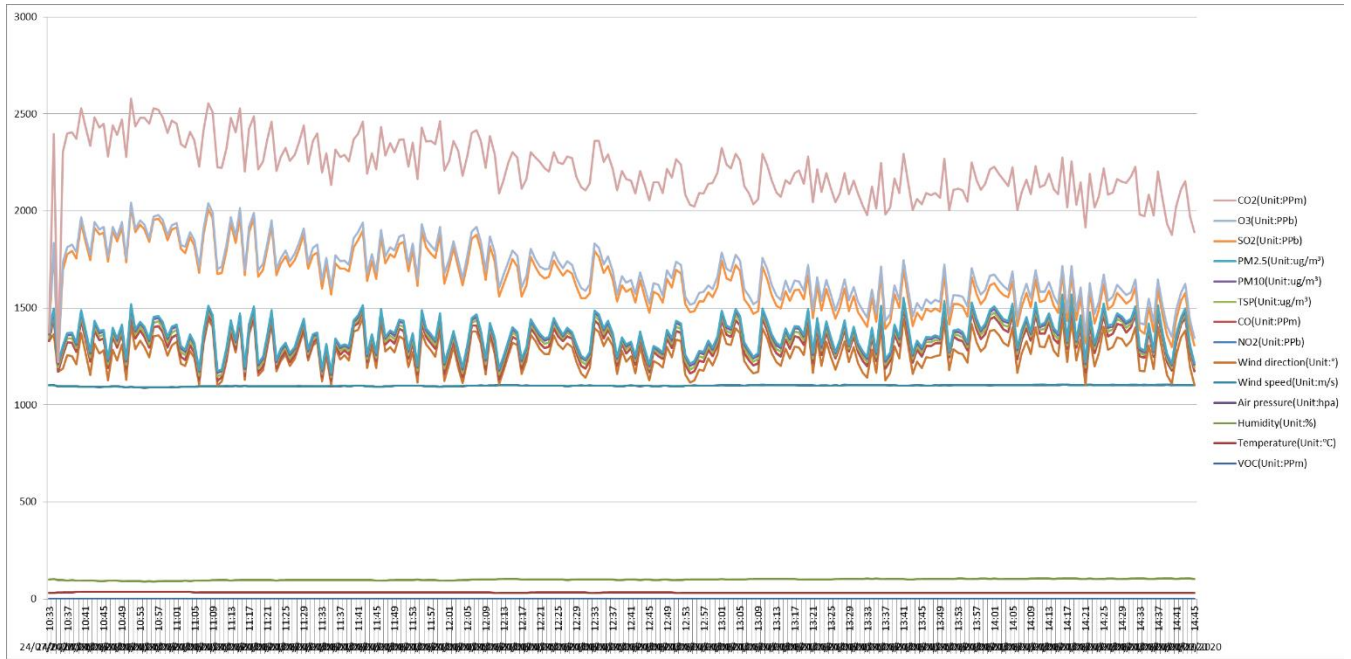


Figure 4-10 Result of air quality monitoring index graph

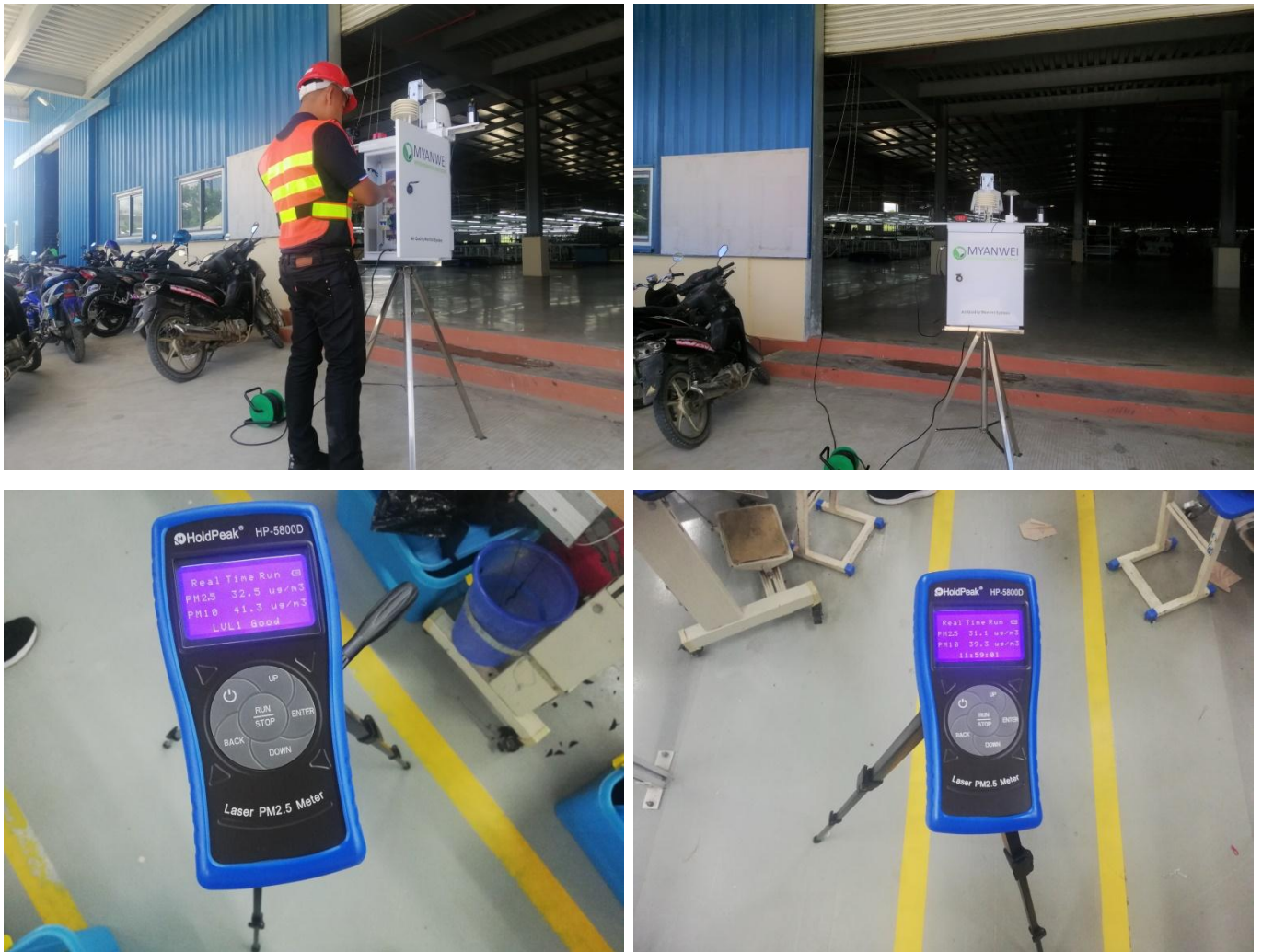


Figure 4-11 Indoor and Outdoor Air Quality Measurement Photos

Environmental Management Plan

4.4.3. Noise

The Noise level was measured by using Digital Sound Level Meter for working 8hours on 24 July 2020. The average noise level in the project site area is presented in Table 4-4 compared with NEQ guideline. However, according to the Noise source monitoring at operation area (inside the production sector) of noise level is exceeding the acceptable level of National Environmental Quality (Emission) Guideline. [4]

Table 4-4 Noise Level Measurement Result

Date and Time	Location	GPS value	Result value	NEQ Guideline
24.7.2020 (11:00 am to 5:00 pm)	Operation Area	16°59'59.72"N 96° 3'22.41"E	66.87 dBA	70 dBA

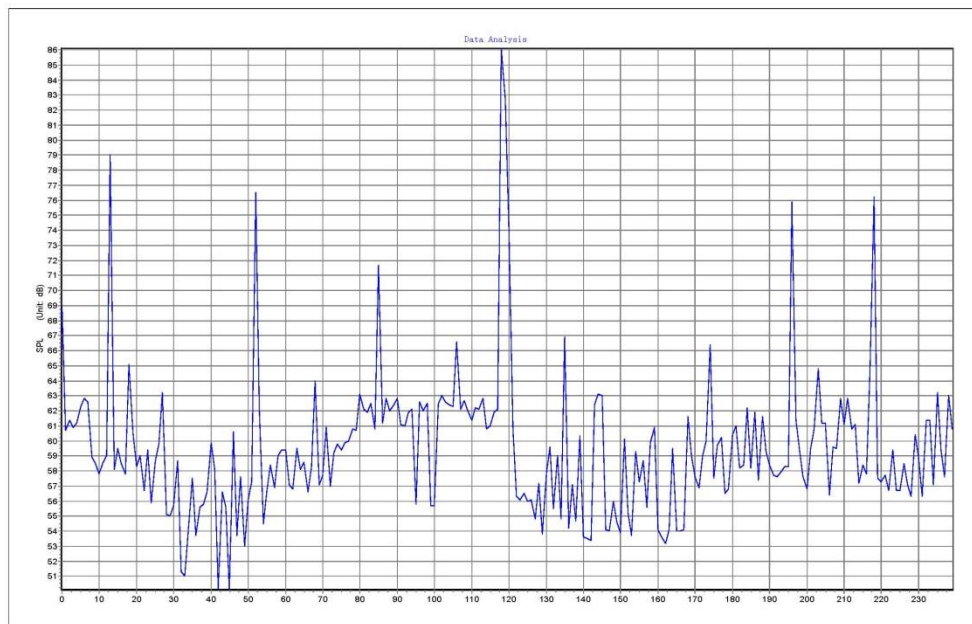


Figure 4-12 Noise Level Result Graph

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Figure 4-13 Sound level measurement photo

4.4.4. Light

Activities of the workers in the factory are highly dependent on the quality of light. Therefore, the consultant conducted the light measurement in the factory is presented. The illustrates the recommended illumination and limiting glare index applicable to typical works (fairly severe to very severe tasks) in factory is provided in Table 4-5.

Appropriate lighting is the need for every department, irrespective to the task being handled. Although, there are some areas where focus on maintaining proper illumination is very crucial in factory, like the inspection points (on-floor and in stores), sampling, and the finishing section, as these areas are crucial for the quality of the production. The tasks involved in these areas require high levels of worker focus and accurate lighting to ensure lower errors and defects passing on to the next stage.

However, according to the result of light measurement at operation area (inside the production sector) is in good condition and at the acceptable level of standard.

Table 4-5 Recommended illumination and limiting glare index based on IES Code, 1968

Visual test	Illumination (lux)	Glare index
Casual seeing	100	28
Rough task with large detail	200	25-28
Ordinary task medium detail	400	25
Fairly severe task, small detail (e.g. drawing office, sewing)	600	19-22
Severe, prolonged task, very small detail (e.g. fine assembly, hand tailoring)	900	16-22
Very severe, prolonged task, very small detail (e.g. gem cutting, hosiery mending, gauging very small parts)	1,300 -2,000	13-16

Source: Koenigsberger, et al. 1975

Environmental Management Plan



Figure 4-14 Light Quantity Measurement Photo

Table 4-6 Result of Light Measurement in NAY SHWE LIN CO., LTD

No.	Location	Measure value (Lux)	Standard*
1	Sewing Area	474	400
2	Cutting Area	988	1000
3	Ironing Area	608	600
4	QC Area	450	900-1500
5	Packing Area	367	600

* Lighting standards and codes usually provide recommended illuminance ratios between the task area and its surroundings (EN 12464-1 2002) (CIBSE 1997) (IESNA 2000, 676708).

4.5. BIOLOGICAL COMPONENT

The proposed project site is not located in or near a sensitive ecosystem as the proposed project area is situated in the Anaw Yahtar industrial zone. The Project Site is a built-environment and the species of flora surveyed at the site are native species uncommon to the Yangon area. There were no protected species or species of conservation value identified.

4.6. SOCIO-ECONOMIC COMPONENT

4.6.1. Population

NAY SHWE LIN CO., LTD is located across Shwe Pyi Thar Township in Yangon Region. In 2019, the population of Shwe Pyi Thar Township is about 284,922 people as present in Table 4-7. ^[1]

Table 4-7 Population of Males and Females at Shwe Pyi Thar Township (2019)

Item	Over 18 year			Under 18 year			Total		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Urban	80770	93866	174196	32429	33876	66305	112759	127742	240501
Rural	15444	18964	34408	4960	5053	10013	20404	24017	44421
Total	95774	112830	208604	37389	38929	76318	133163	151759	284922

Source: Department of Administrative Shwe Pyi Thar Township, Regional data (www.gad.gov.mm.com)

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4.6.2. Religion

The different kinds of religion present in Shwe Pyi Thar Township are shown in Table 4-8. More than 90% of the people living in the township are Buddhists. ^[1]

Table 4-8 Religion in Shwe Pyi Thar Township (2019)

Township	Buddhist	Christian	Hindu	Muslim	Other	Total
Shwe Pyi Thar	269764	7476	2601	4882	199	284922

Source: Department of Administrative Shwe Pyi Thar Township, Regional data (www.gad.gov.mm.com)

4.6.3. Local Economy

Among regional towns, Shwe Pyi Thar Township has a variety of businesses and services operating in the community with other businesses/services, based in the region. Most of the source of livelihood in the Township is employment of factory. Services and facilities available include:

- post office
- beauticians
- butcher
- hairdressers
- furniture and electrical store
- restaurants
- cafes
- shoe and clothing shops
- industrial services
- pharmacy
- veterinarian
- bus service
- gift stores
- music store
- pubs and bars
- florist

4.6.4. Public Infrastructure and Access

4.6.4.1. Communication and Transportation

Major transportation route in Shwe Pyi Thar Township are railway, port, and car road as presented in Table 4-9. ^[1]

Table 4-9 Transportation Route

Categories	Township		Miles
	From	To	
Railway (Yangon-Pyay railway)	Hlwaga	1 ward	4.2
Inland water way	18 ward	Hlwaga	4.2
Bus line (39, 40, 42, 44, 65, 69, 72, 73, 74, 77)	Hlwaga	Downtown area	
Car (No 4. Main road)	1 ward	Hlwaga	5.1

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Source: Department of Administrative Shwe Pyi Thar Township, Regional data (www.gad.gov.mm.com)

4.6.4.2. Electricity

The electricity demand of Shwe Pyi Thar Township is higher and higher due to the normally increased in population and infrastructure. ^[1]

4.6.4.3. Education

Location of major schools were situated i.e. basic education primary school (B.E.P.S.), basic education middle school (B.E.M.S), basic education high school (B.E.H.S) and university, in the Shwe Pyi Thar Township. The name and the located village tract/ ward of schools are described in . ^[1]

Table 4-10 List of major school in Shwe Pyi TTownship

No.	Name of School	Location
1.	University of Computer Study Yangon	Kyaung Kone Viallge tract
2.	BEHS (1)	No(6) Ward
3.	BEHS (2)	Hlaw Kar Village tract
4.	BEHS (3)	No(8) Ward
5.	BEHS (4)	Zee Kong Village tract
6.	BEHS (5)	No(9) Ward
7.	BEHS (Branch) (2)	No(19) Ward
8.	BEHS (Branch) (3)	No (5) Ward
9.	BEHS (Branch) (4)	No (9) Ward
10.	BEHS (Branch) (8)	No (23) Ward
11.	BEHS (Branch) (11)	No (8) Ward
12.	BEMS (1)	Hlaw Kar Village
13.	BEMS (5)	No (15) Ward
14.	BEMS (6)	No (17) Ward
15.	BEMS (7)	No (9) Ward
16.	BEMS (9)	No (11) Ward
17.	BEMS (10)	No (14) Ward
18.	BEMS (12)	No (10) Ward
19.	BEMS (13)	No (20) Ward
20.	BEPS (1 to 30)	Shwe Pyi Thar
21.	Pre School (1)	Shwe Pyi Thar

Source: Department of Administrative Shwe Pyi Thar Township, Regional data (www.gad.gov.mm.com)

4.6.4.4. Health Status

The diseases of high prevalence reported in 2019 are Hypertension, followed by Diarrhea, Tuberculosis (TB), Dysentery and Hepatitis. With reference to the Township Health Profile 2019 of Shwe Pyi Thar Township, no accidental work injuries reported to the township hospital in 2013. The common diseases are shown in Table 4-11.

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Table 4-11 Common Diseases in the Shwe Pyi Thar Township

Disease	Shwe Pyi Thar Township	
	Morbidity	Mortality
Hypertension	921	13
Diarrhea	76	-
Tuberculosis (TB)	192	-
Dysentery	6	-
Hepatitis	392	-

Table 4-12 Lists of hospital in the Shwe Pyi Thar Township

Hospital Name	Beds/Services	Responsible
Township Hospital	35	Government
Clinic	120	Private

Source: Department of Administrative Shwe Pyi Thar, Regional data (www.gad.gov.mm.com)

4.7. CULTURAL AND VISUAL COMPONENTS

Shwe Pyi Thar Township is growing into a busy and vibrant community. The population fluctuates; however, there has been steady growth over the last decade. It tends to be a stopover on a journey rather than a destination. It has a number of sites that are interesting; however, there is no main attraction. Visitors to the town are generally visiting for work, investment or family reasons.

5. ENVIRONMENTAL IMPACT AND MITIGATION MEASURES

5.1. IMPACT IDENTIFICATION

The development of infrastructure for the proposed project likely to happen changes in the local environment in terms of physical, biological and socio-economic aspects along with the perspective on both positive and negative impacts. The potential environmental impacts brought by various activities of proposed factory project will be identified and judged by site surveying with checklist, meeting with client team, including plant manager and supervisor, representatives from the factory operators and assessing the environmental baseline information for operation and decommissioning phases along with its mitigation measure.

5.1.1. Positive Impact

During the project implementation, local people can get job opportunities in administrative sectors, office works, transportation sectors, skill and unskilled workers, etc. Due to the implementation of the project, there will be employment opportunities especially for workers from the local community. Employees will also improve more in their professional knowledge and skills. The net effect of job creation is the improvement of the livelihoods and living standards of the beneficiaries and poverty reduction, development of local people's livelihood. Cause of the proposed project is located in Thar Du Kan Industrial Zone, there may have business opportunities to local people. Local people can have a market by selling foods, snacks and drinks nearby the factory.

5.1.2. Negative Impact

The following Figure 5-1 briefly described the potential negative impacts of the proposed project. There are four main types of impacts; impact on environmental resources, impact on ecological resource, impact on human and impact of waste generation.

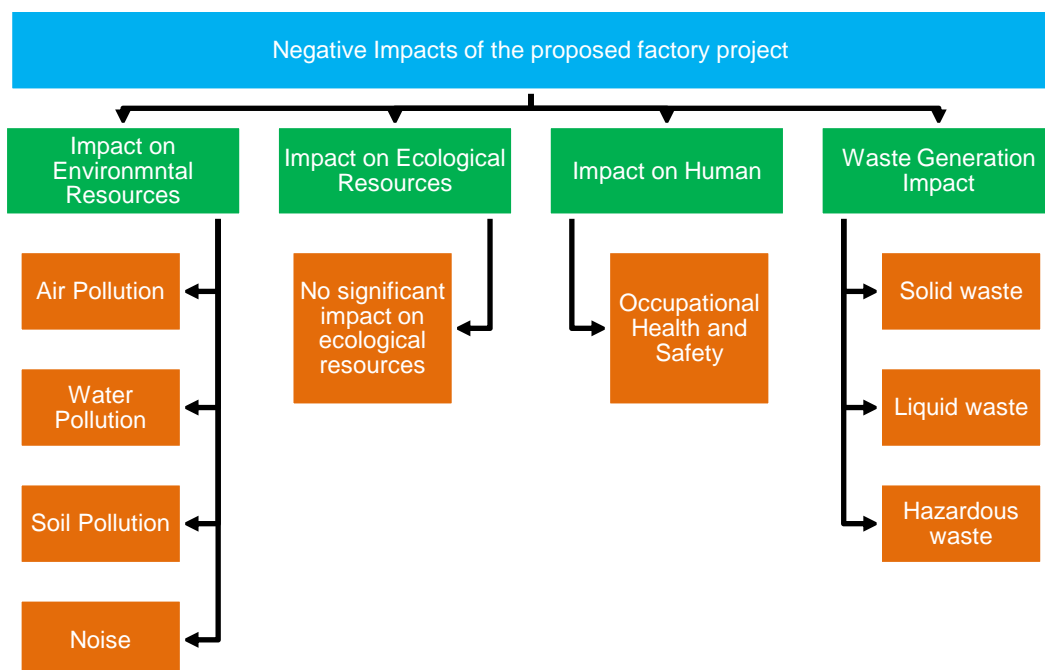


Figure 5-1 Potential negative impact affect from proposed factory project

5.2. METHODOLOGY FOR THE ASSESSMENTS

The assessment of each impact is based on consideration of the magnitude, duration, spatial and frequency of activities, which are going to be carried out during three phases and characteristics of the project site. The assessment is qualitative and the significance of each impact is classified into 5 categories in overall.

The following methodology has been applied to assess the environmental impacts of the factory mainly on air, water, land, biodiversity, including human beings. Each source of impact has been assessed by four parameters, magnitude, duration, extent and probability and each assess point have 5 scales as mentioned in **Error! Reference source not found..**

Table 5-1 Impact assessment parameters and its scale

Assessment	Scale				
	1	2	3	4	5
Magnitude (M)	Insignificant	small and will have no effect on working environment	Moderate and will result in minor changes on working environment	High and will result in significant changes on working environment	Very high and will result in permanent changes on working environment
Duration (D)	0 - 1 year	2 - 5 year	6 - 15 year	Life of operation	Post Closure
Extent (E)	Limited to the site	Limited to the local area	Limited to the region	National	International
Probability (P)	Very improbable	Improbable	Probable	Highly probable	Definite

Then, the Significant Point (SP) calculated by following formula.

$$\text{Significant Point (SP)} = (\text{Magnitude} + \text{Duration} + \text{Extent}) * \text{Probability}$$

Impact Significance: Based on calculated significant point, impact significance can categorize as follows:

Significant Point (SP)	Impact Significance
<15	Very Low
15-29	Low
30-44	Moderate
45-59	High
60	Very high

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5.3. POTENTIAL ENVIRONMENTAL IMPACT DURING CONSTRUCTION AND DECOMMISSIONING PHASE

Construction phase: The project factory is already constructed during environmental assessment study and site visit. Therefore, the proposed project is located in industrial zone and already finished the construction, the potential impact on environment is not assessed and affected must be caused the construction period.

Decommissioning phase: The proposed duration of the investment shall be 25 years. The term of the Lease shall be initial 5 years commencing from the date of signing of the Lease Agreement between Local owner and Nay Shwe Lin Co., Ltd. for proposed project site for 2.446 Acres of land and extendable for ten years in 2 times. The project of land and building will be restitution to land owner after close the operation. Therefore, the assessment study cannot be need for environmental impact assessment during decommission phase.

These two phases of operation shall be represented by land owner. If the owner will be demolished their factory, they will need mitigation and monitoring plan for environmental impact. Therefore, Myanwei's environmental assessment team presented for monitoring plan during decommissioning phase.

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5.4. SIGNIFICANT IMPACTS OF PROJECT ACTIVITY AND MITIGATION MEASURE

The project activities, their impacts and significance of impact are provided in Table 5-2.

Table 5-2 Evaluation and Perdition of Significant Impacts and Mitigation Measures on Operation phase

Categories	Source of Impact	Significant of Potential Impacts					Impact Significance	Reason	Mitigation Measure
		M	D	E	P	SP			
Impact on Environmental Resource									
Air	<ul style="list-style-type: none"> Dust and GHGs emission from vehicles used for transporting raw materials and final products Dust emission from boiler operation Emission from emergency diesel generator and vehicle movement 	2	4	2	2	16	Low	<ul style="list-style-type: none"> Air pollution in atmosphere. Inhaling them can increase the chance you'll have health problems. People with heart or lung disease, older adults and children are at greater risk from air pollution. 	<ul style="list-style-type: none"> To control air pollution, the vehicles, generators and machineries have to check and maintain regularly. The factory uses chimney for generator through which the flue gas are emitted for reducing the impact of stack emission on environment. Ensuring vehicles, compressor and generator are well maintained.
Water	<ul style="list-style-type: none"> Production process Boiler blow down water 	2	4	2	1	8	Very Low	<ul style="list-style-type: none"> The factory not generated wastewater from production process on CMP basic Very little mount of blow down water (5.28 gal / hr) 	<ul style="list-style-type: none"> No Mitigation Measure
Soil	<ul style="list-style-type: none"> Engine oil leaks, spills at diesel 	1	1	1	2	6	Very low	<ul style="list-style-type: none"> The factory compound area was 	<ul style="list-style-type: none"> No Mitigation Measure

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Categories	Source of Impact	Significant of Potential Impacts					Impact Significance	Reason	Mitigation Measure
		M	D	E	P	SP			
	storage and during fuel refueling.							paved with concrete and hence, contamination due to the oil spillage at this area is insignificant.	
Noise and Vibration	<ul style="list-style-type: none"> Generating noise from the production machinery 	2	4	1	2	14	Very low	<ul style="list-style-type: none"> The factory not operate heavy machinery the major noise source of CMP basic operation activities such as cutting, stitching/finishing and packaging by respective machines. There is insignificant impact on surrounding environment 	No Mitigation Measure
Impact on Ecological Resources									
Flora and fauna on terrestrial and aquatic life	Operation of the garment factory	2	4	1	2	14	Very low	<ul style="list-style-type: none"> Not Significant Impact on Ecological Resources 	<ul style="list-style-type: none"> No Mitigation Measure
Impact on Human									
Fire	<ul style="list-style-type: none"> Poor electrical installations 	3	5	2	3	30	Moderate	<ul style="list-style-type: none"> Serious damage to property and even 	<ul style="list-style-type: none"> To provide fire extinguishers, fire hose reels and fire hydrants on

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Categories	Source of Impact	Significant of Potential Impacts					Impact Significance	Reason	Mitigation Measure
		M	D	E	P	SP			
	<ul style="list-style-type: none"> Waste disposed area raw materials and chemical storage 							injury and death	the walls of the factory for fire emergency cases. <ul style="list-style-type: none"> Regular inspection for existing firefighting equipment must be done. In case of fire emergency, water storage tank for fire frightening. The emergency fire alarms are installed at the factory for alerting the workers in case of fire. The main entrances and route for emergency cases of the factory must not be blocked with materials or machines for fire emergency cases.
Occupational Safety	<ul style="list-style-type: none"> Accidental cases cause by operating machines. Unloading, mixing, cutting, pressing and packaging activities. Accidental cases of thermic fluid heater 	3	4	1	4	32	Moderate	<ul style="list-style-type: none"> Accident in workplace (physical injuries or even death) can occur during operation. 	<ul style="list-style-type: none"> First aid training, safety training, firefighting training or other essential training for machinery handling must be provided for emergency cases of workers. According to the observed light intensity values, the proponent provides sufficient lighting for workers for safe working and reducing optical problems of the workers. Personal Protective Equipment (PPEs) like earmuffs, safety gloves, helmets and goggles are

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Categories	Source of Impact	Significant of Potential Impacts					Impact Significance	Reason	Mitigation Measure
		M	D	E	P	SP			
									provided for each department. <ul style="list-style-type: none"> To prevent electric shock hazards, electrical maintenance staff (handyman) is to be assigned to do regular inspections and take preventive measures.
Health	<ul style="list-style-type: none"> Influx of people Noise from the generating of the emergency generators 	3	4	1	4	32	Moderate	<ul style="list-style-type: none"> Change in demographic structure, new diseases form immigrant workers To cause a range of health problems ranging from stress, poor concentration, productivity losses in the workplace, and communication difficulties and fatigue from lack of sleep, to more serious issues 	<ul style="list-style-type: none"> Manage the drainage systems of the factory to prevent health risk of the workers. The maximum allowable noise level for workers is 90dB(A) for 8 hours exposure a day. Thus, adequate protective noise impact measures in the form of ear muffs/ear plugs to the workers working in high noise areas
Waste Generation Impact									
Solid Waste	<ul style="list-style-type: none"> Residual pieces of fabric scraps from the production lines Waste from packaging 	3	4	1	4	32	Moderate	<ul style="list-style-type: none"> Surrounding environmental pollution and soil contamination 	<ul style="list-style-type: none"> Provides separate garbage bins at each building. All of the solid wastes will be collected separately in garbage based on their types and stored

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Categories	Source of Impact	Significant of Potential Impacts					Impact Significance	Reason	Mitigation Measure
		M	D	E	P	SP			
	materials <ul style="list-style-type: none"> Waste from kitchen, dormitory and office. 							in relevant separated waste storage area <ul style="list-style-type: none"> Final wastes should be disposed by using YCDC's service. 	
Liquid Waste	<ul style="list-style-type: none"> Septic system and sewage. Domestic liquid waste disposal from office, kitchen and dormitory. 	2	4	2	4	32	Moderate	<ul style="list-style-type: none"> Contamination of soil, surface water, ground water Regular inspection and cleaning, oil traps, septic tank and adequate covers for all storage and waste disposal areas can decrease these contaminations. 	
Hazardous Waste	<ul style="list-style-type: none"> Used oil and lubricant discharged from the maintenance of vehicles and machines. 	2	4	1	2	14	Very Low	<ul style="list-style-type: none"> Reduce the risk of contamination from fuels, oils and hazardous wastes Response effectively to incident and accident Proper inspection and maintenance in storage of hazardous waste. Dispose of hazardous chemicals and containers in accordance with occupational health, safety and environmental requirements. The empty chemical containers will hand over to suppliers for recycle or appropriate disposal The hazardous wastes are transported by specially licensed carriers and disposed in a licensed faculty (eg., DOWA and YCDC) 	

6. ENVIRONMENTAL MANAGEMENT PLAN

6.1. OBJECTIVE OF ENVIRONMENTAL MANAGEMENT PLAN

An Environment Management System (EMS) is a framework that helps an organization achieves its environmental goals through consistent review, evaluation, and improvement of its environmental performance. The assumption is that this consistent review and evaluation will identify opportunities for improving and implementing the environmental performance of the organization. The EMS itself does not dictate a level of environmental performance that must be achieved; each organization's EMS is tailored to its own individual objectives and targets.

An EMS encourages an organization to continuously improve its environmental performance. The system follows a repeating cycle the organization first commits to an environmental policy, then uses its policy as a basis for establishing a plan, which sets objectives and targets for improving environmental performance. The next step is implementation. After that, the organization evaluates its environmental performance to see whether the objectives and targets are being met. If targets are not being met, corrective action is taken. The results of this evaluation are then reviewed by top management to see if the EMS is working. Management revisits the environmental policy and sets new targets in a revised plan. The company then implements the revised plan. The cycle repeats, and continuous improvement occurs.

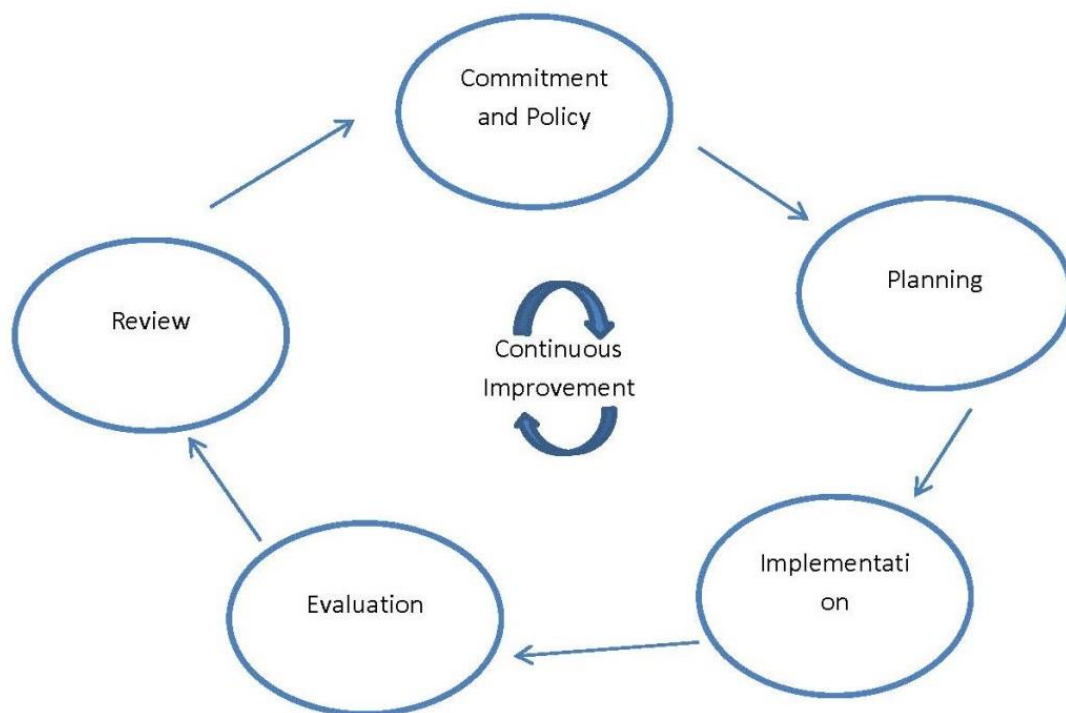


Figure 6-1 Continuous Improvement Circle

- **Commitment and Policy** – Top management commits to environmental improvement and establishes the organization’s environmental policy. The policy is the foundation of the EMS.

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- **Planning** – An organization first identifies environmental aspects of its operations. Environmental aspects are those items, such as air pollutants or hazardous waste that can have negative impacts on people and the environment. An organization then determines which aspects are significant by choosing criteria considered most important by the organization. For example, an organization may choose worker health and safety, environmental compliance, and cost as its criteria. Once significant environmental aspects are determined, an organization sets objectives and targets. An objective is an overall environmental goal (e.g., minimize use of chemical X). A target is a detailed, quantified requirement that arises from the objectives (e.g., reduce use of chemical X by 25% by September 1998). The final part of the planning stage is devising an action plan for meeting the targets. This includes designating responsibilities, establishing a schedule, and outlining clearly defined steps to meet the targets.
- **Implementation** – An organization follows through with the action plan using the necessary resources (human, financial, etc.). An important component is employee training and awareness for all employees. Other steps in the implementation stage include documentation, following operating procedures, and setting up internal and external communication lines.
- **Evaluation** – A company monitors its operations to evaluate whether targets are being met. If not, the company takes corrective action.
- **Review** – Top management reviews the results of the evaluation to see if the EMS is working. Management determines whether the original environmental policy is consistent with the organization's values. The plan is then revised to optimize the effectiveness of the EMS. The review stage creates a loop of continuous improvement for a company.

6.1.1. Institutional Requirement

Nay Shwe Lin Co., Ltd. will manage the development of the proposed project. The project proponent should appoint Health, Safety and Environment (HSE) issues throughout the duration of the project phases. HSE team is responsible for implementation and monitoring of EMP and Environmental Monitoring Plan (EMP) as well as coordination with local authorities and the nearby communities. The HSE Team also makes regular review of EMP to cover all potential impacts, amendments and modifications.

6.1.2. Responsibilities of the EMP

In order to ensure the sound development and effective implementation of the EMP, it will be necessary to identify and define the responsibilities. The environmental management practices, procedures, and responsibilities are defined herein to get full compliance with the existing environmental policy, laws, rules and regulations of the Republic of the Union of Myanmar. The following entities should be involved in the implementation of this EMP:

Nay Shwe Lin Co., Ltd.: The proponent will be charged with the responsibility for ensuring that the proposed development has been accomplished in an environmentally sound manner. This can be achieved by inclusion of environmental specifications in the tender specifications, selection of environmentally conscious contractors, and supervision to ensure that the objectives of this EMP are met. The implementation of Environmental Management Plan (EMP) process will prepare and follow

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up by appointed persons for health, safety, and environmental management under the instruction of management team of Nay Shwe Lin Co., Ltd. for EMP implementation facilities.

ECD (Yangon Region): The responsibility of ECD is to exercise general supervision and coordinating over all matters relating to the environment and to be instrumental in providing guidance for recognized regulatory frameworks.

Third-Party Environmental Consultant: The environmental consultant will have to ensure that the proposed EMP is up to date and is being followed properly by the proponent. Periodic audits of the EMP will have to be done to ensure that its performance is as expected, by comparing with operating standards so that any corrective actions can be taken.

6.1.3. Structure and Responsibilities for the EMP Development and Implementation

The HSE officer is responsible to the HSE components of the project and on matters relating to the implementation of the EMP throughout operation life. The S&E officer will have responsibilities that include:

- Ensure a monitoring system is in place to track and report all health, safety and environmental incidents;
- Carry out a thorough initial site inspection of environmental controls prior to work commencement;
- Record and provide a written report to the General Manager and production team of non-conformances with the EMP and require the HR supervisor to undertake mitigation measures to avoid or minimize any adverse impacts on environment or report required changes to the EMP.

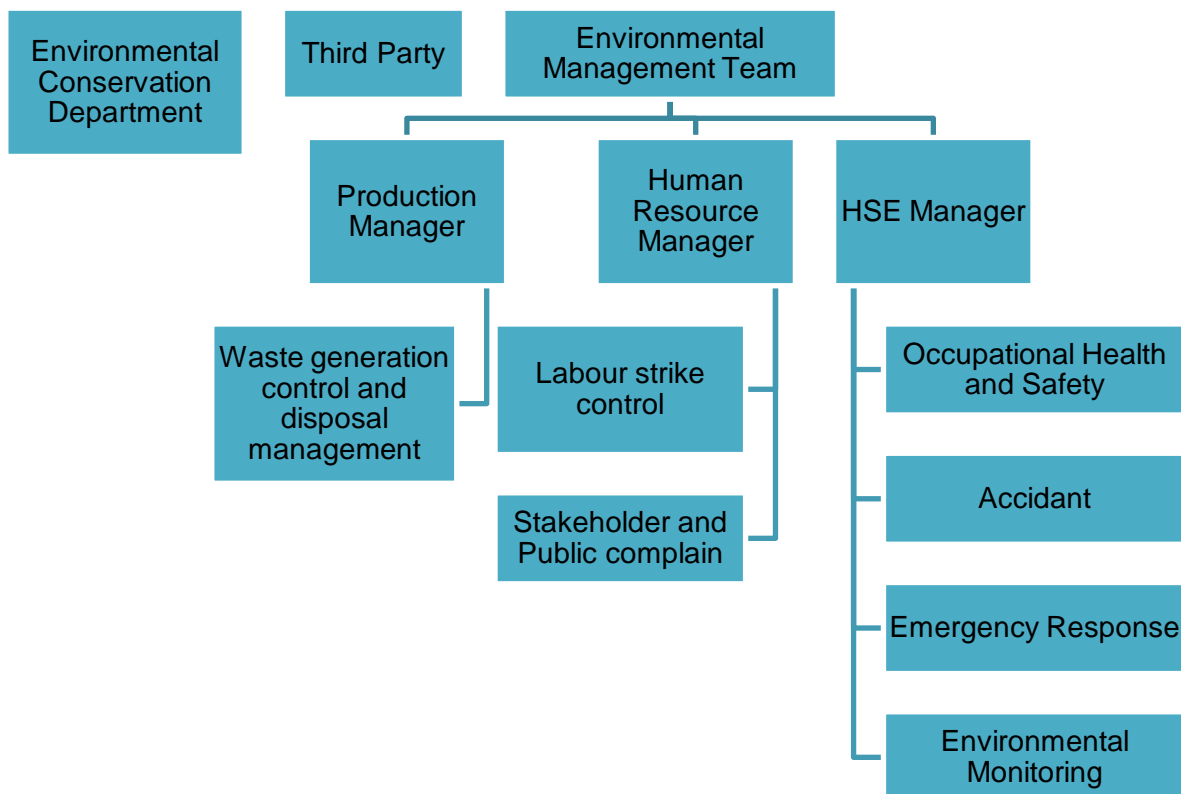


Figure 6-2 Organization Structure of Environmental Management Plan

Environmental Management Plan**6.2. ENVIRONMENTAL MANAGEMENT PROCESS**

The Environmental Management Plan (EMP) prepared for the proposed project covers the anticipated impacts of the said project, mitigation measures, management and monitoring plans.

Table 6-1 Mitigation and Monitoring process in operation phase

Categories	Potential Impact	Mitigation and Enhancement		Inspection		
		Measures	Responsible person	Type	Frequency	Supervision team
Air	Dust and GHGs emission from vehicles used for transporting raw materials and final products Dust emission from boiler operation Emission from emergency diesel generator and vehicle movement	To control air pollution, the vehicles, generators and machineries have to check and maintain regularly. The factory uses chimney for generator through which the flue gas is emitted for reducing the impact of stack emission on environment. Ensuring vehicles, compressor and generator are well maintained.	HSE manager	Regular check	Monthly	Environmental Management Team of Nay Shwe Lin Co., Ltd.
Fire	Poor electrical installations Waste disposed area raw materials and chemical storage	To provide fire extinguishers, fire hose reels and fire hydrants on the walls of the factory for fire emergency cases. Regular inspection for existing firefighting equipment must be done. In case of fire emergency, water storage tank for fire frightening. The emergency fire alarms are installed at the factory for alerting the workers in case of fire. The main entrances and route for emergency cases of the factory must not be blocked with materials or machines for fire emergency cases.	HSE manager Operation Manager	Regular Check	Monthly	Environmental Management Team of Nay Shwe Lin Co., Ltd.
Occupational Safety	Accidental cases cause by operating machines.	First aid training, safety training, firefighting training or other essential training for	HSE manager	Regular Check	Monthly	Environmental Management

Environmental Management Plan

Categories	Potential Impact	Mitigation and Enhancement		Inspection		
		Measures	Responsible person	Type	Frequency	Supervision team
	Unloading, mixing, cutting, pressing and packaging activities. Accidental cases of thermic fluid heater	<p>machinery handling must be provided for emergency cases of workers.</p> <p>According to the observed light intensity values, the proponent provides sufficient lighting for workers for safe working and reducing optical problems of the workers.</p> <p>Personal Protective Equipment (PPEs) like earmuffs, safety gloves, helmets and goggles are provided for each department.</p> <p>To prevent electric shock hazards, electrical maintenance staff (handyman) is to be assigned to do regular inspections and take preventive measures.</p>				Team of Nay Shwe Lin Co., Ltd
Health	Influx of people Noise from the generating of the emergency generators	<p>Manage the drainage systems of the factory to prevent health risk of the workers.</p> <p>The maximum allowable noise level for workers is 90dB(A) for 8 hours exposure a day. Thus, adequate protective noise impact measures in the form of ear muffs/ear plugs to the workers working in high noise areas</p>	HSE manager	Arrangement for requirements, restriction and regular check awareness program	Half a year	Environmental Management Team of Nay Shwe Lin Co., Ltd
Solid Waste	Residual pieces of fabric scraps from the production lines Waste from packaging materials Waste from kitchen, dormitory and office.	<p>Provides separate garbage bins at each building.</p> <p>All of the solid wastes will be collected separately in garbage based on their types and stored in relevant separated waste storage area</p> <p>Final wastes should be disposed by using YCDC's service.</p>	Operation Manager	Regular Check	Weekly	Environmental Management Team of Nay Shwe Lin Co., Ltd
Liquid Waste	Septic system and sewage. Domestic liquid waste disposal	Regular inspection and cleaning, oil traps, septic tank and adequate covers for all	HSE Manager	Regular check	Half a Year	Environmental Management

Environmental Management Plan

Categories	Potential Impact	Mitigation and Enhancement		Inspection		
		Measures	Responsible person	Type	Frequency	Supervision team
	from office, kitchen and dormitory.	storage and waste disposal areas can decrease these contaminations.	Operation Manager			Team of Nay Shwe Lin Co., Ltd
Hazardous Waste	Used oil and lubricant discharged from the maintenance of vehicles and machines.	<p>Proper inspection and maintenance in storage of hazardous waste.</p> <p>Dispose of hazardous chemicals and containers in accordance with occupational health, safety and environmental requirements.</p> <p>The empty chemical containers will hand over to suppliers for recycle or appropriate disposal</p> <p>The hazardous wastes are transported by specially licensed carriers and disposed in a licensed faculty (eg., DOWA and YCDC)</p>	HSE Manager Operation Manager	Restrictions and regular check	Daily	Environmental Management Team of Nay Shwe Lin Co., Ltd

Environmental Management Plan**6.3. ENVIRONMENTAL MONITORING SCHEDULE AND REPORTING**

The EMoP cell members responsible may conduct daily, weekly or monthly general inspections of the project area and facilities. The objectives are to identify non-compliances to EMoP. Table 6-2 is provided the environmental monitoring schedule for Nay Shwe Lin Co., Ltd. The factory submits monitoring report to the Ministry not less frequently than every six (6) months, as provided in a schedule in the EMP,

Table 6-2 Environmental monitoring process

Issues	Parameter	Frequency	Area to be monitored	Responsible Organization
Operation Phase				
Common	Monitoring of mitigation measures (Table 6-1)	Yearly (3 years after operation)	The project	Environmental Management Team's Nay Shwe Lin Co., Ltd
Air quality	SO ₂ , NO ₂ , CO, CO ₂ , PM _{2.5} , PM ₁₀	Biannually monitoring and reporting to ECD (first 3 years after operation)	One point in the factory	Environmental Management Team's Nay Shwe Lin Co., Ltd
Waste Generation	Solid waste, Liquid waste and Hazardous waste	weekly	Recycle house and waste house and at the factory office	Environmental Management Team's Nay Shwe Lin Co., Ltd
Fire Hazardous	Visual inspection, firefighting equipment	Monthly	At the factory	Environmental Management Team's Nay Shwe Lin Co., Ltd
Light intensity	Illuminance	Monthly	At the production line (especially cutting and QC)	Environmental Management Team's Nay Shwe Lin Co., Ltd
Decommissioning Phase				
Air quality	SO ₂ , NO ₂ , CO, CO ₂ , PM _{2.5} , PM ₁₀	One time during this phase	One point in the production area	Land Owner
Noise	Noise level in decibel (dBA)	One time during this phase	One points in demolishing area	Land Owner
Rehabilitation	Recovering and Revegetation		All decommissioning area	Land Owner

6.4. BUDGET PLAN FOR ENVIRONMENTAL MANAGEMENT AND MONITORING

This section describes the budget plans for the environmental management and environmental monitoring by the project proponent. On the other hand, Nay Shwe Lin Co., Ltd. will take necessary environmental mitigation measures and its expenses for the environmental management not only at the construction and operation phases but also at the closing phase in accordance with their responsibility for the studies of recommendation.

The following table shows the expenditures for the implementation of Environmental Management Plan for operation phase annually. Estimation cost for EMP implementation is presented in Table 6-3.

Environmental Management Plan**Table 6-3 Cost estimation for EMP implementation**

No	Item	Frequency/Times	Cost (MMK)
Mitigation Plan			
1	Maintenance of air ventilation system	Once per year	600,000 per year
2	Grass plantation within the area of factory compound	Once per three months	100,000 per three months
3	Solid waste disposal	12	20,000 per month
4	Purchase of Personal Protective Equipment (PPE)	Once per half a year	100,000 per month
5	Medical Check-up and Health Insurances	Once per year	800,000 per year
Monitoring Plan			
1	Air Quality	2	500,000 per year
3	Light level	2	50,000 per year
4	Environmental Monitoring report	1	500,000 lump sum

6.5. CAPACITY BUILDING AND TRAINING PLAN

The emergency preparedness is vital, as quick and correct response is necessary in case of emergency to reduce injuries, harm and other damage. Care should be given for during processing activities in order to prevent synthetic errors and accidental cases (e.g., electricity shock and fire hazards).

The emergency response plans should be established for handling all foreseeable emergencies in the workplace and must provide the following;

6.5.1. Assignment of responsibilities

All senior staff such as a line/production manager or safety officer should be assigned to lead the emergency response team and charged with the duties of (1) assessing the emergency and taking necessary actions (2) overseeing the implementation of the emergency response plan (3) organizing regular drill (4) ensuring all emergency equipment is well maintained.

6.5.2. Emergency procedures

Emergency procedures are operating instructions for employees to follow in emergency case About work safety in the concerned processing, the management team should

- a) Identify and list out all possible emergency situations in the workplace
- b) Assess the effects and impacts of the emergency situations
- c) Establish emergency response plans
- d) Provide and maintain emergency equipment and other necessary resources
- e) Ensure that staff are familiarized with the arrangements in case of emergencies by providing procedural instructions and employee training and organizing drills

6.5.3. Training for Emergencies

The type, amount and frequency of training varies, depending upon the task's employees are expected to perform. Although training must be provided to employees at least annually, safety meetings and drills should be conducted at more frequent intervals.

Environmental Management Plan

Regardless of the specific type of facility, training should include, though not be limited to the following;

- ✚ Hazard recognition and prevention (fire, explosion, etc.)
- ✚ Proper use of fire extinguishers
- ✚ Emergency reporting procedures
- ✚ Preventive maintenance
- ✚ Hazardous materials spill response
- ✚ First Aid

6.5.4. Fire Prevention and Protection

The fire prevention and protection program must address the following topics:

Prevention; policies, practices and procedures designed to keep the conditions necessary for a fire from coming together

- Hot work permits
- Lockout/tag out policies
- Design specifications for storage of flammable materials

Severity reduction; policies, practices and procedures designed to reduce the spread of fire and end the fire.

- Emergency plans
- Alarm systems
- Portable fire extinguishers
- Fire Protection Equipment

Cleanup; policies, practices and procedures designed to return the affected area to an operational level and reduce other losses created by improper cleanup

- First aid
- Removal of debris to an appropriate waste site
- Equipment and facility repair

6.5.5. Fire Protection Equipment

1. **Explosion Suppression Systems:** Explosion suppression systems should be used in unusually hazardous areas such as elevator legs, boots and head, or in areas such as bins, distributors and tanks.
2. **Portable Fire Extinguishers:** All buildings within a facility must have fully charged and operable portable fire extinguishers. If employees are expected to use portable extinguishers or other firefighting equipment against incipient fires, they must be trained to use the equipment. Training must include the following:
 - Correct type of extinguisher to use on different classes of fire
 - Proper techniques for use of the equipment to extinguish a fire
3. **Standpipes and Hoses:** All areas within a facility that are above 75 feet from ground level and in which combustible materials other than grain are stored should have wet or dry standpipes and hoses installed.

Environmental Management Plan

4. Automatic Sprinkler Systems: Automatic sprinkler systems are recommended in areas containing combustible materials.
5. Fire Hydrants: All grain and feed mill facilities should have adequate public or private fire hydrants on site. Each fire hydrant should have an adequate water supply.

6.5.6. Fire Safety and Evacuation Plan

Fire Evacuation plans should include the following information

- o Emergency escape routes must be clearly shown on floor plans and workplace maps
- o Employers must know that their employees know the emergency escape routes
- o Procedures for employees who must remain to operate critical equipment before evacuating
- o Identification and assignment of personnel responsible for rescue or emergency medical aid

Fire Safety Plans should include the following information:

1. Procedure for reporting a fire or other emergency
2. Site plans indicating the following
 - The Occupancy assembly point
 - The locations of fire hydrants
 - The normal routes of fire department vehicles access
3. Floor Plans identifying the locations of the following
 - Exits
 - Primary evacuation routes
 - Secondary evacuation routes
 - Accessible egress routes
 - Areas of refuge
 - Exterior area for assisted rescue
 - Manual fire alarm boxes
 - Portable fire extinguishers
 - Occupant-use hose stations
 - Fire alarm annunciators and controls

The following American National Fire Fighting Association (NFFA) Standards must be following.

Table 6-4 American National Fire Fighting Association (NFFA) Standards

No.	Parameters	Proposed Capacity	Remark
1	Fire water flow	14 bars	
2	Deluging rate	12.0 liters/m2/min	
3	Foam rate	10.0 liters/m2/min	
4	Maximum water pressure	190 liters/min	For storage area

Emergency evacuation Drill: An exercise performed to train staff and occupants and to evaluate their efficiency and effectiveness in carrying out emergency excavation procedures

Environmental Management Plan

Employee Training and Response Procedures: Employee shall be trained in the fire emergency procedure described in their fire evacuation and fire safety plans and training should be based on these plans;

Frequency: Employee shall receive training in the contents of fire safety and evacuation plans and their duties as part of new employee orientation and at least annually thereafter. Records shall be kept and made available to the fire code official upon request.

Employee Training Program: Employee shall be trained in fire prevention, evacuation and fire safety in accordance with the following sections.

Fire Prevention Training - Employee shall be apprised of the fire hazards of the materials and processes to which they are exposed. Each employee shall be instructed in the proper procedures for preventing fires in the conduct of their assigned duties

Evacuation Training – Employees shall be familiarized with the fire alarm and evacuation signals, their assigned duties in the event of an alarm or emergency, evacuation routes, areas of refuge, exterior assembly areas and procedures for evacuation

Fire Safety Training – Employee assigned fire-fighting duties shall be trained to know the locations and proper use of portable fire extinguishers or other manual fire-fighting equipment and the protective clothing or equipment required for its safe and proper use.

6.5.7. Site Fire Control

1. Alert other people through fire alarm
2. If small, control using an extinguisher
3. Contact fire brigade if not under immediate control
4. Attend to human life in immediate danger
5. For electrical fires turn off power before fighting
6. Once out of the building, stay out. Do not allow people to go back into the burning building to collect valuables. While evacuating the building, close doors (but do not lock) to slow down the spread of fire
7. Obey all instructions
8. Proceed to an emergency evacuation area (Muster Point)

6.5.8. Employee Information and Training

Employees must be informed about any operations in their work area where hazardous chemicals or materials are present. They must also be informed about the locations and availability of the hazard communication program, list of chemicals and SDSs. Employees must receive training on the following:

- Methods for detecting the presence or release of a hazardous chemical, such as monitoring devices and the visual
- appearance or odor of the chemical
- Physical and health hazards of chemicals in their work area
- How to protect themselves using work practices, emergency procedures and personal protective equipment
- How to interpret the information on the labels and MSDSs

Environmental Management Plan

6.5.9. Health and Safety Training Plan for Worker

Health and Safety Training plan currently used and provided in Myanmar Xinag Rui Fashion Co., Ltd. to all employees and workers by trainings internally and externally. Specific trainings are recommended and conducted according to the health and safety guidelines to enhance worker’s health and to prevent all potential risks and hazards might occur in the factory. All required trainings related to health and the respective departments propose safety or operational parts, top management makes decision and HR organizes and conducts the trainings.

Table 6-5 Training Plan Used in Nay Shwe Lin Co., Ltd

No.	Health and Safety Guidelines	Training needs
1.	Management	General fire and emergency response plan, evacuation. All training materials and procedures covering health and safety for workers and employees
2.	Machine safety and noise management	Training for machine operations to all operators Use of PPE and proper use of any necessary protection Maintenance and Emergency procedures
3.	Environment safety	Understanding and training on recognition and maintenance not to affect environment
4.	Material storage and safety	Safety use of related devices and machines Use of necessary protections in working areas Sanitation work
5.	Fire Safety	Firefighting and evacuating training and practices Firefighting materials/ devices use
6.	First Aid	first aid / CPR/ AED training from providers (Outsource) training on hazard of pathogens

6.6. GRIEVANCE REDRESS MECHANISM (GRM)

People who live near the project affected area or stakeholders can complain about the problems and impacts that they suffer; they can complain through Grievance Committee, which includes the responsible persons of Nay Shwe Lin Co., Ltd. representative from Thardukan Industrial Zone and representative from General Administration Department (Shwe Pyi Thar Township). Small issues will be solved at the Grievance Committee stage and other unsolved problems will be submitted to higher responsible authorities and finally the responsible person decided by the court in legal terms. The following diagram (Figure 6-3) show steps of Grievance Redress Mechanism of Proposed Factory Project.

Environmental Management Plan

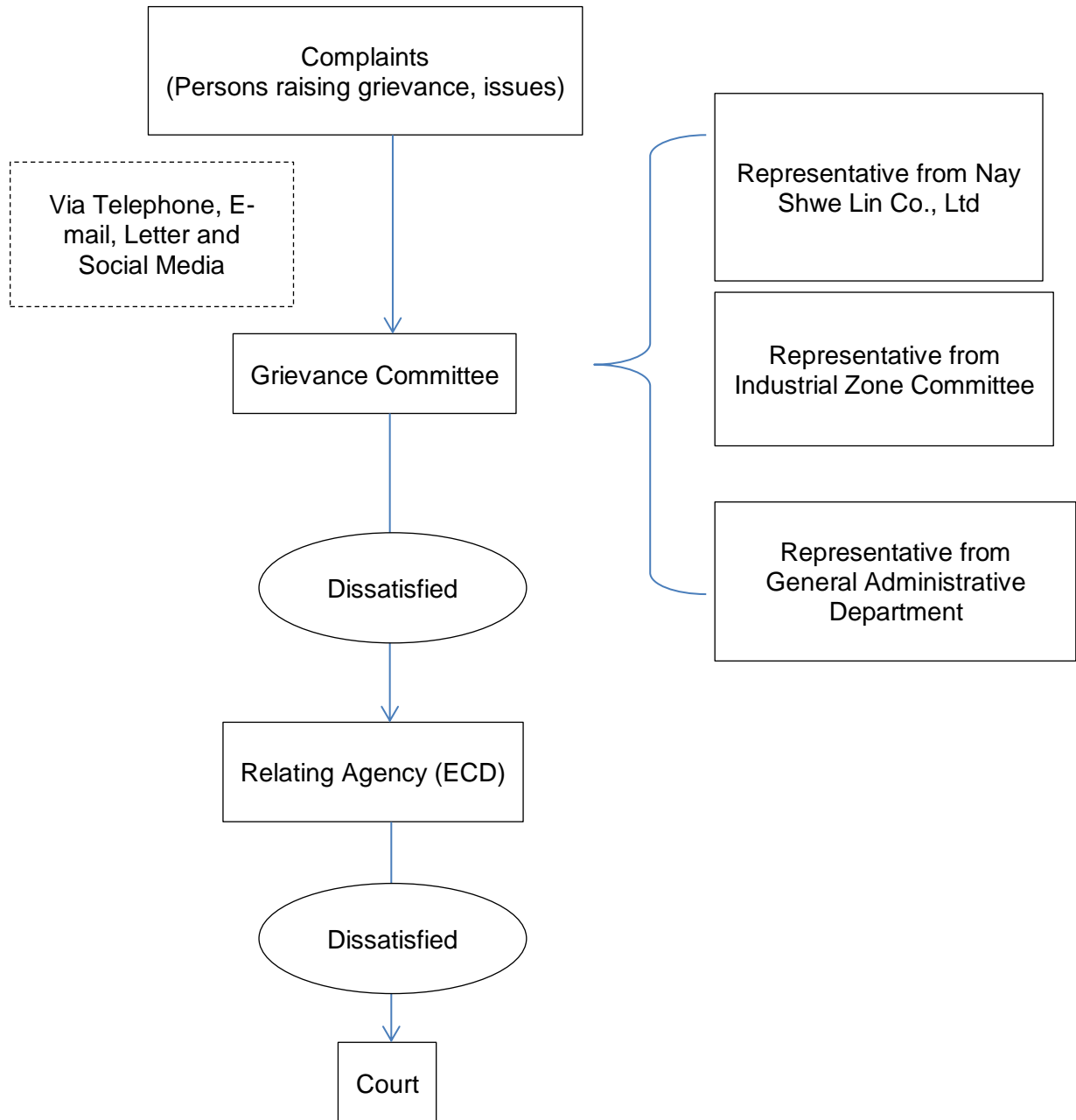


Figure 6-3 Grievance Redress Mechanism flow diagram

6.7. CORPORATE SOCIAL RESPONSIBILITY (CSR) PLAN

The CSR activities have the objective to uplift quality of life and gain favorable relations from all communities in the operation area. The CSR program for Nay Shwe Lin factory consists of three main sectors; Health, Education and Communities Development Sector. CSR activities are conducted in compliance with MIC’s guideline for implementation of CSR program.

Nay Shwe Lin has a plan to implement and donate 2 percent of the profit per year for Corporate Social Responsibility (CSR) and Employee Welfare Arrangement (Table 6-6).

Environmental Management Plan

Table 6-6 CSR plan at Nay Shwe Lin Co., Ltd

Area	Priority item	Contribution (%)	Detail targets
Health	Healthcare for employees and their family	0.8 %	One of our main concerns is the well-being of our employees. We will contribute 0.6 % of our net profit for the healthcare which includes medical checkup for the employees and providing health education to our workers.
Education	Raising awareness education level and human right	0.8 %	We will contribute 0.6 % of our net profit to the public school near the factory to be a part of creating the better community. We will also work together with the school to understand more about the needs and we will also ensure that our contributions will be used in the most effective and efficient way for the society.
Community development	Donation to local community	0.4%	<ul style="list-style-type: none"> • Donate to local charities with a worthy cause • Actively participate in community events • Encourage staff to participate, and to form a community engagement team to actively support community events • Embedding understanding and consciousness about human rights issues among the employees • Development of sexual harassment and power harassmentll (workplace bullying & harassment) prevention efforts

7. PUBLIC CONSULTATION

7.1. PUBLIC CONSULTATION PROCESS

This chapter presents results of public consultation and information disclosure conducted for the factory. Public participation can be considered as the required element of the EMP process. In this study various stakeholder participation were made.

Public consultation during preparation of EMP report was conducted on 10, June 2020, following the EIA procedure.

The project's stakeholders in this category are key officials or representatives of the regional and local authorities who have direct responsibilities for the administration of the EMP process for environmental and social clearance and issuing operation permits for proposed development projects.

For this factory, relevant key offices at the national level are Environmental Conservation Department (ECD) and Industry Supervision and Inspection Department.

Relevant key office at the regional level is Yangon City Development Committee (YCDC), General Administrative Department, Fire Department, Factories and General Labor Law Inspection Department, Public Health Department, Industrial Supervision and Inspection Department.

Public consultation carried out after the presentation on the project, followed by questions, answers and discussion. U Myat Ko Ko presented EMP study and findings from Myanwei, after the presentation following question and answer section. Summary of public consultation meeting is presented in Figure 7-1.

Table 7-1 Summary of Public Consultation Meeting

Time and Date	21 August 2020 10:30AM-12:30PM
Venue	Industrial Zone Committee (1), Shwe Pyi Thar Township, Yangon.
Agenda	Presentation on the Background Information of Project, Project Description, Impact Assessment, Environmental Mitigation Environmental Management Plan and Monitoring Plan Received and Answer from feedback of participants

7.2. RECOMMEND SUGGESTION AND COMMENT

After the presentation, the floor opened for questions and answers. There is no question and comment for presentation and EMP draft report, because the project is sample manufacturing of garment on CMP Basis.

Suggestion; U Kyaw Kyaw; Assistant supervisor (Environmental Conservation and Cleaning Department-Industrial Section) YCDC

- To compliance with YCDC procedure for solid waste management and disposed process
- To implement the sufficient septic tank design for workers
- To Construct the small pond in front of factory to filter the factory's wastewater before discharging to the surrounding drainage

Environmental Management Plan

- To get the septic tank capacity sufficiently with the number of employee
- To get sanitation regularly

Suggestion; U Min Mg Htun (Fire Services Department)

- To provide fire safety training for employee regularly

Suggestions; U Htun Naing Win; Director (General Administration Office)

- To provide 2% of net profit for CSR program according to MIC's guideline for implementation of CSR program for education, health, society, and environment.



Environmental Management Plan



Figure 7-1 Public Consulting Meeting

8. CONCLUSION & RECOMMENTATION

8.1. CONCLUSION

Environmental Management Plan (EMP) has been prepared for factory is located at Plot No. (3), Myay Taing Block No.49, War Tayar Industrial Zone, Shwe Pyi Thar Township, Yangon Region. The main objective of the study is focused specially on the required environmental management measures or creating environmentally friendly workplace. An EMP has been carried out for the factory according to the requirement of the proponent as it has been made for garment manufacturing.

Thus, the factory management can take proper mitigation steps against adverse environmental impacts by following this EMP. The necessary measure to mitigate impact regarding different environmental parameter such as air, water, waste, noise has been proposed in this EMP.

However, all necessary implementation measures to mitigate adverse environmental, health and safety impacts have already been taken to meet National Environmental Quality (Emission) Guideline (2015). On the other, the factory has positive impacts in terms of environmental in the operation phase. Further, this will indirectly help in boosting up the national economic condition through foreign investment. An outline of EMP has been given in the present report to mitigate/enhance the impacts, which occurs during operation phase of the factory.

The effective implementation of the mitigation measures proposed will ensure towards good environmental management within the proposed project area. Furthermore, the environmental monitoring plan prepared as part of the EMP will provide adequate opportunities to address any residual impacts during the operation phase.

In conclusion, it has been figured out that, the proposed garment factory is going to generate local employment opportunities and enhance capabilities and working skills of employees. Consequently, their socio-economic standard is expected to be improved and undertaking corporate social responsibilities (CSR) as recommended. The study further concluded that positive impacts will be of immense benefit to the local community and national development as well.

8.2. RECOMMENTATION

This is recommended that;

- All appropriate environmental management measures detailed in this report, together with any other environmental management commitments should be implemented throughout the entire life of the factory
- Solid wastes and liquid wastes need to dispose according to YCDC rules and regulation
- Workers should be provided proper training and it should be ensured that workers use PPE during factory operation area.
- Daily, monthly and annual action plan shall be formulated based on this EMP and practiced at operation level.
- Keep full records of environmental management activities and present to annual independent third party environment audit.

Environmental Management Plan

- Abide environmental policy, laws, rules and instructions of the Republic of the Union of Myanmar.
- The proposed project is operated the production process with minimum impact on environmental and society
- Nay Shwe Lin factory will use 2% of their income as CSR Plan.
- According to this project, local people especially who lived in near that industry, will get work chance.
- As EMP project, will reduce the impact of the environment.

Finally, the proponent should follow the comments and suggestions made by ECD after reviewing this EMP report. Once concerned authorities approve EMP, effective implementation of EMP by the project proponent is essential. The proponent should abide environmental policy, laws, rules and instructions of the Republic of the Union of Myanmar.

Environmental Management Plan

9. REFERENCE

- [1] General Administrative Department (Shwe Pyi Thar Township), Shwe Pyi Thar Township Data (2019).
- [2] Hla Hla Aung, Potential Seismicity of Yangon Region (Geological Approach), “Yangon Surface Displacement as Detected by Insar Time Series Analysis” July 2011.
- [3] Ministry of Natural Resources and Environmental Conversation (MONREC), “Environmental Impact Assessment Procedure” December 2015.
- [4] Ministry of Natural Resources and Environmental Conversation (MONREC), “National Environmental Quality (Emission) Guidelines” December 2015.
- [5] Specifications for accident prevention signs and tags, regulations (standards 29-CFR), Occupational Safety and Health Administration.
- [6] [https://weatherspark.com/y/112503/Average-Weather-in-Yangon-Myanmar-\(Burma\)-Year-Round](https://weatherspark.com/y/112503/Average-Weather-in-Yangon-Myanmar-(Burma)-Year-Round)



Form (5-B)

THE REPUBLIC OF THE UNION OF MYANMAR

Yangon Region Investment Committee

ENDORSEMENT

Endorsement No. YGN-373/2020

Dated 18 March 2020

This endorsement is issued by Yangon Region Investment Committee accordance with Section 25(d) of the Myanmar Investment Law-

- (1) Investor Name MS. CHAN WAI KAM MONICA
- (2) Citizenship CHINESE
- (3) Residence Address ROOM 1809, BLOCK B, LING POON COURT, DIAMOND HILL, KOWLOON, HONG KONG
- (4) Name and Address of Principal Organization SINO WORLDWIDE INTERNATIONAL LTD, SUITE 2611, 26/F, OFFICE TOWER, LANGHAM PLACE MONGKOK KL, HONG KONG
- (5) Place of Incorporation HONG KONG
- (6) Type of business MANUFACTURING OF GARMENT ON CMP BASIS
- (7) Place(s) of investment Project PLOT NO. 3, MYAY TAING BLOCK NO.49, WARTAYAR INDUSTRIAL ZONE, SHWE PYI THAR TOWNSHIP, YANGON REGION
- (8) Foreign Capital Amount US\$ 2.251 MILLION
- (9) Period for Foreign Capital to be brought in WITHIN TWO YEARS FROM THE DATE OF ISSUANCE OF ENDORSEMENT
- (10) Total Amount of Capital (Kyat) EQUIVALENT IN KYAT OF US\$ 2.251 MILLION
- (11) Construction/ Preparation Period TWO YEARS
- (12) Validity of Endorsement 25 YEARS
- (13) Form of Investment WHOLLY FOREIGN OWNED
- (14) Name of Company Incorporated in MYANMAR NAY SHWE LIN CO., LTD



CF
18/3/2020
(Phyo Min Thein)
Chairman

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THE REPUBLIC OF THE UNION OF MYANMAR
YANGON REGION INVESTMENT COMMITTEE

Plot No. 49, Seinlae May Street,
Kabar Aye Pogada Road, Yankin Township, Yangon.

Tel: 01-658263

Our ref :YRIC-1/E-373/2020(1749.F)

Fax: 01-658264

Dated : 18 March 2020

Subject : Decision of the Yangon Region Investment Committee regarding on
Endorsement for manufacturing of garment on CMP basis under the
name of Nay Shwe Lin Company Limited.

Reference: Nay Shwe Lin Company Limited's letter dated 12/3/2020.

1. The Yangon Region Investment Committee, at its (5/2020) meeting held on 13/3/2020, approved the Endorsement for investment for manufacturing of garment on CMP basis under the name of Nay Shwe Lin Company Limited submitted by Sino Worldwide International Ltd (100%) from Hong Kong as a wholly foreign owned investment in accordance with the Myanmar Investment Law and Rules.
2. The terms and conditions of the Endorsement are as follows:
 - (a) The term of an Endorsed project shall be twenty-five (25) years commencing from the date of the issuance of the Endorsement by the Yangon Region Investment Committee.
 - (b) The term of the land and building Lease Agreement shall be an initial five (5) years commencing from the date of the agreement between U Zaw Win @ U Khin Zaw (Lessor) and Nay Shwe Lin Company Limited (Lessee) and shall be extendable for a period of ten (10) years, and a further consecutive period of ten (10) years by mutual agreement between the Lessor and the Lessee subject to the approval of the Yangon Region Investment Committee.
 - (c) The annual rent for land and building shall be kyat 72 million (kyat seventy-two million only) for the total area of the land measuring 2.446 acres.

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- (d) Nay Shwe Lin Company Limited may submit an application form for the right to use land under Chapter XII and exemptions and reliefs under Sections 75, 77 and 78 of the Chapter XVIII of Myanmar Investment Law.
- (e) Nay Shwe Lin Company Limited shall use its best efforts to achieve a timely realization of the work stated in the Endorsement application.
- (f) Nay Shwe Lin Company Limited shall obey and respect the responsibilities of investors under Section 65 of Myanmar Investment Law and Chapter XX of Myanmar Investment Rules.
- (g) Nay Shwe Lin Company Limited shall carry out of prevention, mitigation and monitoring of significant environmental impacts according to the type of investment activities in accordance with the relevant laws, rules, regulations and procedures.
- (h) Nay Shwe Lin Company Limited shall abide by the Fire Services Department's rules, regulations, directives and instructions. Moreover, Nay Shwe Lin Company Limited shall undertake fire prevention measure such as the appropriate placement of water storage tank, fire hooks, sand bags, and fire extinguishers , and training will be provided to all employees regarding the use of fire fighting equipment. Nay Shwe Lin Company Limited shall also appoint a specific individual who shall be called the fire Safety Officer (FSO) who shall be designated responsible for on-site safety and coordination within the organization.
- (i) Nay Shwe Lin Company Limited shall submit to the Myanmar Investment Commission any sublease, mortgage, transfer of shares or transfer of the business to any person during the investment period in accordance with Section 72 of Myanmar Investment Law and Rule 191 of Myanmar Investment Rules.

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- (j) Nay Shwe Lin Company Limited shall submit an annual report in the prescribed form to the Myanmar Investment Commission within three months of the end of the financial year in accordance with Rule 196 of Myanmar Investment Rules and shall disclose a summary of the report on its website or the Myanmar Investment Commission's website.
- (k) Nay Shwe Lin Company Limited must, during the operation period under the Endorsement of the Yangon Region Investment Committee, submit its operating report quarterly in the prescribed form in accordance with Rule 197 of Myanmar Investment Rules.
3. Nay Shwe Lin Company Limited shall carry out in accordance with the laws, regulations and stipulations of relevant Union Ministries, governmental department and governmental organizations the obtaining of any licence, permit or registration as per Section 65(d) of Myanmar Investment Law.
4. Nay Shwe Lin Company Limited shall submit five (5) copies of all approvals, licences, permits and similar authorizations relevant to the initial implementation of the investment and Lease Agreement to the Yangon Region Investment Committee.



(Phyo Min Thein)
Chairman

Nay Shwe Lin Company Limited

- cc: 1. The Office of the Union Government
2. Ministry of office of the Union Government
3. Ministry of Home Affairs
4. Ministry of Planning, Finance and Industry
5. Ministry of Investment, Foreign Economic Relations

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6. Ministry of Natural Resources and Environmental Conservation
7. Ministry of Labour, Immigration and Population
8. Ministry of Commerce
9. Central Bank of Myanmar
10. Office of the Myanmar Investment Commission
11. Chairman, CMP Enterprises Supervision Committee
12. Director General, National Archives Department
13. Director General, Customs Department
14. Director General, Internal Revenue Department
15. Director General, Directorate of Industrial Supervision and Inspection
16. Director General, Directorate of Investment and Company Administration
17. Director General, Department of Environmental Conservation
18. Director General, Directorate of Labour
19. Director General, Department of Immigration
20. Director General, Department of Trade
21. Monitoring and Supervision Division, Directorate of Investment and Company Administration

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APPENDIX B

Transitional Consultant Registration Certificate



THE REPUBLIC OF THE UNION OF MYANMAR
 Ministry of Natural Resources and Environmental Conservation
 Environmental Conservation Department



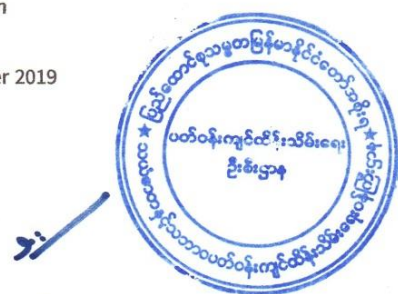
CERTIFICATE FOR TRANSITIONAL CONSULTANT REGISTRATION
 (ကြားကာလအကြံပေးလုပ်ကိုင်သူမှတ်ပုံတင်ခြင်းအထောက်အထားလက်မှတ်)

No. 10068 Date 24 MAY 2019

The Ministry of Natural Resources and Environmental Conservation, hereby, issues this certificate to the organization under Environmental Impact Assessment Procedure, Notification No. 616/2015.

(ပတ်ဝန်းကျင် ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်း၊ အမိန့်ကြော်ငြာစာအမှတ်၊ ၆၁၆/၂၀၁၅ အရ သယံဇာတနှင့် သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာနသည် ဤအထောက်အထားလက်မှတ်ကို ထုတ်ပေးလိုက်သည်။)

- | | |
|--|--|
| (a) Name of Organization
(အဖွဲ့အစည်းအမည်) | Myanwei Consulting Co., Ltd. |
| (b) Name of the representative in the organization
(အဖွဲ့အစည်းကိုယ်စားလှယ်၏အမည်) | U Nyan Lynn Aung |
| (c) Citizenship of the representative in the organization
(အဖွဲ့အစည်းကိုယ်စားလှယ်နိုင်ငံသား) | Myanmar |
| (d) Identity Card /Passport Number of the representative person in the organization
(အဖွဲ့အစည်းကိုယ်စားလှယ်၏ မှတ်ပုံတင်/ နိုင်ငံကူးလက်မှတ် အမှတ်) | 12/Sakhana(N)056196 |
| (e) Address of organization
(ဆက်သွယ်ရန်လိပ်စာ) | No. 28, Myay nu street, Sanchaung Township,
Yangon, Myanmar.
Mobile phone: 09440251888
E mail: ceo@myanweiconsulting.com |
| (f) Type of Consultancy
(အကြံပေးလုပ်ကိုင်မှုအမျိုးအစား) | Organization |
| (g) Duration of validity
(သက်တမ်းကုန်ဆုံးရက်) | 31 December 2019 |



Director General
 Environmental Conservation Department
 Ministry of Natural Resources and Environmental Conservation

Areas of Expertise Permitted
(ခွင့်ပြုသည့် ကျွမ်းကျင်မှုနယ်ပယ်များ)

1. Facilitation of meeting,
2. Land use,
3. Legal analysis,
4. Geology and soil,
5. Occupational Safety and Health,
6. Public Health



EXTENSION
သက်တမ်းတိုးခြင်း
The VALIDITY of this certificate is extended
for one year from (1.1.2020) to (31.12.2020)
ဤလက်မှတ်အား (၁-၁-၂၀၂၀) ရက်နေ့မှ (၃၁-၁၂-၂၀၂၀)
ရက်နေ့အထိ တစ်နှစ်သက်တမ်းတိုးပြန်သည်။
Soe Naing
For Director General
(Soe Naing, Director)
Environmental Conservation Department



REPUBLIC OF THE UNION OF MYANMAR
 Ministry of Natural Resources and Environmental Conservation
 CERTIFICATE FOR TRANSITIONAL CONSULTANT REGISTRATION



(ကြားကာလအကြံပေးလုပ်ကိုင်သူမှတ်ပုံတင်ခြင်းအထောက်အထားလက်မှတ်)

No. 10048 Date 31.03.2018

The Ministry of Natural Resources and Environmental Conservation, hereby, issues this certificate to the person under Environmental Impact Assessment Procedure, Notification No. 616/2015.

(ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်း၊ အမိန့်ကြော်ငြာစာအမှတ်၊ ၅၁၆/၂၀၁၅ အရ သယံဇာတနှင့် သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာနသည် ဤအထောက်အထားလက်မှတ်ကို လူပုဂ္ဂိုလ်အားထုတ်ပေးလိုက်သည်။)

- | | |
|---|---|
| (a) Name of Consultant
(အကြံပေးပုဂ္ဂိုလ်အမည်) | U Lin Htet Sein |
| (b) Citizenship
(နိုင်ငံသား) | Myanmar |
| (c) Identity Card / Passport Number
(မှတ်ပုံတင်/နိုင်ငံကူးလက်မှတ် အမှတ်) | 7/ Tha Ka Na (N) 101377 |
| (d) Address
(ဆက်သွယ်ရန်လိပ်စာ) | No.54, Room No.704, Waizayantar Tower,
Waizayantar Road, Thingangyun Township,
Yangon.
lin.tbs@gmail.com , 09 421137569 |
| (e) Organization
(အဖွဲ့အစည်း) | Total Business Solution Co., Ltd. |
| (f) Type of Consultancy
(အကြံပေးလုပ်ကိုင်မှုအမျိုးအစား) | Person |
| (g) Duration of validity
(သက်တမ်းကုန်ဆုံးရက်) | 31 March 2018 |

EXTENSION
 သက်တမ်းတိုးမြှင့်ခြင်း
 The VALIDITY of this certificate is extended
 for one year from (1.4.2018) to (31.3.2019)
 ဤလက်မှတ်အား (၁-၄-၂၀၁၈) ရက်နေ့မှ (၃၁-၃-၂၀၁၉)
 ရက်နေ့အထိ တစ်နှစ်အတွင်း တိုးမြှင့်သည်။
 For Director General
 (Soe Naing, Director)
 Environmental Conservation Department

Soe Naing

Director General
 Environmental Conservation Department
 Ministry of Natural Resources and Environmental Conservation

Areas of Expertise Permitted
(ခွင့်ပြုသည့် ကျွမ်းကျင်မှုနယ်ပယ်များ)

1. Geology and Soil

EXTENSION
သက်တမ်းတိုးမြှင့်ခြင်း
The VALIDITY of this certificate is extended
for nine months from (1.4.2019) to (31.12.2019)
ဤလက်မှတ်အား (၁-၄-၂၀၁၉) ရက်နေ့မှ (၃၁-၁၂-၂၀၁၉)
ရက်နေ့အထိ (၉)လသက်တမ်း တိုးမြှင့်သည်။
Soe Naing
10.6.2019
For Director General
(Soe Naing, Director)
Environmental Conservation Department

EXTENSION
သက်တမ်းတိုးမြှင့်ခြင်း
The VALIDITY of this certificate is extended
for one year from (1.1.2020) to (31.12.2020)
ဤလက်မှတ်အား (၁-၁-၂၀၂၀) ရက်နေ့မှ (၃၁-၁၂-၂၀၂၀)
ရက်နေ့အထိ တစ်နှစ်သက်တမ်း တိုးမြှင့်သည်။
Soe Naing
16.1.2020
For Director General
(Soe Naing, Director)
Environmental Conservation Department

APPENDIX C

Monitoring Result

Light Result



Plot No. (36, 38), Room No. 9A, 9th floor, Grand Myay Nu Condominium, Myay Nu Street, Sanchaung Township, Yangon Region, The Republic of the Union of Myanmar.
Office: (+95) 1 526574, Mobile: (+95) 9775405118, 9792528677, 9449251888; Website: www.myanweiconsulting.com

Project Name:	NAY SHWE LIN CO., LTD.
Project Location:	Plot No (3), Myay Taing Block No.49, Wartayar Industrial Zone, Shwe Pyi Thar Township, Yangon Region.
Sampling Date:	24 July, 2020
Sampling Time:	11:00 am to 5:00 pm
Sampling Condition:	Normal
Sampling By:	Environmental Team Represented by Myanwei Environmental Solutions Co., Ltd.

Instrument	Type	Sampling Rate	Location
Uni-T (Luminometer)	UT380 Series	100 times/second	16°59'59.72"N 96° 3'22.41"E

No	Measure area	Unit	Result	Standard
1	Sewing Area	Lux	474	600
2	Cutting Area	Lux	988	1000
3	Ironing Area	Lux	608	600
4	QC Area	Lux	450	900-1500
5	Packing Area	Lux	367	600

IESNA Lighting Handbook

Department	Type of Light	Wattage of Light	Lux Level
Fabric store	Fluorescent tube light	40 W	300
Sewing floor	LED tube light	20 W (T8)	400
Cutting floor	LED tube light	22 W (T8)	1000
Finishing	LED tube light	28 W (T8)	600
Inspection points	LED tube light	28 W (T8)	900 (except 1500 at audit tables)
Sampling	LED tube light	22 W (T8)	500
Office areas	Fluorescent tube light	36 W (T)	300

LIN HTET SEIN
DIRECTOR
MYANWEI ENVIRONMENTAL SOLUTIONS
COMPANY LIMITED.

Noise result



Plot No. (36, 38), Room No. 9A, 9th floor, Grand Myay Nu Condominium, Myay Nu Street, Sanchaung Township, Yangon Region, The Republic of the Union of Myanmar.
Office: (+95) 1 526574, Mobile: (+95) 9775405118, 9792528677, 9449251888; Website: www.myanweiconsulting.com

Project Name:	NAY SHWE LIN CO., LTD.
Project Location:	Plot No.3, Myay Taing Block No.49, Wartayar Industrial Zone, Shwe Pyi Thar Township, Yangon Region.
Sampling Date:	24 July, 2020
Sampling Time:	11:00 am to 5:00 pm
Sampling Condition:	Normal Condition
Sampling By:	Environmental Team Represented by Myanwei Environmental Solutions Co., Ltd.

Instrument	Type	Sampling Rate	Location
Digital Sound Level Meter	GM 1356 USB	30 -130 dB	16°59'59.72"N 96° 3'22.41"E

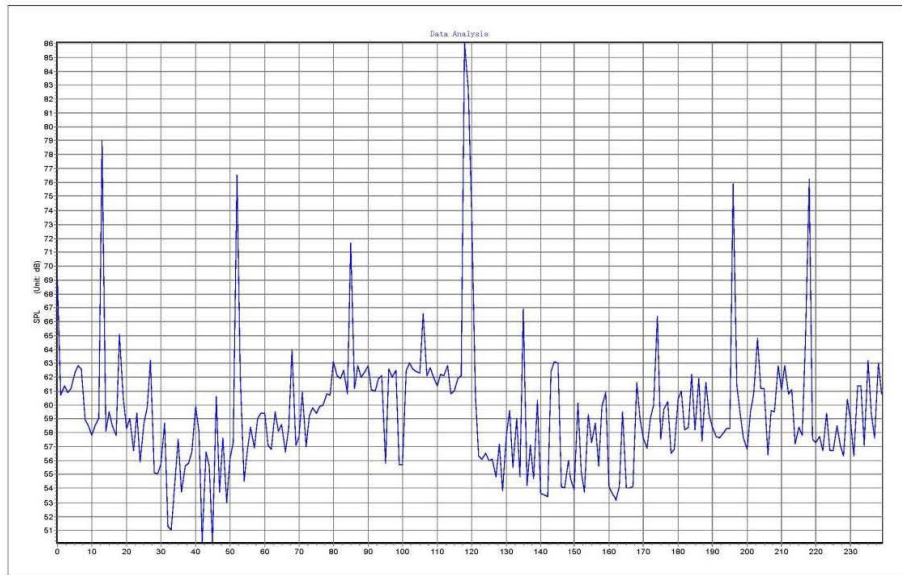
No	Place	Unit	Result	Standard	Remark
1	Operation Area	dBA	66.87 dBA	70 dBA	Normal

National Environmental Quality (Emission) Guideline

Receptor	One Hour Laeq (dBA)	Guideline value
	Daytime	Nighttime
	7:00 – 22:00 (10:00 – 22:00 for Public holidays)	22:00 – 07:00 (22:00 – 10:00 for Public holidays)
Residential, Institutional, Educational	55	45
Industrial, Commercial	70	70

LIN HTET SEIN
DIRECTOR
MYANWEI ENVIRONMENTAL SOLUTIONS
COMPANY LIMITED.

Monitoring Graph



Air Quality Analysis Result



Plot No. (36, 38), Room No. 9A, 9th floor, Grand Myay Nu Condominium, Myay Nu Street, Sanchaung Township, Yangon Region, The Republic of the Union of Myanmar.
Office: (+95) 1 526574, Mobile: (+95) 9775405118, 9792528677, 9449251888; Website: www.myanweiconsulting.com

Project Name:	NAY SHWE LIN CO., LTD.
Project	Plot No.3, Myay Taing Block No.49, Wartayar Industrial Zone,
Location:	Shwe Pyi Thar Township, Yangon Region.
Sampling Date:	24 July, 2020
Sampling Time:	11:00 am to 5:00 pm
Sampling Condition:	Good
Sampling By:	Environmental Team Represented by Myanwei Environmental Solutions Company Limited.

Instrument	Type	Sampling Rate	Location
Myanwei Environmental Solutions	Environmental Perimeter Air Station	1 second to 21 weeks	16°59'59.72"N 96° 3'22.41"E.

No	Parameter	Unit	Result	Standard	Remark
1	PM ₁₀	(µg/M ³)	15.8	50	Below
2	PM _{2.5}	(µg/M ³)	10.6	25	Below
3	SO ₂	(µg/M ³)	286.8	500	Below
4	NO ₂	(µg/M ³)	46.74	200	Below
5	CO	(µg/M ³)	0.3	10	Below
6	O ₃	(µg/M ³)	40.5	100	Below

National Environmental Quality (Emission) Guideline

Parameter	Averaging period	Guideline value	Unit
PM 10b	1-year 24-hour	20 50	(µg/M ³)
PM 2.5b	1-year 24-hour	10 25	(µg/M ³)
NH3	-	-	
CO	-	-	
NO2	1-year 1-hour	40 200	
SO2	24-hours 10 minute	20 500	

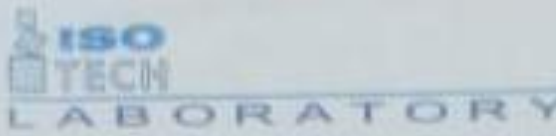
VOC	-	2/20/50/75/100/1 150 c,d	mg/Nm ³
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a. Particulate matter 10 micrometer or less in diameter
b. Particulate matter 2.5 micrometer or less in diameter
c. Calculated as Total carbon

d. As the 30-minute mean for stack emissions: 2 mg/Nm³ for volatile organic compounds classified as carcinogenic or mutagenic with mass flow greater than or equal to 10 g/hour; 20 mg/Nm³ for discharges of halogenated volatile organic compounds with a mass flow equal or greater than 100 g/hour; 50 mg/Nm³ for waste gases from drying of large installations (solvent consumption > 15 tons/year); 75 mg/Nm³ for coating application processes for large installations (solvent consumption > 15 tons/year); 100 mg/Nm³ for small installations (solvent consumption < 15 tons/year); if solvent is recovered from emissions and reused, the guideline value is 150 mg/Nm³


LIN HTET SEIN
DIRECTOR
MYANWEI ENVIRONMENTAL SOLUTIONS
COMPANY LIMITED.


Tube Water Quality Result



ISO
TECH
LABORATORY

Laboratory Technical Certificate of Test (Drinking Water)
4300, Enga Court, 2nd & 3rd Floor, Lovers of Sri (Mang) Apartment (100/101), 10000 Sri
Kuala Lumpur (KUALA) Test quality monitoring & compliance services





WTL-PS-001
Revised Date - 01-10-2012
Effective Date - 01-10-2012
Serial No. - 1 of Page 1 of 1

WQ820 031

WATER QUALITY TEST RESULTS FORM

Client	ngaham
Nature of Water	Purified Drinking Water
Location	Shree Sri Thai Township
Date and Time of collection	6.8.2020
Date and Time of arrival at Laboratory	6.8.2020
Date and Time of commencing examination	6.8.2020
Date and Time of completing	6.8.2020

Results of Water Analysis

WHO Drinking Water Guidelines (General - 1993)

Parameter	Result	Unit	Limit
pH	6.8		6.5 - 8.5
Colour (True)	10	TCU	15 TCU
Turbidity	10	NTU	5 NTU
Conductivity	28	micro S/cm	
Total Hardness	4	mg/l as CaCO ₃	500 mg/l as CaCO ₃
Calcium Hardness	2	mg/l as CaCO ₃	
Magnesium Hardness	2	mg/l as CaCO ₃	
Total Alkalinity	14	mg/l as CaCO ₃	
Phenolphthalein Alkalinity	10	mg/l as CaCO ₃	
Carbonate (CaCO ₃)	10	mg/l as CaCO ₃	
Bicarbonate (HCO ₃)	14	mg/l as CaCO ₃	
Iron	0.05	mg/l	0.3 mg/l
Chloride (as Cl ₂)	2	mg/l	250 mg/l
Sodium chloride (as NaCl)	3	mg/l	
Sulphate (as SO ₄)	10	mg/l	500 mg/l
Total Solids	14	mg/l	1500 mg/l
Total Suspended Solids	10	mg/l	
Total Dissolved Solids	14	mg/l	1000 mg/l
Manganese	10	mg/l	0.05 mg/l
Phosphate	10	mg/l	
Phenolphthalein Acidity	3	mg/l	
Methyl Orange Acidity	10	mg/l	
Salinity	0.1	ppt	

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

<p>Tested by</p> <p>Signature: <u>Zaw Hein Oo</u></p> <p>Name: <u>B.Sc (Chemistry)</u> Sr. Chemist</p>	<p>Approved by</p> <p>Signature: <u>Sue Thit</u></p> <p>Name: <u>B.E (Civil) 1980,</u> <u>Technist Officer</u> <u>ISO TECH Laboratory</u></p>
---	--

(a) Division of WEG Co., Ltd. ISO TECH
 No. 15, Lenth Road, Henthagone Quarter, Insein Township, Yangon, Myanmar
 Tel: 011-444951, 011-71275175, 09-50338807, 01-444506, E-mail: isochlaboratory@gmail.com, Website: weg-myanmar.com

APPENDIX D
Fire Safety Certificate & Training Photos

ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်
ပြည်ထဲရေးဝန်ကြီးဌာန
မီးသတ်ဦးစီးဌာန




မီးဘေးလုံခြုံရေးစစ်ဆေးထောက်ခံချက်

အမှတ်စဉ်(၂၂၄၆)

ရန်ကင်းတိုင်းဒေသကြီး/ပြည်နယ် _____ ခရိုင် _____ မြို့နယ် _____ ရက်စွဲ ၂၀၁၉ ခုနှစ်၊ အောက်တိုဘာလ ၃ ရက်

လှော်ကာလမ်း(ဝါတော်ရာလမ်း) _____ လမ်းအမှတ် (၃) _____ နိုင်ငံခြား/ခေါ် _____ ဦးစော်ဝင်း(ခ)ခင်မော် _____

Steel Structure (၁၇) ထပ် (အထည်ချုပ်စက်ရုံ) _____ အဆောက်အဦအတွက်

ဤဌာန၏ (၃၀-၁၀-၂၀၁၈) ရက်စွဲပါစာအမှတ် _____ ၄၉၅/၁၀၀/ ၅၂ / ဦး ၁

ပြင်သတ်မှတ်ပေးထားသည့်မီးဘေးလုံခြုံရေးဆိုင်ရာ ပြဌာန်းချက်များအား (၂၁-၉-၂၀၁၉) ရက်နေ့တွင် စစ်ဆေးသည့်အခါပြည့်စုံစွာ ဆောင်ရွက်ထားကြောင်း စစ်ဆေးတွေ့ရှိရသည်။

၂။ ဤထောက်ခံချက်သည် စစ်ဆေးသည့်နေ့မှစ၍ (၃)နှစ်အထိသာ အကျုံးဝင်သည်။

၃။ ထို့ပြင် မီးသတ်ဦးစီးဌာနမှ အခါအားလျော်စွာ ထပ်မံစစ်ဆေးချိန်တွင် မီးဘေးလုံခြုံရေးဆိုင်ရာ ပြဌာန်းချက်များကို လိုက်နာဆောင်ရွက်ခြင်းမရှိပါက ဤထောက်ခံချက်ကို ပြန်လည်မှတ်သိမ်းသွားမည်ဖြစ်ပြီး အဆောက်အဦအားအသုံးပြုသူ(သို့မဟုတ်)ပိုင်ရှင်သည် မြန်မာနိုင်ငံမီးသတ်တပ်ခွဲ ဥပဒေအရ အရေးယူခြင်းခံရမည်။

မှတ်ချက်။ ဤထောက်ခံချက်အား လွှဲပြောင်းသုံးစွဲခြင်းမပြုရ။ အဆောက်အဦအား မူလရည်ရွယ်ချက်မှ ပြောင်းလဲအသုံးပြုပါက ထောက်ခံချက်အသစ် ထပ်မံလျှောက်ထားရမည်။


 ညွှန်ကြားရေးမှူးချုပ်(ကိုယ်စား)
 (သိန်းထွန်းဦး ၊ ညွှန်ကြားရေးမှူး)
 Nu


ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်
ပြည်ထဲရေးဝန်ကြီးဌာန
မီးသတ်ဦးစီးဌာန
မြို့နယ်မီးသတ်ဦးစီးမှူးရုံး၊ ရွှေပြည်သာမြို့နယ်



သင်တန်းဆင်းလက်မှတ်

ရန်ကုန်တိုင်းဒေသကြီး၊ မြောက်ပိုင်းခရိုင်၊ ရွှေပြည်သာမြို့နယ်၊ ဝါးတရာစက်မှုဇုန်၊
ဝါးတရာလမ်းမကြီး၊ အမှတ် (၃)ရှိ **NAY SHWE LIN CO.,LTD** အထည်ချုပ်စက်ရုံမှ
အမည် အောင်ကျော်စွန်း (အဘ) ဦးကျော်စင်
နိုင်ငံသားစိစစ်ရေးအမှတ် ၁၂/၈၁၁(၂၆)၁၉၂၈၀၆ သည် ရွှေပြည်သာမြို့နယ်
မီးသတ်စခန်း၌ (၁၈ - ၈ - ၂၀၂၀) ရက်နေ့မှ (၂၀ - ၈ - ၂၀၂၀) ရက်နေ့အထိ ဖွင့်လှစ်သော
အကြံအခြေခံမီးသတ်သင်တန်းတွင် တက်ရောက်ပြီးစီးအောင်မြင်ခဲ့ပါသည်။




မြို့နယ်မီးသတ်ဦးစီးမှူး
(သွင်ယုနိုင်၊ ဦးစီးအရာရှိ)
ရွှေပြည်သာမြို့နယ်

ရက်စွဲ ။ ၂၀၂၀-ပြည့်နှစ်၊ ဩဂုတ်လ (၂၀)ရက်


ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်
ပြည်ထဲရေးဝန်ကြီးဌာန
မီးသတ်ဦးစီးဌာန
မြို့နယ်မီးသတ်ဦးစီးမှူးရုံး၊ ရွှေပြည်သာမြို့နယ်



သင်တန်းဆင်းလက်မှတ်

ရန်ကုန်တိုင်းဒေသကြီး၊ မြောက်ပိုင်းခရိုင်၊ ရွှေပြည်သာမြို့နယ်၊ ဝါးတရာစက်မှုဇုန်၊
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အမည် ရွှေမင်းမြိုးသိန်း (အဘ) ဦးကျော်ဝိသုတ
နိုင်ငံသားစိစစ်ရေးအမှတ် ၁၂/အစန(ခ) ၂၅၂၆၄၉ သည် ရွှေပြည်သာမြို့နယ်
မီးသတ်စခန်း၌ (၁၈ - ၈ - ၂၀၂၀) ရက်နေ့မှ (၂၀ - ၈ - ၂၀၂၀) ရက်နေ့အထိ ဖွင့်လှစ်သော
အကြံအခြေခံမီးသတ်သင်တန်းတွင် တက်ရောက်ပြီးစီးအောင်မြင်ခဲ့ပါသည်။




မြို့နယ်မီးသတ်ဦးစီးမှူး
(သွင်ယုနိုင်၊ ဦးစီးအရာရှိ)
ရွှေပြည်သာမြို့နယ်

ရက်စွဲ ။ ၂၀၂၀-ပြည့်နှစ်၊ ဩဂုတ်လ (၂၀)ရက်

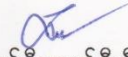
ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်
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သင်တန်းဆင်းလက်မှတ်

ရန်ကုန်တိုင်းဒေသကြီး၊ မြောက်ပိုင်းခရိုင်၊ ရွှေပြည်သာမြို့နယ်၊ ဝါးတရာစက်မှုဇုန်၊
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အမည် --- ခင်ဆန်းလှိုင် --- (အဘ) --- ဒေါ်ကျော်မိုး ---
နိုင်ငံသားစိစစ်ရေးအမှတ် ၁၂/မသရ(၆၆) ၁၂၂၈၉၁ --- သည် ရွှေပြည်သာမြို့နယ်
မီးသတ်စခန်း၌ (၁၈ - ၈ - ၂၀၂၀) ရက်နေ့မှ (၂၀ - ၈ - ၂၀၂၀) ရက်နေ့အထိ ဖွင့်လှစ်သော
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ရက်စွဲ ။ ၂၀၂၀-ပြည့်နှစ်၊ ဩဂုတ်လ (၂၀)ရက်


ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်
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သင်တန်းဆင်းလက်မှတ်

ရန်ကုန်တိုင်းဒေသကြီး၊ မြောက်ပိုင်းခရိုင်၊ ရွှေပြည်သာမြို့နယ်၊ ဝါးတရာစက်မှုဇုန်၊
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အမည် မောင်သန်းခင် (အဘ) ဦးမြင့်
နိုင်ငံသားစိစစ်ရေးအမှတ် ၁၂၂(ရယုသာပြင်) ၀၈၃၁၅၅ သည် ရွှေပြည်သာမြို့နယ်
မီးသတ်စခန်း၌ (၁၈ - ၈ - ၂၀၂၀) ရက်နေ့မှ (၂၀ - ၈ - ၂၀၂၀)ရက်နေ့အထိ ဖွင့်လှစ်သော
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ရက်စွဲ ။ ၂၀၂၀-ပြည့်နှစ်၊ ဩဂုတ်လ (၂၀)ရက်

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သင်တန်းဆင်းလက်မှတ်

ရန်ကုန်တိုင်းဒေသကြီး၊ မြောက်ပိုင်းခရိုင်၊ ရွှေပြည်သာမြို့နယ်၊ ဝါးတရာစက်မှုဇုန်၊
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 အမည် မောင်သိန်းသိန်း (အဘ) ဦးမြတ်စိန်
 နိုင်ငံသားစိစစ်ရေးအမှတ် ၁၂/ရဟာ(ခ) ၁၁၈၀၃၇ သည် ရွှေပြည်သာမြို့နယ်
 မီးသတ်စခန်း၌ (၁၈ - ၈ - ၂၀၂၀) ရက်နေ့မှ (၂၀ - ၈ - ၂၀၂၀) ရက်နေ့အထိ ဖွင့်လှစ်သော
 အကြံအခြေခံမီးသတ်သင်တန်းတွင် တက်ရောက်ပြီးစီးအောင်မြင်ခဲ့ပါသည်။



(Signature)
 မြို့နယ်မီးသတ်ဦးစီးမှူး
 (သွင်ယုနိုင်၊ ဦးစီးအရာရှိ)
 ရွှေပြည်သာမြို့နယ်

ရက်စွဲ ။ ၂၀၂၀-ပြည့်နှစ်၊ ဩဂုတ်လ (၂၀)ရက်


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သင်တန်းဆင်းလက်မှတ်

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နိုင်ငံသားစိစစ်ရေးအမှတ် ၁၂/၂၀၁၁၀၆၁၁၂၀၃၇၀၁၀ သည် ရွှေပြည်သာမြို့နယ်
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အကြိုအခြေခံမီးသတ်သင်တန်းတွင် တက်ရောက်ပြီးစီးအောင်မြင်ခဲ့ပါသည်။




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ရက်စွဲ ။ ၂၀၂၀-ပြည့်နှစ်၊ ဩဂုတ်လ (၂၀)ရက်





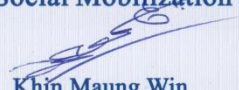
APPENDIX E
First Aid Certificate



This is certify that
(*Nay Shwe Lin co-Ltd*) was
successfully conducted Basic First Aid Training for their staffs,
No.(*၁*), *Wax Ta Yar* Street, Shwe Pyi Thar Industrial Zone,
Shwe Pyi Thar Township, Yangon, Unions of Myanmar from

The training course included the following topic: First Aid Concepts, First Aider's Role, Rights and Duties; First Aid Kits & First Aid Post; Triage & Victim Assessment; Basic life Support & Chocking : Wounds & Bleeding; Burns & Scalds; Head & Spinal injuries: Unconsciousness: Chest, Abdominal and Pelvis Injuries; Bone, Joint and Muscle Injuries: Splinting Extremities; First Aid in Miscellaneous conditions; Poisoning; Animals Bites & Stings; Hendling & Transportation; Psychosocial Support; Advocacy, Social Mobilization and Communication Skills; and Facilitation Skills.

Remarks : Expire Date (*24 JUL 2021*)


Khin Maung Win
Ya Ka-5957
Township Red Cross Brigade Officer
Shwepyithar

Myanmar Red Cross Society

First-aid (Basic Course)



CERTIFICATE

This is to certify Maung / Ma Cherry Soe son / daughter of
U Mjint Soe, has successfully completed the

"First-aid Basic Course on Myanmar Red Cross Society"

of the undermentioned subjects conducted from

(22 - 7 - 2020 to 24 - 7 - 2020)

1. First Aid Concepts
2. First Aider Role
3. Rights and Duties
4. First Aid Kits & First Aid Post
5. Triage & Victim Assessment
6. Basic Life Support & Chocking
7. Wounds & Bleeding
8. Burns & Scalds
9. Head & Spinal Injuries
10. Bone, Joint and Muscle Injuries
11. Splinting Extremities
12. First Aid in Miscellaneous Conditions
13. Poisoning
14. Animals Bites & Stings
15. Handling & Transportation
16. Psychosocial Support
17. Advocacy, Social Mobilization and Communication Skills
18. Facilitation Skills



Khin Maung Win
Ya Ka-5957
Township Red Cross Brigade Officer
Shwepyithar

Myanmar Red Cross Society

First-aid (Basic Course)



CERTIFICATE

This is to certify Maung / Ma Hnin Nwtt Yee son / daughter of
U Kyaw Thawng, has successfully completed the

"First-aid Basic Course on Myanmar Red Cross Society"

of the undermentioned subjects conducted from

(22 - 7 - 2020 to 24 - 7 - 2020)

1. First Aid Concepts
2. First Aider Role
3. Rights and Duties
4. First Aid Kits & First Aid Post
5. Triage & Victim Assessment
6. Basic Life Support & Chocking
7. Wounds & Bleeding
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9. Head & Spinal Injuries
10. Bone, Joint and Muscle Injuries
11. Splinting Extremities
12. First Aid in Miscellaneous Conditions
13. Poisoning
14. Animals Bites & Stings
15. Handing & Transportation
16. Psychosocial Support
17. Advocacy, Social Mobilization and Communication Skills
18. Facilitation Skills



Khin Maung Win
Ya Ka-5957
Township Red Cross Brigade Officer
Shwepyithar

Myanmar Red Cross Society

First-aid (Basic Course)



CERTIFICATE

This is to certify Maung / Ma Htay Htay Nwe son / daughter of
U Kyi Htay, has successfully completed the

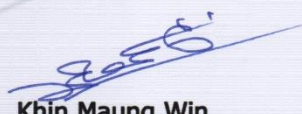
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of the undermentioned subjects conducted from

(22 - 7 - 2020 to 24 - 7 - 2020)

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18. Facilitation Skills




Khin Maung Win
Ya Ka-5957

Township Red Cross Brigade Officer
Shwepyithar

Myanmar Red Cross Society

First-aid (Basic Course)



CERTIFICATE

This is to certify Maung / Ma Htun Htun Aung son / daughter of
U Khin Maung Yin, has successfully completed the

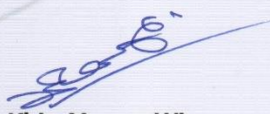
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Khin Maung Win
Ya Ka-5957

Township Red Cross Brigade Officer
Shwepyithar

Myanmar Red Cross Society

First-aid (Basic Course)



CERTIFICATE

This is to certify Maung / Ma Khin May Phoo son / daughter of
U Tin Hla, has successfully completed the

"First-aid Basic Course on Myanmar Red Cross Society"

of the undermentioned subjects conducted from

(22 - 7 - 2020 to 24 - 7 - 2020)

1. First Aid Concepts
2. First Aider Role
3. Rights and Duties
4. First Aid Kits & First Aid Post
5. Triage & Victim Assessment
6. Basic Life Support & Chocking
7. Wounds & Bleeding
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Khin Maung Win
Ya Ka-5957
Township Red Cross Brigade Officer
Shwepyithar

Myanmar Red Cross Society

First-aid (Basic Course)



CERTIFICATE

This is to certify Maung / Ma Lai Lai Khain son / daughter of
U Win Kyi, has successfully completed the

"First-aid Basic Course on Myanmar Red Cross Society"

of the undermentioned subjects conducted from

(- - to - -)

1. First Aid Concepts
2. First Aider Role
3. Rights and Duties
4. First Aid Kits & First Aid Post
5. Triage & Victim Assessment
6. Basic Life Support & Chocking
7. Wounds & Bleeding
8. Burns & Scalds
9. Head & Spinal Injuries
10. Bone, Joint and Muscle Injuries
11. Splinting Extremities
12. First Aid in Miscellaneous Conditions
13. Poisoning
14. Animals Bites & Stings
15. Handing & Transportation
16. Psychosocial Support
17. Advocacy, Social Mobilization and Communication Skills
18. Facilitation Skills



Khin Maung Win
Ya Ka-5957
Township Red Cross Brigade Officer
Shwepyithar

Myanmar Red Cross Society

First-aid (Basic Course)



CERTIFICATE

This is to certify Maung / Ma May Phalar Wlar son / daughter of
U Min Zaw, has successfully completed the


"First-aid Basic Course on Myanmar Red Cross Society"

of the undermentioned subjects conducted from

(22 - 7 - 2020 to 24 - 7 - 2020)

1. First Aid Concepts
2. First Aider Role
3. Rights and Duties
4. First Aid Kits & First Aid Post
5. Triage & Victim Assessment
6. Basic Life Support & Chocking
7. Wounds & Bleeding
8. Burns & Scalds
9. Head & Spinal Injuries
10. Bone, Joint and Muscle Injuries
11. Splinting Extremities
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18. Facilitation Skills




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Shwepyithar

Myanmar Red Cross Society

First-aid (Basic Course)



CERTIFICATE

This is to certify Maung / Ma Su Myat Po Po son / daughter of
U Myat Noe, has successfully completed the

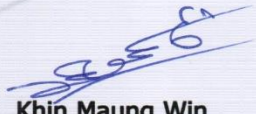
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Ya Ka-5957

Township Red Cross Brigade Officer
Shwepyithar

Myanmar Red Cross Society

First-aid (Basic Course)



CERTIFICATE

This is to certify Maung / Ma Thet Htan San son / daughter of
U Sai Min Naing Tun, has successfully completed the

"First-aid Basic Course on Myanmar Red Cross Society"

of the undermentioned subjects conducted from

(22 - 7 - 2020 to 24 - 7 - 2020)

1. First Aid Concepts
2. First Aider Role
3. Rights and Duties
4. First Aid Kits & First Aid Post
5. Triage & Victim Assessment
6. Basic Life Support & Chocking
7. Wounds & Bleeding
8. Burns & Scalds
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Shwepyithar

APPENDIX F Boiler Certificate

သို့လောထာဝရအသုံးပြုခွင့်လက်မှတ်
| လုပ်ထုံးလုပ်နည်း၊ အပိုင်း ၆၊ အပိုင်း ၉ (ခ) |

စာအမှတ်: ၅၃၁/၂၀၁၅/၂၀၁၅
၂၀၁၅.၂.၂၀

၂၀၁၅.၂.၂၀ - My Shan Tea Co., Ltd. စာအုပ်အမှတ် ၂၀၁၅.၂.၂၀

အမှတ် ၂၀၁၅.၂.၂၀၊ မြောက်ဧရာဝတီ၊ မြောက်ဧရာဝတီ၊ မြောက်ဧရာဝတီ

အမှတ် ၂၀၁၅.၂.၂၀၊ မြောက်ဧရာဝတီ၊ မြောက်ဧရာဝတီ၊ မြောက်ဧရာဝတီ

၂၀၁၅.၂.၂၀ ကျွတ် ၂၀၁၅.၂.၂၀ နိုင်ငံမှ

ထုတ်လုပ်သည့်သို့လောထာဝရ စာအုပ်အမှတ် ၂၀၁၅.၂.၂၀ ပါသော

သို့လောထာဝရအသုံးပြုခွင့်လက်မှတ် စာအုပ်အမှတ် ၂၀၁၅.၂.၂၀ ဖြစ်သော သို့လောထာဝရအသုံးပြုခွင့်လက်မှတ်

နှင့်ပြိုင်ဆိုင် ၂၀၁၅.၂.၂၀ ဖြစ်လက်မှတ်ထုတ်ပေးသည့်နေ့မှ (၆)လအသုံးပြုခွင့်ရှိသည်။

ယင်းစာအုပ်အပေါ် အခြေခံ၍ အခြေခံသည့်အခါ ထုတ်ပေးထားသည့် ဤသို့လောထာဝရအသုံးပြုခွင့်

လက်မှတ်ပျက်ပြယ်စေရမည်။


 ပုဂံပြည်နယ်အစိုးရအဖွဲ့
 (သို့လောထာဝရအသုံးပြုခွင့်)
 ပြန်လည်ထုတ်ပေးခြင်း


 (သို့လောထာဝရအသုံးပြုခွင့်)
 သို့လောထာဝရအသုံးပြုခွင့်
 ၂၀၁၅.၂.၂၀
 (သို့လောထာဝရအသုံးပြုခွင့်)
 စာအုပ်အမှတ် ၂၀၁၅.၂.၂၀

မှတ်စွဲ: ၂၀၁၅.၂.၂၀

မှတ်ချက်: ၂၀၁၅.၂.၂၀ သို့လောထာဝရအသုံးပြုခွင့် ၁၅ ပြည့်နှစ်အထိ ထုတ်ပေးထားသည့် သက်ဆိုင်ရာအစိုးရအဖွဲ့မှ အဖွဲ့အစည်းက လိုအပ်၍တောင်းဆိုသည့်အခါ ဤလက်မှတ်ကို တပ်ပြုရမည်။

