

XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED

Environmental Management Plan

MANUFACTURING OF VARIOUS KINDS OF BAGS



MYANWEI ENVIRONMENTAL SOLUTIONS COMPANY LIMITED

08-Jul-22



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

Attention: Dear Director
Environmental Conservation Department

Subject: Environmental Management Plan (EMP) Report in respect of the Manufacturing of various kinds of bags by Xin Sheng (Myanmar) Industrial Company Limited.

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.



XINSHENG (MYANMAR) INDUSTRIAL CO.,LTD

NO-710, KALAWYE NORTH VILLAGE, THANLYNN TOWNSHIP, YANGON, MYANMAR.

PHONE: 09-766691888, Email: Rosa@xinshengbags.com, franky.x@xinshengbags.com.

Dear: Director

Environmental Conservation Department

Nay Pyi Taw

Subject: Environmental Management Plan (EMP) Report in respect of the Manufacturing of Various Kinds of Bags

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.

Xin Sheng (Myanmar) Industrial Company Limited will at all times comply fully with all commitment and obligations in the EMP report.

We acknowledge and understand that


Mr. Xia, Yin
Managing Director
Xinsheng (Myanmar) Industrial Co., Ltd.

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Environmental Management Plan

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. MOECF	= 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 စနစ်ဖြင့်အိတ်အမျိုးမျိုး ချုပ်လုပ်ခြင်းလုပ်ငန်းအတွက် ရင်းနှီးမြှုပ်နှံသော ကုမ္ပဏီဖြစ်ပါသည်။ ရင်းနှီးမြှုပ်နှံမှုလိုင်စင်ကို ၂၀၁၉ နိုဝင်ဘာလ ၂၀ ရက်နေ့တွင် (အတည်ပြုမိန့်အမှတ် ရက-၂၉၀/၂၀၁၉) ဖြင့် ရန်ကုန်တိုင်းဒေသကြီး ရင်းနှီးမြှုပ်နှံမှုကော်မတီမှ ရရှိပြီးဖြစ်ပါသည်။ လုပ်ငန်းလည်ပတ်ရန်အတွက် မြန်မာနိုင်ငံသယံဇာတနှင့် သဘာဝပတ်ဝန်းကျင် ထိန်းသိမ်းရေးဝန်ကြီးဌာန (MONREC) ၏ အတည်ပြုချက်ရယူရန် လိုအပ်ကြောင်း ကော်မရှင်မှ မှာကြားခဲ့ပါသည်။

ထို့ကြောင့် မြန်မာနိုင်ငံ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေး ဥပဒေ (၂၀၁၂)အရ၊ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် (EMP) ပြုလုပ်ရန်လိုအပ်ကြောင်း ၂၀၂၀ ခုနှစ်၊ ဇွန်လ၊ ၂ ရက်နေ့ရက်စွဲပါ စာအမှတ်၊ ရက(အီးအိုင်အေ) ၄/၃/၁- (၁၆၉၁/၂၀၂၀) ဖြင့် ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန ရန်ကုန်တိုင်းဒေသကြီးမှ သဘောထားမှတ်ချက် ရရှိပြီးဖြစ်ပါသည်။ ထို့ကြောင့် EMP အစီအရင်ခံစာရေးဆွဲရန် တတိယအဖွဲ့အစည်းဖြစ်သော MYANWEI CONSULTING GROUP LIMITED မှ တာဝန်ယူရေးဆွဲခဲ့ပါသည်။

EMP အစီအစဉ်တွင် XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED ၏ CMP စနစ်ဖြင့် အိတ်အမျိုးမျိုး ချုပ်လုပ်ခြင်း လုပ်ငန်းအတွက် MYANWEI CONSULTING GROUP LIMITED မှ ရေးသားပြုစုထားသော ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီရင်ခံစာဖြစ်သည်။ အဆိုပါ လေ့လာဆန်းစစ်ခြင်း၏ ရည်ရွယ်ချက်များမှာ-

- ✓ သဘာဝပတ်ဝန်းကျင်နှင့် လူမှုစီးပွားပတ်ဝန်းကျင်အပေါ် စီမံကိန်းဆောင်ရွက်ချက်များကြောင့် ထိခိုက်မှုများကိုလေ့လာရန်။
- ✓ ထိုထိခိုက်မှုများကို လျော့ချနိုင်ရန် လျော့နည်းစေမည့်နည်းလမ်းများကို ဖော်ပြရန်။
- ✓ စီမံကိန်းအတွက် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်ကို ပြင်ဆင်ရန်နှင့် အကောင်အထည်ဖော်ရန်။
- ✓ စီမံကိန်းအတွက် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် အစီရင်ခံစာ လုပ်ဆောင်ရာတွင် လုံလောက်မှုရှိစေရန်။
- ✓ ဒေသခံများ၏ လူမှုရေးသက်သာချောင်ချိမှုများ တိုးမြှင့်ရန်နှင့် ဒေသတွင်း ဖွံ့ဖြိုးတိုးတက်မှုများ အတွက် မရှိမဖြစ်အရေးပါသော လူမှုစီးပွားတာဝန်ယူမှုအစီအစဉ်များအား အကောင်အထည်ဖော်ရန်တို့ဖြစ်ပါသည်။

အဆိုပြုထားသော စီမံကိန်း၏ ရည်ရွယ်ချက်သည် CMP စနစ် (ဖြတ်-လုပ်-ထုတ်) စနစ်ကို အသုံးပြု၍ အိတ်အမျိုးမျိုးကို ထုတ်လုပ်ပြီးနိုင်ငံခြားသို့ ၁၀၀ % တင်ပို့ရန်ဖြစ်ပါသည်။

Environmental Management Plan**ဥပဒေနှင့် မူဝါဒဆိုင်ရာ အချက်အလက်များ**

EMP ရေးဆွဲခြင်း၏ ရည်ရွယ်ချက်မှာ နိုင်ငံတော်နှင့် နိုင်ငံတကာမှ ချမှတ်ထားသော ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးအစီအစဉ်များ၊ စည်းမျဉ်းစည်းကမ်းများ၊ ဥပဒေနှင့် နည်းဥပဒေများကို လိုက်နာပြီး ပတ်ဝန်းကျင်နှင့်လိုက်ရောညီထွေမှုရှိသော ထိခိုက်မှုလျော့ချရေး အစီအစဉ်များပြုလုပ်ရန်ဖြစ်ပါသည်။ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် အစီရင်ခံစာရေးသားပြုစုသူများ၏ ကျွမ်းကျင်မှုနယ်ပယ်ဆိုင်ရာ ဖော်ပြချက်များကို ရေးသားဖော်ပြထားပါသည်။ ဥပဒေနှင့် နည်းဥပဒေ အခန်းတွင် MONREC မှ ထုတ်ပြန်ထားသည့် ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်းများ၊ အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များအပြင် စက်ရုံနှင့်ဆက်စပ်သက်ဆိုင်နေပြီး လိုက်နာရမည့် ဥပဒေနှင့် နည်းဥပဒေများ၊ ဒေသတွင်း သို့မဟုတ် အပြည်ပြည်ဆိုင်ရာ သဘာဝပတ်ဝန်းကျင်နှင့် လူမှုပတ်ဝန်းကျင်ဆိုင်ရာ မူဝါဒများ၊ ဆက်စပ်နေသည့် နိုင်ငံတကာသဘောတူချက်များကို အကျဉ်းချုပ်ရေးသားဖော်ပြထားပါသည်။ စက်ရုံအတွင်းလိုက်နာ ဆောင်ရွက်ရမည့် စည်းမျဉ်းစည်းကမ်းများ၊ လုပ်ငန်းခွင် အန္တရာယ်ကင်းရှင်းရေးနှင့် ကျန်းမာရေးဆိုင်ရာ အခြေခံစည်းမျဉ်းစည်းကမ်းများလည်း ထည့်သွင်းဖော်ပြထားပါသည်။ XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED ၏ 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

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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. Labor Dispute Settlement Law, 2012
23. The Law Amending the Settlement of Labor Dispute Law, 2019
24. The Social Security Law, 2012
25. The Employment and Skill Development, 2013
26. The Worker's Compensation Act, 1923
27. The Leave and Holidays Act (1951, partially reused in 2014)
28. The Minimum Wage Law, 2013
29. Public Health Law, 1972
30. Prevention and Control of Communicable Disease Law (1995 Amendment in 2011)
31. Occupational Safety and Health Law, 2019
32. The Law on Standardization
33. လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတက်သော ဝတ္ထုပစ္စည်းများဆိုင်ရာ ဥပဒေ (2018)
34. The Motor Vehicles Law, 2015
35. The Conservation of Water Resources and River Law, 2006
36. The Commercial Tax Law (1990 Amended 2014)

စီမံကိန်းဆိုင်ရာအချက်အလက်

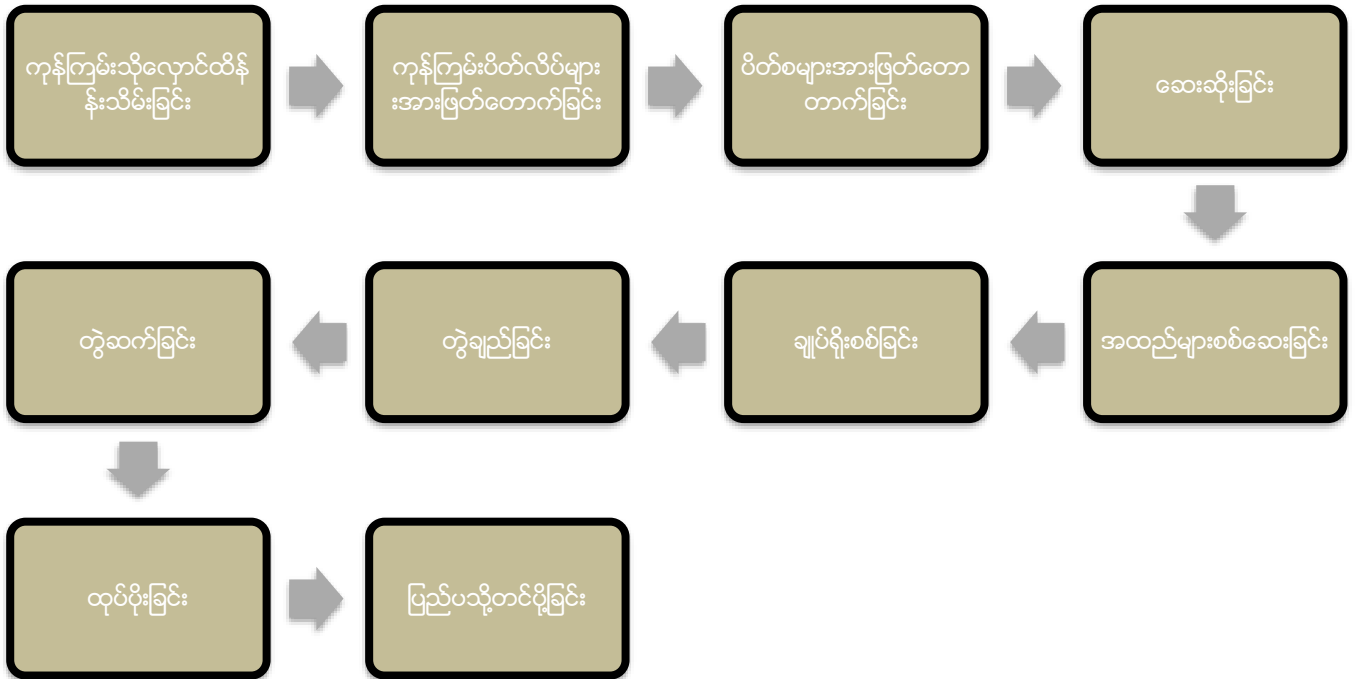
အဆိုပြုထားသော စီမံကိန်း	အိတ်အမျိုးမျိုးချုပ်လုပ်ခြင်းလုပ်ငန်း
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ရင်းနှီးမြှုပ်နှံမှုပုံစံ	၁၀၀ % နိုင်ငံခြားသားရင်းနှီးမြှုပ်နှံမှု
ကုမ္ပဏီအမည်	XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED
အဆိုပြုရင်းနှီးမြှုပ်နှံမှုကာလ	၂၀ နှစ်
စုစုပေါင်းမြေကွပ်ဧရိယာ	၂.၈ ဧက (၁၁၃၃၁).၁၉၈ စတုရန်းမီတာ)
မြေနေရာပုံစံ	စက်မှုဇုန်မြေ
တည်ဆောက်မှုကာလ	၁ နှစ်
စီမံကိန်း တည်နေရာ	ကွင်းအမှတ်၊ အမည် ၇၁၀။ ကုလားဂဲမြောက်ကွင်း။ ဦးပိုင်အမှတ် ၈/ခ၊ ၉/က၊၁၀/က၊ ၁.၆၆ဧကနှင့် ၇+၁၁/၀(၁၄.၇၅) အနက်မှ 1.14 ဧက
ဆက်သွယ်ရန် ဖုန်းနံပါတ်	ဒေါ်စန္ဒာ ဦး (HR Manager) ၀၉-၆၇၅၁၉၃၃၃၉ မောင်နွယ်ထွန်း (CSR Assistant) ၀၉-၄၂၀၀၈၃၈၇

အဆိုပြုလုပ်ငန်းအတွက် တည်နေရာနှင့် စက်ရုံအတွင်းပါရှိသည့် အဆောင်များ၊ စားသောက်ဆောင်၊ စတို၊ ပြုပြင်ထိန်းသိမ်းရေးအခန်း၊ 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။

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လုပ်ငန်းမှ ပထမနှစ်မှ ၁၀ နှစ်အတွင်း အိတ်အရေအတွက် (720000) မှ (903600)အထိ တိုးမြှင့်ထုတ်လုပ်သွားမည်ဖြစ်သည်။ နိုင်ငံခြားသားလုပ်သား (၁၃)ဦး နှင့် နိုင်ငံသား (ပြည်တွင်း) ဝန်ထမ်း (၅၀၀)ဦး၊ စုစုပေါင်း ၅၁၃ ဦးဖြင့် ဆောင်ရွက်သွားမည်ဖြစ်သည်။

အနီးပတ်ဝန်းကျင် အခြေအနေ

ကနဦးစစ်တမ်းကောက်ယူခြင်းနှင့် ဒေသဆိုင်ရာမှအချက်အလက်များရယူခြင်းသည် အလွန်အရေးကြီးပါသည်။ ပတ်ဝန်းကျင်အရည်အသွေး တိုင်းတာခြင်းကဲ့သို့သော ကနဦးစစ်တမ်းကောက်ယူခြင်းသည် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီရင်ခံစာတွင် အရေးပါသောအခန်းအဖြစ် တည်ရှိနေသည်။ ထို့အတွက် စီမံကိန်းဒေသသို့ ကွင်းဆင်းလေ့လာမှုများကို ၂၀၂၀ ခုနှစ်၊ ၂၀ ဖေဖော်ဝါရီလတွင်ကွင်းဆင်းလေ့လာခဲ့ပြီးလိုအပ်သည့် 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။

ပဏာမစစ်တမ်းကောက်ယူခြင်း နှင့် သန်လျင်မြို့နယ်ဆိုင်ရာ ဒေသ ဆိုင်ရာအချက်အလက်များကို ပတ်ဝန်းကျင်သက်ရောက်မှုများ လျှော့ချခြင်းလုပ်ငန်းများအတွက် အသုံးပြုပါသည်။ ပတ်ဝန်းကျင်ဆိုင်ရာတိုင်းတာမှုများ နှင့် စောင့်ကြပ်ကြည့်ရှုမှုများသည် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်ရေးဆွဲရာတွင် အဓိကအခန်းကဏ္ဍမှ ပါဝင်သည်။ ဒေသဆိုင်ရာ အချက်အလက်များဖြစ်သည့် ဒုတိယအချက်အလက်များကို အစိုးရဌာန ဝန်ဆိုင်မှုမှ ကောက်ယူရေးသားပါသည်။ MYANWEI ENVIRONMENTAL SOLUTIONS COMPANY LIMITED မှ

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၂၇ရက် ဖေဖော်ဝါရီလ ၂၀၂၀ တွင် လေအရေအသွေး၊ အပူချိန်၊ စိုထိုင်းဆ၊ ဆူညံသံ နှင့် ညစ်ညမ်းမှုကို တိုင်းတာ၍ အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာအရည်အသွေးထုတ်လွှတ်မှုလမ်းညွှန်ချက်များ နှင့် နှိုင်းယှဉ်ဖော်ပြထားပါသည်။ စီမံကိန်းကြောင့်သက်ရောက်မှုများကို လျော့ချရန် နှင့် ထိန်းသိမ်းရေးများပြုလုပ်ရန် ဖော်ပြထားပါသည်။ ရာသီဥတုအခြေအနေ၊ မိုးရေချိန်၊ လူမှုစီးပွားစစ်တမ်းများကိုလည်း ထည့်သွင်းဖော်ပြထားပါသည်။

အမျိုးအမည်	တိုင်းတာမှုများ	နေရာ
လေထု	ပတ်ဝန်းကျင်လေထု	စီမံကိန်း ဧရိယာ
ဆူညံသံ	ဆူညံမှု အတိုင်းအတာ	စီမံကိန်း ဧရိယာ
ရေအရည်အသွေး	သောက်သုံးရေ အရည်အသွေး	သောက်သုံးရေ၊ စီမံကိန်း ဧရိယာ

တိုင်းတာမှု ရလဒ်များအရ PM10 သည် အမျိုးသား ပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေးထုတ်လွှတ်မှုလမ်းညွှန်ချက်များထက် အနည်းငယ်ကျော်လွန်နေသည်။ ဆူညံသံ သည် အမျိုးသားအရည်အသွေးထုတ်လွှတ်မှုလမ်းညွှန်ချက်များ အောက်တွင်ရှိသည်။ ရေအ ရည်အသွေးသည် လမ်းညွှန်မှုအောက်တွင် ရှိသည်။

ပတ်ဝန်းကျင်ထိခိုက်မှုနှင့် လျော့ချရေး အစီအစဉ်

စီမံကိန်းဆောင်ရွက်ချက်များကြောင့် ပတ်ဝန်းကျင်ဆိုင်ရာအရင်းအမြစ်များ၊ ဂေဟဆိုင်ရာ အရင်းအမြစ်များ၊ လူ့စွမ်းအားအရင်းအမြစ်များနှင့် စွန့်ပစ်ပစ္စည်းများစွန့်ပစ်ခြင်း စသည့်ဖြစ်လာနိုင်သည့်ထိခိုက်မှုများကို ခွဲခြားသတ်မှတ်ပြီး ၎င်းတို့၏ ရလဒ်များကို ထိခိုက်မှုဆန်းစစ်သည့် နည်းလမ်းများကို အသုံးပြု၍ သတ်မှတ်ခဲ့ပါသည်။ စီမံကိန်းအား ထိခိုက်မှုများကို အပိုင်းသုံးပိုင်းခွဲ၍ သတ်မှတ်ထားသည်။ အမျိုးအစားမှာ တည်ဆောက်သည့်ကာလ၊ လုပ်ငန်းလည်ပတ်သည့်ကာလ နှင့် လုပ်ငန်းဖျက်သိမ်းသည့်ကာလများ ဖြစ်ပါသည်။ ပတ်ဝန်းကျင်ထိခိုက်မှု လျော့ပါးစေရေး နည်းလမ်းများကိုလဲထည့်သွင်းဖော်ပြထားပါသည်။

ပတ်ဝန်းကျင် လက္ခဏာ	လုပ်ငန်းလုပ်ဆောင်မှု	ထိခိုက်မှုအဆင့်	လျော့ချရေးနှင့် ထိန်းချုပ်မှု
တည်ဆောက်ရေးကာလ။ ။ပတ်ဝန်းကျင်ထိခိုက်မှုလေ့လာချိန်တွင် စက်ရုံတည်ဆောက်ပြီး လုပ်ငန်းလည်ပတ်နေချိန်ဖြစ်သော်ကြောင့် ဤကာလကိုထည့်သွင်း စဉ်းစားတော့မည် မဟုတ်ပါ။			
လုပ်ငန်းလည်ပတ်ခြင်းကာလ			
လေထုညစ်ညမ်းမှု	<ul style="list-style-type: none"> သယ်ယူပို့ဆောင်ရေးသုံး ဧ မော်တော်ယာဉ်တို့ကြော ကာင့် ဖုန်မှုနှင့် ဖန်လုံအိမ်ခါ ဓါတ်ငွေ့ထွက်ခြင်း လုပ်ငန်းခွင်အတွင်းဖုန်မှုထွက်ခြင်း မီးဖိုမှ မီးခိုးထွက်ခြင်း အရေးပေါ်သုံးမီးစက်မှာ စွန့်ထ 	အသင့်တင့်	<ul style="list-style-type: none"> ဘွိုင်လာနှင့်မီးစက် တို့တွင် မီးခိုးခေါင်းတိုင် တပ်ဆင်ခြင်းဖြင့် အခိုးအ ငွေ့ကြောင့် ပတ်ဝန်းကျင် ထိခိုက်မှုကို လျော့ချခြင်း၊ စက်ရုံအတွင်းနှင့် အနီး အနားတွင် သစ်ပင်ပန်းမံ စိုက်ပျိုးခြင်းဖြင့် carbon ထွက်ရှိမှုကို လျော့ချပေးခြင်း၊ NOx ထွက်ရှိမှုနည်းသော နည်း

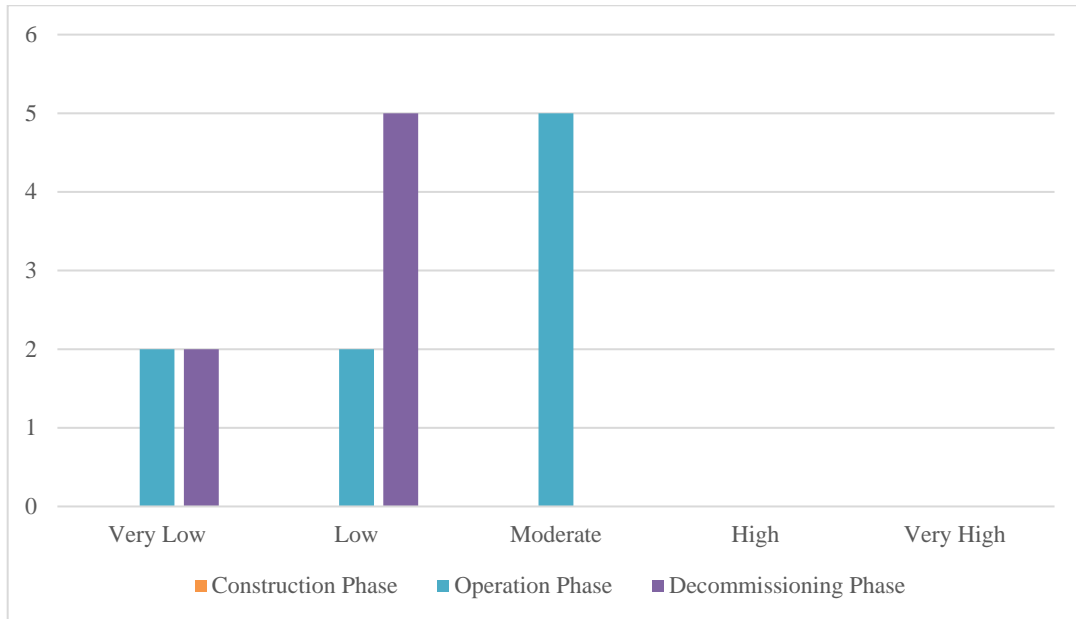
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ပတ်ဝန်းကျင် လက္ခဏာ	လုပ်ငန်းလုပ်ဆောင်မှု	ထိခိုက်မှုအဆင့်	လျော့ချရေးနှင့် ထိန်းချုပ်မှု
	ထုတ်အခိုးအငွေ့ ထွက်ခြင်း		နည်းပညာဖြင့် စက်ပစ္စည်း များသုံးခြင်း၊ • စက်ပစ္စည်းများကို ပုံမှန်ပြုပြင်ထိန်းသိမ်းပေးခြင်း။
ရေ	• မိလ္လာစွန့်ထုတ်ရေ • စက်ပစ္စည်း၊ မော်တော်ယာဉ်များမှ ဆီယိုဖိတ်ခြင်း	အနည်းငယ်	• လက်ရှိရေဆိုးစွန့်ပစ်မှုပုံစံဖြစ်သော မိလ္လာစနစ်ကို ပုံမှန်စစ်ဆေးပေးခြင်း၊ • မိလ္လာကန်နှင့် မိလ္လာ စနစ်ကို လူဦးရေနရနှင့် သင့်တင့်သည့် ပမာဏ ရှိရန် စီစဉ်ထားခြင်း၊ • ပုံမှန်သန့်ရှင်းရေးပြုလုပ်ပေးခြင်း။ • စက်ပစ္စည်းများကို ပုံမှန်ပြုပြင်ထိန်းသိမ်းပေးခြင်း။
မြေဆီလွှာညစ်ညမ်းမှု	• မတော်တဆ စက်ပစ္စည်း၊ မော်တော်ယာဉ်များမှ ဆီယိုဖိတ်ခြင်း	အလွန်နည်း	• စက်ပစ္စည်းများကို ပုံမှန်ပြုပြင်ထိန်းသိမ်းပေးခြင်း။ • မတော်တဆမှု မဖြစ်စေရန် ထိန်းသိမ်းခြင်း။
ဆူညံသံ	• မီးစက်၊ လေမှုတ်စက်နှင့် မော်တော် ယာဉ် အသုံးပြုမှုကြောင့် ပတ်ဝန်းကျင် ဆူညံမှု	အသင့်တင့်	• ဆူညံသံထွက်သောနေရာများကို အကာအကွယ် ဖြင့်ထားရှိခြင်း • စက်ပစ္စည်းများကို ပုံမှန်ပြုပြင်ပေးခြင်း
မီးဘေးအန္တရာယ်	• ကုန်ကြမ်းသိုလှောင်မှု နှင့် လျှပ်စစ်သုံးစွဲ ပေါ့လျော့မှု	အသင့်တင့်	• ကုန်ကြမ်းများအား သီးသန့်ထားရှိခြင်း • လျှပ်စစ်သုံးစွဲမှုများအား စနစ်တကျ အသုံးပြုစေခြင်း
စွန့်ပစ်အမှိုက်	• ထုတ်လုပ်ရာတွင် ကျန်ရှိသော ပိတ်စ အပိုင်းအစများ၊ မီးဖိုချောင်နှင့် ရုံးတွင်းစွန့်ပစ်ပစ္စည်းများ	အသင့်တင့်	• စွန့်ပစ်အမှိုက်များအား ပြန်လည်သုံးစွဲရန် နှင့် စွန့်ပစ်ရန် အဖြစ်သတ်မှတ်ပြီး သီးခြားစွန့်ပစ်စေခြင်း
စွန့်ပစ်အရည်	• နေအိမ်၊ စားသောက်ဆောင်တို့မှစွန့်ထုတ်ရေ၊ မိလ္လာကန်စနစ်	အသင့်တင့်	• စွန့်ပစ်အမှိုက်များအား ပြန်လည်သုံးစွဲရန် နှင့် စွန့်ပစ်ရန် အဖြစ်သတ်မှတ်ပြီး သီးခြားစွန့်ပစ်စေခြင်း
အန္တရာယ်ရှိအမှိုက်	• စက်များမှ ဆီယိုစိမ့်မှုများ၊ မော်တော်ယာဉ်များပြုပြင်ထိန်းသိမ်းမှုက ထွက်ရှိသည့်အမှိုက်များ	အလွန်နည်း	• စက်သုံးဆီများအားစနစ်တကျ အသုံးပြုစေခြင်း၊ စနစ်တကျသိုလှောင်ခြင်း နှင့် အန္တရာယ်ရှိပစ္စည်းများအား စနစ်တကျထားရှိစေခြင်း
လူမှုစီးပွားဘဝ	• ဒေသခံပြည်သူများအတွက်		

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ပတ်ဝန်းကျင် လက္ခဏာ	လုပ်ငန်းလုပ်ဆောင်မှု	ထိခိုက်မှုအဆင့်	လျော့ချရေးနှင့် ထိန်းချုပ်မှု
	အလုပ်အကိုင်အခွင့်အလမ်းများ ရရှိစေခြင်း		
လုပ်ငန်းပိတ်သိမ်းခြင်းကာလ			
လေထုညစ်ညမ်းမှု	<ul style="list-style-type: none"> အဆောက်အဦများ ဖြိုချမှုများ ဖြိုချပစ္စည်းများ သယ်ယူမှုများ 	အနည်းငယ်	<ul style="list-style-type: none"> NOx ထွက်ရှိမှုနည်းသော နည်းပညာဖြင့် စက်ပစ္စည်း များသုံးခြင်း၊ စက်ပစ္စည်းများကို 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"> အဆောက်အဦနှင့် ဆက်စပ်ပစ္စည်းများ ဖြိုချပစ္စည်းများ သယ်ယူမှုများ 	အနည်းငယ်	<ul style="list-style-type: none"> မတော်တမမှု မဖြစ်စေရန် ထိန်းသိမ်းခြင်း။
အမှိုက်စွန့်ပစ်မှု	<ul style="list-style-type: none"> အဆောက်အဦများ ဖြိုချပစ္စည်းများ သယ်ယူမှုများ 	အလွန်နည်း	<ul style="list-style-type: none"> စွန့်ပစ်အမှိုက်များအား ပြန်လည်သုံးစွဲရန် နှင့် စွန့်ပစ်ရန် အဖြစ်သတ်မှတ်ပီး သီးခြားစွန့်ပစ်စေခြင်း
အန္တရာယ်ရှိအမှိုက်	<ul style="list-style-type: none"> စက်များမှ ဆီယိုစိမ့်မှုများ၊ မော်တော်ယာဉ်များပြုပြင်ထိန်းသိမ်းမှုက ထွက်ရှိသည့်အမှိုက်များ ဖြိုချပစ္စည်းများ သယ်ယူမှုများ 	အလွန်နည်း	<ul style="list-style-type: none"> စက်သုံးဆီများအားစနစ်တကျ အသုံးပြုစေခြင်း၊ စနစ်တကျသိုလှောင်ခြင်း နှင့် အန္တရာယ်ရှိပစ္စည်းများအား စနစ်တကျထားရှိစေခြင်း
မတော်တဆ ထိခိုက်မှုများ	<ul style="list-style-type: none"> အဆောက်အဦများ ဖြိုချမှုများ ဖြိုချပစ္စည်းများ သယ်ယူမှုများ 	အနည်းငယ်	<ul style="list-style-type: none"> မတော်တမမှု မဖြစ်စေရန် ထိန်းသိမ်းခြင်း။
လူမှုစီးပွားဘဝ	<ul style="list-style-type: none"> ဒေသခံပြည်သူများအတွက် အလုပ်အကိုင် ခေတ္တရရှိခြင်း 		

Environmental Management Plan



ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှု အစီအစဉ် လုပ်ဆောင်ချက်

အဆိုပြုလုပ်ငန်း၏ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်အတွက် Plan-Do-Check-Act (P D C A) စက်ဝိုင်းဖြင့် အစီစဉ်တကျ ပြုလုပ်သွားမည်ဖြစ်ပါသည်။ အစီအစဉ်တွင် စက်ရုံကြောင့် ဖြစ်ပေါ်စေနိုင်သော ပတ်ဝန်းကျင်နှင့် လူမှုဘဝအပေါ် ဆိုးကျိုးသက်ရောက်မှုများကို လျော့ချရေး၊ စီမံခန့်ခွဲရေးနှင့် စောင့်ကြပ်ကြည့်ရှုရေး အစရှိသည့် အစီအစဉ်များ ပါဝင်ပါသည်။ ၎င်း EMP အစီအစဉ်များကို အကောင်အထည်ဖော်ရန်အတွက်သည် စက်ရုံတွင် ကျန်းမားရေး၊ ဘေးအန္တရာယ်ကင်းရှင်းရေးနှင့် ပတ်ဝန်းကျင်ဆိုင်ရာ အဖွဲ့အစည်းတစ်ခုထားရှိပြီး လျော့ချရေး၊ စီမံခန့်ခွဲရေးနှင့် စောင့်ကြပ်ကြည့်ရှုရေး အစီအစဉ်များကို အကောင်အထည်ဖော်သွားမည်ဖြစ်ပါသည်။ အဆိုပါစက်ရုံ၏ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်ကို ရေရှည်ဖွံ့ဖြိုးတိုးတက်ကောင်းမွန်သော ပတ်ဝန်းကျင် အဖြစ် အကောင်အထည်ဖော်ဆောင်ရွက်ရန် ပတ်ဝန်းကျင်ဆိုင်ရာ ဆိုးကျိုးသက်ရောက်မှုများကို လျော့နည်းစေရန် စီမံခန့်ခွဲမှုအစီအစဉ်များနှင့် စောင့်ကြပ်ကြည့်ရှုမည့်အစီအစဉ်များကို အောက်ပါအတိုင်းပတ်ဝန်းကျင်ဆိုင်ရာ အကြောင်းအရာတစ်ခုချင်းစီအလိုက် ခွဲခြားမှု ပြုလုပ်ထားပါသည်။

၁။ လေထုညစ်ညမ်းမှုနှင့် ဖုန်မှုန့်ဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်

- လေထုညစ်ညမ်းမှုနှင့် ကာသွန်ထွက်ရှိမှုကို လျော့ချရန် သစ်ပင်များစိုက်ပျိုးခြင်း
- ဖုံထူထပ်သောနေရာများတွင် အလုပ်သမားများကို တစ်ကိုယ်ရေသုံး အကာအကွယ်ပစ္စည်းများ အသုံးပြုစေခြင်း
- တစ်နှစ်လျှင် ခန့်မှန်းကုန်ကျစရိတ် ၁၀၀၀၀၀၀ ကျပ်

၂။ ဆူညံမှုထိန်းခြင်းဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်

- မီးစက်ခန်းများတွင် ဆူညံသံထိန်းချုပ်ကိရိယာများတပ်ဆင်ခြင်း
- လုံလောက်သော တစ်ကိုယ်ရေကာကွယ်ရေးပစ္စည်းများအသုံးပြုစေခြင်း

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- ဆူညံသော နေရာများတွင် အလုပ်လုပ်သော အလုပ်သမားများအတွက် တစ်ကိုယ် ရေသုံးကာကွယ်ရေးပစ္စည်းများကို အသုံးပြုစေခြင်း
- တစ်နှစ်လျှင် ခန့်မှန်းကုန်ကျစရိတ် ၁၀၀၀၀၀ ကျပ်

၃။ အမှိုက်စွန့်ပစ်မှုဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်

- စွန့်ပစ်အစိုင်အခဲများကို အစိုအခြောက်ခွဲခြား၍ သီးခြားစွန့်ပစ်စေခြင်း
- နေ့စဉ်ထွက်စွန့်ပစ်ပစ္စည်းများကို ရန်ကုန်စည်ပင်သာယာရေးကော်မတီနှင့် ချိတ်ဆက်စွန့်ပစ်ခြင်း
- တစ်နှစ် ခန့်မှန်းကုန်ကျစရိတ် ၅၀၀၀၀ ကျပ်

၄။ ရေဆိုးစွန့်ပစ်မှုဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်

- စက်ရုံမြောင်း ရေစီးရေလာကောင်းစေရန် ထိန်းချုပ်ခြင်း နှင့်
- မိလ္လာစနစ်ကို စစ်ဆေးခြင်း
- စက်ရုံရေမြောင်းများ ပိတ်ဆို့ခြင်းမဖြစ်စေရန် စစ်ဆေးခြင်း
- တစ်နှစ်လျှင် ခန့်မှန်းကုန်ကျစရိတ် ၈၀၀၀၀၀ ကျပ်

၅။ စွမ်းအင်အသုံးပြုမှုဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်

- စွမ်းအင်အသုံးပြုမှုလျော့ချရေးစနစ်ကို အသုံးပြုခြင်း
- မလိုအပ်သော နေရာများတွင် လျှပ်စစ်အသုံးပြုခြင်း၊ မီးထွန်းထားခြင်း စသည်တို့ကို ကြည့်ရှုထိန်းသိန်းခြင်း
- တစ်နှစ်လျှင် ခန့်မှန်းကုန်ကျစရိတ် ၁၀၀၀၀၀ ကျပ်

၆။ ရေအသုံးပြုမှုဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်

- ရေအသုံးပြုမှုကို သိရှိနိုင်ရန် water meter အသုံးပြုခြင်း
- ရေအသုံးပြုမှုကို ထိန်းသိမ်းမှုများ ပြုလုပ်နိုင်စေရန် ဝန်ထမ်းများကို သင်ကြားပေးခြင်း
- တစ်နှစ်လျှင် ခန့်မှန်းကုန်ကျစရိတ် ၅၀၀၀၀၀ ကျပ်

၇။ အရေးပေါ်တုန့်ပြန်ရေး အစီအစဉ်

- မီးသတ်စနစ်များကို ကောင်းမွန်အောင်ပြုလုပ်ခြင်း
- အရေးပေါ်စနစ်ထားရှိခြင်း (ဥပမာ- အရေးပေါ်ထွက်ပေါက်)
- ငလျင်နှင့် တခြားသော အရေးပေါ်ကိစ္စရပ်အများအတွက် ဆေးဝါး၊ ကြက်ခြေနီသင်တန်းများထားရှိခြင်း
- မီးသတ်တပ်ဖွဲ့များ၊ ကယ်ဆယ်ရေးတပ်ဖွဲ့များ ဖွဲ့စည်းခြင်း၊ လုံခြုံရေးအတွက် စက်ရုံဝန်ထမ်းများကို သင်တန်းပေးခြင်း။
- ၁၅၀၀၀၀၀ ကျပ်

၈။ လူမှုအကျိုးတူ ပူးပေါင်းပါဝင်မှု အစီအစဉ် CSR Plan

- ကျန်းမာရေးစောင့်ရှောက်မှု - ၀.၅%
- သင်တန်းပို့ချမှု - ၁%

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- ဝန်ထမ်းများကျန်းမာရေးစောင့်ရှောက်မှု - ၀.၅%

သက်ဆိုင်သူများနှင့် တွေ့ဆုံဆွေးနွေးခြင်း

သက်ဆိုင်သူများနှင့် တွေ့ဆုံဆွေးနွေးခြင်း အစီအစဉ်ကို ၃၁ ရက်၊ မတ်လ၊ ၂၀၂၀ ခုနှစ်တွင် ကနောင်ခန်းမ၊ ဇန်နဝါရီလ၊ ဒဂုံမြို့သစ်ဆိပ်ကမ်းမြို့နယ်တွင် ပြုလုပ်ခဲ့ပါသည်။ တွေ့ဆုံပွဲ အစည်းဝေးတွင် သက်ဆိုင်ရာ အစိုးရအဖွဲ့ရုံး၏ တာဝန်ရှိပုဂ္ဂိုလ်များ၊ စက်မှုဇုန်စီမံခန့်ခွဲမှုကော်မတီ၏ တာဝန်ရှိပုဂ္ဂိုလ်များမှ လိုအပ်သည်များကို အကြံပေးခြင်း၊ စီမံကိန်း၏ အစီရင်ခံစာတွင် လိုအပ်သည်များကို ဖြည့်စွက်ပေးရန် အကြံပြုချက်များပေးခဲ့ပါသည်။ ပြုလုပ်ခဲ့သည့် အစီအစဉ်အကျဉ်းကိုပါ ထည့်သွင်းဖော်ပြထားပါသည်။

အချိန်	အင်္ဂါနေ့၊ မတ်လ ၃၁ရက်၊ ၂၀၂၀ ပြည့်နှစ်။
နေရာ	ကနောင်ခန်းမ၊ ဇန်နဝါရီလ၊ ဒဂုံမြို့သစ်ဆိပ်ကမ်းမြို့နယ်
အစီအစဉ်အကျဉ်း	<ul style="list-style-type: none"> စက်ရုံနောက်ခံအကြောင်း စက်ရုံလုပ်ငန်းအကြောင်း ပတ်ဝန်းကျင်ထိခိုက်မှုနှင့် လျှော့ချရေးအစီအစဉ် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်နှင့် စောင့်ကြပ်ကြည့်ရှုမှုအစီအစဉ် အမေးအဖြေကဏ္ဍ

နိဂုံး

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

EXECUTIVE SUMMARY

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 XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED. 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.

The project is new investment for manufacturing of High-Quality bags by Contract Manufacturing Process (CMP) basic company from China. The project is issued by the Yangon Region Investment Committee (YRIC) on 20, November 2019 with the Endorsement No. (YGN- 290/2019). 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 various kinds of bags on CMP basis under the name of XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED.

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) No. YGN – 290/2019 on 20, November 2019. Therefore, XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED commissioned MYANWEI CONSULTING GROUP LIMITED 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 of the various kinds of bags 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.

Environmental Management Plan

Policy, Legal and Institutional Framework

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

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. Labor Dispute Settlement Law, 2012
23. The Law Amending the Settlement of Labor Dispute Law, 2019
24. The Social Security Law, 2012
25. The Employment and Skill Development, 2013
26. The Worker's Compensation Act, 1923
27. The Leave and Holidays Act (1951, partially reused in 2014)
28. The Minimum Wage Law, 2013
29. Public Health Law, 1972

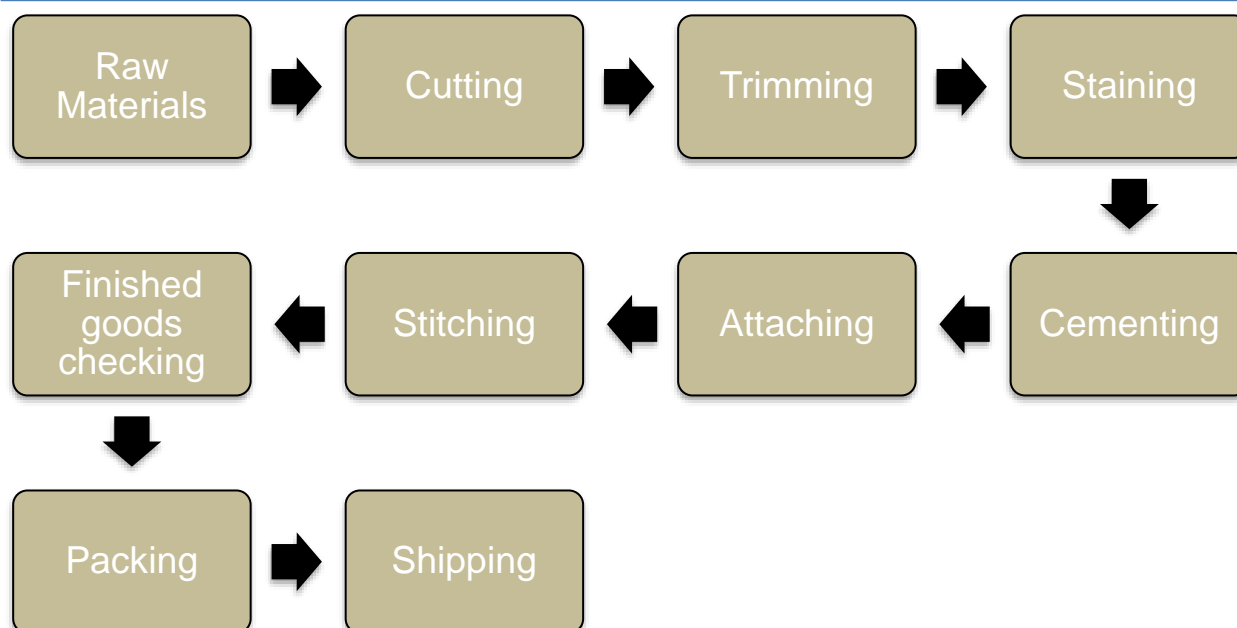
Environmental Management Plan

30. Prevention and Control of Communicable Disease Law (1995 Amendment in 2011)
31. Occupational Safety and Health Law, 2019
32. The Law on Standardization
33. လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတက်သော ဝတ္ထုပစ္စည်းများဆိုင်ရာ ဥပဒေ (2018)
34. The Motor Vehicles Law, 2015
35. The Conversation of Water Resources and River Law, 2006
36. The Commercial Tax Law (1990 Amended 2014)

Project Description

Type of Proposed Business:	Manufacturing of Various Kinds of Bags on CMP Basis
Type of investment:	100% Foreign Investment
Type of Share:	Ordinary Share
Type of land:	Industrial Land
Total land area:	2.8 Acres
Total building area:	Production building (9180.45 square meter)
Land lease year:	20 years
Construction period:	One year
Address:	Kue No-710, U Paing No-8/b, 9/a, 10/a, 1.66 acres, 7+11/e, 1.14 acres Kalawye North Village, Kalawye North Kue, Thanlynn Township
Contact Person:	Daw Sanda Oo (HR Manager) 09-675193339 Zin New Tun (CSR Assistant) 09-420008387

The proposed project is located at Thanlynn, Yangon region. The total area of project site is 2.8 acres (9180.45 square meter). Main structure is designed into production area for one building. Transformer room, generator room and water treatment plant are separated by main factory building structure. The factory layout plan that also can be seen in this report. The main product of the XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED is bags. The Utilities for proposed factory include electrical power, fuel oil for emergency used generator and water for domestic use.

Environmental Management Plan**Production Process of XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED**

Production rate of XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED is produced between first year of operation and ten-years operation as 720000 pcs to 903600 pcs annually. It is required of work force (13) foreign technician and (500) local employees for first year operation to 10years 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 CONSULTING GROUP LIMITED conducted air quality, temperature and humidity, noise level measurement and light pollution measurement on 20 February 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.

Primary data and secondary data collections for Thanlyin Township are very imported to assess environmental impacts. Primary data collections (environmental quality measurements and monitoring) play an important role for conducting EMP. Secondary data like regional data are collected and referenced from township data from government website. MYANWEI ENVIRONMENTAL SOLUTIONS COMPANY LIMITED conducted air quality, temperature and humidity, noise level measurement and pollution measurement on 3 March 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.

Item	Parameter	Location
Air quality	Ambient air	Project Area
Noise level	sound level (LAeq)	Project Area
Water	Drinking water	Drinking Water, Project Area

Environmental Management Plan

According to the result of monitoring, PM10 is a little bit more than the guideline limit and other parameters are within the NEQG. Noise level is under the guideline limit. Water parameters are within the guideline limit.

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

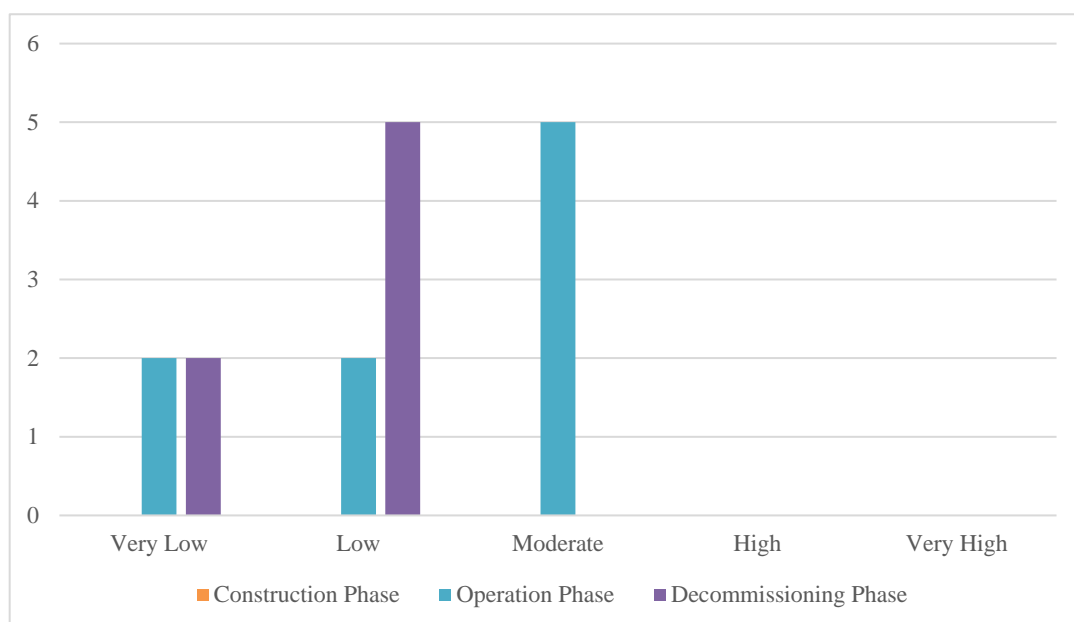
Environmental Impact	Project Activities	Significant of Potential Impacts					Impact Significance
		M	D	E	P	SP	
Construction Phase; It is not assessed in this phase, because of construction is already completed during EMP preparation.							
Operation Phase							
Air pollution	<ul style="list-style-type: none">Dust and GHGs emission from vehicles used for transporting raw materials and final productsParticulate matters emission from the activities of production processEmission of smoke from kitchenEmission from emergency diesel generator	3	4	2	4	36	Moderate
Water pollution	<ul style="list-style-type: none">Sewage disposed of from the toiletsOil spill and grease leaks from transporting vehicles and machinery equipment used in operation phase	2	4	2	3	24	Low
Soil Contamination	<ul style="list-style-type: none">Accidental spillage of oil used by vehicles operating	1	4	1	2	12	Very Low
Noise Pollution	<ul style="list-style-type: none">Generating noise from the production machineryNoise from the generating of the emergency generators	3	4	1	4	32	Moderate
Fire Hazard	<ul style="list-style-type: none">Poor electrical installationswaste disposed areaRaw materials storage	3	5	2	4	40	Moderate
Solid waste	<ul style="list-style-type: none">residual pieces of fabric scraps from the production linesWaste from packaging materialsWaste from kitchen, dormitory and	3	4	1	4	32	Moderate

Environmental Management Plan

Environmental Impact	Project Activities	Significant of Potential Impacts					Impact Significance
		M	D	E	P	SP	
	office.						
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 materials 	3	1	1	4	20	Low
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

Environmental Management Plan

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.



Impact Significance of the Proposed Project

Environmental Management Action

The proposed project of environmental management plan, which need to made the PDCA plan especially Plan-Do-Check-Act cycle. 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 SCG 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. Environmental related works about the project is responsible by HSE manager. The following environmental issues that require environmental management plans based upon the potential impacts of activities by for SCG are as follows:

1. Air pollution/Dust Management Plan
 - The Factory has Planted Trees to reduce the carbon and minimize the air pollution
 - Workers are provided mask during working in any dusty area
 - 1,000,000 kyat per year
2. Noise Management
 - Building noise insulated generator room
 - Provide sufficient personal protective equipment (PPE) at the work place
 - All the related personal will be provided proper training about the relevant issues and ensure PPE wear during working in noisy area.

Environmental Management Plan

- 100,000 kyat per year
- 3. Solid waste Management Plan
 - The solid wastes are stored properly and separately in a certain in proper manner
 - The daily domestic waste of workers hands over to YCDC waste collector to collect every day
 - All related personal is provided proper training about the relevant issues.
 - 50,000 kyat per month
- 4. Wastewater Management Plan
 - Ensure that drainage lines and sewage system of factory and the nearest public drainage are watertight and sufficient capacity
 - Regular check and maintain sewerage facility
 - Clean the Factory's drainage to avoid odor emission and to avoid the block of water flow
 - 800,000 kyat per year
- 5. Energy Consumption Management Plan
 - Used of energy saving devices must be installed
 - Ensure that good housekeeping measures such as turning off equipment and lights when not in use
 - 100,000 kyats per year
- 6. Water Consumption Management Plan
 - Install water meter for internal control of water consumption
 - All staff trains and makes aware conservation practices and proper methods of water use must be place in toilets and other areas of water consumption
 - Trees plantation surrounding the factory
 - 500000 kyats per year
- 7. Emergency Response Plan
 - Provision and inspection of firefighting equipment and fire hydrant system in all the sections
 - A detail evaluation plan (fire exist, emergency exit door, etc.) is established and communicated with workers
 - Workers are informed about what to do in earthquake and physics hazards. A medical team has been prepared for primary treatment (First Aid)
 - Build a safety committee which from firefighting team, rescue team. The committee arrange a meeting every month to discuss about safety management
 - 1500000 Kyats
- 8. Corporate Social Responsible (CSR) Plan
 - Health Care – 0.5%
 - Nonprofit training– 1%
 - Employee Healthcare – 0.5%

Public Consulting

This chapter presents results of public consultation and information disclosure conducted for the XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED. Public participation can consider 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 March 31, 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

Environmental Management Plan

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	Thursday, March 31, 2020 10:30-12:30
Venue	Industrial Zone Committee, Ka Naung Hall, Dagon Seikkan Township, Yangon.
Agenda	<ul style="list-style-type: none"> • 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 bags manufacturing 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.
- Abide environmental policy, laws, rules and instructions of the Republic of the Union of Myanmar.

Environmental Management Plan

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**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 XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED. 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. 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) 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 various kinds of bags on CMP Basis from China. The Yangon Region Investment Committee (YRIC) issues the project on 20, November 2019 with the Endorsement No. (YGN- 290/2019). The committee must issue the notification 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 various kinds of bags on CMP Basis under the name of XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED.

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 EMP to meet the environmental assessment requirements of Notification No. Yaka-1/3/4 (EIA) (1691/2020) on 2 June 2020. Therefore, XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED commissioned to MYANWEI CONSULTING GROUP LIMITED for EMP report study.

1.1.1. Project Proponent Profile

This is the information of project proponent from the MIC's registration that is describing in below Table 1-1 and Table 1-2.

Table 1-1 Information of Investor

Investor Name:	Mr. Xia Yin
Citizenship:	Chinese
Company ID No./ Passport No	E- 04513765

Environmental Management Plan

Address of Registration office:	UNIT – 2, ROOM – 1203, BUILDING – 3, HUASHAN TOWN, GUANGZHOU, GUANGDONG, THE PEOPLE'S REPUBLIC OF CHINA.
Email Address	rosa@xinshengbags.com

1.1.2. Director List

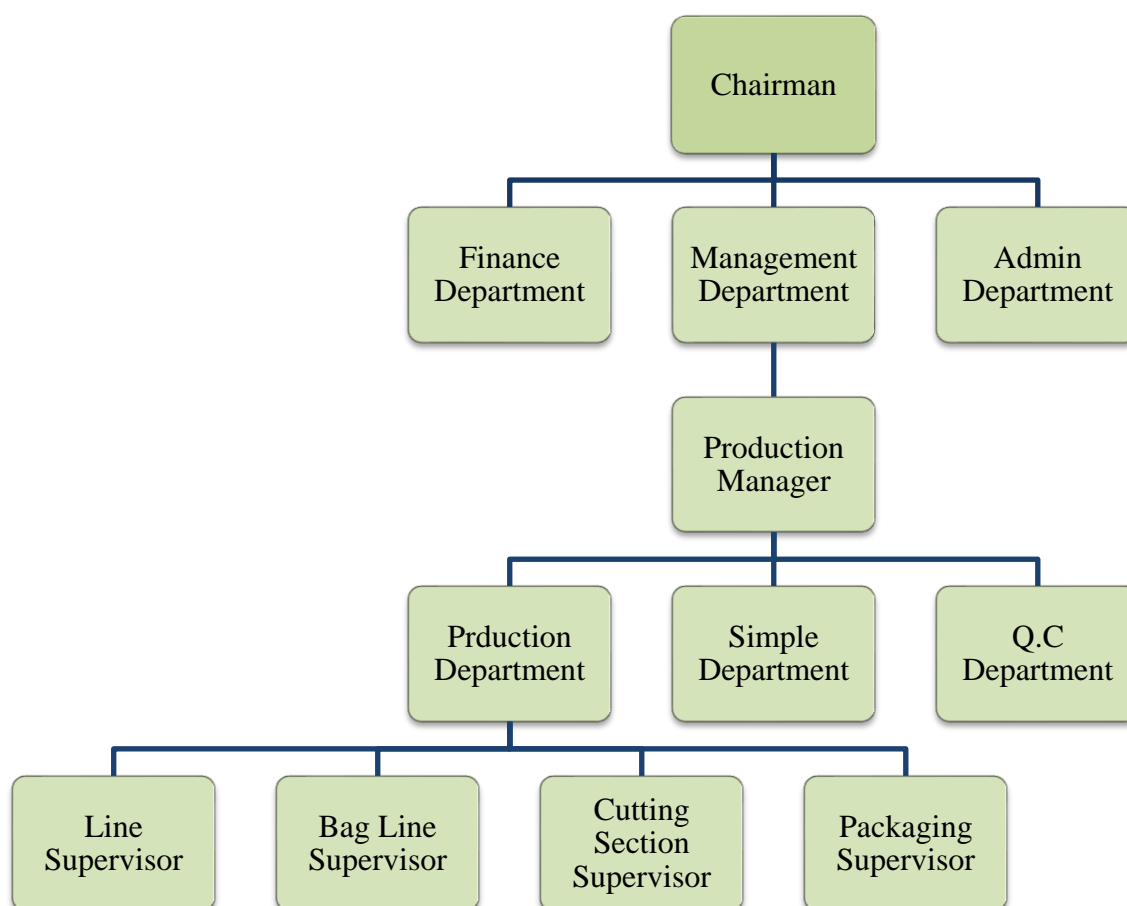
Name	Type	Nationality	Share Percentage
Dongguan Xinsheng Handbag Craft Co., Ltd		Chinese	90 %
Represented By			
Mr Xie Yuhui	Director	Chinese	
Mr Xia Yin	Director	Chinese	10%

1.1.3. Investment Plan and Salient Features of the Project

The estimated authorized capital investment is 1 Million US Dollar (Table 1-2). Organization chart of XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED is presented in Figure 1-1.

Table 1-2 Salient Features of the Project

Type of Proposed Business:	Manufacturing of Various Kinds of Bags on CMP Basis
Type of investment:	100% Foreign Investment
Type of Share:	Ordinary Share
Type of land:	Industrial Land
Total land area:	2.8 Acres
Total building area:	Production building (9180.45 square meter)
Land lease year:	20 years
Construction period:	One year
Address:	Kue No-710, U Paing No-8/b, 9/a, 10/a, 1.66 acres, 7+11/e, 1.14 acres Kalawye North Village, Kalawye North Kue, Thanlynn Township
Contact Person:	Daw Sanda Oo (HR Manager) 09-675193339 Zin New Tun (CSR Assistant) 09-420008387 rosa@xinshengbags.com
Website	https://en.xinshengbags.com/

Environmental Management Plan**Figure 1-1 Organization Chart of XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED****1.2. ENVIRONMENTAL CONSULTANT PROFILE**

MYANWEI CONSULTING GROUP LIMITED 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 (Environmental 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 also 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 responsibilities during the study period.

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

Environmental Management Plan

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 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
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



No. 36-38, 9th floor (A), Grand Myay Nu Condo, Myay Nu
Street, Sanchaung Township, Yangon,
Myanmar. www.myanweiconsulting.com
01-501221

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 FRAMEWORK

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 (MOECF) 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;

Environmental Management Plan

Law and Regulation	Description
Provisions of Duties and Powers relating to the Environmental Conservation of the Ministry: Section 7	<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>
Chapter VI Environmental Quality Standards: Section 10	<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>
Section 14	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.
Section 15	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.
Section 16	<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>

Environmental Management Plan

Law and Regulation	Description
Section 24	The project proponent has to allow relevant governmental organization or 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</p>

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	<p>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 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.	
Air Quality Guideline		
Parameters	Guideline Value	Averaging Period
NO ₂	40	1 year
	200	1 hour
O ₃	100	8-hour daily maximum
PM ₁₀	20	1 year
	50	24 hours

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PM _{2.5}	10	1 year	
	25	24 hours	
SO ₂	20	24 hours	
	500	10 minutes	
Noise Guideline ²⁵			
Receptor	One Hour LAeq (dBA) ^a		
	Daytime 7:00 – 22:00 (10:00 – 22:00 for public holiday)	Night time 22:00 – 7:00 (22:00 – 10:00 for public holiday)	
Residential, institutional, educational	55	45	
Industrial, Commercial	70	70	
National Myanmar Environmental Policy (2019)			
National Environmental Policy Vision & mission	Vision A clean environment, with healthy and functioning ecosystem, that ensures includes development and wellbeing for all people in Myanmar. Mission To establish national environmental policy principle for guiding environmental protection and sustainable development and for mainstreaming environmental consideration into all policies, laws, regulation, plans, strategic, programmes and projects in Myanmar.		
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. (b) Development of employment activities (l) Protection and conservation of the environment. (q) Appearing the required modern services for the Union and citizens.		
Section 17	(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.		
Foreign Investment Rule, 2013			
Rule 54	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		

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	and standards prescribed by relevant Union Ministry in conducting construction of factories, workshops, buildings, and other activities; (e) shall enforce Safety and Health
Myanmar Investment Rules, 2017	
Rule 202	The project proponent has to comply with the conditions of the permit issued by the MIC and applicable laws when making the investment
Rule 203	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
Rule 206.	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
Myanmar Insurance Law (1993)	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.
Payment of Wages Law (2016)	
Section 3 & 4	The project proponent has to pay the wages in accord with section 3 and 4 of said law,
Section 5	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
Section 7-13	The project proponent has to abide by the provisions of section 7 to 13 in the chapter (3) in respect of deduction from wages.
Section 14	The project proponent has to pay the overtime fees, prescribed by law, to the employees who work over working hours
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	

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Basic Principles: Section 3	<p>Private Industrial Enterprises shall be conducted in accordance with the following basic principles:-</p> <p>(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;</p> <p>(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;</p> <p>(d) to cause narrowing down of the gap between rural development and urban development by causing the development and improvement of industrial enterprises;</p> <p>(e) to cause opening up of more employment opportunities;</p> <p>(f) to cause avoidance of or reduction of the use of technical know-how which cause environmental pollution;</p> <p>(g) to cause the use of energy in the most economical manner.</p>
The Export and Import Law (2012)	
Objectives	<p>The objectives of this law are as follows:</p> <p>a) To enable to implement the economic principles of the State successfully.</p> <p>b) To enable to lay down the policies relating to export and import that supports the development of the State.</p> <p>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.</p> <p>d) To cause to be streamlined and speedy in carrying out the matters relating to export and import.</p>
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.
The Prevention of Hazard from Chemical and Related Substances Law, 2013	
<p>This law was enacted with the objectives of:</p> <p>a. To protect from being damaged the natural environment resources and being hazardous any living beings by chemical and related substances;</p> <p>b. To supervise systematically in performing the chemical and related substances business with permission for being safety;</p> <p>c. To perform the system of obtaining information and to perform widely educative and research for using the chemical and related substance systematically;</p> <p>d. To perform the sustainable development for the occupational safety, health and environmental conservation.</p> <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</p>	

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	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.
Myanmar Fire Brigade Law (2015)	
The Pyidaungsu Hluttaw enacted this law by Law No.11/2015 on the date of 17th March, 2015 with the following objectives:	
(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	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: 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	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
The Electricity Law (2014)	
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 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.	
Labor Dispute Settlement Law (28 Mar 2012 replacing 1929 version)	
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.	
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

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	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 if 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 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

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	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	<p>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</p> <p>The project owner has to cooperate with the authorized person or organization in line with the section 3 and 5 of said law.</p> <p>The project proponent has to abide by any instruction or stipulation for public health under the section 3 of said law.</p> <p>The project proponent has to allow any inspection, anytime, anywhere if it is needed under the section 5 of said law.</p>
Prevention and Control of Communicable Disease Law 1995 (Amendment in 2011)	
Chapter 2 Prevention	<p>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;</p> <p>The public shall abide by measures undertaken by the Department of Health under sub-section (a).</p>
Chapter 4 Environmental Sanitation	<p>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;</p> <p>Indoor, outdoor sanitation or inside the fence outside the fence sanitation;</p> <p>Well, ponds and drainage sanitation;</p> <p>Proper disposal of refuse and destruction thereof by fire;</p> <p>Construction and use of sanitary latrines;</p> <p>Other necessary environmental sanitation measures.</p>
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;
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

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	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	<p>The Objectives of this Law are as follows:</p> <ul style="list-style-type: none"> 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	<p>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:</p> <ul style="list-style-type: none"> warning suspending the certificate of certification for limited period cancelling the certificate of certification
လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတက်သော ဝတ္ထုပစ္စည်းများဆိုင်ရာဥပဒေ (၂၀၁၈)	
ရည်ရွယ်ချက်	<p>လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတက်သော ဝတ္ထုပစ္စည်းများကို စနစ်တကျပြုလုပ်ခြင်း၊ တင်သွင်းခြင်း၊ သယ်ယူခြင်း၊ သိုလှောင်ခြင်းနှင့် သုံးစွဲခြင်းတို့ပြုနိုင်ရန်၊</p> <p>ယမ်းဘီလူးနှင့် ဆက်စပ်သုံးပစ္စည်းများ အသုံးပြုသည့် လုပ်ငန်းခွင်ဘေးအန္တရာယ် ကင်းရှင်း၍ လုံခြုံမှုရှိစေရန်၊</p> <p>လုပ်ငန်းခွင်သုံး ပေါက်ကွဲစေတက်သော ဝတ္ထုပစ္စည်းများ ပြုလုပ်သုံးစွဲမှုများကို စနစ်တကျ ကြီးကြပ်နိုင်ရန်။</p>
အခန်း ၇ တားမြစ်ချက်များ	<p>လိုင်စင်ရရှိသူနှင့် ခွင့်ပြုချက်ရရှိသူ မည်သူမျှ စစ်ဆေးရေးအရာရှိချုပ် သို့မဟုတ် စစ်ဆေးရေးအရာရှိ၏ စစ်ဆေးခြင်းကို ခံယူရန် ငြင်းပယ်ခြင်းမပြုရ။</p>

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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	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

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Return 12 (a)	the relevant month. Moreover, a three-monthly return shall be furnished to the relevant Township Revenue Officer within one month after the 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. POLICY AND LEGAL FRAMEWORK INCLUDING INTERNATIONAL CONVENTIONS, TREATIES AND AGREEMENTS, AND INTERNATIONAL STANDARDS, GUIDELINES

International Conventions, Treaties and Agreements Myanmar has signed a number of international treaties related to the environment which may have implications for the Project. These include:

- a) Plant Protection Agreement for the Asia and Pacific Region; Vienna Convention for the Protection of the Ozone Layer; Montreal Protocol on Substances that Deplete the Ozone Layer;
- b) London Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer;
- c) United Nations Framework Convention on Climate Change (UNFCCC); United Nations Convention to Combat Desertification;
- d) International Civil Aviation Organization: ANNEX 16 Annex to the Convention on International Civil Aviation Environmental Protection Vol. I, II, Aircraft Noise;
- e) Vienna Convention for the Protection of Ozone Layer;
- f) Montreal Protocol on Substances that Deplete the Ozone Layer;
- g) Convention Concerning the Protection of the World Cultural and Natural Heritage;

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- h) Convention on Biological Diversity (CBD); International Tropical Timber Agreement (ITTA);
- i) Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES);
- j) ASEAN Agreement on the Conservation of Nature and Natural Resources; Cartagena Protocol on Bio-safety
- k) Kyoto Protocol to the United Nations Framework Convention on Climate Change; Ramsar Convention on Wetlands; and
- l) Copenhagen Amendment to Montreal Protocol on Substances that deplete the Ozone Layer.
- m) United Nations Declaration on the Rights of Indigenous People

2.4. INTERNATIONAL STANDARDS AND GUIDELINES

The following international standards, guidelines, policies and procedures are referred to, in preparation of this Report:

- a) UNEP Environmental Impact Assessment Training Resource Manual
- b) European Bank for Reconstruction and Development (Sub-sectoral Environmental and Social Guidelines)
- c) International Finance Corporation, World Bank Group (Environmental, Health, and Safety Guidelines)
- d) NHS, Health, Scotland (Health Impact Assessment in Practice)
- e) BS 14001:2004 Environmental management systems - Requirements with guidance for use
- f) Principles of Environmental Impact Assessment Best Practice International Association for Impact Assessment
- g) OHSAS 18001, Occupational Health and Safety Assessment

3.3 Institutional Framework**2.5. NATIONAL SUSTAINABLE DEVELOPMENT STRATEGY**

The National Sustainable Development Strategy (NSDS) is part of a broader programme of the UN Sustainable Development Commission set up after the World Summit on Sustainable Development in 2002. Every country, including Myanmar, that signed Agenda 21 at the Earth Summit in Rio de Janeiro in 1992, agreed to develop an NSDS by 2010 in line with the Millennium Development Goals (MDGs). UNEP provided funding for Myanmar to develop an NSDS. The main aim of the process was to develop an NSDS in line with international standards by meeting the MDGs and ensure that environmental and social impacts are mitigated when implementing development projects. Myanmar's NSDS was published in August 2009. The three goals described in Myanmar's NSDS are sustainable management of natural resources, integrated economic development and sustainable social development. Specific strategies are outlined under each goal. For example, the goal for

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Sustainable Management of Natural Resources suggests strategies for forest resource management, sustainable energy production and consumption, biodiversity conservation, sustainable freshwater resources management, sustainable management of land resources, sustainable management for mineral resources utilization, and so on.

2.6. PROJECT'S ENVIRONMENTAL AND SOCIAL STANDARD

Principle 17 of the Rio Declaration on Environment and Development stated; 'Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of competent national authority.'

2.7. THE EVOLVING SCOPE OF EIA PROCESS AND PRACTICE

In the early stages of EIA, only the biophysical impacts of proposals were considered (such as effects on air and water quality, flora and fauna, noise levels, climate and hydrological systems). Increasingly EIA processes are used to analyse a range of impact types within a single framework, include social, health, and economic aspects, e.g. social impact assessment (SIA), health impact assessment (HIA) and risk assessment. However, this trend toward integrated assessment for decision-making is by no means universal or uniform. Even in EIA systems where this trend is well established, the degree and extent of integration varies with legal requirements and accepted practice. Despite a lack of internationally consistent practice, integrated impact assessment, linking biophysical and socio-economic effects, is identified as an important priority in Agenda 21.

2.8. UNITED NATIONS DECLARATION ON THE RIGHTS OF INDIGENOUS PEOPLES

Myanmar has endorsed the United Nations Declaration on the Rights of Indigenous Peoples in September 2007 as one of 144 states. Article 32 describes indigenous peoples' right to free and prior informed consent (FPIC): "States shall consult and co-operate in good faith with the Indigenous Peoples concerned through their own representative institutions in order to obtain FPIC prior to approval of any project affecting their land or territories". Article 10 and Article 26 elaborate on forcible relocation of indigenous people, the need for FPIC and land rights. It is required to ensure conformance to all relevant international environmental and social conventions in relation to this project.

2.9. WORLD BANK CLASSIFICATION

World Bank Operational Directive on EIA, which is illustrative and provides a framework for screening.

Category A: for projects likely to have significant adverse environmental impacts that are serious (i.e., irreversible, affect vulnerable ethnic minorities, involve involuntary resettlement, or affect cultural heritage sites), diverse, or unprecedented, or that affect an area broader than the sites of facilities subject to physical works. A full EIA is required.

Category B: for projects likely to have adverse environmental impacts that are less significant than those of Category A projects, meaning that few if any of the impacts are likely to be irreversible, that they are site-specific, and that mitigation measures can be designed more readily than for Category A projects. Normally, a limited EIA will be undertaken to identify suitable mitigation and management measures, and incorporate them into the project.

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Category C: for projects that are likely to have minimal or no adverse environmental impacts. No EIA is required.

2.10. DIRECTIVE 2011/92/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 13 DECEMBER 2011 ON THE ASSESSMENT OF THE EFFECTS OF CERTAIN PUBLIC AND PRIVATE PROJECTS ON THE ENVIRONMENT

The EIA Directive (85/337/EEC) has been in force since 1985 and applies to a wide range of defined public and private projects, which also respectively list projects subject to mandatory EIA and non-mandatory EIA.

Usually this kind of major projects, will warrant a full EIA, because they are known or considered to have potentially significant adverse impacts on the environment; for example, on human health and safety, rare or endangered species, protected areas, fragile or valued ecosystems, biological diversity, air and water quality, or the lifestyle and livelihood of local communities.

3. PROJECT DESCRIPTION

3.1. LOCATION

XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED is located at Oo Paing No.(8/B+9/A+10/A) and (7+11/C), Kwin No.710, Kalawye North Kwin, Kalawye Village Tract, Thanlynn Township, Yangon Region. Location map is as shown in Figure 3-1.

3.2. OBJECTIVES OF THE PROJECT

The proposed project intends to manufacture bag on CMP basic and to export 100% of the finished products. HONGKONG YILI INDUSTRIAL CO., LTD. will supply raw materials for bags manufacturing. HONGKONG YILI INDUSTRIAL CO., LTD. agrees to supply to ready make products and pay CMP charges to XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED.

3.2.1. Site Description of the Project Site

The total area of project site is 2.8 acres (11331.198 square meters). Main factory is designed and included office area, QC department, sewing department, cutting department and iron department as production building. Transformer room and generator room are separated within the factory compound. The factory layout plan can be seen in Figure 3-4.

Implementation Schedule of Factory

1	Construction	29 th November 2019
2	Operation	5 th April 2020
3	Construction Period	6 months
4	Commercial Operation Running	10 years with possible extension
5	Decommissioning phase	-

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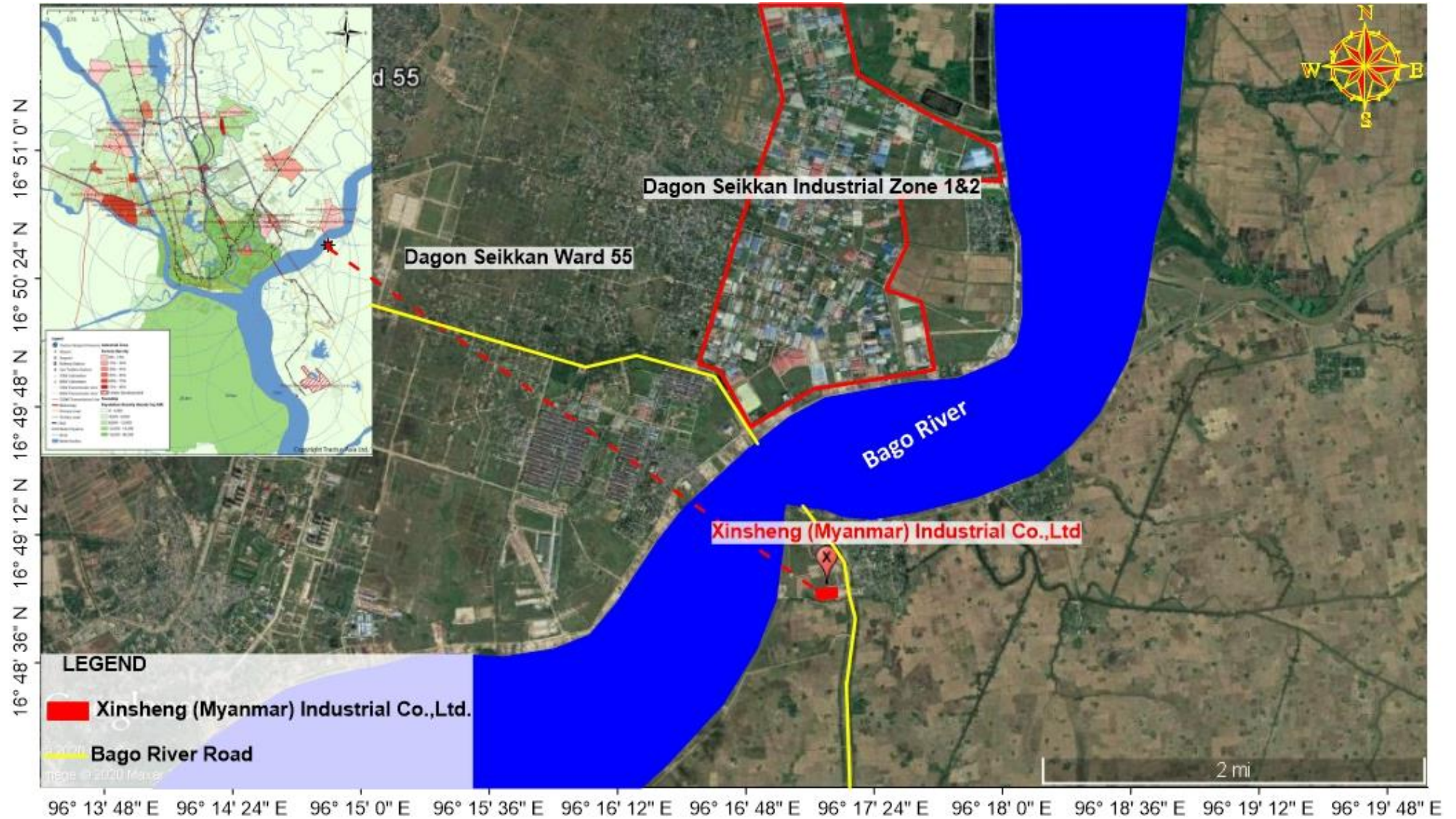


Figure 3-1 Location Map of XIN SHENG (MYANMAR) INDUSTRIAL CO., LTD.

Environmental Management Plan

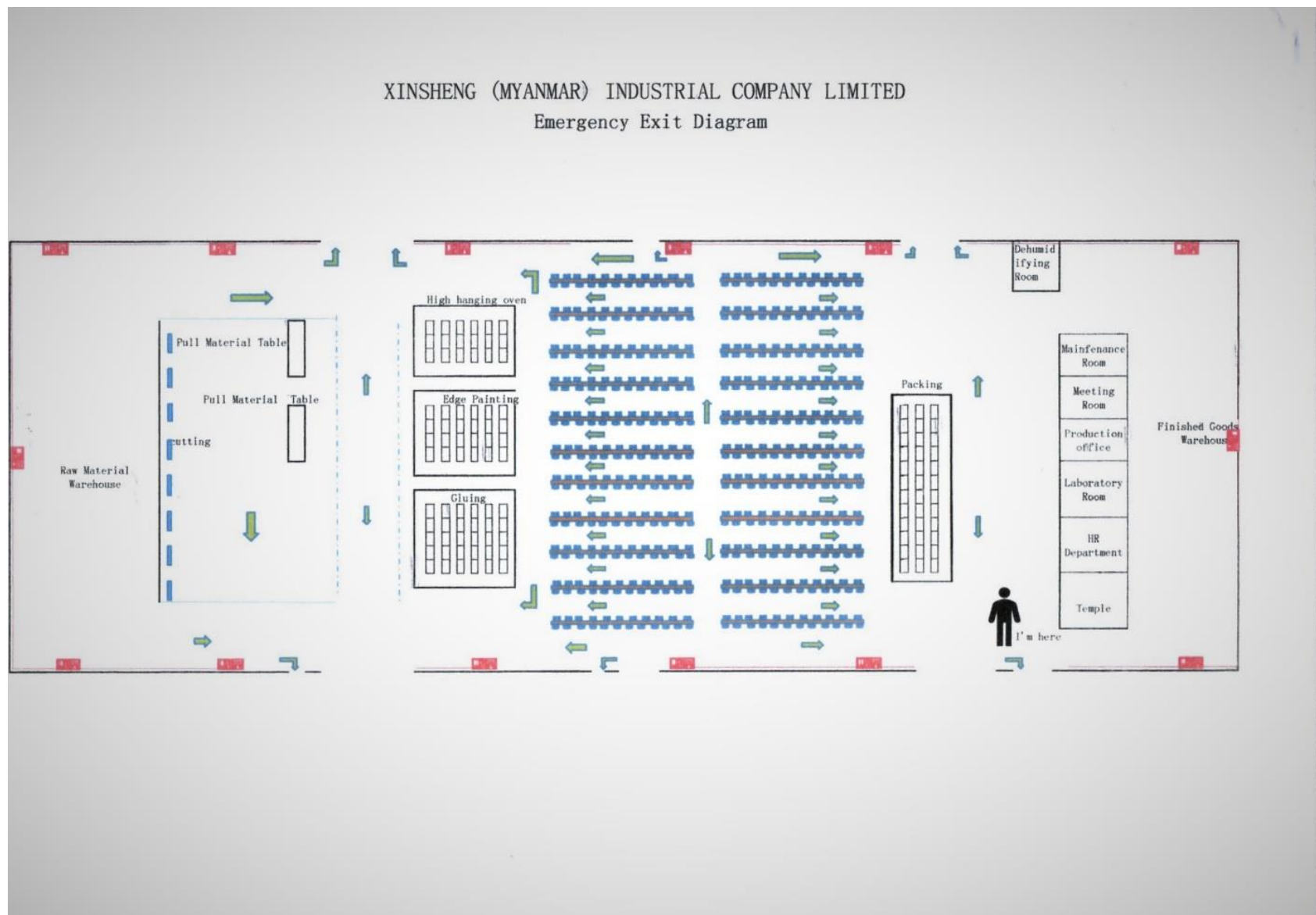
1.Security Gate 2.Fire Safety Pump & Water Tank 3.Kitchen 4.Dormitory 5.Warehouse 6.Canteen 7.Office
8.Toilets 9.Operation Area 10.Generator Room 11.Transformer 12.Packing Area 13.Chemical Storage Area 14.Dust Bin

Figure 3-2 Aerial Photo of XIN SHENG (MYANMRA) INDUSTRIAL CO., LTD.

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Figure 3-3 Project Adjacent Map

Environmental Management Plan**Figure 3-4 Factory Layout Drawing**

Environmental Management Plan**3.2.2. Production Process**

These three important parts in the production process

- Fabric Cutting
- Stitching
- Zippers

The first step is cutting the material. In this process, according to the designing process, we cut the fabric for the right shape. Starting from the small parts, each part is carefully cut and stitched. The cutting process is followed by the webbing, stitching and Zippers where each part of the bags is carefully and consistently put together in each step. Finally, after going through the process, the bags get it full form. QC is the main and most important part of the process.

Almost all the manufacturers take this process seriously as it ensures a high-quality product to the customer. And check the bag for faults, strength, and proper design. And once pass through the process the are properly packed and shipped to the customers. Once the bag reaches the final process, the bags are quality checked for quality

The process flow diagram for bags manufacturing is shown in Figure 3-5. The raw materials are cut and trimming and cementing which are attached when cemented. And then stitching to finished goods. Finally, these are packed and shipping to the buyer.

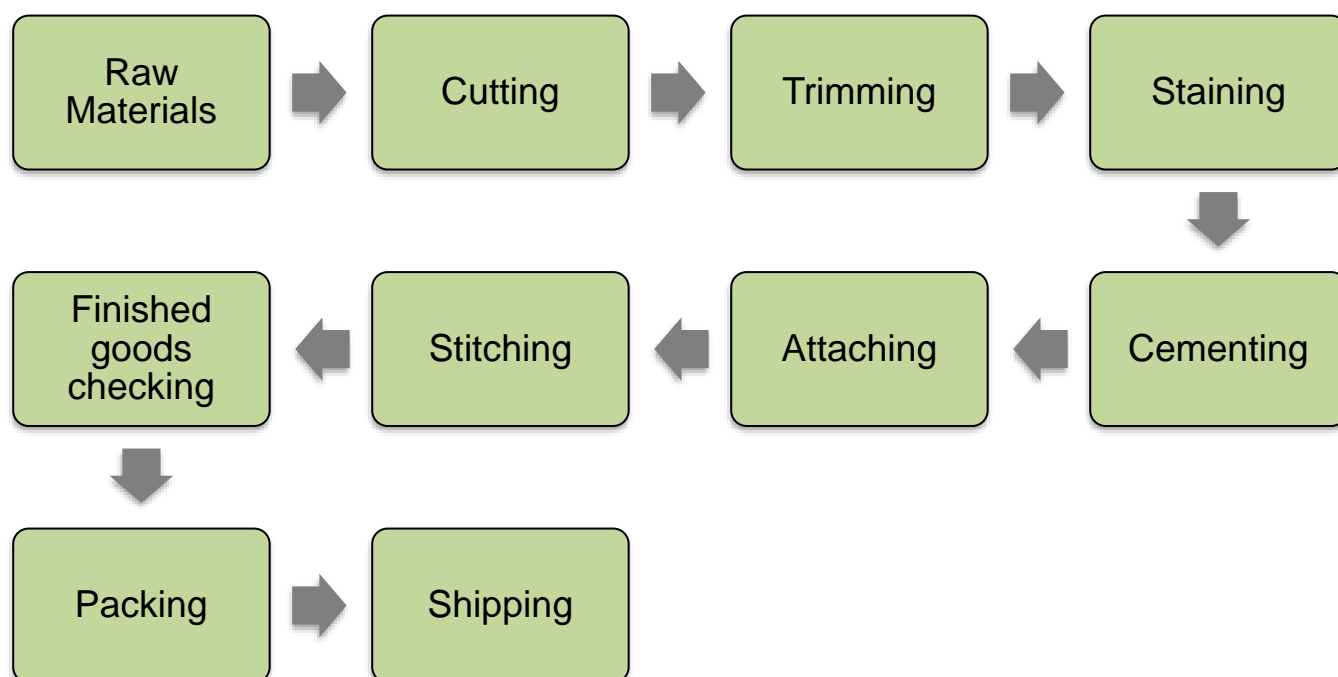


Figure 3-5 Process Flow Diagram of XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED

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Fabric Warehouse



Cutting



Cementing Section



Attaching Section



Stitching Section



Quality Control

Environmental Management Plan

Packing Section



Finished Goods Warehouse

Figure 3-6 Production Process Photos of XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED**3.3. UTILITIES**

The Utilities for proposed factory include electrical power, fuel oil for emergency used generator and water for general uses. Electric power is used for the purpose of to run the machinery and to provide lighting.

3.3.1. Products

The products of XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED. are various kinds of bags. The product of the factory are Cross body and Handbag. Production rate for the first 10 years is 720000 pcs to 903600 pcs. Table 3-1 is described in annual production rate.

Table 3-1 Annual Production Rate

No	Particular	Unit	Year					
			1	2	3	4	5	6-10
1	Crossbody Bag-80227	Pcs	68,000	74,120	80,240	86,360	92,480	98,600
2	Crossbody Bags-80455	Pcs	206,000	212,120	218,240	224,360	230,480	236,600
3	Handbag-80482	Pcs	68,000	74,120	80,240	86,360	92,480	98,600
4	Handbag-80483	Pcs	206,000	212,120	218,240	224,360	230,480	236,600
5	Handbag-80489	Pcs	35,000	41,120	47,240	53,360	59,480	65,600
6	Handbag-80636	Pcs	137,000	143,120	149,240	155,360	161,480	167,600
Total bags		Pcs	720,000	756,720	793,440	830,160	866,880	903,600

Environmental Management Plan**Figure 3-7 Product Photo****3.3.2. Raw Material**

The main Raw Materials are nylon, thread, Piping, Lining, Fabric, glue and tender etc..., which are imported from China only. Annually raw materials require for product is described in Table 3-2.

**Raw Material Storage**

Environmental Management Plan

Chemical Storage

Figure 3-8 Warehouse (Raw Material Storage)**Table 3-2 List of Raw Material Requirement (Annually)**

No	Particular	Unit	Year - 1	Year - 2	Year -3	Year -4	Year -5	Year -6-10
Crossbody 80455								
1	PU	y	200000	205800	211800	218000	225000	225000
2	Lining	y	14000	14406	14900	15400	15900	15900
3	Non-Woven	y	20000	20580	21200	22000	23000	23000
4	2mm EVA	y	8600	8900	9200	9500	10000	10000
5	Nylon	y	2000	2058	2200	2300	2500	2500
6	2mm Foam Sheet	y	50000	51430	53000	54600	56200	56200
7	Coil Zipper	y	46600	47950	50000	52000	53500	53500
8	3# Silder	Pcs	200000	205800	212000	220000	226380	226380
9	Hook	Pcs	400000	411600	424000	440000	452760	452760
10	Metal Buckle	Pcs	200000	205800	212000	219000	225300	225300
11	O ring	Pcs	400000	411600	424000	437000	449673	449673
12	D ring	Pcs	200000	205800	212000	219000	225351	232000
13	Magnet Botton	Set	200000	205800	212000	219000	225351	232000
14	Eyelets	Set	2400000	2469600	2540000	2614000	2689806	2768000
15	Thread	M	20000000	20580000	21200000	21900000	2253510	2319000
16	Paint Edge	Kg	100000	102900	106000	110000	113190	116500
Handbag 80482								
1	Fabric	y	6400	6600	6800	7000	7200	7200
2	PU	y	13500	13900	14400	14900	15400	15400
3	Lining	y	11800	12200	12600	13000	13400	13400
4	Non-Woven	y	8900	9200	9500	9800	11000	11000
5	1 mm EVA	y	121400	12500	12900	13300	13700	13700

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No	Particular	Unit	Year - 1	Year - 2	Year - 3	Year - 4	Year - 5	Year - 6-10
6	1 mm Glue	y	2300	2400	2500	2600	2700	2700
7	Piping	y	127500	131200	135000	139000	144000	144000
8	2 mm Foam Sheet	y	25000	25800	26600	27400	28200	28200
9	Chain	Pcs	100000	102900	105900	109000	112200	112200
10	Lock	Set	100000	102900	105900	109000	112200	112200
11	Thread	M	1500000	1543500	1588300	1634400	1682000	1682000
12	Paint Edge	Kg	1000	1029	1060	1100	1200	1200
Handbag 80483								
1	PU	y	205000	211000	217119	223500	229900	229900
2	Lining	y	185000	190365	195900	201600	207500	207500
3	Non-woven	y	210000	216090	222400	228900	235600	235600
4	1 mm EVA	y	41300	42500	43800	45100	46500	46500
5	0.8 mm Lining	y	13000	13377	13800	14300	14800	14800
6	420D Nylon	y	2200	2300	2400	2500	2600	2600
7	Hook	Pcs	2000000	2058000	2117700	2179000	2242200	2242200
8	D ring	Pcs	2000000	2058000	2117700	2179000	2242200	2242200
9	Magnic Stud	Pcs	1000000	1029000	1058900	1089700	1121400	1121400
10	2 mm Foam Sheet	Y	250000	257250	265000	272685	280600	280600
11	Thread	M	30000000	30870000	31765230	32686500	33645000	33645000
12	Paint Edge	Kg	30000	30870	31800	32800	33800	33800
13	Lable	Pcs	1000000	1029000	1058900	1089700	1121400	1121400
14	Hangtag Sticker	Pcs	1000000	1029000	1058900	1089700	1121400	1121400
Handbag 80489								
1	Nylon	y	28000	28812	29700	29800	30000	30000
2	Lining	y	16000	16464	195900	201600	207500	207500
3	Nylon Binding	y	158000	162582	222400	228900	235600	235600
4	Webbing	y	140000	144060	43800	45100	46500	46500
5	5 # Plastic zipper	y	55000	56595	13800	14300	14800	14800
6	1 ½ Plastic Buckle	Pcs	100000	102900	2400	2500	2600	2600
7	1 ½ Plastic adjuster	Pcs	100000	102900	2117700	2179000	2242200	2242200
8	5 # Two way silder + Zipper Puller	Pcs	100000	102900	2117700	2179000	2242200	2242200
9	# Plastic Zipper Puller	Pcs	200000	205800	1058900	1089700	1121400	1121400
10	Thread	M	700000	720300	265000	272685	280600	280600
11	Lable	Pcs	100000	102900	105900	32686500	33645000	33645000
12	Hanging Sticker	Pcs	100000	102900	31800	32800	33800	33800

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No	Particular	Unit	Year - 1	Year - 2	Year - 3	Year - 4	Year - 5	Year - 6-10
Handbag 80636								
1	PU	y	17000	17493	29700	30000	31000	31000
2	Lining	y	10000	10290	195900	201600	207500	207500
3	Non-Woven	y	10000	10290	222400	228900	235600	235600
4	1.2 mm EVA	y	8500	8746.5	43800	45100	46500	46500
5	5# manel Zipper	y	31000	31899	13800	14300	14800	14800
6	1 Metal Buckle	Pcs	100000	102900	2400	2500	2600	2600
7	¼ * 4.0, O ring	Pcs	200000	205800	2117700	2179000	2242200	2242200
8	O ring	Pcs	100000	102900	2117700	2179000	2242200	2242200
9	# 5 top Stopper	Pcs	200000	205800	1058900	1089700	1121400	1121400
10	# 5 end Stopper	Pcs	100000	102900	265000	272685	280600	280600
11	5 # Silder	Pcs	100000	102900	105900	32686500	33645000	33645000
12	2.04mm metal tube	Pcs	200000	205800	31800	32800	33800	33800
13	2 mm Foam Sheet	Y	25000	25725	31800	32730	33700	34000
14	Thread	M	500000	514500	529500	544900	560700	560700
15	Paint Edge	Kg	50000	51450	529500	544900	560700	560900
16	Lable	Pcs	100000	102900	105900	108900	112100	112100
17	Hanging Sticker	Pcs	100000	102900	105900	108900	112100	112100

3.3.3. Machinery and equipment

Lists of machinery and equipment list required for the XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED is following in Table 3-3. They are 224 days running annually.

Table 3-3 List of Machinery

NO	Machine Name	H.S CODE	A/U	Unit Price	Quality
1	Computer Sewing Machine	8452	Set	1500	50
2	Overlock Machine	8452	Set	350	2
3	High Chariot Sewing Machine	8452	Set	550	80
4	Sewing Machine	8452	Set	300	200
5	Column Sewing Machine	8452	Set	700	20
6	Nailing Machine	8440	Set	220	10
7	Twin Needle Machine	8479	Set	250	12
8	The Rotary Oven	8516	Set	26000	1
9	Cutting Machine	8453	Set	5000	6
10	Folding Machine	8453	Set	2100	10
11	Automatic Straight Edge Folding	8422	Set	2500	2
12	Belt Cutting Machine	8451	Set	430	6

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NO	Machine Name	H.S CODE	A/U	Unit Price	Quality
13	Wire Cutting Machine	8451	Set	200	8
14	Staking Machine	8453	Set	320	6
15	Hot Melt Glue Machine	8420	Set	150	2
16	Gluing Machine	8453	Set	400	6
17	Cutting ribbing Machine	8451	Set	500	2
18	Dehumidifier	3506	Set	400	6
19	Glue Sprayer Machine	8453	Set	2500	2
20	Cloth Inspection Machine	8452	Set	550	1
21	Zipper Machine	8447	Set	1290	1
22	Cutter	8467	Set	150	1
23	Electric Fork - Lift	8427	Set	2000	1
24	Fork Lift	8427	Set	190	4
25	Electronic Scale	8508	Set	150	5
26	Coding Machine	8463	Set	1860	1
27	Heat Pressing Machine	8453	Set	220	2
28	Heat Gluing Machine	8424	Set	140	10
29	Handle Needle Check	8443	Set	30	6
30	Needle Check Machine	8443	Set	1500	1
31	Heat Cutting Machine	8453	Set	200	1
32	Air Compressor	8209	Set	1000	2
33	Edge Painting Machine	8453	Set	200	10
34	Color Light Box	8462	Set	280	1
35	Friction Resistance Colour	9015	Set	2260	1
36	Tensile Testing Machine	9015	Set	2260	1
37	Salt Spray Testing Machine	9024	Set	430	1
38	Oven Dryer	8414	Set	320	1
39	Humidity Measuring Machine	9025	Set	2140	1
40	Needle	8482	Pcs	0.05	30000
41	Sewing Machine Accessories	8452	Pcs	5	3000
42	Mould	8480	Pcs	5	2000
43	Cutter Mould	8480	Pcs	20	1000
Total					36,483.00

3.3.4. Human Resource

The proposed Factory of XIN SHENG (MYANMAR) COMPANY LIMITED has the employees more than 95 % are local people, who manage the company by their dynamic, enthusiastic, experienced, and cooperative skills. Currently, one shift (8 hours + overtime 2 hours) of production are

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running or operating. Management and team member detail of human resource is mentioned in Table 3-4.

Table 3-4 Employment Schedule

No	Particular	Local	Foreign
1	Production Manager	1	1
2	HR Manager	2	1
3	Accountant	1	-
4	Office Staff	5	-
5	Supervisor	3	-
6	Leader	10	-
7	Skill and Semi-Skill Worker	230	-
8	Unskilled Worker	200	-
9	Quantity Control	20	-
10	Finishing Staff	20	-
11	Mechanic/Electric	2	-
12	Cleaner	1	-
13	Nurse	1	-
14	Security	2	-
15	Driver	2	-
16	Assistance Manger (Production)	-	1
17	Technical Staff	-	10
		500	13
Total		513	

3.3.5. Water

Thanlyinn Township has no centralized water supply system and the factory gets water from the two tube wells installed inside the factory compound. Groundwater from this tube wells are pumped in the storage tanks for the factory and domestic use. The main water use in the proposed project is for domestic usage such as for personal washing, food preparation, and washing of utensils. Annual water needed is 5000 gallons and stored in 25000 water storage tank of underground. Drinking water will be provided by outsource suppliers. Figure 3-9 is described by water storage tank and drinking water supply for XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED.

Environmental Management Plan**Figure 3-9 Drinking Water Supply****3.3.6. Electricity and Fuel Requirement**

The proposed project is intended to get required electricity supply form Yangon City Electricity Supply Board (YESB) and distributed by 500 kVA Transformers. Another source of energy 65 kVA and 500 kVA generators will also be kept as the emergency generator if normal electricity supply could not provide for the proposed project. Diesel usage is 200-250 gallons monthly. Electricity distribution room is shown in the Figure 3-8.

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Figure 3-10 Electricity System at XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED

3.4. STATUS OF THE FACTORY

XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED is using ground water for both industrial and household purpose, which is supplied by deep tube well. The factory also has generators for electricity generation. The fuel used in the industry is Diesel. The sanitary liquid waste of the factory is stored in septic tank.

The major pollution caused by the factory's operation are water pollution by discharging liquid waste generated in wet process i.e. air pollution by generator's effluent gas emission, noise pollution created during the operation of generator and other machines.

Solid wastes (recycle waste) such as broken machine parts, paper box, fabric scraps, etc. are hand over to local waste buyer. Although the factory causes some pollution but also has a positive side and that is the factory has created employment for many people, due to this factory local community has built up daily.

Environmental Management Plan**3.5. GENERATION OF WASTE, EMISSION AND DISTURBANCES****3.5.1. Industrial Wastes**

Wastes generated from the bags manufacturing factory are fabric scrap and lining of 50% from cutting section, 35% from sewing section and 15% from packing section. In addition, packing waste of plastic sheet, carton box and fabric paper tube are generated from cutting line and packing section. Total amount of waste about maximum 30 kg per day are generated from operation process.

3.5.2. Human wastes

The number of staff and workers required in the day shift for the factory is maximum 513 persons during operation. Solid waste generated from maximum number of operators and office staffs with assumption of waste generation rate at 200.07 kg/day was calculated based on solid waste generation rate of 0.39 kg/person/day¹.

Domestic wastewater generated by maximum amount of 513 persons with assumption rate 51.3 m³/day was calculated based on domestic wastewater generated rate of 0.1 m³/person/day². This water will be released in operation hour discharge to septic tank or factory drainage.

3.5.3. Waste Balance

A mass balance diagram is illustrated in below Figure which presents water and energy inputs and the outputs with respect to residue and sub-products, liquid effluents and air emissions.

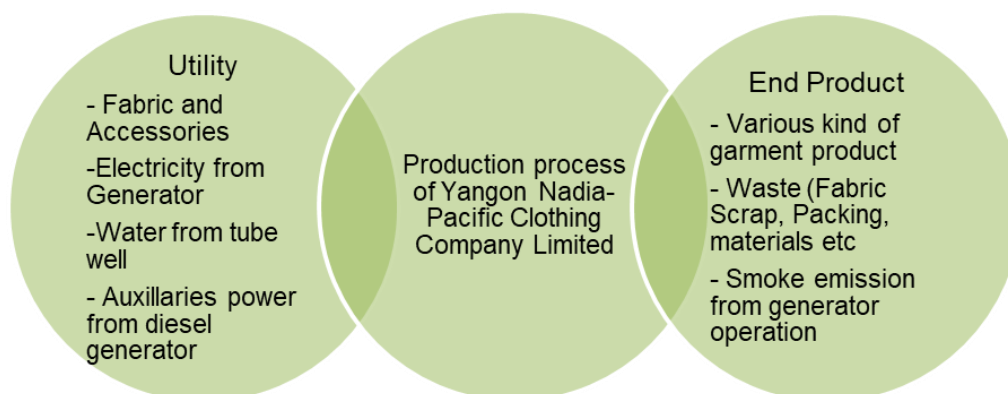


Figure 3-11 Balance Diagram of garment production

¹ 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).

² 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, and 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 Thanlyinn Township, Yangon Region.

4.2. ENVIRONMENTAL BASELINE STUDY

The field 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.

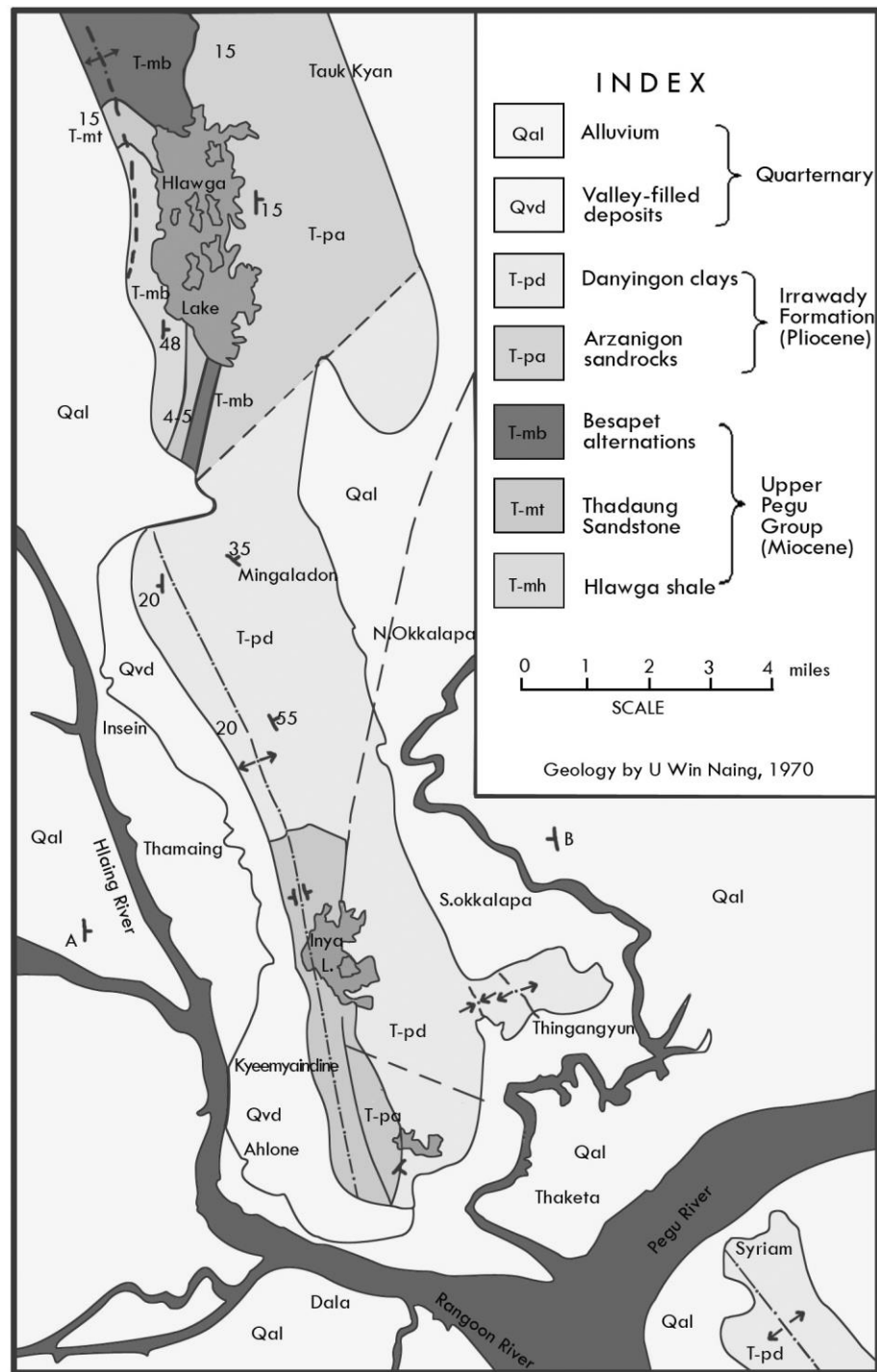
4.3. PHYSICAL COMPONENT

4.3.1. Topography

The proposed project area is situated in Thanlyinn 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

Alluvial deposits (Pleistocene to Recent), the non-marine fluvialtile sediments of Irrawady 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.

Environmental Management Plan**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 salty 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 could accommodate the construction of the Project.

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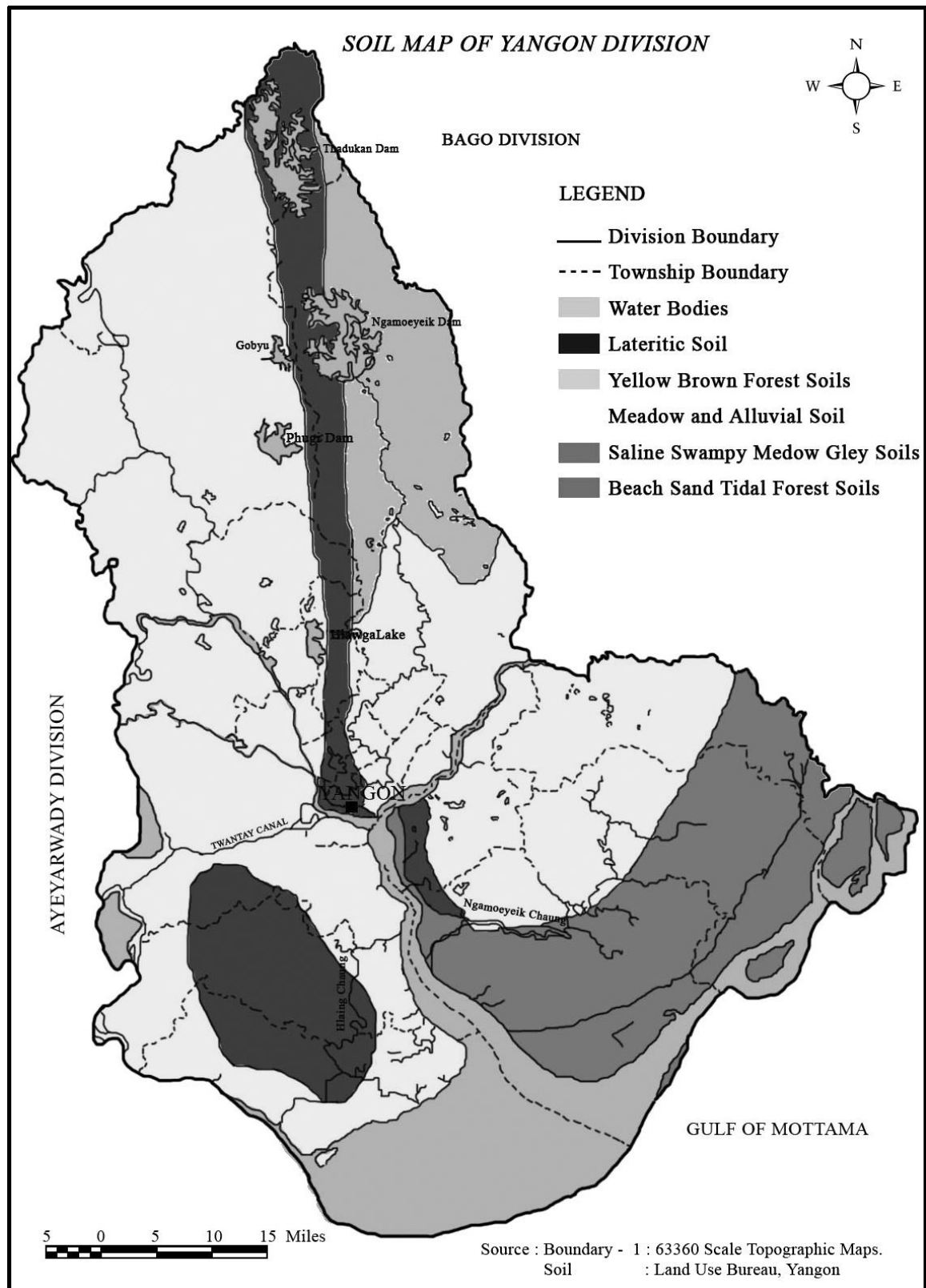


Figure 4-2 Soil Map of Yangon (Source: Land use of Bureau of Yangon)

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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.

4.3.6. Climate and Meteorology

Yangon has a tropical monsoon climate under the Koppen climate classification system. The city typically experiences a distinct rainy season from the month of May through to October when a substantial amount of precipitation occurs; and dry season, which commences from November and ends in April. During the course of a year, average temperatures show some variance with average highs ranging from 26 °C to 36 °C and average lows occurring between 18 °C and 25 °C. The hottest period is between February and May, with little or no rain. At the end of this season, generally from March to April, the average monthly temperature reaches the upper 30 °C. The average temperatures in Yangon range from 24 °C to 36 °C in April during the hot season and it ranges from 18 °C to 32 °C in January during the cooler season.

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Rainfall and Relative Humidity: The climate of Myanmar follows a typical monsoon pattern. Historically, the average annual mean rainfall for Yangon is 2,681 mm with the annual average rainy days of 129.3 days. During the course of 2013, the Department of Meteorology and Hydrology (Myanmar) reported an annual precipitation of approximately 2700 mm. The month with the most precipitation was in July. The relative humidity was generally higher from May to October 2013. The dry season occurs from November to April. Based on the historical weather for the last twelve months in Yangon, no precipitation was observed in December 2012, February 2013 and March 2013. The least humid month of the last 12 months was February 2013 with an average daily low humidity of 34%, and the most humid month was September with an average daily high humidity of 80%. The proposed project is located at Thanlyinn Township, Yangon Region. The climate condition of Thanlyinn Township is the dry season of area in which the project lies starts in December and ends in March. The raining season starts in June and ends in September and the cold season follow with the cooler, drier months of October to January. The highest temperature ranging 38°C and low range 30°C reference from Township Meteorology data, Regional Data of Thanlyinn Township. 2013 to 2017 Yearly data of rainfall and temperature is presented in Table 4-1. The weather condition during 3 March 2020 shows the average temperature of 37.035 °C while the average humidity is 27.88 percent Table 4-2.

Table 4-1 Annual Rainfall and Temperature

Year	Rainfall		Temperature	
	Raining day	Rainfall value	Summer season Max (°C)	Winter season Min (°C)
2012-2013	121	53.46	41	27
2013-2014	131	61.25	40	26
2014-2015	128	58.35	39	25
2015-2016	113	48.45	40	26
2016-2017	126	56.97	41	27

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

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

Date and Time	Description	Result value	Environmental parameter air station guideline
25 March 2020 (10:00 am to 4:00 pm)	Relative Humidity RH %	27.88 (%)	Present condition
	Temperature	37.035 °C	Present condition

Wind Speed and Direction. Based on 2013 data, it was reported that the month with the highest wind speed was April 2013 with an average wind speed of 3 m/s while the least windy month was December 2012 with an average wind speed of 1m/s. The highest sustained wind speed was 54 m/s, occurring on September 19, 2013 and the highest daily mean wind speed was 4 m/s, occurred on May 14, 2013.

Natural Hazards: Myanmar is exposed to multiple natural hazards including cyclones, earthquakes, floods and fire. It has been periodically exposed by natural disasters. The Yangon District is in the vicinity of the southern section of the Sagaing Fault which has not been active in the past 50 to 75 years indicating that the faults may be under accumulating stress increasing the potential for an earthquake to occur. The Sagaing Fault is the most prominent active fault in Myanmar trending roughly north to south. It has been the originator of a large proportion of destructive earthquakes in Myanmar.

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The Project Site is also located in an earthquake zone and therefore the building construction design needs to cater for this hazard with adequate planning on emergency response procedures. Myanmar is exposed to cyclones and associated storm surges from the Bay of Bengal. Annually, there are approximately 10 tropical storms in the Bay of Bengal from April to December. Severe cyclones occur during the pre-monsoon period of April to May and post-monsoon period of October to December. The threat of flooding usually occurs in three waves each year: June, August and late September to October.

4.4. BASELINE ENVIRONMENTAL MONITORING

The baseline environmental quality at the Project Site and its immediate surroundings was established by groundwater, wastewater and ambient air quality samples; as well as noise measurements at immediate surrounding areas. The data is presented below.

4.4.1. Temperature and Humidity

The weather condition during 20, February, 2020 shows the average temperature of 29.6°C while the average humidity is 29.6 % and its cloudy day. There were partly cloudy on the day between 10:00 am and 4:00 pm and the wind speed is 15 to 25 km/h SW direction.

Table 4-3 Relative Humidity and Temperature Measure at XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED

Date and Time	Description	Result value	Environmental parameter air station guideline
20 February 2020 (1:00 pm to 5:00 pm)	Relative Humidity RH %	88.2 (%)	Present condition
	Temperature	29.6 °C	Present condition

4.4.2. Air Quality

To determine the existing baseline ambient air quality status within the project site on 3 March 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 and international ambient air quality standard (NAAQS, ACGIH) guidelines. The measurement location point is situated at latitude 16°48'52.65"N and longitude 96°17'13.41"E.

It was observed that the air quality of CO, CO₂ and SO₂ concentration level are within the limit of NEQ (emission) guideline but particulate matter (PM_{2.5}) and gases level of Nitrogen Dioxide (NO₂) are also within the National Environmental Quality (Emission) Guideline. Particulate Matter (PM₁₀) is a little more than the guideline limit because construction work is not done yet at that time of project site surveying.

Table 4-6 Observed Air Quality Results

Parameters	Observed value	Guideline value	Unit	Organization	Period	Actual Measuring Time
PM ₁₀	57.17	50	µg/m ³	NEQG	24 hrs	8 hours
PM _{2.5}	46.44	25	µg/m ³	NEQG	24 hrs	8 hours

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Parameters	Observed value	Guideline value	Unit	Organization	Period	Actual Measuring Time
NO ₂	127	200	µg/m ³	NEQG	1 hr	8 hours
SO ₂	106.21	500	µg/m ³	NEQG	10 mins	8 hours

NEQ = National Environmental Quality (Emission) Guideline

Note

Air quality and Noise level monitoring was done within 8 hours of the operation time in factory.

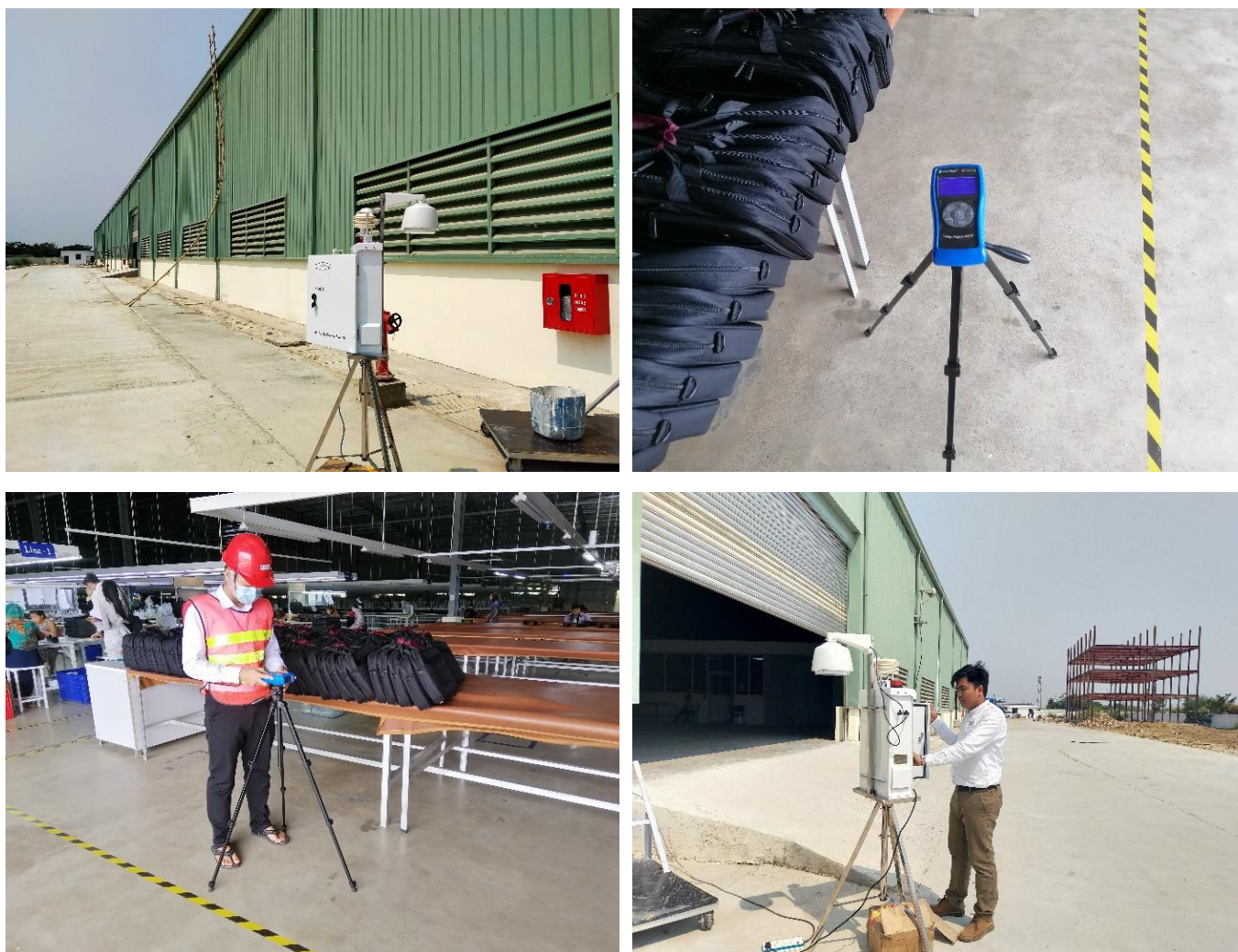


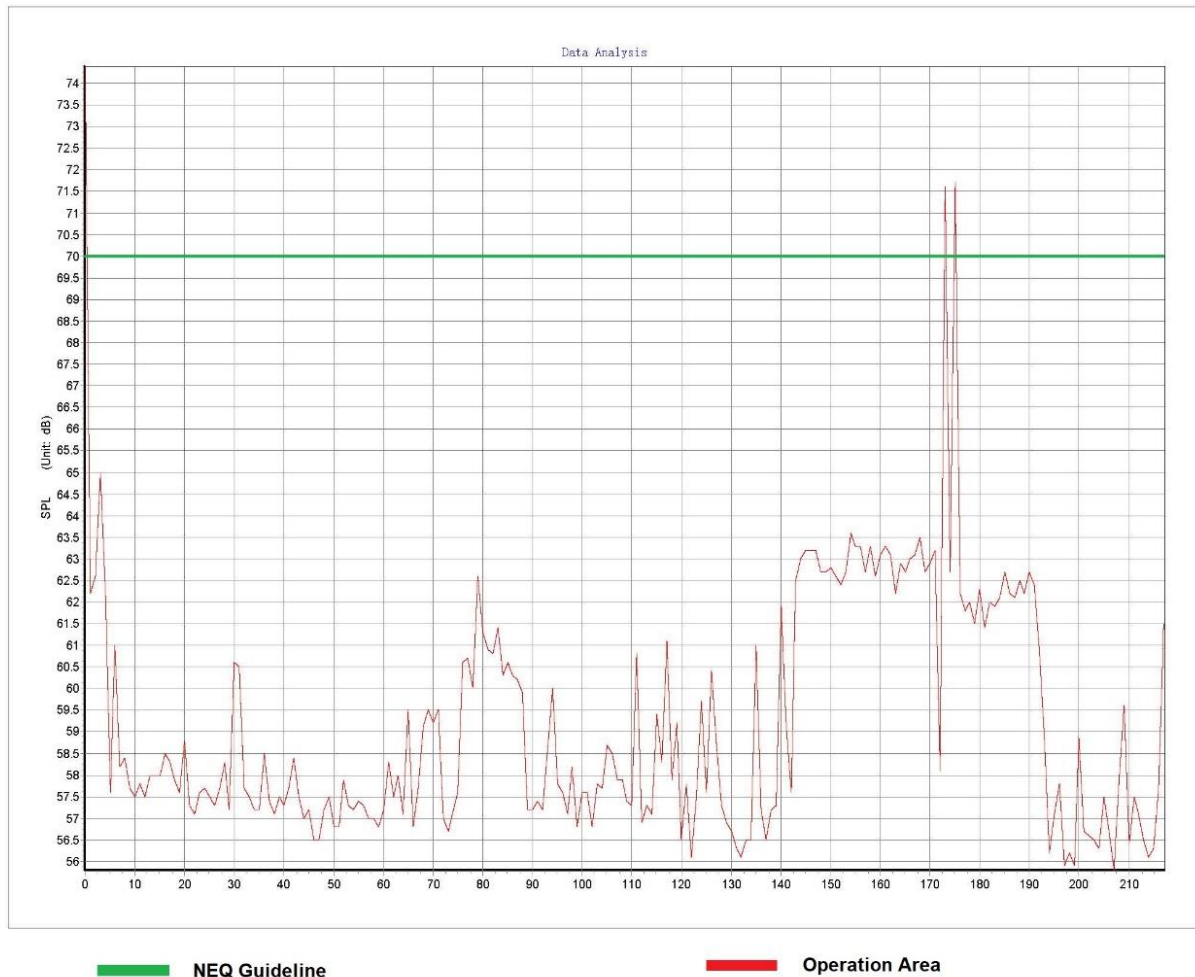
Figure 4-3 Air Quality Measurement at the Project Site

4.4.3. Noise

The Noise level was measured by using Digital Sound Level Meter for working 8hours on 20 February 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.

Environmental Management Plan**Table 4-4 Noise Level Measurement Result**

Date and Time	Location	GPS value	Result value	Guideline
20 February 2020 (1:00 pm to 5:00 pm)	Operation area	16°48'52.65"N 96° 17'13.41"E	69.83 dBA	70 dBA

**Figure 4-4 Noise Level Result Graph**

Environmental Management Plan**Figure 4-5 Sound Level Measurement Photos****4.4.4. Ground Water Quality**

The baseline data on ground water quality were collected on 20, February 2020 with respect to WHO Guidelines for Drinking Water Standard and Laboratory analysis results can be seen in (Table 4-6). Which affected by the project, was studied with the aim of understanding, preventing and minimizing water pollutions in the public water sources so as to ensure human health and biodiversity. Water quality is one of the key factors affecting the environment and health. Analyzed results of groundwater result compare with Drinking water guideline and all the parameters are within the guideline limit.

The collected samples (ground water from treated water station at the factory) were tested at ISO Tech Laboratory.

Table 4-5 Coordinated Point of Water and Wastewater Collection Point

Water Parameter	GPS Value	Location
Ground Water	16°48'52.65"N and 96° 17'13.41"E	Within proposed site of Ground water tank

4.4.4.1. Ground water result**Table 4-6 Ground Water Quality Laboratory Results**

No	Parameter	Unit	Water result	Drinking standard
1	pH		7.1	6.5-8.5
2	Colour (True)	TCU	Nil	15 TCU
3	Turbidity	NTU	1	5 NTU
4	Conductivity	Micro S/cm	142	
5	Total Hardness	mg/l as CaCO ₃	8	500 mg/l as CaCO ₃
6	Calcium Hardness	mg/l as CaCO ₃	6	-
7	Magnesium Hardness	mg/l as CaCO ₃	2	-
8	Total Alkalinity	mg/l as CaCO ₃	14	-
9	Phenolphthalein Alkalinity	mg/l as CaCO ₃	Nil	-

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10	Carbonate (CaCO ₃)	mg/l as CaCO ₃	Nil	-
11	Bicarbonate (HCO ₃)	mg/l as CaCO ₃	14	-
12	Iron	mg/l	0.10	0.3 mg/l
13	Chloride (as CL)	mg/l	41	250 mg/l
14	Sodium Chloride (as NaCL)	mg/l	68	-
15	Sulphate (as SO ₄)	mg/l	10	500 mg/l
16	Total Solids	mg/l	73	1500 mg/l
17	Total Suspended Solids	mg/l	2	-
18	Total Dissolved Solids	mg/l	71	1000 mg/l
19	Manganese	mg/l	Nil	0.05 mg/l
20	Phosphate	mg/l	Nil	-
21	Phenolphthalein Acidity	mg/l	2	-
22	Methyl Orange Acidity	mg/l	Nil	-
23	Salinity	ppt	0.1	-

NG= No guideline

4.4.5. Light

Activities of the workers in the bags manufacturing factory are highly dependent on the quality of light. Therefore, the consultant conducted the light measurement in the bags manufacturing factory is presented in Table 4-7. The illustrates the recommended illumination and limiting glare index applicable to typical works (fairly severe to very severe tasks) in bags manufacturing factory is provided.

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 bags manufacturing 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 4-7 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

Environmental Management Plan**Figure 4-6 Light Quality Measurement****Table 4-8 Result of Light Measurement at XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED**

No	Measure area	Unit	Measure value	Standard	Type of Light
1	Sewing Section 1	Lux	1458.33	1000	LED tube light
2	Sewing Section 2	Lux	1400.22	900	LED tube light
3	Cutting Section	Lux	1269	1300 - 2000	LED tube light
4	Quality Control	Lux	961.5	1300 - 2000	LED tube light
5	Packing Section	Lux	1126	600	LED tube light

4.5. BIOLOGICAL COMPONENT

The proposed project site is not located in a sensitive ecosystem, is situated in the Thanlyinn Township. 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**

XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED is located across Thanlyinn Township in Yangon Region. In 2017, the population of Thanlyinn Township is about 273,721 peoples as present in Table 4-9.

Table 4-9 Population of Males and Females at Thanlyinn Township (2017)

Item	Older 18 year			Younger 18 year			Total		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Urban	25,181	28,515	53,696	12,856	14,788	27,644	38,037	43,303	81,430
Rural	52,807	53,308	106,115	30,267	30,494	60,761	83,074	83,802	166,876
Total	77,988	81,823	159,811	43,123	45,282	88,405	121,111	127,105	248,216

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

4.6.2. Religion

The different kinds of religion present in Thanlyinn Township are shown in Table 4-10. More than 95% of the people living in the township are Buddhists.

Table 4-10 Religion in Thanlyinn Township (2017)

Township	Buddhist	Christian	Hindu	Muslim	Other	Total
Thalyinn	237,660	605	5504	4507	-	248216

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

4.6.3. Local Economy

Among regional towns, Thanlyinn 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 Thanlyinn Township are railway, port, and car road as presented in Table 4-11.

Table 4-11 Transportation Route

Categories	Transportation Route+		Miles
	From	to	
Inland Waterway (Phar Kuu)	Phar Kuu	Tha Yat Pin Chaung	2 miles, 3 furlongs
Inland Waterway (Tha Pyay Kone)	Tha Pyay kone	Yangon	24miles
Inland Waterway (Day Set)	Day Set	Tha Yat Pin	3 furlongs

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		Chaung	
Inland Waterway (Khayan Chaung)	Khayan Spillway	Bagan Taung-Tha PyayKone	6 furlongs
Railway (East Yangon University)	Aung Thuka	East Yangon University	4miles 2 furlongs
Railway (Yangon Thilawa)	Aung Thuka	Thilawa	13miles 4 furlongs
Highway (Thahtay Kwin-Bagan Taung-PharKuu-Maung Ma Rd)	Thahtay Kwin Village	Maung Ma Village	18miles 4furlongs
Highway (Bago-ThaNatPin-KhaYanThoneKhwa-Thalyin Rd)	Thanlyin	Pearl Village	13miles
Highway (Thalyin-Thilawa-Satekan Rd)	Sate Kyi Lan Sone	Dagon-Thilawa	3miles
Road (Thalyin-Kyouttan Rd)	Phayar Kone	Thilawa	6miles
Road (Bago-Thanatpin-KhayanThoneKwa-Thalyin Rd)			4miles
Road (Thalyin-Thilawa-Padakyi Rd)			13miles
Road (Thalyin-Thilawa-Middle Padakyi Rd)			3miles
Bus (Tawa) 31, Kone Baung, Yangon Nyein Chan Gabar-3 KAPAYA			4miles 4furlongs
Bus (70, Shwe Taung Pine)	East yangon University	Bo Tahtaung	
Bus (32, Kone Baung, Yangon Shwe Taung Pine)	GTU	Bo Tahtaung	
Bus (76,104)	MMU - Aung Mingalar-3lansone	Kha Yae Pin Yate Mon	
Bridge (Thalyin-Yangon)	East Yangon University - YanKin 12 lone Tan	Sat Mhu 1	
Bridge (Dagon-Kalawae)			7056ft
Bridge (Vault Chaung)			4540ft
Bridge (Vault Chaung)			195ft
Bridge (Minga Loon Ywar Awin)			120ft
Bridge (Bagan Taung)			104ft
Bridge (Kalar Ma)			148ft
Bridge (Minga Loon Ywar Apyin)			60ft
Bridge (Bago-Thanatpin-Khayanthoekwa-2/67)			52ft
Bridge (Thalyin-Thilawa habour 1/4)			50ft
Bridge (Dagon Bridge connected to Thilawa Industrial Zone 1/1)			60ft
Bridge (Thalyin-Thilawa-Lower Pada 2/1)			60ft
			60ft
			60ft

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

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The electricity demand of Thanlyinn Township is higher and higher due to the normally increased in population and infrastructure.

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 Thanlyinn Township. The name and the located village tract/ ward of schools are described in Table 4-12.

Table 4-12 List of Major School in Thanlyinn Township

No.	Name of School	Location
1	East Yangon University	Pharyar Kone Village
2	Maritime University	Pharyar Kone Village
3	Technological University (Thanlyin)	Lat Yat Sam Village
4	ThaMa University	Nyaung Thone Pin Village
5	BEHS-1	Oke Pho Su
6	BEHS-2	East Myo Thit
7	BEHS-3	Htan Pin Kone
8	BEHS-4	Bago Su
9	BEHS(Kyout yae Twin)	Pharyar Kone
10	BEHS (Phar Kuu)	East Phar Kuu
11	BEHS(Tha Pyay Kone)	Tha Pyay Kone
12	BEHS(Myo Haung)	Middle Myo Haung
13	BEHS(Pyin Htaung School)	Lat Yat Sam Village
14	BEHS(Branch) (Yone Tha Pyay Kan)	Yone Tha Pyay Kan Village
15	BEHS(Branch)(Jamar)	Kyoung Kong Sate Kyi Village
16	BEHS(Branch)(Chaung Saut)	Chaung Saut Village
17	BEHS(Branch)(Kyoung Kong Sate kyi)	Kyoung Kong Sate Kyi Village
18	BEHS(Branch)(Mya yar Yoe)	Lat Yat Sam Village
19	BEMS(Lahar Yak)	Lahar Yark Village
20	BEMS(Kon Chan Kone)	Phayar Kone Village
21	BEMS(Vault Tha Pyay Kan)-1	Vault Tha Pyay Kan Village
22	BEMS(Kalar Wae)	Kala Wae Village
23	BEMS(Branch)(Kayin Sate)	Kayin Sate Village
24	BEMS(Branch)(Sit Pingun)	Sit Pingun Village
25	BEMS(Branch)(Htaw Wat)	Htaw Wat Village
26	BEMS(Branch)(Bogyoke Ywarthit)	Bogyoke Ywarthit Village
27	BEMS(Branch)(Nyaung Thone Pin)	A Mhu Htan
28	BEPS(57 nos)	Thalyin

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29	Pre-School	Thalyin
30	Monastery Education Centre(14nos)	Thalyin

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

4.6.4.4. Health Status

The diseases of high prevalence reported in 2013 are Tuberculosis (TB), followed by Acute Respiratory Infection (ARI), Diarrhea, TB and snakebites. With reference to the Township Health Profile 2014 of Thanlyinn Township, no accidental work injuries reported to the township hospital in 2013. The common diseases are shown in Table 4-13 and

Disease	Thanlyin Township	
	Morbidity	Mortality
Malaria (Per 100000P)	1	-
ARI(Per 100000<5Children)	-	-
Dysentery	1	-
Diarrhea (Per 100000P)	603	-
TB (Sputum+)(Per 10000P)	959	-
HIV/AIDS (2015-2016)	308	5
(2016-2017)	130	12

Table 4-14.

Table 4-13 Common Diseases in the Thanlyinn Township

Disease	Thanlyin Township	
	Morbidity	Mortality
Malaria (Per 100000P)	1	-
ARI(Per 100000<5Children)	-	-
Dysentery	1	-
Diarrhea (Per 100000P)	603	-
TB (Sputum+)(Per 10000P)	959	-
HIV/AIDS (2015-2016)	308	5
(2016-2017)	130	12

Table 4-14 Lists of Hospital in the Thanlyinn Township

Hospital	Beds/Services	Responsible
Thanlyin General Hospital	200	Government
District Hospital	16	Government
Chan Myay Myittar Hospital	16	Private
Total	232	3

Source: Department of Administrative Thanlyinn Townships, Regional data (www.gad.gov.mm.com)

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4.7. CULTURAL AND VISUAL COMPONENTS

Thanlyinn 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. 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 Table 5-1:

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) is 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 be categorized 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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5.2. IMPACT IDENTIFICATIONS

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.

5.2.1. 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 Thanlyin, there may have business opportunities to local people. Local people can have a market by selling foods, snacks and drinks nearby the factory.

5.2.2. 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.

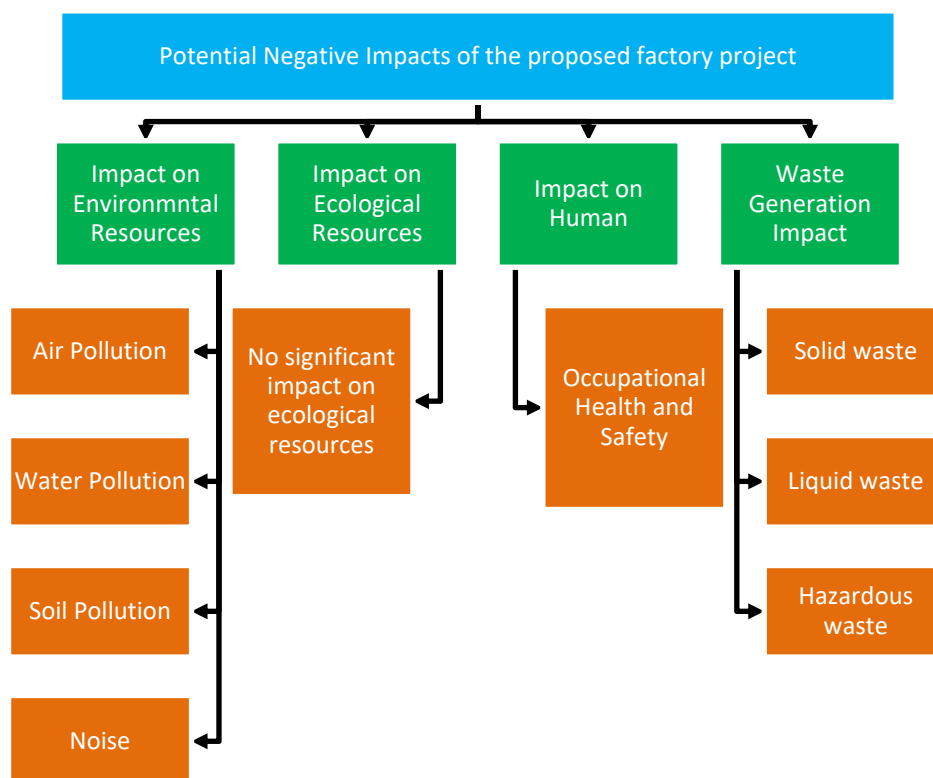


Figure 5-1 Potential Negative Impact Affect from Proposed Project

Environmental Management Plan**5.3. IMPACT ON ENVIRONMENTAL RESOURCES****5.3.1. Impact on Air Quality**

The project factory is already constructed during environmental assessment study and site visit. During construction phase, dust emission was addressed as potential environmental impact and is expected to be non-significant because the construction phase is a short-term affect. Therefore, we are not assessed potential environmental impact during construction phase.

During the operation phase, there is no emission of smoke from the process of production. Particulate matters are generated during cutting and pressing the raw materials. However, that particles amount is low. Dust particles, CO₂ and SO₂ would be emitted from the activities of loading, unloading and transportation of the raw materials and final product. Various activities as cooking from kitchen, using air conditioners in office building, storage of raw materials, vehicles movements, operating diesel generators would also be a factor slightly affecting to air quality.

Though main electricity source for the factory is the national grid line, sound-proof diesel generators will be set-up in case of electricity shortages. So, 100 kVA and 500 kVA of standby generator will be used for both operation and administration appliances. The proposed project will use annually 1,200 gallons of diesel for vehicles such as transportation vehicle and emergency use of a generator. The following table shows the amount of CO₂ emission coming from the combustion of fuels.

Burning diesel or other fuels creates exhaust gasses. Diesel generators produce carbon dioxide (CO₂), nitrogen oxide (NO_x), and particulate matter. These generators release this into the atmosphere and substantially reduce air quality in the nearby regions. Every liter of fuel has 0.73 kg of pure carbon, 2.6 kg of carbon dioxide released per liter of diesel fuel.

Category of GHGs Assessment

Category	Range
Negligible	no GHG assessment necessary
Low	< 20 kt/y CO ₂ -equivalent per year
Medium-Low	20 – 100 kt CO ₂ - equivalent per year
Medium-High	100 kt – 1 Mt CO ₂ - equivalent per year
High	>1 Mt CO ₂ -e equivalent per year

Source: EBRD GHG Assessment Methodology, 2010

CO₂ Emission by the Uses of Fuel

No.	Type	Amount(gallon/year)	Equivalent CO ₂ emission (Kilotons)	Status
1	Diesel for generator	1200	0.0141	Negligible

Furthermore, likewise the construction phase, negative impact on ambient air quality such as emissions of dust particles emission from the movement of vehicles used for carrying decommissioned materials and gaseous emission from these vehicles and machines can be expected during the decommissioning phase of the proposed project after its lifespan, 50 years.

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5.3.2. Impact on Water Quality

During the construction period, water consumption is for implementation of the construction works and domestic water usage by construction workers. Surface water and ground water could be contaminated from the several activities of construction works such as mixing of the concrete, wetting of dry surfaces, washing of the equipment, etc. Moreover, oil spill from the vehicles and machinery can pollute water quality and can enter into the ground water and run into near river during the rainy season. However, the project factory is already constructed during environmental assessment study and site visit. Therefore, impact on water quality is not assessed for this project.

During operation phase of bags manufacturing factory, there is no water use for proposed project. Tube well is the main source of raw water for this factory waster's usage. The raw water is provided for the whole factory use of general office facilities such as canteen, toilets and kitchen. Moreover, sewage disposed from the employees, staffs, oils spill and grease leakage from transporting vehicles and machinery equipment used in operating the production of bags can seriously pollute the quality of underground water source. But the factory plans to use separate waste water channels, septic type toilet system and sewage treatment plants in accordance with YCDC guidelines to avoid potential contaminations and hazards by waste water and sewages. So, it can cause low impact to the water quality.

During the decommissioning phase, oil spill from the demolished vehicles and machinery can penetrate into the ground water quality. Water can also be contaminated by activities related with decommissioning works and waste disposed by workers.

5.3.3. Impact on Soil Quality

During the construction phase, the excavation works from the construction activities must be the major impact on soil. The soil is compacted by the vehicles and the solid waste disposal improperly by the workers can affect the soil quality. Oil spillage from the vehicles could be also polluted to the soil. However, the project factory is already constructed during environmental assessment study and site visit. Therefore, impact on water quality is not assessed for this project.

During the operational phase, there is no significant impact on soil quality due to bags manufacturing activities because concrete road facilities have been implemented at the whole project site area. However, there may be effect on soil if wastes from the operation period are disposed improperly.

During the decommissioning phase, transportation of decommissioning materials and transferred of heavy machinery may happen oil leakage and lubricants, and thus it can lead to impact on soil. Moreover, hazardous releases of materials or oil utilized in the infrastructure can contaminate the existing soil during the decommissioning phase.

5.3.4. Impact of Noise

During the construction phase, significant impact on noise and vibration to surrounding environment must be generated from the movements of vehicles, operating the machinery, excavation activities and transportation of equipment and construction materials by heavy trucks. However, 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

Environmental Management Plan

impact on noise and vibration is not assessed and short-term affect must be caused the construction period is temporary.

During the operation phase, noise impact may be a significant impact for bags production sectors. The significant sources of noise impact activities are the operation of various machinery and equipment listed in for sewing line, cutting line and the emergency used of generator, vehicles and automobile movements (short-term noise) will be noise impacts sources. According to the noise results of 8 hours continuously measurement, at the source of operation area inside the factory and within the factory area are slightly exceeding the noise level of 70 dB of NEQ (emission) guideline. Therefore, no obvious influence can be caused expected to environment.

During the decommissioning phase, the heavy vehicles, machineries and equipment used for decommissioning activities can affect the noise level and vibration of the area.

5.4. IMPACT ON ECOLOGICAL RESOURCES

The proposed project is located in the industrial zone. Therefore, there is no wildlife, forests, protected area, coastal resource or mangrove area and rare and endangered species are found around the project area. The nearest water body Bago River which flows from North to South and flows to Yangon River.

5.5. IMPACT ON HUMAN

5.5.1. Socio-economic

The proposed project is the long-term investment in the industrial sector. Most of the impacts of the proposed project on socio-economic environment may be positive. Implementation of proposed project may create temporary employment during construction and decommissioning phases and permanent jobs in the operation phase. Subsequently, socio-economic standards of local people will be increased and eventually it may lead to the economic growth at local and regional level.

5.5.2. Occupational Health and Safety

During the construction phase, significant accidents and injuries like electric shocks, falling from heights, chemical exposure, crushing injury, fire hazards can be occurred due to the construction activities including metal grinding and cutting, concrete work and welding the metals. Moreover, accidents and injuries to workers and local communities could be caused from heavy vehicles movement for the transport of construction materials and equipment. Small injuries due to slips, headache and sickness must be caused of the noise, air pollution and odor could also be affected to the workers and local people. However, the project factory is already constructed during environmental assessment study and site visit. Therefore, impact on water quality is not assessed for this project.

During the operation phase, using the machinery for production process can get injuries. Noise from the generating of the machine and generator may also affect the health of people working in the project area. Fire and explosion hazards are mainly cause from the storage of raw materials and poor management of waste disposal. The usage of fuel must carefully handle because spillage and leakage of oil and grease can cause ignition of fire. Domestic wastewater or grey water produced from canteen, kitchen and toilets will cause enormous breeding of mosquitos, which can lead to diseases like malaria and dengue fever, if not carefully managed.

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During the decommissioning phase, activities related with decommissioning process can cause injuries and can affect the health of decommissioning workers.

5.5.3. Waste Disposal**5.5.3.1. Solid Waste**

During the construction and decommissioning phase, various kinds of solid wastes will be generated. These wastes will be collected and clean every day to avoid any undesirable working condition and environmental impacts. Based on their types (glass, metal, plastic, wood, cement residues, oil spills and paper based), these solid wastes will be collected separately in rubbish bins and regular and proper disposal will be done in accordance with YCDC guidelines.

In the operation phase, major solid wastes of the proposed bags manufacturing factory may be generated from production lines, cutting and packaging. Factory shall use textile, thread and carton box as raw materials. The residual pieces of the fabric scraps from the production lines and cutting line used carton box, plastic sheet from the packaging are the main source of solid waste. In addition to factory solid waste, canteen, kitchen and dormitory will produce solid wastes mainly personal remnants, household wastes and food residues.

5.5.3.2. Liquid Waste

There may be expected no significant liquid waste from the construction and decommissioning phase. The main source of the liquid waste of these two phases may be from the sanitary wastewater.

During the operation phases, sanitary wastewater from the usage of toilet facilities, kitchen and canteens will be discharged as liquid waste. All of the liquid waste will be collected in septic tanks which are attached with proper sewage treatment tanks (as mentioned in factory site plan) and regular monitoring should be done in cooperation with YCDC and follow the YCDC guidelines for proper disposal.

5.6. PROJECT ACTIVITIES AND ITS SIGNIFICANT IMPACTS

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.

Table 5-2 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 assessment in this phase, because of construction is already completed during EMP preparation.							
Operation Phase							
Air pollution	Dust and GHGs emission from vehicles used for transporting raw materials and	2	4	2	3	24	Low

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Environmental Impact	Project Activities	Significant of Potential Impacts					Impact Significance
		M	D	E	P	SP	
	final products Particulate matters emission from the activities of production process Emission of smoke from kitchen Emission from emergency diesel generator						
Water pollution	Sewage disposed of from the toilets Oil spill and grease leaks from transporting vehicles and machinery equipment used in operation phase	2	4	2	3	24	Low
Soil Contamination	Accidental spillage of oil used by vehicles operating	1	4	1	2	12	Very Low
Noise Pollution	Generating noise from the production machinery Noise from the generating of the emergency generators	2	4	1	3	21	Moderate
Fire Hazard	Poor electrical installations waste disposed area Raw materials storage	3	5	2	4	40	Moderate
Solid waste	residual pieces of fabric scraps and lining from the production lines Waste from packaging materials Waste from kitchen, dormitory and office.	3	4	1	4	32	Moderate
Liquid waste	Septic system and sewage. Domestic liquid waste disposal from office, kitchen and dormitory.	2	4	2	4	32	Moderate
Hazardous waste	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)	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	Job opportunities for local people	-	-	-	-	-	Positive Impact
Decommissioning Phase							
Air pollution	Decommissioning of buildings and related materials Transportation of demolished materials	3	1	1	4	20	Low
Water pollution	Sewage form decommissioning workers	3	1	1	3	15	Low

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Environmental Impact	Project Activities	Significant of Potential Impacts					Impact Significance
		M	D	E	P	SP	
	Demolition machinery equipment						
Soil Contamination	Decommissioning of buildings and related materials Transportation of demolished materials	3	1	1	3	15	Low
Noise Pollution	Decommission activities Transportation of demolished materials	3	1	1	3	15	Low
Waste disposal	Sewage system Demolished debris such as bricks, concrete materials	2	1	1	3	12	Very Low
Hazardous waste	Used lubricants from decommissioning vehicles and machines	2	1	1	3	12	Very Low
Occupational Health and Safety (Accidents, Injuries)	Decommissioning activities Transportation of demolished materials	3	1	2	3	18	Low
Social-economic Condition	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.

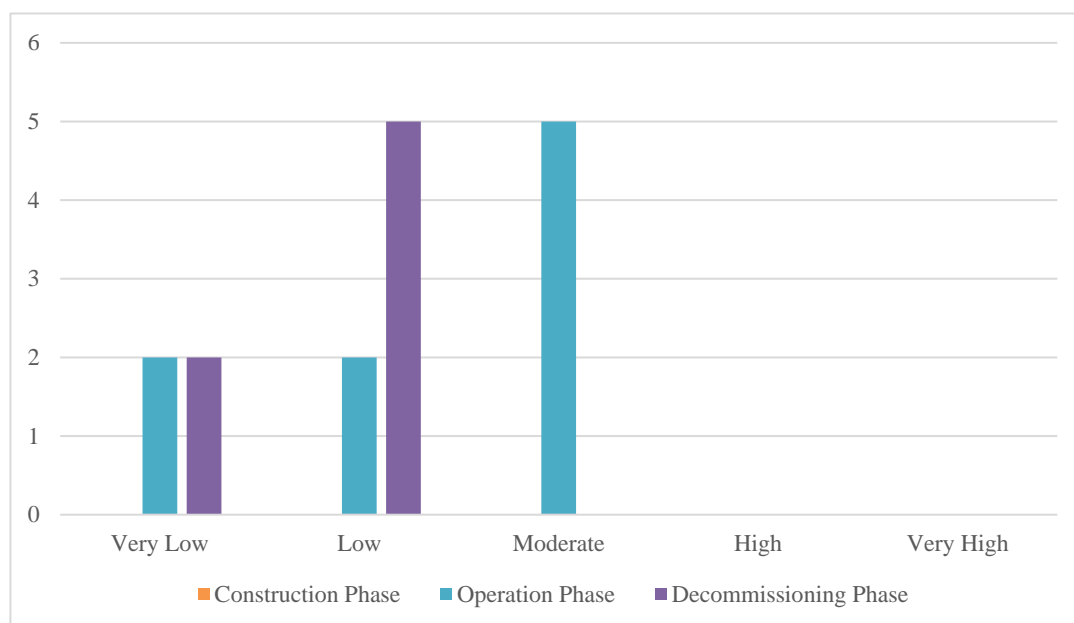


Figure 5-2 Impact Significance of the Proposed Project

5.7. MITIGATION MEASURES OF IMPACT ON ENVIRONMENTAL RESOURCES

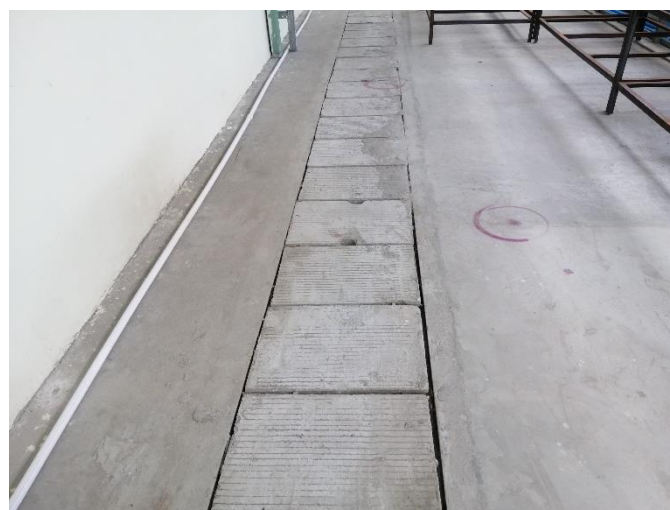
5.7.1. Recommended Air Impact Mitigation Measures

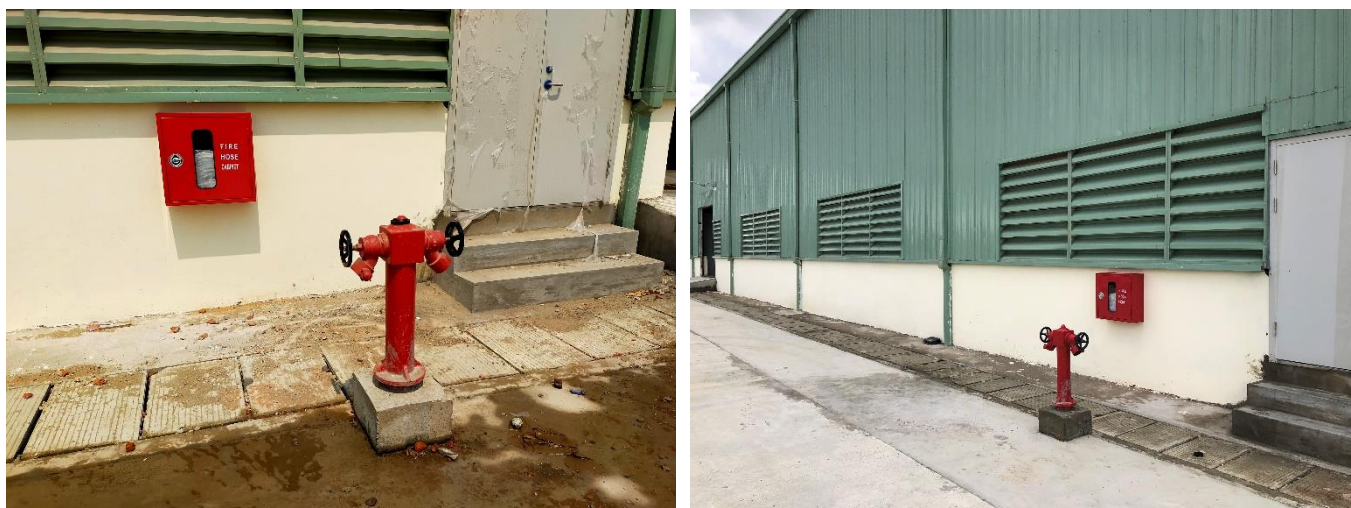
During the operation phases, ventilation system of the factory is enough for the workers cause the proponent has installed moist fan around the factory building. To control air pollution, the vehicles, generators and machineries have to check and maintain regularly. Since the factory compound area is paved with concrete, dust emission from the movements of vehicles and cars is not significant. The project proponent must install good exhaust system at the kitchen to reduce adverse impacts of indoor air quality. The factory uses chimney for generator through which the flue gases are emitted for reducing the impact of stack emission on environment. Monitoring and check installed cyclones and ventilation system. Ensuring vehicles, compressor and generator are well maintained.

During the decommissioning phases, the impact on air quality can be controllable and reduced to minimum level and minimized dust emissions from material handling sources. Sprinkling water on the top soil can reduce dust emission from the demolishing activities. In the proposed project area, vehicle movements should be limit and maintain and check the vehicles and machineries regularly. Burning the demolished materials and residual wastes must not be allowed.

5.7.2. Mitigation Measure of Impact on Water

During the operation phase, water discharge from the factory site will be treated by silts track tank before discharging. Water effluent levels should be within acceptable limit of the National Environmental Quality (Emissions) Guidelines values. The factory plan has canteen and toilet facilities attached in various buildings of the factory. 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 5-3. Besides, the factory plans to use separate wastewater channels, septic type toilet system. Wastewater from the dining room, canteens and toilet facilities are collected in septic tanks which are attached with sewer treatment plant and the proponent will connect and cooperate with YCDC to be carried out for disposing of these septic tank wastes. To mitigate the impact on water, the drainages around the compound area of the factory have to maintain and clean regularly. Spillage and leakages of oil and grease should also be minimized.



Environmental Management Plan**Figure 5-3 Drainages in Project Area**

During the decommissioning phases, appropriate sanitary facilities should be provided for demolishing workers. An accidental spill of fuel and oil should be avoided. Wastes generated from the demolishing activities should not be disposed directly into the drainage channels.

5.7.3. Mitigation Measure of Impact on Soil Contaminate

During the operation phase, the compound area of the factory area will be paved with concrete and hence, contamination due to the oil spillage at this area is insignificant. But refilling fuel must be done with great care for preventing spillage.

During the decommissioning phase, impact on soil can be mitigated by using modernized machineries, these machines would be maintained regularly and isolated maintenance area would be identified. Any accidental spills of fuel, oil or other hazardous waste must be avoided. Construction wastes and demolishing debris should be disposed properly.

5.7.4. Mitigation Measure of Impact on Noise

During the operation phase, the regular maintenance plans for vehicles, machines generators should be provided to mitigate impact on noise. Using modernized low noise machines should be used if possible. Noise impact to employees shall be minimized by providing earmuffs and ear plugs to those working near the noisy machines.

During the decommissioning phases, temporary noise pollution can be controlled by planning regular maintenance for decommissioning vehicles and machines. Moreover, construction and decommissioning activities should not be worked during nighttime.

5.8. MITIGATION MEASURES OF IMPACT ON HUMAN**5.8.1. Mitigation Measures on Fire Hazard**

The project proponent has provided 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 is also constructed with the capacity of 25,000 gallons at the proposed area. The emergency contact numbers of township and

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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 below.



Figure 5-4 Firefighting Plan and Escape plan

5.8.2. Mitigation Measure for Occupational Health and Safety

The proposed project has a clinic and a nurse. Medicines and first aid kits are provided in this clinic. Moreover, these medicines and first aid 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 each department. To prevent electric shock hazards, electrical maintenance staff (handyman) is to be assigned to do regular inspections and take preventive measures. The project proponent must manage the drainage systems of the factory to prevent health risk of the workers.

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The Occupational Safety and Health Administration (OSHA) have recommended permissible noise exposure limit for industrial workers, which is based on 90 dB (A) for 8hours exposure a day with 5dB trading rates. The limits are mentioned in. According to OSHA, the maximum allowable noise level for workers is 90 dB (A) for 8hours 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, need to provide if actual noise level monitoring results are more than 90 dB (A) at the work site for working time hours for 8 hours.

Table 5-3 Permissible Exposure of Noise Limits

Total Time of Exposure Per Day in Hours	Noise Level dB(A)
8	90
6	92
4	95
3	97
5	100
1	105
½	110
¼	115

5.8.3. First Aid Guidelines and Facilities

A well-organized and proper first aid system is implanted to provide immediate first aid to anyone who is injured in the workplace and had also conducted the first aid training by Myanmar Red Cross Society. Adequate number of first-aid kits are listed and made available at all workplaces and contacts of medical providers, hospitals will be notified. The followings are some of the contents in a sample first aid kit.

- Bandage
- Adhesive Tape
- Antiseptic wipe
- Burn dressing and treatment items
- Cold pack
- CPR barrier
- Sterile wound dressings
- Sterile eye coverings
- Scissors, tweezers, compress

5.8.4. Mitigation Measure of Waste Generation

During the operation phase, the project proponent 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 houses: Non-hazardous Waste Production related house, Hazardous Waste Production related house, Non- Hazardous Waste Non-Production related house and Hazardous Waste Non-Production related house and final wastes will be disposed by using YCDC's service.

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During the decommissioning phase, some of demolished solid wastes must be recycled and the other solid wastes should be stored in dedicated waste storage area in the project site and transferred to YCDC for final disposal.



Figure 5-5 Garbage Bin Photos

Environmental Management Plan**6. ENVIRONMENTAL MANAGEMENT PLAN****6.1. AIR POLLUTION/DUST MANAGEMENT PLAN**

Objectives:	<ul style="list-style-type: none"> To minimize the adverse impact to air quality caused by stack gas emission from generator and also dust management generated from vehicular movement. To comply with relevant government rules 	
Relevant government law and rule	<ul style="list-style-type: none"> National Environmental Quality (Emission) Guidelines (2015) Motor Vehicles Act, (2015) 	
Time Frame	<ul style="list-style-type: none"> Entire life spans of the factory operation 	
Management Plan	<ul style="list-style-type: none"> Must be plant around the proposed project to reduce carbon emission Should be prohibited burning of waste material at the proposed project site Must be control air pollution, the vehicles, generators and machineries have to check and maintain regularly. The factory should use chimney for generator through which the flue gas is emitted for reducing the impact of stack emission on environment. Must be ensuring vehicles, compressor and generator are well maintained. 	
Monitoring & Reporting	Frequency	Biannually
	Monitoring Point	Indoor and Outdoor of proposed project
	Parameters	PM _{2.5} , PM ₁₀ , SO ₂ , NO ₂ , O ₃ , CO
Estimated cost	1,000,000 Kyats per year	
Responsibility	Management of the factory; <ul style="list-style-type: none"> Head of maintenance: Total implementation of above of air pollution management plan Production manager: Air quality in the production area is good enough Manager: To hire organization/independent third-party testing air quality EHS officer-Monitor the hygiene of ambient air quality in surrounding of the factory 	

6.2. WATER CONSUMPTION MANAGEMENT PLAN

Objectives:	<ul style="list-style-type: none"> The water consumption management is aimed at minimizing ground water use
Performance Indicator:	<ul style="list-style-type: none"> Prohibitions on accessing and using underground water without a license Water consumption saving of general water use from groundwater
Relevant government law and rule	<ul style="list-style-type: none"> The Underground Water Act (1930)
Management Plan	<ul style="list-style-type: none"> Install water meter for internal control of water consumption All staff trains and makes aware conservation practices and proper methods of water use must be place in toilets and other areas of water consumption The contamination of water is avoided by suitable management of oil and fuel used in machineries and vehicles Trees plantation surrounding the factory

Environmental Management Plan

Monitoring & Reporting	<ul style="list-style-type: none"> Daily visual inspections
Time Frame	<ul style="list-style-type: none"> Once in a year throughout the factory life
Estimated cost	<ul style="list-style-type: none"> Approximately 5 million kyats (annually)
Responsibility	Manager <ul style="list-style-type: none"> Arrange audit on water usage controls environmental officer

6.3. WASTEWATER MANAGEMENT PLAN

Objectives:	<ul style="list-style-type: none"> To implementation plan for the management of liquid waste from collection, through treatment and resource recovery, to residual disposal 	
Relevant government law and rule	Yangon City Development Committee Law (2018), National Environmental Quality (Emission) Guidelines (2015), Underground Water Act	
Time Frame	<ul style="list-style-type: none"> Entire life spans of the factory operation 	
Management Plan	<ul style="list-style-type: none"> Regular inspection and cleaning, oil traps, septic tank and adequate covers for all storage and waste disposal areas can decrease these contaminations. 	
Monitoring & Reporting	Frequency	Biannually
	Parameters	pH, Turbidity, Conductivity, Iron, Sulphate, TSS, TDS, Manganese, COD, BOD, Cyanide, Copper, Zinc, Carbonate
	Proper maintenance of drainage and sewerage system will be conducted periodically	
Estimated cost	800,000 Kyats per year	
Responsibility	Manager -To hire organization/independent third-party testing wastewater quality EHS officer-Monitor the condition of factory's drainage and sewerage system	

6.4. NOISE MANAGEMENT PLAN

Objectives:	<ul style="list-style-type: none"> To avoid nuisance noise to nearby residents generated from generator and other machineries. To comply with noise standard of National Environmental Quality (Emission) Guideline 	
Relevant government law and rule	National Environmental Quality (Emission) Guidelines (2015)	
Time Frame	<ul style="list-style-type: none"> Throughout the project life 	
Management Plan	<ul style="list-style-type: none"> Building noise insulated generator room and ensure satisfactory maintenance of relevant equipment Impose speed limit to track and vehicles at the transportation route. Provide sufficient personal protective equipment (PPE) at the work place All the related personnel will be provided proper training about the relevant issues and ensure PPE wear during working in noisy area. 	
Monitoring & Reporting	Frequency	Biannually
	Monitoring Point	Two points in operation area (especially cutting and sewing)

Environmental Management Plan

	Parameters	Sound Decibel
Estimated cost	100,000 Kyats per year	
Responsibility	HSE Manager or Environmental Management Team of Xin Sheng (Myanmar) Industrial Company Limited	

6.5. SOLID WASTE MANAGEMENT PLAN

Objectives:	<ul style="list-style-type: none"> To minimize waste generation by developing strategies for the management and disposal of all waste in a manner that is sustainable and sensitive to the environment To comply government waste management policy
Relevant government law and rule	Yangon City Development Committee Law (2018), National Waste Management Strategy and Action Plan (Draft 2018)
Time Frame	<ul style="list-style-type: none"> Entire life spans of the factory operation
Management Plan	<ul style="list-style-type: none"> Must be 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 storage area Final wastes should be disposed by using YCDC's service.
Monitoring & Reporting	<ul style="list-style-type: none"> Daily wastes have to be collected and hand over to YCDC waste collector The inventory record of waste disposal will be maintained as proof for proper management as designed
Estimated cost	50,000 Kyats per month
Responsibility	Manager (HR) <ul style="list-style-type: none"> Responsible for overall site cleanliness and waste management Regular waste collection to minimize excessive waste storage

6.6. FIRE MANAGEMENT PLAN

Objectives:	<ul style="list-style-type: none"> To ensure that fire control practices are implemented on site to minimise the risk of fire from site operations and bush fires
Relevant government law and rule	Myanmar Fire Brigade Law 2015
Time Frame	<ul style="list-style-type: none"> Entire life spans of proposed project operation
Management Plan	<ul style="list-style-type: none"> Must be provide fire extinguishers, fire hose reels and fire hydrants on the walls of the factory for fire emergency cases. Must be indicated the emergency exit and assembly point in public area. 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

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	with materials or machines for fire emergency cases.
Monitoring & Reporting	To check monthly Visual inspection, Firefighting equipment (fire extinguish, firefighting hose, portable fire pumps, fire hose reels, fire monitor and firefighting nozzles)
Estimated cost	1,200,000 Kyats per year
Responsibility	HSE Manager, Operation Manager or Environmental Management Team of Xin Sheng (Myanmar) Industrial Company Limited

6.7. OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT PLAN

Objective	<ul style="list-style-type: none"> To provide a broad framework for improving standards of workplace health and safety to reduce work-related injury and illness.
Relevant Government Law and Rule	Public Health Law (1972), Prevention and Control of Communicable Diseases Law 1995 (Amendment 2011), Occupational Safety and Health Law (2019)
Time Frame	<ul style="list-style-type: none"> Entire life spans of proposed project
Management Action	<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 (PPE) like earmuffs, safety gloves, helmets and goggles are provided for each department. To prevent electric shock hazards, electrical maintenance staff (handyman) is to be assigned to do regular inspections and take preventive measures. 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 8hours 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.
Monitoring and Reporting	<ul style="list-style-type: none"> Weekly check fire extinguishers and water hydrant in position Daily inspect that all fire exist are open Servicing fire extinguisher and records accidents
Estimated Cost	500,000 Kyats per year
Responsible Person	HSE Manager, Operation Manager or Environmental Management Team of Xin Sheng (Myanmar) Industrial Company Limited

6.8. ENERGY MANAGEMENT PLAN

Objectives:	<ul style="list-style-type: none"> To improve energy efficiency, reduce cost, optimize capital investment, reduce environmental and greenhouse gas emissions, and conserve natural resources
Relevant government law	National Energy Management Committee (Myanmar Energy Master Plan 2015)

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and rule	
Time Frame	Once in a year throughout the factory life
Management Plan	<ul style="list-style-type: none"> • Installation of timers and thermostats to control heating and cooling • Energy saving light installed in different area of the factory for saving energy • Used of energy saving devices must be installed • Ensure that good housekeeping measures such as turning off equipment and lights when not in use
Monitoring & Reporting	Conduct annual energy efficiency of adult to find out the scope for energy saving
Estimated cost	Approximately 100,000 Kyats per year
Responsibility	<p>Manager</p> <ul style="list-style-type: none"> • To arrange energy audit technical personnel • To monitor and record electricity consumption, other related energy issues and take necessary actions if any problem arises

6.9. EMERGENCY RESPONSE AND DISASTER MANAGEMENT PLAN

Objectives:	<ul style="list-style-type: none"> • To reduce the harmful effects of all hazards, including disasters. The World Health Organization defines an emergency as the state in which normal procedures are interrupted, and immediate measures (management) need to be taken to prevent it from becoming a disaster, which is even harder to recover from.
Relevant government law and rule	<ul style="list-style-type: none"> • The Employment and Skill Development Law (August 2013), ILO guide to Myanmar Labour Law (2017)
Time Frame	<ul style="list-style-type: none"> • Entire life spans of the factory operation
Management Plan	<ul style="list-style-type: none"> • The factory management has taken proper measures to handle any emergency situation like fire, earthquake, flood and storm • Provision and inspection of firefighting equipment and fire hydrant system in all the sections • A detail evaluation plan (fire exist, emergency exit door, etc.) is established and communicated with workers • Periodic inspection of safety relief valve provided with pressure vessels and equipment, preventive maintenance; aware the workers about electric shock by necessary training. • Regular fire drill operation is conducted • Workers are informed about what to do in earthquake like stay in a safe place such as under table of desk, not to try move outside during earthquake, workers who will be outside during earthquake shall remain stay out of the building, trees, lump post, etc. Other relevant safety instruction of emergency situation it informed to workers by training • Workers are aware of dangers from physical hazards such as obstacles covered by floodwater (storm debris, drainage opening, ground erosion) and from displaced reptiles (Snake) or other animals. • A medical team has been prepared for primary treatment (First Aid) • Prepare an emergency contact directory consisting contact numbers of nearest fire service, local police station, hospitals, etc. and display it in a place that everybody can see it easy.

Environmental Management Plan

	<ul style="list-style-type: none"> Build a safety committee which from firefighting team, rescue team. The committee arrange a meeting every month to discuss about safety management Ensure proper training of the employees about the disaster management, fire safety as well as occupational health and safety
Monitoring & Reporting	Weekly check fire extinguishers and water hydrant in position Daily inspect that all fire exist are open Servicing fire extinguisher and records accidents,
Estimated cost	Approximately 1,500,000 Kyats per year
Responsibility	Manager and EHS officer <ul style="list-style-type: none"> Arrange firefighting training after every 3 months Responsible for fire control and response Monitoring daily danger warning and bans

6.10. 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. **Error! Reference source not found.** is provided the environmental monitoring schedule for Xin Sheng (Myanmar) Industrial Company Limited. 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 6-1 Environmental Monitoring Schedule for Xin Sheng (Myanmar) Industrial Company Limited

Issues	Parameter	Frequency	Area to be monitored	Monitoring cost	Responsible Organization
Operation Phase					
Common	Monitoring of mitigation measures	Yearly (3 years after operation)	The project	2500,000 Kyats	Environmental Management Team's Xin Sheng (Myanmar) Industrial Company Limited
Air quality	PM 2.5, PM 10, SO ₂ , NO ₂ , O ₃ , CO	Biannually monitoring and reporting to ECD (first 3 years after operation)	Outdoor and Indoor of proposed project	800,000 Kyats	Environmental Management Team's Xin Sheng (Myanmar) Industrial Company Limited
Waste Generation	Solid waste, Liquid waste and Hazardous waste	weekly	Recycle house and waste house and at the factory office	50,000 Kyats	Environmental Management Team's Xin Sheng (Myanmar) Industrial Company Limited

Environmental Management Plan

Issues	Parameter	Frequency	Area to be monitored	Monitoring cost	Responsible Organization
Fire Hazardous	Visual inspection, firefighting equipment	Monthly	At the factory	500000 Kyats	Environmental Management Team's Xin Sheng (Myanmar) Industrial Company Limited
Light intensity	Illuminance	Monthly	At the production line (especially cutting and QC)	20,000 Kyats	Environmental Management Team's Xin Sheng (Myanmar) Industrial Company Limited
Decommissioning Phase					
Air quality	PM 2.5, PM 10, SO ₂ , NO ₂ , O ₃ , CO	One time during this phase	One point in the production area	1000000 Kyats	Land Owner
Noise	Noise level in decibel (dBA)	One time during this phase	One points in demolishing area	1000000 Kyats	Land Owner
Rehabilitation	Recovering and Revegetation		All decommissioning area		Land Owner

6.11. 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;

6.11.1. 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.

6.11.2. 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







Environmental Management Plan

- 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

6.11.3. 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.

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

6.11.4. 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

6.11.5. 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.

Environmental Management Plan

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.
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.

6.11.6. Fire Safety and Evacuation Plan

Fire Evacuation plans should include the following information

- Emergency escape routes must be clearly shown on floor plans and workplace maps
- Employers must know that their employees know the emergency escape routes
- Procedures for employees who must remain to operate critical equipment before evacuating
- 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.

Environmental Management Plan**Table 6-2 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

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.

6.11.7. 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)

Environmental Management Plan**6.11.8. 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 MSDS of chemical materials

6.11.9. Health and Safety Training Plan for Worker

Health and Safety Training plan currently used and provided in Yangon Nadia-Pacific Clothing Company Limited 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 6-3 Training Plan Used in Xin Sheng (Myanmar) Industrial Company Limited

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

Environmental Management Plan**6.12. 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 XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED consists of three main sectors; Health, Education and Community Development Sector. CSR activities are conducted in compliance with MIC's guideline for implementation of CSR program.

XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED will contribute 2% of our Net Profit to social welfare activities that will help society and country of Myanmar. Our social welfare activities shall include training of our employees such as on job training to be more qualified, language (Chinese) training on weekends with experienced teachers and providing necessary healthcare such as medical checkups and giving proper medical knowledge about diseases and its prevention. Part of our CSR activity such as donations will also contribute to public school around our factory (Table 6-4).

Table 6-4 CSR Plan at XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED

No.	Particle	Contribution
1	Public school	0.5%
2	Non-profit training	1
3	Employees healthcare	0.5%

6.12.1. Public School

We will contribute 0.5% 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.

6.12.2. Non-profit Training

We will contribute 1% of our net profit for the trainings of our Employees. Our trainings include job-related trainings, language trainings and safety trainings. The main objective of our trainings are that we want our bags with their work but also improving their other skills such as language and promoting knowledge about safety measures and occupational health employees to be not only become more productive and more qualified.

6.12.3. Healthcare

One of our main concern is the well-being of our employees. We will contribute 0.5% of our net profit for the healthcare which includes medical checkup for the employees and providing health education to our workers.

6.13. 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 XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED representative from Thanlyinn Township and representative from General Administration Department (Thanlyinn Township). Small issues will be solved at the Grievance Committee stage and other

Environmental Management Plan

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 6-1) show steps of Grievance Redress Mechanism of Proposed Factory Project.

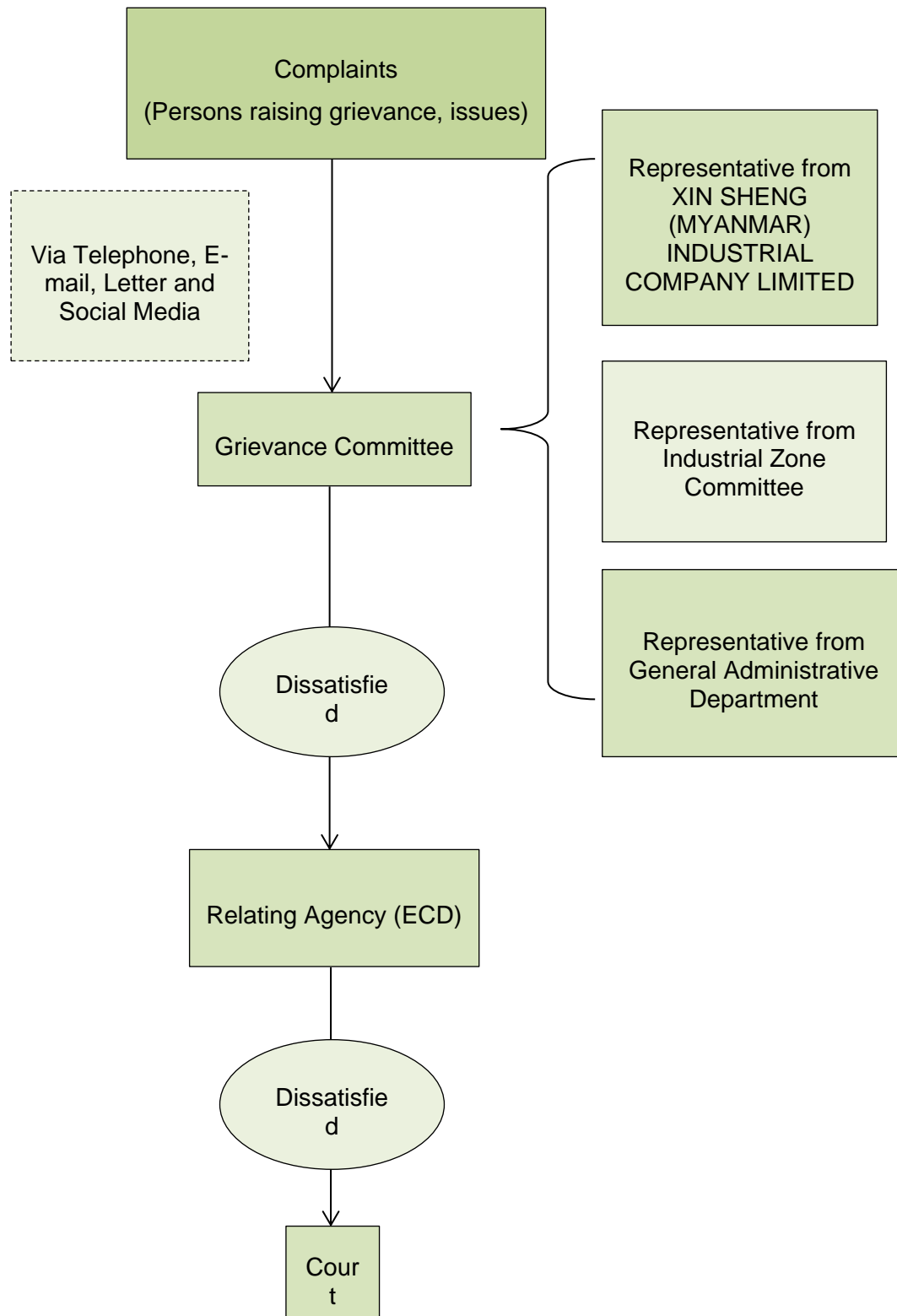


Figure 6-1 Grievance Redress Mechanism Flow Diagram

7. PUBLIC CONSULTATION

7.1. PUBLIC CONSULTATION PROCESS

This chapter presents results of public consultation and information disclosure conducted for the XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED. 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 31, March 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. Saw Yan Naung presented EMP study and findings from MYANWEI, after the presentation following question and answer section. Summary of public consultation meeting is presented Table 7-1 is shown the consultation meeting photo. **(PCM attendant list and presentation power point slide are described in Appendix)**

Table 7-1 Summary of Public Consultation Meeting

Time and Date	Thursday, March 31, 2020 10:30-12:30
Venue	Industrial Zone Committee, Ka Naung Hall, Dagon Seikkan Township, Yangon.
Agenda	<ul style="list-style-type: none"> • 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 various kinds of bags on CMP Basis.

Suggestion; **U Kyaw Kyaw**, Yangon City Development Committee

- To compliance with YCDC procedure for solid waste management and disposed process

Environmental Management Plan

- To implement the sufficient septic tank design for workers

Suggestion; **Daw Thet Wai Hnin**, Environmental Conservation Department;

- To control the dust emissions, form the cutting line and other dust emission area
- To describe the mitigation plan of dust emission level in the report
- To describe the monitoring plan of air quality and detail parameter in the report

Suggestion; **U Aung Myint Oo**; Yangon City Development Committee

- To provide the waste tank for waste water and some used oils
- To plant around this factory and
- To make when they wasted at that time to get a bail

Note

Suggestions in public consultation meeting are done by the factory of project proponent. If there is other complains and suggestions of environmental cases about the factory, project proponent will also response



Environmental Management Plan



Figure 7-1 Public Consultation Meeting Photos

8. CONCLUSION & RECOMMENDATION

8.1. CONCLUSION

Environmental Management Plan (EMP) has been prepared for XIN SHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED. is located at Kue No.-710, U Paing No-8/b, 9/a, 10/a, 1.66 acres, 7+11/e, 1.14 acres Kalawye North Village, Kalawye North Kue, Thanlynn 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 bags 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 bags manufacturing 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. RECOMMENDATION

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.

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.

9. REFERENCES

- [1] General Administrative Department (Thanlyinn Township), Thanlyinn Township Data (2017).
- [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.

APPENDIX A
Company Document of XIN SHENG (MYANMAR) INDUSTRIAL COMPANY
LIMITED



Form (5-B)

THE REPUBLIC OF THE UNION OF MYANMAR

Yangon Region Investment Committee

ENDORSEMENT

Endorsement No. YGN -290/2019


Date 20 November 2019

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

- (1) Name of Investor MR. XIA, YIN
- (2) Citizenship CHINESE
- (3) Residence Address UNIT-2, ROOM -1203, BUILDING - 3, HUASHAN TOWN, GUANGZHOU, GUANGDONG, THE PEOPLE'S REPUBLIC OF CHINA
- (4) Name and Address of Principal Organization DONGGUAN XINSHENG HANDBAG CRAFT CO., LTD., UNIT-2, ROOM-1203, BUILDING -3 HUASHAN TOWN, GUANGZHOU, GUANGDONG, THE PEOPLE'S REPUBLIC OF CHINA
- (5) Place of Incorporation THE PEOPLE'S REPUBLIC OF CHINA
- (6) Type of business MANUFACTURING OF HANDBAGS ON CMP BASIS
- (7) Place(s) of investment Project HOLDING NO. (8/B+9/A,+10/A) AND (7+11/C), KWIN NO. 710, KALAWYE NORTH KWIN, KALAWYE VILLAGE TRACT, THANLYNN TOWNSHIP YANGON REGION
- (8) Foreign Capital Amount US\$ 1.000 MILLION
- (9) Period for Foreign Capital to be brought in WITHIN 1 YEAR FROM THE DATE OF ISSUANCE OF ENDORSEMENT
- (10) Total Amount of Capital (Kyat) EQUIVALENT IN KYAT OF US\$ 1.000 MILLION
- (11) Construction/ Preparation Period 1 YEAR
- (12) Validity of Endorsement 20 YEARS
- (13) Form of Investment WHOLLY FOREIGN OWNED
- (14) Name of Company Incorporated in Myanmar XINSHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED



YRIC 2902019


(Phyto Min Thein)
Chairman



ပုံစံ (၅-ခ)

ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်
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- (၁) ရင်းနှီးမြှုပ်နှံသူ/ကမကထပြုသူအမည် MR. XIA, YIN
- (၂) နိုင်ငံသား CHINESE
- (၃) နေရပ်လိပ်စာ UNIT-2, ROOM -1203, BUILDING - 3, HUASHAN TOWN, GUANGZHOU, GUANGDONG, THE PEOPLE'S REPUBLIC OF CHINA
- (၄) ပင်မအဖွဲ့အစည်းအမည်နှင့်လိပ်စာ DONGGUAN XINSHENG HANDBAG CRAFT CO., LTD., UINT-2, ROOM-1203, BUILDING -3 HUASHAN TOWN, GUANGZHOU, GUANGDONG, THE PEOPLE'S REPUBLIC OF CHINA
- (၅) ဖွဲ့စည်းရာအရပ် THE PEOPLE'S REPUBLIC OF CHINA
- (၆) ရင်းနှီးမြှုပ်နှံသည့်လုပ်ငန်းအမျိုးအစား CMP စနစ်ဖြင့် လက်ဆွဲအိတ် ထုတ်လုပ်ခြင်း လုပ်ငန်း
- (၇) ရင်းနှီးမြှုပ်နှံသည့်အရပ်ဒေသ(များ) ဦးပိုင်အမှတ်-၈/ခ၊ ၉/က၊ ၁၀/က နှင့် ၇+၁၁/င၊ ကွင်းအမှတ်-၇၁၀/ကုလားဝဲမြောက်ကွင်း၊ ကုလားဝဲကျေးရွာအုပ်စု၊ သန်လျင်မြို့နယ်၊ ရန်ကုန်တိုင်းဒေသကြီး
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- (၉) နိုင်ငံခြားမတည်ငွေရင်းယူဆောင်လာရမည့်ကာလ အတည်ပြုမိန့် ရရှိသည့် နေ့မှ ၁ နှစ်အတွင်း
- (၁၀) စုစုပေါင်း မတည်ငွေရင်းပမာဏ(ကျပ်) အမေရိကန်ဒေါ်လာ ၁.၀၀၀ သန်း နှင့် ညီမျှသော မြန်မာကျပ်ငွေ
- (၁၁) တည်ဆောက်မှုကာလ ၁ နှစ်
- (၁၂) ရင်းနှီးမြှုပ်နှံမှုခွင့်ပြုသည့်သက်တမ်း ၂၀ နှစ်
- (၁၃) ရင်းနှီးမြှုပ်နှံမှုပုံစံ ရာခိုင်နှုန်းပြည့်နိုင်ငံခြားရင်းနှီးမြှုပ်နှံမှု
- (၁၄) မြန်မာနိုင်ငံတွင်ဖွဲ့စည်းမည့်ကုမ္ပဏီအမည် XINSHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED




(ဖြိုးမင်းသိန်း)
ဥက္ကဋ္ဌ



Confidential

THE REPUBLIC OF THE UNION OF MYANMAR
YANGON REGION INVESTMENT COMMITTEE

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

Tel : 01- 658263

Our ref : YRIC -1 /E- 290/2019(1307)

Fax: 01- 658264

Date : 20 November 2019

Subject: Decision of the Yangon Region Investment Committee regarding
an Endorsement for manufacturing of handbags on CMP basis
under the name of Xinsheng (Myanmar)Industrial Company Limited

Reference: Xinsheng (Myanmar)Industrial Company Limited's letter dated
13/11/2019

1. The Yangon Region Investment Committee, at its (19/2019) meeting held on 13/11/2019, approved the Endorsement for investment for manufacturing of handbags on CMP basis under the name of Xinsheng (Myanmar)Industrial Company Limited submitted by Dongguan Xinsheng Handbag Craft Co., Ltd. (90%) and Mr. Xia, Yin (10%) from The People's Republic of China 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 (20) 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 ten (10) years commencing from the date of the agreement between Dr Phay Thet Zaw (Lessor) and Xinsheng (Myanmar) Industrial Company Limited (Lessee).

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- 2 -

- (c) The annual rent for land and building shall be USD 113,311.98 (United States Dollar one hundred and thirteen thousand, three hundred , eleven and ninety-eight cent only) for the total area of the land measuring 2.8 acres.
- (d) Xinsheng (Myanmar) Industrial 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) Xinsheng (Myanmar) Industrial Company Limited shall use its best efforts to achieve a timely realization of the work stated in the Endorsement application.
- (f) Belink (Myanmar) Technology 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) Xinsheng (Myanmar) Industrial 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) Xinsheng (Myanmar) Industrial Company Limited shall abide by the Fire Services Department's rules, regulations, directives and instructions. Moreover, Xinsheng (Myanmar) Industrial 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

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- 3 -

employees regarding the use of fire fighting equipment. Xinsheng (Myanmar) Industrial 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) Xinsheng (Myanmar) Industrial 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.
 - (j) Xinsheng (Myanmar) Industrial 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) Xinsheng (Myanmar) Industrial 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. Xinsheng (Myanmar) Industrial 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.

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Confidential

- 3 -

employees regarding the use of fire fighting equipment. Xinsheng (Myanmar) Industrial 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) Xinsheng (Myanmar) Industrial 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.
- (j) Xinsheng (Myanmar) Industrial 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) Xinsheng (Myanmar) Industrial 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. Xinsheng (Myanmar) Industrial 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.

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- 5 -

19. Director General, Customs Department
20. Director General, Internal Revenue Department
21. Director General, Directorate of Investment and Company Administration
22. Monitoring and Supervision Division, Directorate of Investment and
Company Administration

Confidential

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

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 တစ်နှစ်သက်တမ်းတိုးမြှင့်သည်။

See Naing
For Director General
(See Naing, Director)

Environmental Conservation Department



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

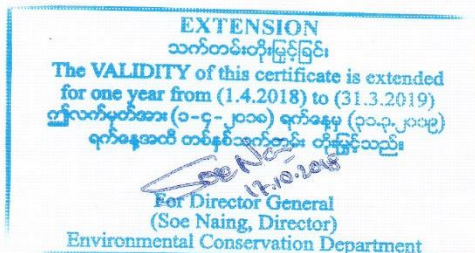


No. 10048 Date 07.03.2018

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 |



Handwritten signature in blue ink.

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
6.1.2020
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:	Xin Sheng (Myanmar) Industrial Company Limited
Project Location:	Kue No.(710), U Paing No-8/b, 9/a, 10/a, 1.66 acres, 7+11/e, 1.14 acres, Kalawye North Village, Kalawye North Kue, Thanlynn Township, Yangon Region.
Sampling Date:	20 February, 2020.
Sampling Time:	11:00 am to 2:00 pm
Sampling Condition:	Normal
Sampling By:	Environmental Team Represented By Myanwei Consulting Group Company Limited

No	Measure area	Unit	Result	Standard	Remark
1.	Sewing Area	Lux	1458.33	1000	
2.	Ironing Area	Lux	658	600	
3.	Cutting Area	Lux	1269	1000	
4.	Warehouse	Lux	356	500	
5.	Quality Control	Lux	961.5	600	
6.	Packing Area	Lux	1126	600	

IESNA Lighting Handbook

Area / Task / Process	Illuminance levels (lux)
Exterior calculating, walkways, stores, main entrances and exit roads, car parking, internal factory roads, etc.	20-50
Boiler house, transformer yards, furnace rooms, entrances, corridors, stairs, etc.	70-100
Calculation area in industry, stores, stock rooms and canteen.	100-150
Coarse Work	200-300
Medium work	300-500
Fine Work	500-1500
Very fine minute and precise work	1500-3000

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
 Environmental Consultant
 Myanwei Consulting Co., Ltd.

Noise Result



Plot No. (36, 38), Room No. 5A, 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: Xin Sheng (Myanmar) Industrial Company Limited
Project Location: Kue No. (710), U Paing No-8/b, 9/a, 10/a, 1.66 acres, 7+11/e, 1.14 acres, Kalawye North Village, Kalawye North Kue, Thantlaryn Township, Yangon Region.
Sampling Date: 20 February, 2020.
Sampling Time: 9:00 am to 8:00 pm
Sampling Condition: Normal Condition
Sampling By: Environmental Team Represented By Myanwei Consulting Group Company Limited

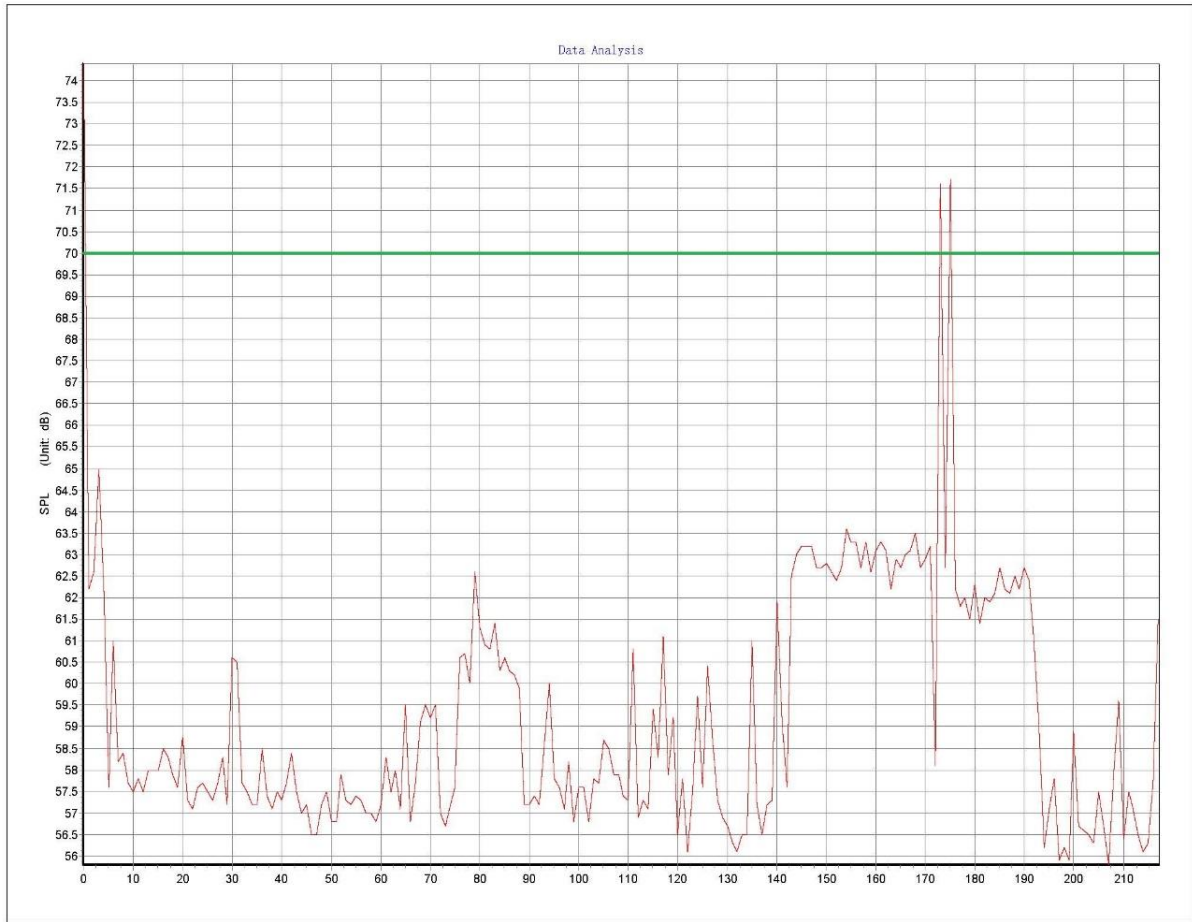
Instrument	Type	Sampling Rate	Location
Digital Sound Level Meter	GM 1356 USB	30 -130 dB	16°48'52.65"N 96° and 17°13.41"E

No	Place	Unit	Result	Standard	Remark
1	Operation Area	dBA	59.26 dBA	70 dBA	Normal

National Environmental Quality (Emission) Guideline

Receptor	One Hour Leq (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
Environmental Consultant
Myanwei Consulting Co., Ltd.



NEQ Guideline

Operation Area

Air Result



Plot No. (36, 38), Room No. 5A, 9th floor, Grand Myay Nu Condominium, Myay Nu Street, Sanchaung Township, Yangon Region, The Republic of the Union of Myanmar.
Office: (+95) 1 526514, Mobile: (+95) 9775405118, 9792528677, 9448251888; Website: www.myanweiconsulting.com

Project Name:	Xin Sheng (Myanmar) Industrial Company Limited
Project Location:	Kue No. (710), U Paing No-8/b, 9/a, 10/a, 1.66 acres, 7+11/e, 1.14 acres, Kalawye North Village, Kalawye North Kue, Thanlynn Township, Yangon Region.
Sampling Date:	20 February, 2020
Sampling Time:	9:00 am to 5:00 pm
Sampling Condition:	Good
Sampling By:	Environmental Team Represented by Myanwei Consulting Group Company Limited

Instrument	Type	Sampling Rate	Location
OCEANUS-AQM-09	Environmental Perimeter Air Station	1 second to 21 weeks	Operation Area (Indoor)



No	Parameter	Unit	Result	Standard	Remark
1	PM ₁₀	($\mu\text{g}/\text{M}^3$)	57.17	50	Normal
2	PM _{2.5}	($\mu\text{g}/\text{M}^3$)	46.44	25	Normal
3	SO ₂	($\mu\text{g}/\text{M}^3$)	106.21	500	Normal
4	NO ₂	($\mu\text{g}/\text{M}^3$)	127	200	Normal

National Environmental Quality (Emission) Guideline

Parameter	Averaging period	Guideline value	Unit
PM 10b	1-year 24-hour	20 50	($\mu\text{g}/\text{M}^3$)
PM 2.5b	1-year 24-hour	10 25	($\mu\text{g}/\text{M}^3$)
NH ₃	-	-	
CO	-	-	
NO ₂	1-year 1-hour	40 200	
SO ₂	24-hours 10 minute	20 500	
VOC	-	2/20/50/75/100/1 150 c,d	mg/Nm ³

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
Environmental Consultant
Myanwei Consulting Co., Ltd.

APPENDIX D

Water Quality Test Result



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



WTL-RE-001

Issue Date - 01-12-2012

Effective Date - 01-12-2012

Issue No - 1.0/Page 1 of 1

W0320 632

WATER QUALITY TEST RESULTS FORM

Client Dong Guan Xinsheng Handbags Co., Ltd.
Nature of Water Treated Water
Location No.710, Kalawae North Village, Thanlyin.
Date and Time of collection 18.3.2020
Date and Time of arrival at Laboratory 19.3.2020
Date and Time of commencing examination 20.3.2020
Date and Time of completing 22.3.2020

Results of Water Analysis

WHO Drinking Water Guideline (Geneva - 1993)

pH	7.1		6.5 - 8.5
Colour (True)	Nil	TCU	15 TCU
Turbidity	1	NTU	5 NTU
Conductivity	142	micro S/cm	
Total Hardness	8	mg/l as CaCO ₃	500 mg/l as CaCO ₃
Calcium Hardness	6	mg/l as CaCO ₃	
Magnesium Hardness	2	mg/l as CaCO ₃	
Total Alkalinity	14	mg/l as CaCO ₃	
Phenolphthalein Alkalinity	Nil	mg/l as CaCO ₃	
Carbonate (CaCO ₃)	Nil	mg/l as CaCO ₃	
Bicarbonate (HCO ₃)	14	mg/l as CaCO ₃	
Iron	0.10	mg/l	0.3 mg/l
Chloride (as CL)	41	mg/l	250 mg/l
Sodium chloride (as NaCL)	68	mg/l	
Sulphate (as SO ₄)	10	mg/l	500 mg/l
Total Solids	73	mg/l	1500 mg/l
Total Suspended Solids	2	mg/l	
Total Dissolved Solids	71	mg/l	1000 mg/l
Manganese	Nil	mg/l	0.05 mg/l
Phosphate	Nil	mg/l	
Phenolphthalein Acidity	2	mg/l	
Methyl Orange Acidity	Nil	mg/l	
Salinity	0.1	ppt	

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

Tested by

Signature: Zaw Hein Oo
Name: B.Sc (Chemistry)
Sr. Chemist

Approved by

Signature: Soe Thit
Name: B.E (Civil) 1980,
Technical Officer
ISO TECH Laboratory

(a division of WEG Co.,Ltd.) ISO TECH Laboratory



Green Myanmar

Environmental Services Co., Ltd

No.115, Kanaung Min Thar Gyi Road, Industrial Zone (1), Hlaing Thar Yar Industrial City,
Yangon, Myanmar

Tel: 09 897 978 296, 09-5081451 E-mail: info@gmes-inm.com

WATER QUALITY TEST RESULT FORM

Name of Customer: Xinsheng (Myanmar)

Date of Sample Collection: -

Name of Person:

Date of Sample Arrival to Lab: 6.4.2020

Contact:

Date of Issued of Result: 6.4.2020

WATER QUALITY ANALYSIS RESULT

Sr. No.	Parameters	Unit	Analysis Values		WHO (2011) Drinking Water Standards
			Sample – 1 သုံးရေ	Sample – 2 သောက်သုံးရေ	
1.	Chloride	mg/l	1547	32	250
2.	Total Hardness	mg/l	978	2	500
3.	Total Iron	mg/l	2	ND	0.3
4.	pH	-	6.62	6.01	6.5 ~ 8.5

Analyzed By

U Thet Min Paing
Technician (Laboratory)

Approved By

Daw Cherry Thwin
Manager (Laboratory)

APPENDIX E

Fire Safety Certificate and Training Photos

ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်
ပြည်ထဲရေးဝန်ကြီးဌာန
မီးသတ်ဦးစီးဌာန




ရန်ကုန်

မီးဘေးလုံခြုံရေးစစ်ဆေးထောက်ခံချက်

အမှတ်စဉ်(၂၄၇၈)

ရက်စွဲ၊ ၂၀၂၀ပြည့်နှစ်၊ ဖေဖော်ဝါရီလ ၁၈ ရက်

၁။ ရန်ကုန်-တိုင်းဒေသကြီး/ပြည်နယ်၊ သန်လျင်-မြို့နယ်၊ ကုလားဝဲကျေးရွာအုပ်စု-ရပ်ကွက်/ကျေးရွာ၊ (-) လမ်းအမှတ်- ကွင်းအမှတ်(၇၁၀)၊ အမှတ် (၈/၁၉/က၊၁၀/ကနှင့်၇+၁၁/င) ရှိ ဝိုင်ရှင် ဦး/ဒေါ်- Mr. Xia Yin ၏ Steel Structure (၁)ထပ် (အိတ်စက်ရုံ) အဆောက်အဦအတွက် ဤဌာနမှသတ်မှတ်ပေးထားသော မီးဘေးလုံခြုံရေးဆိုင်ရာ ပြဌာန်းချက်များအား (၈-၂-၂၀၂၀) ရက်နေ့တွင် ကွင်းဆင်းစစ်ဆေးသည့်အခါ ပြည့်စုံစွာဆောင်ရွက်ထားကြောင်း စစ်ဆေးတွေ့ရှိရသည်။

၂။ ဤထောက်ခံချက်သည် စစ်ဆေးသည့်နေ့မှစ၍ (၃)နှစ်အထိသာ အကျိုးဝင်သည်။

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

မှတ်ချက်။ ဤထောက်ခံချက်အား လွှဲပြောင်းသုံးစွဲခြင်းမပြုရ။ အဆောက်အဦအား မူလရည်ရွယ်ချက်မှ ပြောင်းလဲအသုံးပြုပါက ထောက်ခံချက်အသစ် ထပ်မံလျှောက်ထားရမည်။

ညွှန်ကြားရေးမှူးချုပ်(ကိုယ်စား)
(သိန်းထွန်းဦး၊ ညွှန်ကြားရေးမှူး)
Nwe

XINSHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED

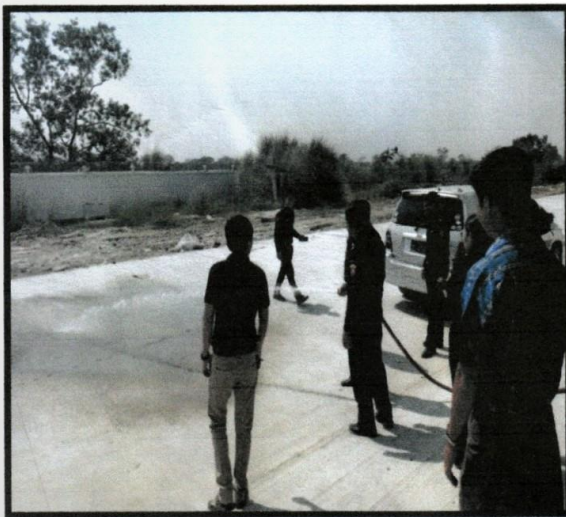
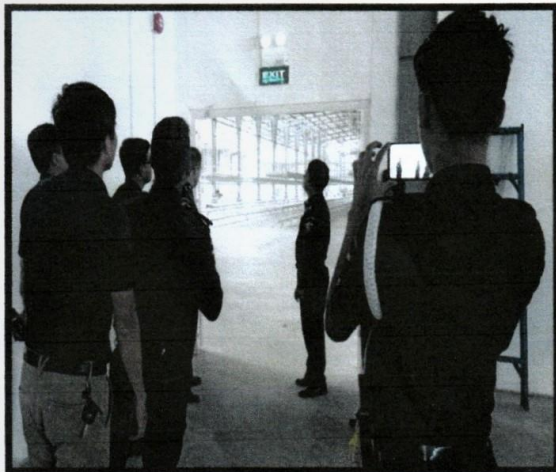
Fire Safety inspection Record

Date 8.2.2020

F-0001

Division of Fire Safety inspection

မီးဘေးကင်းလုံခြုံရေးစစ်ဆေးခြင်းဌာန







XINSHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED

Fire Training Record

Date : 10.20.2020

F- 0002

Purpose	Internal fire Training
Attendant	8 Workers
Training record	<p>Training us how to use the fire equipment . မီးသတ်ကိရိယာများ မည်သို့ အသုံးပြုရမည်ကို လေ့ကျင့်သင်ကြားပေးခြင်း ။</p>    
Host Name :	Safety Officer
Start Time :9:00 Am	End Time : 9:45 Am

APPENDIX F Electricity Bill

လျှပ်စစ်ပုံစံ (၂၄၃)

ရန်ကုန်လျှပ်စစ်ဓာတ်အားပေးရေးကော်ပိုရေးရှင်း
ဓာတ်အားခတောင်းခံလွှာ

သန်လျင်

Apr, 2020

ဒေါက်တာဇေသက်ဇော်

ကွင်းအမှတ်(၇၀၀)ကုလားစံမြို့နယ်ကွင်း

1829 045 369

ရန်ကုန်လျှပ်စစ်ဓာတ်အားပေးရေးကော်ပိုရေးရှင်း
25 May 2020
မူရင်းပုံစံ ဖော်ပြပါပုံစံ

စွဲစာရင်းအမှတ်	IND / 13 / 02	မီတာအမှတ် 3501004031	နှုန်းထား	သင့်ငွေ(ကျပ်)
မိုး	4	၁ မှ ၅၀၀ ယူနစ်အထိ	၁၂၅ ကျပ်	82,500
မီတာဖတ်သည့်နေ့	05/05/2020	၅၀၀ မှ ၅၀၀၀ ယူနစ်အထိ	၁၃၅ ကျပ်	607,500
သစ်လဖတ်ချက်	1	၅၀၀၀ မှ ၁၀၀၀၀ ယူနစ်အထိ	၁၄၅ ကျပ်	95,700
လျှပ်စစ်ဓာတ်	6.6%			
ကုန်မြှေးယူနစ်	6			
မူရင်းကုန်	1000			
မူရင်းနှုန်း				
သုံးစွဲယူနစ်	5,640	ဓာတ်အားရောင်းချပေးခြင်း		785,700
မြှေးကောင်းမှု	537	မီတာသန်ဆောင်ခ		5,000
ငွေတောင်းခံလွှာအမှတ် -	42350	မြှေးကောင်းမှုရောင်းချခြင်း		107,400
(Group No - NR1)		ကျပ်သင့်ငွေစုစုပေါင်း		878,100

20၀၀



စီမံ-05622666- မြို့မ-05621501-
ဘုရားကုန်း-05621505

မြို့မလျှပ်စစ်ဓာတ်အားပေးရေးကော်ပိုရေးရှင်း

APPENDIX G
PowerPoint Presentation

Xin Sheng (Myanmar) Industrial Company Limited ၏ CMP
စနစ်ဖြင့် အိတ်အမျိုးမျိုးချုပ်လုပ်ခြင်းလုပ်ငန်း

ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ် အစီရင်ခံစာ အတွက်
ဆွေးနွေးခြင်း

မတ်လ၊ ၂၀၂၀ ခုနှစ်။

Preparaed By

Myanwei Environmental Solutions Co., Ltd.

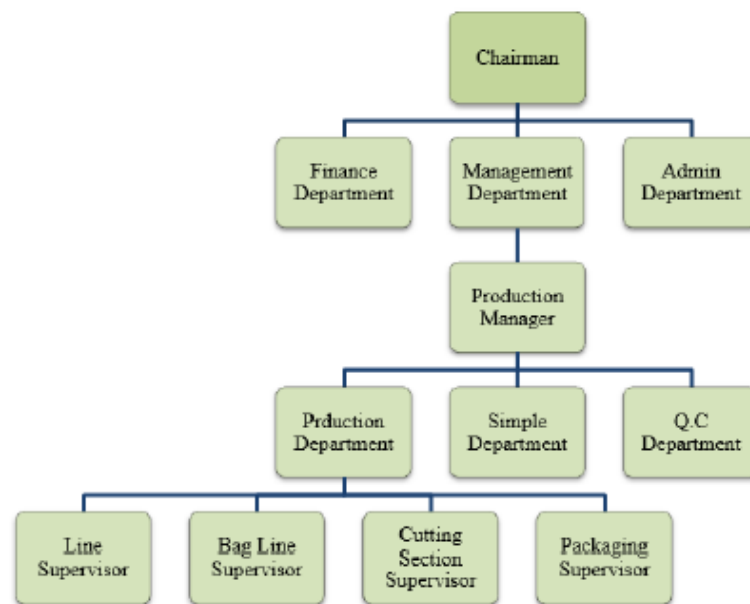
အစည်းအဝေး အကြောင်းအရာ

- ၁။ Xin Sheng (Myanmar) Industrial Company Limitedအား မိတ်ဆက်ခြင်း
- ၂။ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်နှင့် ပတ်သက်သော အကြောင်းအရာများ အား မိတ်ဆက်ခြင်း
- ၃။ သက်ရောက်မှုဆန်းစစ်ခြင်း ရလဒ်များနှင့် ထိခိုက်မှုအဆင့်သတ်မှတ်ချက်များ
- ၄။ ပတ်ဝန်းကျင်အပေါ်သက်ရောက်မှုများနှင့် ဖြေလျှော့ရေးနည်းလမ်းများ
- ၅။ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ် နှင့်
- ၆။ စက်ရုံ၏ဆောင်ရွက်ချက်များ

Xin Sheng (Myanmar) Industrial Company Limited



Xin Sheng (Myanmar) Industrial Company Limited ၏ ဖွဲ့စည်းပုံ



Xin Sheng (Myanmar) Industrial Company Limited

လုပ်ငန်းအမျိုးအစား	CMP စနစ်ဖြင့် အိတ်အမျိုးမျိုးချုပ်လုပ်ခြင်းလုပ်ငန်း။
အတည်ပြုမိန့်အမှတ်	(အတည်ပြုမိန့်အမှတ် ရကတ - ၂၉၀/၂၀၁၉)၂၀၁၉ ခုနှစ် နိုဝင်ဘာလ ၂၀ ရက်
ရင်းနှီးမြှုပ်နှံမှု	၁၀၀ ရာခိုင်နှုန်း နိုင်ငံခြားရင်းနှီးမြှုပ်နှံမှု
မြေဧရိယာ	မြေဧရိယာစုစုပေါင်း = ၂.၈ ဧက (၁၁၃၃၁.၁၉၈ စတုရန်းမီတာ)
အဆောက်အအုံ	(ပေ ၁၇၄.၅၆ × ပေ ၅၆၅.၈) တစ်ထပ် အဆောက်အအုံ ၁လုံး
ရင်းနှီးမြှုပ်နှံသည့်ကာလ	၁၀နှစ် နှင့် သက်တမ်းတိုး (၁၀)နှစ်
စက်ရုံလိပ်စာ	ဦးပိုင်အမှတ်-၈/ခ၊ ၉/က၊ ၁၀/က နှင့် ၇+၁၁/င၊ ကွင်းအမှတ် -၇၁၀/ ကုလားဝဲမြောက်ကွင်း၊ ကုလားဝဲကျေးရွာအုပ်စု၊ သန်လျင်မြို့နယ်၊ ရန်ကုန်တိုင်းဒေသကြီး။

လုပ်ငန်းလည်ပတ်ရန်အခြေခံလိုအပ်ချက်များ

ရေအသုံးပြုမှုအခြေအနေ	
ရေအရင်းအမြစ်	အဝီစိတွင်းရေ (၁ တွင်း)
အဓိကလိုအပ်ချက်	
လက်ရှိလူဦးရေ	နိုင်ငံခြားသားလုပ်သား (၁၃) ဦး နှင့် နိုင်ငံသား (ပြည်တွင်း) လုပ်သား (၅၀၀) ဦး
အဓိကကုန်ကြမ်း	ပိတ်ထည်၊ နိုင်လွန်၊ ကြယ်သီး၊ ဇစ်နှင့် ဆက်စပ်ပစ္စည်းများ။
နှစ်စဉ်ထွက်ကုန်ပစ္စည်းပမာဏ	နှစ်စဉ် ပျမ်းမျှအထည်အရေအတွက် ပထမနှစ်မှ ၁၀နှစ်အတွင်း ၇၂၀၀၀၀ မှ ၉၀၃၆၀၀ အထိ။

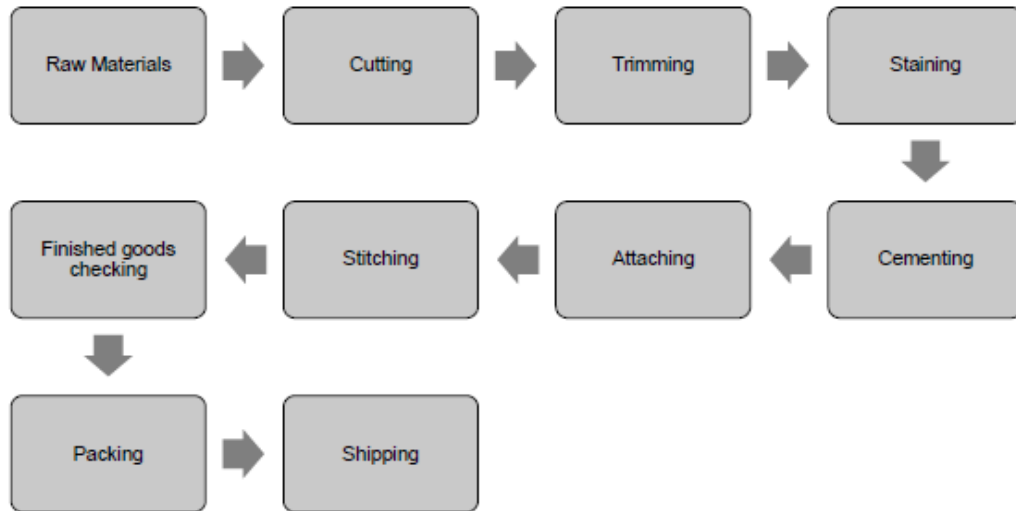
Xin Sheng (Myanmar) Industrial Company Limited ၏ စက်ရုံတည်နေရာ



Xin Sheng (Myanmar) Industrial Company Limited ၏ ထုတ်လုပ်မှုအလိုက်နေရာပြပုံ



Xin Sheng (Myanmar) Industrial Company Limited ၏ထုတ်လုပ်ပုံအဆင့်ဆင့်



Xin Sheng (Myanmar) Industrial Company Limited. ၏ထုတ်လုပ်ပုံများ



ပစ္စည်းသိုလှောင်ခြင်း



ပိတ်စဖြတ်ခြင်း



အိတ်ချုပ်ခြင်း



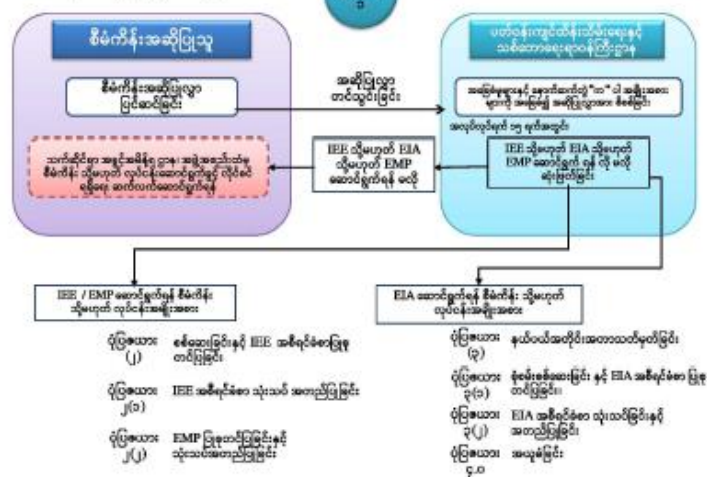
တွဲဆက်ခြင်း



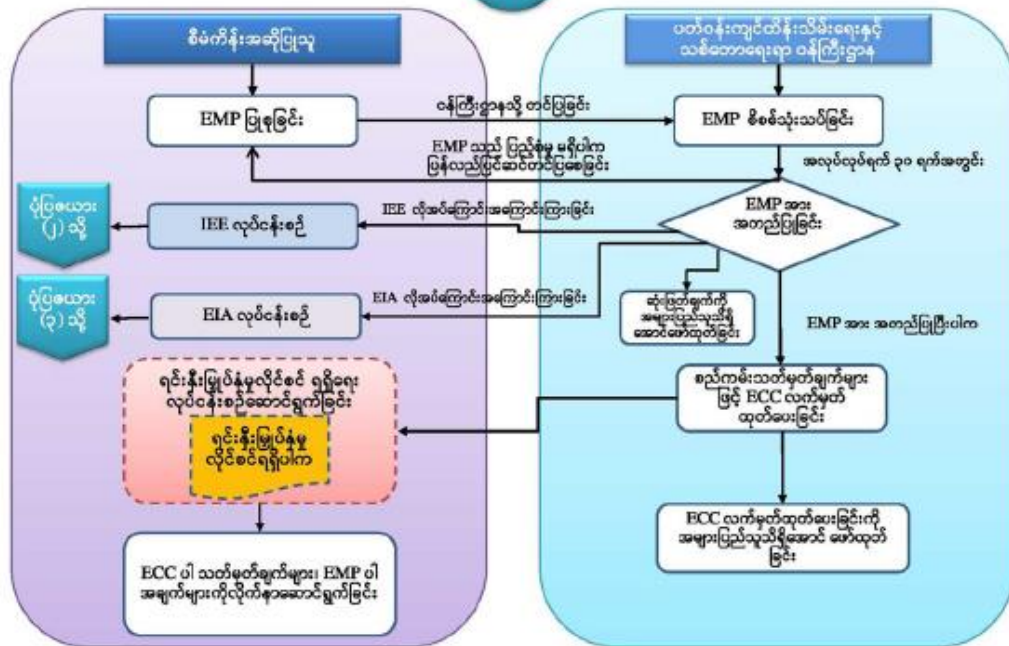
QC




ထုတ်ပိုးခြင်း



ပုံငြိမ်းယား
၂၅



ရန်ကုန်တိုင်းဒေသကြီးရင်းနှီးမြှုပ်နှံမှုကော်မတီအတည်ပြုမိန့်.



THE REPUBLIC OF THE UNION OF MYANMAR


Yangon Region Investment Committee

ENDORSEMENT


Endorsement No. YOR-2007315 Date 1st November 2009


This endorsement is issued by Yangon Region Investment Committee in accordance with Section 25(4) of the Myanmar Investment Law-

(1)	Name of Investor	MR. JOA, YIN
(2)	Citizenship	CHINESE
(3)	Residence Address	UNIT-2, ROOM-1202, BUILDING-3, HURSHAN TOWN, GUANGZHOU, GUANGDONG, THE PEOPLE'S REPUBLIC OF CHINA
(4)	Name and Address of Principal Organization	DONGGUAN KINGSHENG HANDMAO CO., LTD., UNIT-2, ROOM-1202, BUILDING-3, HURSHAN TOWN, GUANGZHOU, GUANGDONG, THE PEOPLE'S REPUBLIC OF CHINA
(5)	Place of Incorporation	THE PEOPLE'S REPUBLIC OF CHINA
(6)	Type of business/ MANUFACTURING OF HANDBAGS ON OMP BAGS	
(7)	Place(s) of Investment Project	HOLDING NO. 1818-01A, 1819A AND 1713/CUL. PHEM NO. 710, KALAWAY NORTH AREA, KALAWAY VILLAGE TRACT, THAWLYIN TOWNSHIP YANGON REGION
(8)	Foreign Capital Amount	US\$ 1,000 MILLION
(9)	Period for Foreign Capital to be brought in	WITHIN 1 YEAR FROM THE DATE OF ISSUANCE OF ENDORSEMENT
(10)	Total Amount of Capital (kyat)	EQUivalent in KYAT OF US\$ 1,000 MILLION
(11)	Constructibility Preparation Period	1 YEAR
(12)	Validity of Endorsement	20 YEARS
(13)	Form of Investment	WHOLLY FOREIGN OWNED
(14)	Name of Company Incorporated in Myanmar	XINSHENG (MYANMAR) INDUSTRIAL COMPANY LIMITED



YRIC 25/03/2015





(Mye Min Thaw)
Chairman

[illegible]

သက်ရောက်မှုဆန်းစစ်ခြင်းရလဒ်များနှင့် ထိခိုက်မှုအဆင့်သတ်မှတ်ချက်များ

စီမံကိန်းပတ်ဝန်းကျင်အနေအထား

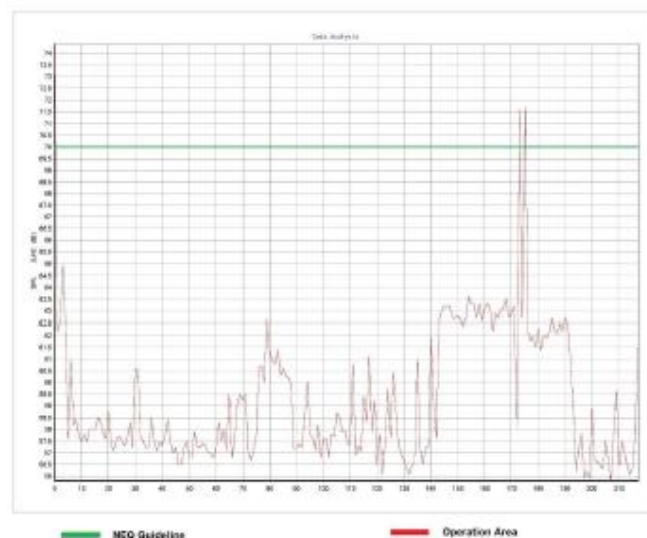
စဉ်	အကြောင်းအရာ	ဖော်ပြချက်
၁။	ကိုဩဒိနိတ်အမှတ်	မြောက်လတ္တီကျု 16.814732°နှင့် အရှေ့လောင်ဂျီကျု 96.286563°
၂။	ရာသီဥတုအခြေအနေ	သန်လျင်မြို့နယ် နှစ်စဉ်ပျမ်းမျှအမြင့်ဆုံးအပူချိန် 36°C၊ အနိမ့်ဆုံးအပူအချိန် 24°C တစ်နှစ် မိုးရေချိန်လက်မ ၁၂၈ လက်မ
၃။	စက်ရုံနေရာတွင်မြေအသုံးချမှု	စက်မှုလုပ်ငန်းနှင့်သက်ဆိုင်သောမြေအသုံးချမှုပုံစံ (စက်မှုဇုန်)
၄။	အနီးဆုံးရေအရင်းအမြစ်	ပဲခူးမြစ်
၅။	သစ်တောဧရိယာ	မရှိ
၆။	ကန့်သတ်ကာကွယ်ထားသော ဧရိယာ	မရှိ
၇။	တိုင်းတာမှုရလဒ်	<input type="checkbox"/> ဆူညံသံ တိုင်းတာခြင်း <input type="checkbox"/> အလင်းရောင် တိုင်းတာခြင်း <input type="checkbox"/> လေထုအရည်အသွေး တိုင်းတာခြင်း <input type="checkbox"/> အပူချိန် နှင့် စိုထိုင်းမှု အရည်အသွေး တိုင်းတာခြင်း

ဆည်သံတိုင်းတာမှု

Date and Time	Location	GPS value	Result value	NEQ Guideline
20 February 2020 (1:00AM to 5:00PM)	Production area	16°48'52.65"N 96° 17'13.41"E	69.83 dBA	70 dBA

အထက်ဖော်ပြပါ ဆည်သံတိုင်းတာမှုရလဒ်များအရ ဆည်သံများမှာ National Emission Quality Guideline အတွင်းတည်ရှိနေသည်ကို ဆန်းစစ်တွေ့ရှိရပါသည်။

Xin Sheng (Myanmar) Industrial Company Limited ၏ဆည်သံတိုင်းတာမှုပြ ဂရပ်



စက်ရုံတွင်းဆူညံသံတိုင်းတာမှု



လုပ်ငန်းခွင်အလင်းရောင်တိုင်းတာမှု

No	Location	Measure value (Lux)	Standard*
1	Cutting area (1)	1269	1000
2	Sewing Area (1)	1458.33	600
3	Sewing Area (2)	1400.22	600
4	QC	961.5	2000
4	Packing	1126	2000

လုပ်ငန်းခွင်အတွင်းအလင်းရောင်တိုင်းတာမှု



ပတ်ဝန်းကျင်လေထုတိုင်းတာမှု

Parameters	Observed Value	Guideline Value	Unit	Organization	Period
PM ₁₀	57.17	50	μg/m ³	NEQG	8 hours
PM _{2.5}	46.44	25	μg/m ³	NEQG	8 hours
SO ₂	106.21	20	μg/m ³	NEQG	8 hours
NO ₂	127	200	μg/m ³	NEQG	8 hours

ပတ်ဝန်းကျင်လေထုတိုင်းတာမှုပြပုံ

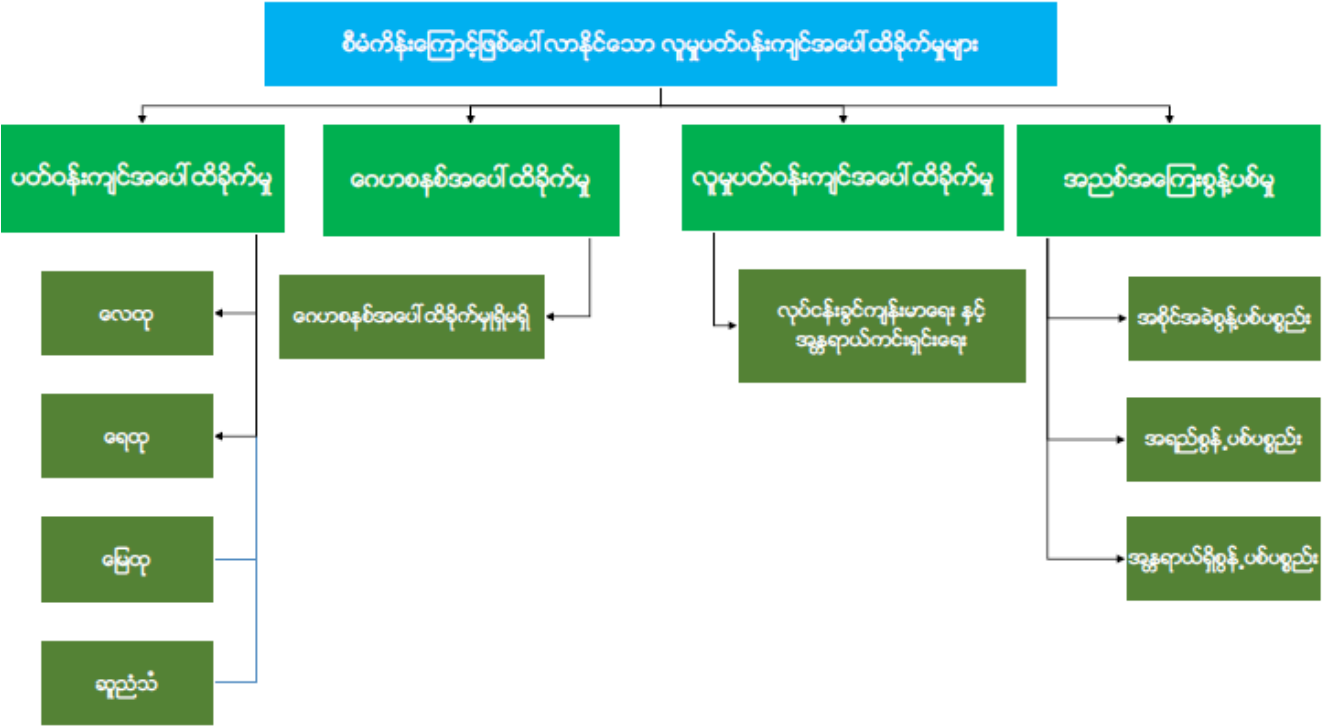


အပူချိန်တိုင်းတာမှု



Xin Sheng (Myanmar) Industrial Company Limited. ၏ လုပ်ငန်းခွင်ပျမ်းမျှတိုင်းတာမှုမှာ
27.88% နှင့် အပူချိန်တိုင်းတာမှုမှာ 37.03°C ရှိပါသည်။

ပတ်ဝန်းကျင်အပေါ် သက်ရောက်မှုများနှင့် ဖြေလျှော့ရေးနည်းလမ်းများ



သက်ရောက်မှု	စီမံကိန်းဆောင်ရွက်ချက်	လျော့နည်းစေရန် အရေးယူဆောင်ရွက်မှု
ဆူညံသံ	<ul style="list-style-type: none"> မီးစက်၊ အပ်ချုပ်စက်နှင့် မော်တော်ယာဉ် အသုံးပြုမှုတို့ကြောင့် ပတ်ဝန်းကျင်အပေါ် ဆူညံမှု 	<ul style="list-style-type: none"> ဆူညံသံထွက်သောနေရာများကို အကာကွယ်ဖြင့် ထားရှိခြင်း စက်ရုံပန်ထမ်းများကို PPE အပြည့်စုံအထောက်ပံ့ပေးခြင်း
မီးဘေးအန္တရာယ်	<ul style="list-style-type: none"> ကုန်ကြမ်းသိုလှောင်မှု နှင့် လျှပ်စစ်သုံးစွဲ ပေါ့လျော့မှု 	<ul style="list-style-type: none"> ကုန်ကြမ်းများအား သီးသန့်ထားရှိခြင်း လျှပ်စစ်သုံးစွဲမှုများအား စနစ်တကျ အသုံးပြုစေခြင်း
စွန့်ပစ်အမှိုက်	<ul style="list-style-type: none"> ထုတ်လုပ်ရာတွင်ကျန်ရှိသော ချည်မျှင်အပိုင်းအစများ၊ ရုံးတွင်းစွန့်ပစ်ပစ္စည်းများနှင့် အမှိုက်များ။ 	<ul style="list-style-type: none"> စွန့်ပစ်အမှိုက်များအား ပြန်လည်သုံးစွဲရန် နှင့် စွန့်ပစ်ရန် အဖြစ်သတ်မှတ်ပီး သီးခြားစွန့်ပစ်စေခြင်း
စွန့်ပစ်အရည်	<ul style="list-style-type: none"> နေအိမ်၊ စားသောက်ဆောင် တို့မှစွန့်ထုတ်ချေ၊ မိလ္လာကန်စနစ် 	<ul style="list-style-type: none"> စွန့်ပစ်အရည်များအားသီးခြားရေနုတ်မြောင်းတွေဖြင့် တွဲဖြင့်စွန့်ပစ်ခြင်း။
အန္တရာယ်ရှိအမှိုက်	<ul style="list-style-type: none"> စက်များမှဆီယိုစိမ့်မှုများ၊ နိုင်လွန်ပိတ်စများ၊ တစ်ခြားမီးလောင်လွယ်သောအမှိုက်များ 	<ul style="list-style-type: none"> စက်သုံးဆီများအားစနစ်တကျ အသုံးပြုစေခြင်း၊ စနစ်တကျသိုလှောင်ခြင်း နှင့် အန္တရာယ်ရှိပစ္စည်းများအား စနစ်တကျထားရှိစေခြင်း

ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်

လေထုညစ်ညမ်းမှုလျော့ချရေး

ရည်ရွယ်ချက်	စီမံကိန်းကြောင့် စက်ရုံမှ ထွက်သော ဓာတ်ငွေ့များနှင့် မီးစက်များမှ ထွက်ရှိသော ဓာတ်ငွေ့များကြောင့် လေထုညစ်ညမ်းမှုကို လျော့ချရန်
လိုက်နာရမည့် စည်းကမ်း	အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာအရည်အသွေး(ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များ (၂၀၁၅)
စီမံခန့်ခွဲမှု အစီအစဉ်	<ul style="list-style-type: none"> စက်ရုံအတွင်းနှင့် အနားဝန်းကျင်တွင် သစ်ပင်ပန်းမန်စိုက်ပျိုးခြင်း စက်ရုံအတွင်း မည်သည့်စွန့်ပစ်ပစ္စည်းများအား မီးရှို့ဖျက်စီးခြင်း မပြုလုပ်ခြင်း လုပ်သားများအား Personal Protective Equipment (PPE) ဟုခေါ်သော အကာအကွယ်ပစ္စည်းများဖြစ်သည့် လေကာ/နေကာမျက်မှန်များ၊ နှာခေါင်းစည်း၊ Helmets စသည်တို့အားထောက်ပံ့ခြင်း၊ အသိပညာပေး သင်တန်းများ ပေးခြင်း
တာဝန်ယူရမည့် ပုဂ္ဂိုလ်	<ul style="list-style-type: none"> ပြုပြင်ထိန်းသိမ်းရေးအရာရှိ - လေထုညစ်ညမ်းမှုလျော့ချရေးနည်းလမ်းများ ထုတ်လုပ်ရေးမန်နေဂျာ- လုပ်ငန်းခွင်လေထုသန့်ရှင်းရေး မန်နေဂျာ - ပတ်ဝန်းကျင်လေအရည်အသွေးတိုင်းတာရန် (ThirdParty) ဖြင့်ညှိနှိုင်းဆောင်ရွက်ရန်

ဆူညံသံလျော့ချရေး

ရည်ရွယ်ချက်	ဘေးပတ်ဝန်းကျင်ဆူညံမှုမဖြစ်ပေါ်စေရန် နှင့် စက်ရုံရှိ မီးစက်နှင့် အခြားစက်ပစ္စည်းများ ကြောင့် လုပ်သားများအပေါ်ထိခိုက်မှု လျော့ချရန်
လိုက်နာရမည့် စည်းကမ်း	<ul style="list-style-type: none"> ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာလုပ်ထုံးလုပ်နည်း (၂၀၁၅) အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာအရည်အသွေး(ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များ (၂၀၁၅)
စီမံခန့်ခွဲမှုအစီအစဉ်	<ul style="list-style-type: none"> မီးစက်၊လေမှုတ်စက်တို့ကို ဆူညံသံထိန်းချုပ်နိုင်သော ခန်းဖွဲ့စည်းမှုပုံစံ တည်ဆောက်ထားခြင်း လုပ်ငန်းသုံးယာဉ်များကိုဆူညံသံလျော့ချရန်သတ်မှတ်အရှိန်ထက်ကျော်လွန်မမောင်းစေမောင်းစေခြင်း လုပ်သားများအား Personal Protective Equipment (PPE) ဟုခေါ်သော အကာအကွယ်ပစ္စည်းများဖြစ်သည့် လေကာ/နေကာမျက်မှန်များ၊ နှာခေါင်းစည်း၊ Helmets စသည်တို့အား ထောက်ပံ့ခြင်း၊ အသိပညာပေး သင်တန်းများ ပေးခြင်း
တာဝန်ယူရမည့်ပုဂ္ဂိုလ်	မန်နေဂျာ - ဆူညံသံတိုင်းတာရန် (ThirdParty) ဖြင့်ညှိနှိုင်းဆောင်ရွက်ရန်

အစိုင်အခဲစွန့်ပစ်မှု ထိန်းသိမ်းရေး

ရည်ရွယ်ချက်	စွန့်ပစ်အမှိုက်ထွက်ရှိမှုလျော့ချရေးနှင့် စွန့်ပစ်အမှိုက်ကြောင့် ပတ်ဝန်းကျင်ညစ်ညမ်းမှုကို လျော့ချရန်
လိုက်နာရမည့်စည်းကမ်း	<ul style="list-style-type: none"> ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာလုပ်ထုံးလုပ်နည်း (၂၀၁၅) National Waste Management Strategy and Action Plan (Draft 2018)
စီမံခန့်ခွဲမှုအစီအစဉ်	<ul style="list-style-type: none"> စက်ရုံမှ မည်သည့်စွန့်ပစ်ပစ္စည်းမှ မြစ်၊ ချောင်း၊ အင်း၊ အိုင် အတွင်းသို့ မစွန့်ပစ်ရ စက်ရုံတွင် စွန့်ပစ်ပစ္စည်းများကို ပြန်လည်အသုံးပြုနိုင်သောပစ္စည်း(ဆိုးဆေး၊ စက္ကူ၊ ဖာ၊ ပလတ်စတစ်၊ စသည်ဖြင့်) များကို ပြည်တွင်းဝယ်ယူသူများထံ ပြန်လည်ရောင်းချခြင်း စွန့်ပစ်ရန်ပစ္စည်း(လုပ်သားများမှစွန့်ပစ်ပစ္စည်းနှင့်မီးဖိုချောင်ထွက်ပစ္စည်းများ)ကို မြို့တော်စည်ပင်သာယာရေးအဖွဲ့အစည်း ကို နေ့စဉ်ခေါ်ယူပြီး သိမ်းဆည်းစေခြင်း အန္တရာယ်ရှိပစ္စည်း (စက်ဆီအဟောင်းများ၊ လျှပ်စစ်ပစ္စည်းအပျက်များ၊ သံထည်ပစ္စည်း) များကို ဝယ်ယူသူထံမှပြန်လည် သိမ်းဆည်းစေခြင်း စက်ရုံတွင် အမှိုက်စွန့်ပစ်ရန် အတွက် အမှိုက်ပုံးများကို စီမံထားခြင်း စက်ရုံဝန်းထမ်းအားလုံးကို စနစ်တကျ အမှိုက်စွန့်ပစ်ရန် တိုက်တွန်းနှိုးဆော်ထားခြင်း
တာဝန်ယူရမည့်ပုဂ္ဂိုလ်	<ul style="list-style-type: none"> မန်နေဂျာ - စက်ရုံအတွင်းသန့်ရှင်းရေးအတွက်စီမံခန့်ခွဲရန်တာဝန်ရှိသည် အမှိုက်စွန့်ပစ်မှု ပုံမှန်ပြုလုပ်ရန်နှင့် စွန့်ပစ်ပစ္စည်းသယ်ယူသူများကို ပုံမှန်ပြုလုပ်ရန် တာဝန်ယူဆောင်ရွက်ရန်

စွန့်ပစ်အရည် ထိန်းသိမ်းရေး

ရည်ရွယ်ချက်	မြေပေါ် ရေနှင့် မြေအောက်ရေ ညစ်ညမ်းမှုမဖြစ်စေရေး
လိုက်နာရမည့်စည်းကမ်း	<ul style="list-style-type: none"> ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာလုပ်ထုံးလုပ်နည်း (၂၀၁၅) အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာအရည်အသွေး(ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များ (၂၀၁၅)
စီမံခန့်ခွဲမှုအစီအစဉ်	<ul style="list-style-type: none"> စက်ရုံရေမြောင်းများနှင့်မိလ္လာစနစ်ကို စနစ်တကျ သန့်ရှင်းအောင်ထားရှိခြင်း လုံလောက်သည့်အတိုင်းအတာ ပမာဏရှိခြင်း မိလ္လာစနစ်ကို ပုံမှန်စစ်ဆေးပြီး လိုအပ်သကဲ့သို့ ထိန်းသိမ်းပြုပြင်ခြင်း စက်ရုံရေမြောင်းအတွင်းတွင် ပိတ်ဆို့မှုမရှိစေရန်နှင့် အနံ့ဆိုးများမထွက်စေရန်စီမံခြင်း
တာဝန်ယူရမည့်ပုဂ္ဂိုလ်	မန်နေဂျာ - စွန့်ထုတ်ရေအရည်အသွေးတိုင်းတာရန် (ThirdParty) ဖြင့်ညှိနှိုင်းဆောင်ရွက်ရန်

စွမ်းအင်သုံးစွဲမှု ထိန်းသိမ်းရေး

ရည်ရွယ်ချက်	လျှပ်စစ်သုံးစွဲမှုလျော့ချစေရန်နှင့် လုပ်ငန်းခွင်အတွင်း လျှပ်စစ်သုံးစွဲမှုကြောင့် အန္တရာယ်မရှိစေရန်
စီမံခန့်ခွဲမှုအစီအစဉ်	<ul style="list-style-type: none"> ▪ စက်ရုံတွင်း လျှပ်စစ်သုံးစွဲမှုများအတွက် စွမ်းအင်လျော့ချနိုင်သည့် စက်ကရိယာများတပ်ဆင်ခြင်း ▪ အသုံးမပြုလျှင် စက်ကရိယာများပိတ်ဆင်ထားခြင်း ▪ စွမ်းအင်အသုံးနည်းသော Lighting စနစ်တပ်ဆင်ခြင်း ▪ စက်ပစ္စည်းနှင့် Lighting အသုံးပြုမှုကို စောင့်ကြည့်ထိန်းသိမ်းရေးစနစ်ထားရှိခြင်း (ဥပမာ-အသုံးမပြုပီမီဖွင့်ထားခြင်း၊ စက်ဖွင့်ထားခြင်းမျိုး မရှိစေရန်)
တာဝန်ယူရမည့်ပုဂ္ဂိုလ်	မန်နေဂျာ

မြေအောက်ရေသုံးစွဲမှု

ရည်ရွယ်ချက်	ရေသုံးစွဲမှုလျော့ချရေး
လိုက်နာရမည့်စည်းကမ်း	The Underground Water Act (1930)
စီမံခန့်ခွဲမှုအစီအစဉ်	<ul style="list-style-type: none"> ▪ ရေအသုံးပြုမှု သိရှိနိုင်သော မီတာတပ်ဆင်ခြင်း ▪ ဝန်ထမ်းများအားအသိပညာပေးခြင်းနှင့် လိုက်နာဆောင်ရွက်ရန် တိုက်တွန်းခြင်း ▪ စက်ရုံရှိတာဝန်ရှိပုဂ္ဂိုလ်များအား (Third Party) နေပြင်မြေအောက်ရေအကျိုးရှိရှိအသုံးချရန်စည်းကမ်းချက်နဲ့အညီ လမ်းညွှန်ထားခြင်း။
တာဝန်ယူရမည့် ပုဂ္ဂိုလ်	မန်နေဂျာ <ul style="list-style-type: none"> ▪ ရေ အသုံးပြုမှုစာရင်း စစ်ဆေးခြင်း ▪ ဝန်ထမ်းများလိုက်နာဆောင်ရွက်မှု စစ်ဆေးခြင်း

အရေးပေါ်အခြေအနေတုန့်ပြန်မှု

ရည်ရွယ်ချက်	စက်ရုံတွင်းမတော်တဆထိခိုက်မှု လျော့ချရေး
လိုက်နာရမည့်စည်းကမ်း	အလုပ်အကိုင်နှင့် ကျွမ်းကျင်မှုဖွံ့ဖြိုးတိုးတက်ရေးဥပဒေ (၂၀၁၃), ILO guide to Myanmar Labour Law (2017)
စီမံခန့်ခွဲမှုအစီအစဉ်	<ul style="list-style-type: none"> အရေးပေါ်အခြေအနေဖြစ်သော (မီး၊ ငလျင်၊ ရေကြီးရေလျှံမှု) တို့အတွက် စက်ရုံတွင် စီမံခန့်ခွဲမှုရှိခြင်း စက်ရုံအိမ်သတ်စနစ်များကို ပုံမှန်စစ်ဆေးခြင်း ရေးဆွဲထားသော အရေးပေါ်တုန့်ပြန်ရေး အစီအစဉ်များကို ဝန်ထမ်းများ အကျွမ်းတဝင်ဖြစ်စေရန် စီမံထားခြင်း လောင်စာသိုလှောင်နေရာများ၊ လျှပ်စစ်ဖြန့်ဖြူးရေးနေရာများကို အဓိကထားပြီး စောင့်ကြည့်စစ်ဆေးခြင်း၊ ပြုပြင်မှုနည်းလမ်းများ ပုံမှန်မီးဘေးကာကွယ်ရေး၊ ငလျင်လုပ်ခတ်လျှင် ပြုလုပ်ရမည့်ပုံစံများ၊ ရေကြီးရေလျှံမှု၊ အခြေအနေထိန်းသိမ်းရေး အစီအစဉ်များ၊ ရှေးဦးပြုစုခြင်းသင်တန်းများကို ပုံမှန်လေ့ကျင့်မှုများ သင်ကြားမှုများ ပြုလုပ်ခြင်း အရေးပေါ်ဆက်သွယ်ရန် ဖုန်းနံပါတ်၊ လိပ်စာများ၊ အများသူငါမြင်သာစေသောနေရာများတွင် ကပ်ထားခြင်း စက်ရုံတွင်း မီးသတ်အဖွဲ့ ငယ်၊ အန္တရာယ်ကင်းရှင်းရေး စောင့်ကြည့်ရေးအဖွဲ့ငယ်များထားရှိပြီး လစဉ် ဆွေးနွေးတိုင်ပင်ခြင်း လေ့ကျင့်ခြင်းများ ပြုလုပ်ခြင်း
တာဝန်ယူရမည့်ပုဂ္ဂိုလ်	<ul style="list-style-type: none"> Manager and EHS officer မီးသတ်သင်တန်းများ ၃ လတစ်ကြိမ်ပြုလုပ်ရန်စီမံပေးခြင်း အရေးပေါ်အခြေအနေနှင့် မတော်တဆထိခိုက်မှုမရှိစေရေး စောင့်ကြည့်စစ်ဆေးခြင်း

ပတ်ဝန်းကျင်ဆိုင်ရာစောင့်ကြည့်မှု

ကဏ္ဍ	အမျိုးအစား	ကြိမ်နှုန်း	နေရာ	တာဝန်ရှိသူ
လုပ်ငန်းလည်ပတ်ချိန် လေထု	PM _{2.5} , PM ₁₀ , SO ₂ , NO ₂	တစ်နှစ် ၂ကြိမ်	ထုတ်လုပ်မှု ဧရိယာအတွင်း	Xin Sheng (Myanmar) Industrial Company Limited
ရေ	pH, temperature, arsenic, chlorine, iron, phosphate, iron, manganese, turbidity	တစ်နှစ် ၂ကြိမ်	အင်္ဂါစိုက်ခင်းရေ	Xin Sheng (Myanmar) Industrial Company Limited
ဆူညံသံ	ဆူညံသံ ပမာဏ	တစ်နှစ် ၂ကြိမ်	၂ နေရာ (ထုတ်လုပ်မှု ဧရိယာ အတွင်း)	Xin Sheng (Myanmar) Industrial Company Limited
အမှိုက်စွန့်ပစ်မှု	အစိုင်အခဲ၊ အန္တရာယ်ရှိပစ္စည်း	ပုံမှန်	စက်ရုံအတွင်း ပြန်လည်အသုံးပြုရန်နှင့် စွန့်ပစ်ရန်တူ၍ အမှိုက်ပုံများအား ခွဲခြားခြင်း	Xin Sheng (Myanmar) Industrial Company Limited
မီးဘေးအန္တရာယ်	မီးသတ်ဆေးဘူးပစ္စည်းများနှင့်အခြေအနေပေါ်ရန်နံပါတ်များ	လစဉ်	စက်ရုံဧရိယာ အတွင်း	Xin Sheng (Myanmar) Industrial Company Limited
အလင်းရောင်ပြင်းပြမှု	အလင်းရောင်ပေးခြင်း	တစ်နှစ် ၂ကြိမ်	ထုတ်လုပ်မှု ဧရိယာအတွင်း (ဝိတ်ဖတ်ခြင်းနှင့် အရည်အသွေး စစ်ဆေးခြင်း)	Xin Sheng (Myanmar) Industrial Company Limited
လုပ်ငန်းခြတ်သိမ်းခြင်းကာလ				
လေထု	PM _{2.5} , PM ₁₀ , SO ₂ , NO ₂	ခြတ်သိမ်းမှု ကာလအတွင်း ၁ကြိမ်	ထုတ်လုပ်မှု ဧရိယာအတွင်း	Xin Sheng (Myanmar) Industrial Company Limited
ဆူညံသံ	ဆူညံသံ ပမာဏ	ထိုကာလအတွင်း ၁ကြိမ်	ခြတ်သိမ်းမှု ဧရိယာ	Xin Sheng (Myanmar) Industrial Company Limited
ပြန်လည်မွမ်းမံခြင်း	သစ်ပင်များပြန်လည်စိုက်ပျိုးခြင်း		ခြတ်သိမ်းမှု ဧရိယာအားလုံး	Xin Sheng (Myanmar) Industrial Company Limited

ပတ်ဝန်းကျင်ဆိုင်ရာစောင့်ကြည့်မှု ခန့်မှန်းကုန်ကျစရိတ်

ကဏ္ဍ	အမျိုးအစား	ကြိမ်နှုန်း	နေရာ	ကုန်ကျစရိတ်
လုပ်ငန်းလည်ပတ်ချိန်				
လေထု	PM _{2.5} , PM ₁₀ , SO ₂ , NO ₂	တစ်နှစ် ၂ကြိမ်	ထုတ်လုပ်မှု ဧရိယာအတွင်း	800000
ရေ	pH, temperature, arsenic, chlorine, iron, phosphate, iron, magnese, turbidity	တစ်နှစ် ၂ကြိမ်	အင်္ဂါစိုက်ခင်းရေ	300000
ဆူညံသံ	ဆူညံသံ ပမာဏ	တစ်နှစ် ၂ကြိမ်	ထုတ်လုပ်မှု ဧရိယာ	200000
အမှိုက်စွန့်ပစ်မှု	အပိုင်အခဲ၊ အရည် နှင့် အမွှာရည်၊ အမွှာရည်	အပတ်စဉ်	စက်ရုံအတွင်း၊ ပြန်လည်အသုံးပြုရန်နှင့် စွန့်ပစ်ရန်ဟူ၍ အမှိုက်ခုံများအား ခွဲခြားခြင်း	50000
လုပ်ငန်းဖြတ်သိမ်းခြင်းကာလ				
လေထု	PM _{2.5} , PM ₁₀ , SO ₂ , NO ₂	ဖြတ်သိမ်းမှု ကာလအတွင်း ၁ကြိမ်	ထုတ်လုပ်မှု ဧရိယာအတွင်း	1000000
ဆူညံသံ	ဆူညံသံ ပမာဏ	ထိုကာလအတွင်း ၁ကြိမ်	ဖြတ်သိမ်းမှု ဧရိယာ	1000000
ပြန်လည်မွမ်းမံခြင်း	သစ်ပင်များပြန်လည်စိုက်ပျိုးခြင်း		ဖြတ်သိမ်းမှု ဧရိယာအားလုံး	

လူမှုအကျိုးတူပူးပေါင်း ပါဝင်မှု

Xin Sheng (Myanmar) Industrial Company Limited တွင် CSR အတွက် အမြတ်ငွေ၏ ၂% ကို ကျန်းမာရေး၊ ပညာရေးနှင့် နယ်မြေဖွံ့ဖြိုးတိုးတက်ရေးတို့ အတွက် အသုံးပြုသွားမည် ဖြစ်ပါသည်။

ကျန်းမာရေး	ဝန်ထမ်းများ ကျန်းမာရေး စောင့်ရှောက်မှု	၀.၅ %
ပညာရေး	ပညာရေးကဏ္ဍ မြှင့်တင်ရေးနှင့် လူ့အခွင့်အရေး အသိပညာပေးခြင်း	၀.၅ %
နယ်မြေဖွံ့ဖြိုးတိုးတက်ရေး	ဒေသတွင်း လိုအပ်သကဲ့သို့ လှူဒါန်းခြင်း	၁ %

စက်ရုံ၏ဆောင်ရွက်ချက်များ



Xin Sheng (Myanmar) Industrial Company Limited
ဝန်ထမ်းများအတွက်သုံးရေပြင်ဆင်ထားရှိမှု



Xin Sheng (Myanmar) Industrial Company Limited
၏ လျှပ်စစ်သုံးစွဲမှု



Xin Sheng (Myanmar) Industrial Company Limited
၏ မီးဘေးအန္တရာယ်အတွက်ထားရှိမှုများ



ဝန်ထမ်းများအတွက် ဆေးခန်းနှင့်ဆေးပစ္စည်းများထားရှိမှုများ



Xin Sheng (Myanmar) Industrial Company Limited ၏ အမှိုက်စွန့်ပစ်မှုအခြေနေများ

***Thank You for Your Patient
Attention!***

APPENDIX G

List of Commitment

Xin Sheng (Myanmar) Industrial Company Limited ၏ CMP စနစ် အိတ်ပိန်းအတွက် တင်ပြလာသော ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် (Environmental Management Plan – EMP) တွင် ပါဝင်ရမည့် အချက်များကို အကောင်အထည်ဖော် စီမံဆောင်ရွက်သွားမည် ဖြစ်ကြောင်း၊ အောက်ဖော်ပြပါ ဇယားဖြင့် အကျဉ်းချုပ် စာရင်းပြုစု ဖော်ပြထားပါသည်။

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
မူဝါဒ၊ဥပဒေနှင့် အဖွဲ့အစည်းဆိုင်ရာမူဘောင် များ	၁	ပတ်ဝန်းကျင် ထိန်းသိမ်းရေး ဥပဒေ (၂၀၁၂) ပတ်ဝန်းကျင် ထိန်းသိမ်းရေး နည်းဥပဒေ (၂၀၁၄) ပတ်ဝန်းကျင် ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်း (၂၀၁၅) မြန်မာနိုင်ငံမှ ချမှတ်ထားသော စက်ရုံနှင့် သက်ဆိုင်သည့် တခြား လိုက်နာဆောင်ရွက်ရမည့် လုပ်ထုံးလုပ်နည်း၊ ဥပဒေ၊ နည်းဥပဒေ နှင့် မူဝါဒများ အမျိုးသား ပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက် (၂၀၁၅) နှင့် နိုင်ငံတကာ ပတ်ဝန်းကျင်ဆိုင်ရာ စံသက်မှတ်ချက်များနှင့် ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှုဆိုင်ရာ လမ်းညွှန်ချက်များ	အခန်း (၂)
ပတ်ဝန်းကျင်အရည်အသွေး တိုင်းတာမှု	၂	အမျိုးသား ပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက် (၂၀၁၅) နှင့် နိုင်ငံတကာ ပတ်ဝန်းကျင်ဆိုင်ရာ စံသက်မှတ်ချက်များနှင့် ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှုဆိုင်ရာ လမ်းညွှန်ချက်များကို အခြေခံလေ့လာ တိုင်းတာထားပါသည်	အခန်း (၃)

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
လေအရည်အသွေး	၂.၁	အမျိုးသား ပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက် (၂၀၁၅) ၏ ထုတ်လွှတ်အစိုးအငွေ့ (Air emissions) လမ်းညွှန်သက်မှတ်ချက် (PM ₁₀ , PM _{2.5}) တို့ဖြင့် နှိုင်းယှဉ် ဖော်ပြထားပါသည်။	အပိုဒ်ခွဲ (၄.၄.၂)
ဆူညံသံ	၂.၂	အမျိုးသား ပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက် (၂၀၁၅) ၏ အမြင့်ဆုံးလက်ခံနိုင်သည့် ဆူညံသံအဆင့် (Noise level) လမ်းညွှန်သက်မှတ်ချက် စက်မှုဇုန် ဧရိယာတွင် (70 One-hour LAeq (dBA)) ဖြင့် နှိုင်းယှဉ် ဖော်ပြထားပါသည်။	အပိုဒ်ခွဲ (၄.၄.၃)
စက်ရုံတွင်း အလင်းရောင် ရရှိမှု	၂.၃	Illumination and Limiting Glare Index based on IES Code, 1968 ဖြင့် နှိုင်းယှဉ် ဖော်ပြထားပါသည်။	အပိုဒ်ခွဲ (၄.၄.၅)
ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှု	၃	Xin Sheng (Myanmar) Industrial Company Limited သည် စက်ရုံအခြေအနေ၊ အလုပ်သမား၊ ဒေသခံလူထုအမြင်၊ အစုရှယ်ယာဝင်များနှင့် ညှိနှိုင်းဆွေးနွေးခြင်းအပါအဝင် စောင့်ကြပ်ကြည့်ရှုခြင်းများကို ဆောင်ရွက်မည်။ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်သည် စက်ရုံ၏ ဘေးအန္တရာယ်ကင်းရှင်းရေးအတွက် ကံပါ ဖြည့်စွက်ဆောင်ရွက်ထားပါသည်။	အခန်း (၆)
လေထုညစ်ညမ်းမှုနှင့် ဖုန်မှုန့်	၃.၁	<ul style="list-style-type: none"> လေထုညစ်ညမ်းခြင်းကို ကာကွယ်ရန်နှင့် ကာဗွန်ထုတ်လုပ်မှုကို လျော့ချပေးနိုင်ရန်အတွက် စက်ရုံဝင်းအတွင်း အပင်များစိုက်ပျိုးခြင်း မီးစက်များကို ပြုပြင်ထိန်းသိမ်းခြင်း 	အပိုဒ်ခွဲ (၆.၁)

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
		<ul style="list-style-type: none"> • အမှိုက်များ မီးရှို့ခြင်းကို တားမြစ်ခြင်း • ဖုန်ထူထပ်သော နေရာများတွင် တာဝန်ထမ်းဆောင်သော ဝန်ထမ်းများအတွက် နာခေါင်းစီးများ ဝတ်ဆင်စေခြင်း 	
ဆူညံသံထွက်ရှိမှု	၃.၂	<ul style="list-style-type: none"> • အသံလုံအခန်းများတည်ဆောက်ပြီး စက်ပစ္စည်းများကို သေချာစွာ ပြုပြင်ထိန်းသိမ်းစေခြင်း • သယ်ယူပို့ဆောင်ရေးလမ်းကြောင်းတွင် ယာဉ်များ၏ အမြန်နှုန်းကို ကန့်သတ်ခြင်း • လုံလောက်သော တစ်ကိုယ်ရည်သုံး အကာအကွယ်ပစ္စည်းများ ထားရှိပေးခြင်း • သက်ဆိုင်ရာ ဝန်ထမ်းများအားလုံးကို သင့်လျော်သော သင်တန်းများပို့ချခြင်းနှင့် ဆူညံသော နေရာတွင် အလုပ်လုပ်စဉ် တစ်ကိုယ်ရည်သုံး အကာအကွယ်များ တပ်ဆင်စေခြင်း 	အပိုဒ်ခွဲ (၆.၄)
မီးဘေးအန္တရာယ်	၃.၃	<ul style="list-style-type: none"> • အရေးပေါ်အခြေအနေများအတွက် စက်ရုံနံရံများတွင် မီးသတ်ဆေးဘူးများ၊ မီးသတ်ပိုက်ဘီးများနှင့် မီးသတ်ရေပိုက်များ ထားရှိခြင်း • အရေးပေါ်ထွက်ပေါက်ပြ မြေပုံများနှင့် စုဝေးရပ်ညွှန်ပြရာ သင်္ကေတများ ထားရှိခြင်း • မီးသတ်ပစ္စည်းများကို ပုံမှန်စစ်ဆေးခြင်းနှင့် မီးသတ်ရေကန်ကို အရေးပေါ်အခြေအနေအတွက် ပြင်ဆင်ခြင်း • အလုပ်သမားများအား သတိပေးရန် မီးဘေးအချက်ပြခေါင်းလောင်းများ တပ်ဆင်ထားခြင်း • အဓိက ဝင်ပေါက်ထွက်ပေါက်များကို ပိတ်ဆို့ထားခြင်း မပြုလုပ်စေခြင်း 	အပိုဒ်ခွဲ (၆.၆)
လုပ်ငန်းခွင်ထိခိုက်မှုနှင့် ကျန်းမာရေး	၃.၄	<ul style="list-style-type: none"> • ရှေးဦးသူနာပြုသင်တန်း၊ ဘေးအန္တရာယ်ကင်းရှင်းရေးသင်တန်း၊ မီးဘေးအန္တရာယ်ကာကွယ်ရေး သင်တန်း၊ စက်ယန္တရားများ ကိုင်တွယ်ခြင်းသင်တန်းများ 	အပိုဒ်ခွဲ (၆.၇)

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
		<p>ပို့ချခြင်း</p> <ul style="list-style-type: none"> • လေ့လာတွေ့ရှိထားသော အလင်းတိုင်းတာချက်များအရ၊ အလုပ်သမားများ ဘေးကင်းလုံခြုံစွာ လုပ်ကိုင်နိုင်စေရန် လုံလောက်သောအလင်းရောင် ရရှိစေရန် ဆောင်ရွက်ခြင်း • တစ်ကိုယ်ရည်သုံး ကာကွယ်ရေးကိရိယာများ (ဥပမာ- နားကြပ်၊ လက်အိတ်၊ ခေါင်ဆောင်း၊ မျက်မှန်) များကို ဌာနအလိုက် ပေးအပ်ခြင်း • ဓာတ်လိုက်ခြင်း အန္တရာယ်မှ ကာကွယ်ရန်အတွက် လျှပ်စစ်ထိန်းသိမ်းစောင့်ရှောက်ရေးဝန်ထမ်းအား ပုံမှန်စစ်ဆေးခြင်းနှင့် ကြိုတင်ကာကွယ်မှုပြုလုပ်ရန် တာဝန်ပေးခန့်အပ်ခြင်း • ရေနတ်မြောင်းများ ရေစီးရေလာကောင်းအောင် ဆောင်ရွက်ခြင်းဖြင့် အလုပ်သမားများ၏ ကျန်းမာရေး ဘေးအန္တရာယ် ကာကွယ်ခြင်း • အလုပ်သမားများအတွက် အများဆုံးခွင့်ပြုနိုင်သော ဆူညံသံအဆင့်မှာ 90dB(A)သည် တစ်ရက်လျှင် ၈နာရီသာ ဖြစ်သည်။ ထို့ကြောင့် ဆူညံသောနေရာများတွင် လုပ်ကိုင်ပါက နားကြပ်ကိရိယာ တပ်ဆင်ခြင်းရမည်။ 	
အမှိုက်စွန့်ပစ်မှု	၃.၅	<ul style="list-style-type: none"> • စီမံကိန်းမှ ထွက်ရှိသော စွန့်ပစ်အမှိုက်များကို စက်ရုံပင်းအတွင်း (သို့မဟုတ်) ဒေသရှိ အင်းအိုင်၊ ချောင်း၊ မြောင်း၊ မြစ် စသည်တို့ထဲသို့ စွန့်ပစ်ခြင်း မပြုလုပ်ပါ။ • စွန့်ပစ်အမှိုက်များကို တစ်နေရာတည်းတွင် စနစ်တကျ ခွဲ၍ စုဆောင်းရန် လိုအပ်ပြီး အထည်အလိပ် စွန့်ပစ်အမှိုက်များကို သီးခြားသိုလှောင်သိမ်းဆည်းခြင်း၊ အန္တရာယ်ရှိသော စွန့်ပစ်ပစ္စည်းများနှင့် တခြားသော သတ္တုပစ္စည်းများကို သီးခြား သိုလှောင်သိမ်းဆည်းခြင်း 	အပိုဒ်ခွဲ (၆.၅)

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
		<ul style="list-style-type: none"> ပြန်လည်အသုံးပြုနိုင်သော အဝတ်စ၊ ပိတ်စ၊ ကတ်ထူပြား၊ ပလတ်စတစ်ပြား စသည်တို့ကို တစ်ဆင့် ပြန်လည်ရောင်းချခြင်းဖြင့် ပြန်လည်အသုံးပြုခြင်း သတ္တုပစ္စည်း (သို့မဟုတ်) ဖန်စများကို ပြန်လည် အသုံးပြုခြင်း နေ့စဉ်ထွက်ရှိသော အမှိုက်များကို ရန်ကုန်မြို့တော်စည်ပင်သာယာရေးကော်မတီနှင့် ချိတ်ဆက်စွန့်ပစ်ခြင်း 	
စွန့်ပစ်အရည်	၃.၆	<ul style="list-style-type: none"> ရေနုတ်မြောင်းလိုင်းကို သင့်တော်သော အကျယ်၊ အနက်ရှိစေပြီး မိလ္လာစနစ်သည် ရေလုံပြီး စနစ်တကျ သိုလှောင်နိုင်ခြင်း မိလ္လာပိုက်လိုင်းကို အမြဲစစ်ဆေးခြင်းနှင့် ထိန်းသိမ်းခြင်း ရေနုတ်မြောင်းကို အနံ့အသက်များ ကင်းစေရန် အမှိုက်များ ပိတ်ဆို့စေခြင်းမရှိအောင် ဆောင်ရွက်ခြင်း ဘွိုင်လာရေ၏ အပူချိန်ကို မြောင်းအတွင်း မစွန့်ပစ်ခင် တိုင်းတာခြင်း 	အပိုဒ်ခွဲ (၆.၃)
အရေးပေါ် အခြေအနေ	၃.၇	<ul style="list-style-type: none"> စက်ရုံအနေဖြင့် အရေးပေါ်ဖြစ်ပေါ်လာနိုင်သော မီးဘေးအန္တရာယ်၊ ငလျင်၊ ရေကြီးခြင်းနှင့် မုန်တိုင်းများအတွက် စီမံထားရှိခြင်း မီးသတ်ပစ္စည်းကိရိယာများနှင့် မီးသတ်ဆေးဘူးများကို နေရာတိုင်းတွင် တပ်ဆင်ထားခြင်းနှင့် စစ်ဆေးခြင်း အသေးစိတ်အခြေအနေပြ ရုပ်ပုံ(အရေးပေါ်ထွက်ပေါက်တံခါး စသည်) ကို အလုပ်သမားများ သိရှိစေရန် ဆောင်ရွက်ထားခြင်း 	အပိုဒ်ခွဲ (၆.၉)

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
		<ul style="list-style-type: none"> • ရေပိုက်ခေါင်း၊ မီးသတ်ဘူး စသည်တို့ကို ထားရှိခြင်း၊ စစ်ဆေးခြင်းနှင့် ဓာတ်လိုက်ခြင်းမှ ကာကွယ်ရန် လျှပ်စစ်အန္တရာယ် အသိပေး သင်တန်းများ ပို့ချခြင်း • အလုပ်သမားများအား ငလျင်လှုပ်သောအခါ စားပွဲအောက်ကဲ့သို့သော ဘေးကင်းသောနေရာများတွင် နေထိုင်ရန်၊ အပြင်သို့ မရွေ့ရန်၊ အပြင်တွင်ရှိနေသော အလုပ်သမားများအနေဖြင့် အဆောက်အဦးအောက်၊ သစ်ပင်အောက်၊ တိုင်များအောက်တွင် နေထိုင်ခြင်းမပြုဘဲ ကွင်းပြင်တွင်သာ နေထိုင်ရန်၊ တခြားသော သက်ဆိုင်ရာ ဘေးကင်းလုံခြုံရေး လမ်းညွှန်ချက်များကို အသိပညာပေးခြင်း • ရေလွှမ်းမိုးမှု (မုန်တိုင်းအပျက်အစီးများ၊ ရေမြောင်းများ ပွင့်နေခြင်း၊ မြေတိုက်စားမှု) နှင့် ရွေ့ပြောင်း တွားသွားသတ္တဝါများ (မြွေ သို့မဟုတ် တခြားတိရိစ္ဆာန်များ) ၏ အန္တရာယ်များကို သတိပြုစေခြင်း • အရေးပေါ်ဆေးအဖွဲ့များနှင့် ဆေးပစ္စည်းများ ထားရှိခြင်း • အရေးပေါ်ဆက်သွယ်နိုင်သည့် မီးသတ်ဌာန၊ ရဲတပ်ဖွဲ့၊ ဆေးရုံ စသည့် တယ်လီဖုန်းနံပါတ်များကို မြင်သာနိုင်သည့်နေရာတွင် ကပ်ထားခြင်း • မီးငြိမ်းသတ်ရေးအဖွဲ့၊ ကယ်ဆယ်ရေးအဖွဲ့တို့ဖြင့် ဘေးကင်းရေးကော်မတီတစ်ရပ် တည်ဆောက်ခြင်းနှင့် ကော်မတီအနေဖြင့် ဘေးအန္တရာယ်ကင်းရှင်းရေးဆိုင်ရာ စီမံခန့်ခွဲမှုနှင့် ပတ်သတ်၍ လစဉ်အစည်းအဝေး ကျင်းပခြင်း • သဘာဝဘေးအန္တရာယ်စီမံခန့်ခွဲရေး၊ မီးဘေးအန္တရာယ်နှင့် လုပ်ငန်းခွင်ထိခိုက်မှုနှင့် ကျန်းမာရေး ကာကွယ်ရေးအတွက် သင့်လျော်သော 	

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
		သင်တန်းများပို့ချခြင်း	
စောင့်ကြပ်ကြည့်ရှုမှု	၄	အဆိုပြုစီမံကိန်းသည် စောင့်ကြပ်ကြည့်ရှုမှု အစီရင်ခံစာကို ပန်ကြီးဌာနသို့ (၆)လ တစ်ကြိမ် တင်ပြဆောင်ရွက်မည်။	အခန်း (၆) အပိုဒ်ခွဲ (၆.၁၀)
လေအရည်အသွေး စစ်ဆေးမှု	၄.၁	<ul style="list-style-type: none"> ဆာလဖာဒိုက်အောက်ဆိုဒ်ဓာတ်ငွေ့များ၊ နိုက်ထရိုဂျင်ဒိုင်အောက်ဆိုဒ်ဓာတ်ငွေ့များ၊ ကာဗွန်ဒိုင် အောက်ဆိုဒ်ဓာတ်ငွေ့များ၊ ကာဗွန်မိုနောက်ဆိုဒ်ဓာတ်ငွေ့များနှင့် အမှုန်အမွှားများ တိုင်းတာခြင်း တစ်နှစ် (၂) ကြိမ်တိုင်းတာပြီး ပတ်ဝန်းကျင်ထိန်းသိမ်းရေး ဦးစီးဌာနသို့ တင်ပြခြင်း ထုတ်လုပ်မှုဧရိယာအတွင်း တိုင်းတာခြင်း 	ဇယား (၆.၁)
စွန့်ပစ်ပစ္စည်းထွက်ရှိမှုအခြေအနေ	၄.၂	<ul style="list-style-type: none"> စွန့်ပစ်အပိုင်အခဲ၊ စွန့်ပစ်အရည်နှင့် အန္တရာယ်ရှိသော စွန့်ပစ်ပစ္စည်းများ အပတ်စဉ် စွန့်ပစ်ခြင်း စက်ရုံအတွင်း ပြန်လည်အသုံးပြု သိုလှောင်ခြင်း၊ စွန့်ပစ်နေရာသတ်မှတ်ခြင်း 	ဇယား (၆.၁)
မီးဘေးအန္တရာယ် စစ်ဆေးမှု	၄.၃	<ul style="list-style-type: none"> ထွက်ပေါက်လမ်းပြပုံများ ကပ်ထားခြင်း၊ မီးသတ်ပစ္စည်း ကိရိယာများ တပ်ဆင်ခြင်း လစဉ် စက်ရုံဧရိယာအတွင်း တိုင်းတာခြင်း 	ဇယား (၆.၁)
စက်ရုံတွင်း အလင်းရောင်အခြေအနေ	၄.၄	<ul style="list-style-type: none"> အလင်းရောင်တိုင်းတာခြင်း လစဉ် ထုတ်လုပ်မှုဧရိယာအတွင်း တိုင်းတာခြင်း (အထူးသဖြင့် အပတ်ဖြတ်ခြင်းနေရာနှင့် အရည်အသွေးစစ်ဆေးခြင်းနေရာ) 	ဇယား (၆.၁)

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
စွမ်းရည်မြှင့်တင်ခြင်းနှင့် သင်တန်းများပေးခြင်း	၅	လုပ်ငန်းခွင်အတွင်း ဖြစ်ပေါ်လာနိုင်သော အရေးပေါ်အခြေအနေများအားလုံးကို ကိုင်တွယ်ရန်အတွက် အရေးပေါ်တုံ့ပြန်ရေးအစီအစဉ်များကို ချမှတ်မည်။ ဓာတုပစ္စည်းလောင်ကျွမ်းခြင်းနှင့် မတော်တဆဖြစ်ရပ်များ (ဥပမာ- လျှပ်စစ်အန္တရာယ်၊ မီးဘေးအန္တရာယ်) ကို ကာကွယ်ရန် လုပ်ဆောင်နေစဉ်အတွင်း ဂရုစိုက်ဆောင်ရွက်မည်။	အခန်း (၆) အပိုဒ်ခွဲ (၆.၁၁)
လူထုအကျိုးပြုလုပ်ငန်းများဆောင်ရွက်ခြင်း	၆	လူထုအကျိုးပြုဆောင်ရွက်ချက်များကို လူနေမှုအဆင့်အတန်း မြင့်မားစေရန်နှင့် စီမံကိန်းဧရိယာရှိ လူနေမှုအသိုင်းအဝိုင်းများအားလုံးနှင့် အဆင်ပြေစေရန် ရည်ရွယ်ပါသည်။ Xin Sheng (Myanmar) Industrial Company Limited ၏ လူထုအကျိုးပြု ဆောင်ရွက်ချက်များအနေဖြင့် ဒေသအတွင်း ပညာရေးအထောက်အပံ့များ ဆောင်ရွက်ခြင်း၊ အကျိုးအမြတ်မယူသော သင်တန်းများ ဖော်ဆောင်ပေးခြင်း၊ လုပ်သားများ၏ကျန်းမာရေးစောင့်ရှောက်မှုများ ဆောင်ရွက်ခြင်းဟူ၍ကဏ္ဍသုံးခုအလိုက် က် ဆောင်ရွက်ပါမည်။	အခန်း (၆) အပိုဒ်ခွဲ (၆.၁၃)
သက်ဆိုင်သူများနှင့် တွေ့ဆုံဆွေးနွေးခြင်း	၇	သက်ဆိုင်သူများနှင့် တွေ့ဆုံဆွေးနွေးခြင်း အစီအစဉ်တွင် Xin Sheng (Myanmar) Industrial Company Limited စက်ရုံ၏ EMP အစီရင်ခံစာ အကြောင်းကို ရှင်းလင်းတင်ပြခြင်းဖြစ်သည်။ တွေ့ဆုံပွဲကို 31 ရက်၊ မတ်လ၊ ၂၀၂၀ ခုနှစ်တွင် ကနောင်ခန်းမ၊ အုံဆိပ်ကမ်းမြို့နယ်တွင် ပြုလုပ်ခဲ့ပါသည်။ တွေ့ဆုံပွဲတွင် စက်ရုံ၏သက်ဆိုင်ရာပုဂ္ဂိုလ်များ၊ အစိုးရအဖွဲ့ရုံး များဖြစ်သော ပတ်ဝန်းကျင်ထိန်းသိမ်းရေး ဦး	အခန်း (၇)

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
		ဦးစီးဌာန၊ စက်မှုကြီးကြပ်နှင့်စစ်ဆေးရေးဦးစီးဌာန၊ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးနှင့် သန့်ရှင်းရေးဌာန အစရှိသော သက်ဆိုင်ရာဌာနများ၏ တာဝန်ရှိပုဂ္ဂိုလ်များ၊ စက်မှုဇုန်စီမံခန့်ခွဲမှုကော်မတီ၏ တာဝန်ရှိပုဂ္ဂိုလ်များမှ လိုအပ်သည်များကို အကြံပေးခြင်း၊ စီမံကိန်း၏ အစီရင်ခံစာတွင် လိုအပ်သည်များကို ဖြည့်စွက်ပေးရန် အကြံပြုချက်များပေးခဲ့ပါသည်။	
အများပြည်သူနှင့် ပူးပေါင်းပါဝင်မှုနှင့် ပြဿနာများ ဖြေရှင်းခြင်း	၈	စီမံကိန်းဧရိယာအတွင်း နေထိုင်သူများနှင့် ဒေသရှိ အစိုးရအဖွဲ့အစည်းများအနေဖြင့် စီမံကိန်းကြောင့် ဖြစ်ပေါ်လာသော ပြဿနာများနှင့် ထိခိုက်နစ်နာမှုများဖြေရှင်းရေးအဖွဲ့ ဖွဲ့စည်းသွားမည်ဖြစ်ပြီး ယင်းအဖွဲ့တွင် Xin Sheng (Myanmar) Industrial Company တာဝန်ရှိ လူကြီးများနှင့် စက်မှုဇုန်မှ တာဝန်ရှိလူကြီးများဖြင့် ဖွဲ့စည်းဆောင်ရွက်သွားမည် ဖြစ်သည်။ အသေးစားကိစ္စရပ်များကို ထိခိုက်နစ်နာမှုများ ဖြေရှင်းရေးအဖွဲ့မှ ဖြေရှင်းမည်ဖြစ်ပြီး တခြားသော ကိစ္စရပ်များကို သက်ဆိုင်ရာ အာဏာပိုင်များနှင့် ဖြေရှင်းဆောင်ရွက်မည်ဖြစ်သည်။	အခန်း (၇) အပိုဒ်ခွဲ (၇.၂)