

## IEE REPORT

# Milestone Leatherware Co., Ltd.

## *Manufacturing of Various Kinds of Bags and Belts on CMP basis*



*Prepared by*

**HRD Environmental Training and Services Co., Ltd.**



# INITIAL ENVIRONMENTAL EXAMINATION REPORT

For  
MILESTONE LEATHERWARE CO., LTD

On  
*Manufacturing of Various Kinds of Bags and  
Belts on CMP basis*



Prepared by

**HRD Environmental Training and Services Co., Ltd.**

**Human Resource Development Environmental Training and Services**

Register Address: Room.3, Bdg.2, Quarter 3, Insein Road, Mayangon Township, Yangon, Myanmar

**January, 2022**

### ဝန်ခံကတိပြုလွှာ

- (က) ဤကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်း အစီအစဉ်ကို တိကျခိုင်မာမှုများနှင့် ပြည့်စုံစွာ ဆောင်ရွက် ထားပါသည်။
- (ခ) ပတ်ဝန်းကျင် ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်းများ အပါအဝင် သက်ဆိုင်ရာ ဥပဒေ၊ နည်းဥပဒေများကို တိကျစွာလိုက်နာ၍ ဤကနဦးပတ်ဝန်းကျင် ဆန်းစစ်ခြင်း အစီအစဉ်ကို ရေးဆွဲထားပါသည်။
- (ဂ) စီမံကိန်းသည် ဤကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်း အစီအစဉ်ပါ ကတိကဝတ်၊ ပတ်ဝန်းကျင် ထိခိုက်မှုလျော့ချရေးလုပ်ငန်းများနှင့် အစီအစဉ်များကို အပြည့်အဝ အစဉ်အမြဲ လိုက်နာ ဆောင်ရွက်သွားမည် ဖြစ်ကြောင်း ကတိကဝတ်ပြုပါသည်။
- (ဃ) စီမံကိန်းပိတ်သိမ်းချိန်တွင်လည်း ပတ်ဝန်းကျင်နှင့်လူမှုဝန်းကျင်အားထိခိုက်မှုအနည်းဆုံး ဖြစ်စေရန် စီမံဆောင်ရွက်သွားမည်ဖြစ်ပါသည်။

(လက်မှတ်)

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**အကြံပေးအဖွဲ့အစည်း၏ဝန်ခံချက်**

ဤပတ်ဝန်းကျင် စီမံခန့်ခွဲမှု အစီအစဉ်သည် တိကျခိုင်မာ၍ ပြည့်စုံ မှန်ကန်ကြောင်းနှင့် ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်းအပါအဝင် သက်ဆိုင်ရာ ဥပဒေများကို တိကျစွာလိုက်နာ၍ မိမိတို့၏ ကျွမ်းကျင်မှုနယ်ပယ်အလိုက် တာဝန်ယူ ဆောင်ရွက်ခဲ့ကြသည်မှာ မှန်ကန်ကြောင်း ဝန်ခံကတိပြုပါသည်။

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**ABBREVIATION/ACRONYMS**

ACGIH	American Conference of Governmental Industrial Hygienists
°C	Degree Celsius
CMP	Cutting-Making-Packing
CSR	Corporate Social Responsibility
CV	Curriculum Vitae
EMP	Environmental Management Plan
EIA	Environmental Impact Assessment
EPAS	Environmental Perimeter Air Station
EPC	Electric Power Enterprise
HR	Human Resource
MIC	Myanmar Investment Commission
NEQEG	National Emission Quality Guideline
NGO	Non-Governmental Organization
OHS	Occupational Health and Safety
PM	Particulate Matter
PPE	Personal Protective Equipment
QTY	Quantity
USD	United States Dollar
U.S. EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds
WHO	World Health Organization
YCDC	Yangon City Development Committee



## ၁။ အကျဉ်းချုပ် အစီရင်ခံစာ

### ၁.၁။ နိဒါန်း

ရန်ကုန်တိုင်းဒေသကြီး၊ ဒဂုံဆိပ်ကမ်းမြို့နယ်၊ မြေတိုင်းရပ်ကွက်အမှတ်စက်မှုဇုန်(၁)၊ မြေကွက်အမှတ် (၁၉၈/၁၁၊ ၁၉၈/၁၄၊ ၁၉၈/၁၅) ပေါ်ရှိ Milestone Leatherware Co., Ltd ၏ စီအမ်ပီစနစ်ဖြင့် အိတ်နှင့်ခါးပတ်အမျိုးမျိုး ထုတ်လုပ်ခြင်းလုပ်ငန်းနှင့် ပက်သက်ပြီး ကနဦးပတ်ဝန်းကျင် ဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ငန်းအတွက် HRD Environmental Training and Services Co.,Ltd မှ ဆောင်ရွက်ခဲ့ပါသည်။ ဤစီမံကိန်းလုပ်ငန်းအတွက် ကနဦး ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်း လုပ်ငန်းများကို ၂၀၂၁ ခုနှစ်၊ အောက်တိုဘာလတွင် စတင်ဆောင်ရွက်ခဲ့ပြီး ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဥပဒေ(၂၀၁၂)နှင့် ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းလုပ်ထုံးလုပ်နည်း (၂၀၁၅)ပါ ပြဌာန်းချက်များအတိုင်း လိုက်နာဆောင်ရွက်ထားပါသည်။

### ၁.၂။ ရည်ရွယ်ချက်

အဆိုပြုစက်ရုံလည်ပတ်ခြင်းကြောင့် တည်ဆဲ ဥပဒေနှင့် ညီညွတ်မှု ရှိ/မရှိအား အကဲဖြတ်ရန်၊ စီမံကိန်းတည်ရှိရာဒေသ၏ နောက်ခံ လူမှုစီးပွားအခြေအနေများ၊ ပတ်ဝန်းကျင်ဆိုင်ရာ အချက်အလက်များကို လေ့လာသုံးသပ်ရန်၊ စီမံကိန်းဆိုင်ရာ အချက်အလက်များကို အများပြည်သူအား ထုတ်ဖော်ကာ ဆွေးနွေးညှိနှိုင်းခြင်း၊ အကြံပြုချက်များရယူခြင်းဆောင်ရွက်ရန်၊ စီမံကိန်းကြောင့် ဖြစ်ပေါ်လာနိုင်သည့် ပတ်ဝန်းကျင်နှင့်လူမှုစီးပွားအပေါ်သက်ရောက်မှုများကို လေ့လာတွက်ဆရန် နှင့် ဆိုးကျိုးသက်ရောက်မှုများကို လျော့ချကုစားရန်နည်းလမ်းများ၊ ကောင်းကျိုးသက်ရောက်မှုများကို ဆပွားမြှင့်တင်ရန်နည်းလမ်းများ ရှာဖွေဖော်ထုတ်ရန် စသည့် ရည်ရွယ်ချက်များဖြင့် ဤကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်း လုပ်ငန်းများကို ဆောင်ရွက်ခဲ့ပါသည်။

### ၁.၃။ မူဝါဒနှင့်ဥပဒေရေးရာ

အဆိုပြုစီမံကိန်းပတ်သက်၍ လိုက်နာရမည့် ဥပဒေနှင့် နည်း ဥပဒေများ၊ ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်းများ၊ အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များ၊ ကမ္ဘာ့ကျန်းမာရေးအဖွဲ့၏ စံချိန်စံညွှန်းများနှင့် အပြည်ပြည်ဆိုင်ရာ ဘဏ္ဍာရေးကော်ပိုရေးရှင်း၏ လမ်းညွှန်ချက်များ စသည်တို့ကို ထည့်သွင်းဖော်ပြထားပြီး အသေးစိတ်အား အစီရင်ခံစာ၏ အခန်း (၃) တွင် ဖော်ပြထားပါသည်။

### ၁.၄။ လေ့လာရေး လုပ်ငန်းရပ်များ

ဤကနဦးပတ်ဝန်းကျင် ထိခိုက်မှုဆန်းစစ်ခြင်း အစီအစဉ်ကို စီမံကိန်းတည်ရှိရာ ဒေသ၏ နောက်ခံ လူမှုစီးပွား အခြေအနေများ၊ ပတ်ဝန်းကျင်ဆိုင်ရာ အချက်အလက်များစသည့်တို့ကို အခြေပြု၍ ဆောင်ရွက်ခဲ့ပါသည်။ လေ့လာရေးလုပ်ငန်းစဉ်တွင် ပါဝင်သည့် လုပ်ငန်းရပ်များမှာ ကနဦးလေ့လာမှု၊ နယ်ပယ်အတိုင်းအတာ သတ်မှတ်ခြင်း၊ စက်ရုံအလုပ်သမားများနှင့် တွေ့ဆုံခြင်း၊ စီမံကိန်းကြောင့် ထိခိုက်ခံစားရနိုင်ခြေရှိသည့်သူများ၊ ဒေသဆိုင်ရာ အုပ်ချုပ်ရေး အဖွဲ့အစည်းများ၊ ရပ်ရွာအခြေပြုအဖွဲ့များ၊ လူမှုအဖွဲ့အစည်းများနှင့်တွေ့ဆုံခြင်းများ၊ အသေးစိတ်အချက်အလက်

များအား တိုင်းတာကောက်ယူခြင်း၊ သက်ရောက်မှု ဖော်ထုတ်ခြင်းနှင့် အကဲဖြတ်ခြင်း၊ အစီရင်ခံစာ မူကြမ်းပြုစုခြင်း၊ တွေ့ရှိချက်များကို အများပြည်သူအား ထုတ်ဖော်ခြင်းနှင့် အပြီးသတ် အစီရင်ခံစာ ပြုစုခြင်း တို့ဖြစ်ကြပါသည်။

အသေးစိတ်အချက်အလက်များ ကောက်ယူရာတွင် တိုက်ရိုက်လေ့လာခြင်း၊ တွေ့ဆုံမေးမြန်းခြင်း၊ သဘာဝအရင်းအမြစ်များကို လေ့လာခြင်း၊ ရာသီဥတု အခြေအနေများကိုလေ့လာခြင်း၊ စက်ရုံ အတွင်းနှင့်ပြင်ပရှိ အသံဆူညံမှု၊ ရေလေအရည်အသွေး တိုင်းတာစစ်ဆေးခြင်းများ ပါဝင်ပါသည်။ လူမှုစီးပွားနှင့်ဆိုင်သော အချက်အလက်များကို ကောက်ယူရာတွင် စီမံကိန်းဝန်းကျင်တွင် အခြေချနေထိုင်သော လူဦးရေအခြေအနေ၊ စီးပွားရေးအခြေအနေ၊ အလုပ်အကိုင်၊ လူထု၏ ပညာရေးအခြေအနေ လေ့လာမှုများ ပါဝင်ပါသည်။

### ၁.၅။ စီမံကိန်းအကြောင်းအရာ

အဆိုပြုစက်ရုံသည် CMP စနစ်ဖြင့် အိတ်နှင့်ခါးပတ်အမျိုးမျိုးထုတ်လုပ်ခြင်းဖြစ်ပြီး လုပ်ငန်းစဉ် အကျဉ်းမှာ နိုင်ငံခြားမှတင်သွင်းသော သားရေ၊ ပိတ်စ၊ အိတ်ချုပ်လုပ်မှု ဆိုင်ရာ ဆက်စပ်ပစ္စည်းများ စသည်ကုန်ကြမ်းများကို ဖြတ်တောက်ခြင်း၊ ပုံသွင်းခြင်း၊ တွဲဆက်ခြင်း၊ ချုပ်လုပ်ခြင်း၊ ထုတ်ပိုးခြင်းနှင့်ဖြန့်ဖြူးခြင်း စသည့်လုပ်ငန်းများသာ လုပ်ဆောင်ပါသည်။ စီမံကိန်းနှင့် သက်ဆိုင်သည့် အကြောင်းအရာအကျဉ်း ဖော်ပြချက်များမှာ အောက်ပါအတိုင်း ဖြစ်ပါ သည်။

စီမံကိန်းအကြောင်းအရာဖော်ပြချက်များ	
စီမံကိန်းအဆိုပြုသူ	Milestone Leatherware Co., Ltd.
လုပ်ငန်းအမျိုးအစား	စီအမ်ပီစနစ်ဖြင့် အိတ်နှင့်ခါးပတ်အမျိုးမျိုးချုပ်လုပ်ခြင်း
စီမံကိန်းတည်နေရာ	မြေကွက် အမှတ် (၁၉၈/၁၁၊ ၁၉၈/၁၄၊ ၁၉၈/၁၅)၊ မြေတိုင်းရပ်ကွက် အမှတ် စက်မှုဇုန်(၁)၊ ဒဂုံဆိပ်ကမ်းမြို့နယ်၊ ရန်ကုန်တိုင်းဒေသကြီး။
ရင်းနှီးမြှုပ်နှံသူ	Yixin Leather Products(HK) Co., Ltd. မှ ၁၀၀% ရင်းနှီးမြှုပ်နှံသည်။
ရင်းနှီးမြှုပ်နှံမှုပမာဏ	USD သန်းပေါင်း ၁.၁၂၉
ရင်းနှီးမြှုပ်နှံမည့်အချိန်	၃၀ နှစ်
ထုတ်လုပ်နိုင်စွမ်း	တစ်နှစ်လျှင် အိတ်နှင့်ခါးပတ်အမျိုးစုံ (၁၆,၆၀၀,၀၀၀) ခန့်
စက်သုံးဆီလိုအပ်မှု	တစ်နှစ် ဒီဇယ်ဆီ ၈၅၀ ဂါလံ
လျှပ်စစ်ဓါတ်အားလိုအပ်မှု	တစ်နှစ်လျှင် ၂၀၀,၀၀၀ ကီလိုဝပ်
လျှပ်စစ်ဓါတ်အားအရင်းအမြစ်	မြန်မာ့လျှပ်စစ်ဓါတ်အားလုပ်ငန်း
ရေလိုအပ်မှု	တစ်နှစ်လျှင် ၆၅,၀၀၀ ဂါလံ
ရေအရင်းအမြစ်	အဝိဇ္ဇာတွင်းရေ
လိုအပ်သောကုန်ကြမ်းပစ္စည်းများ	နိုင်ငံခြားမှတင်သွင်းသော သားရေ၊ အထည်လိပ်များနှင့် ချုပ်လုပ်မှုဆိုင်ရာ ဆက်စပ်ပစ္စည်းများ (ကုန်ကြမ်းပစ္စည်းများ

	စာရင်းအား အခန်း ၄ တွင် ဖော်ပြထားပါသည်)
စီမံကိန်း၏အကျယ်အဝန်း	၁၈၂၁၀.၉ စတုရန်းမီတာ (၄.၅ ဧက)
စီမံကိန်းနေရာမြေနေရာအသုံးပြုမှု	စက်မှုဇုန်မြေကွက်များ
စီမံကိန်းလက်ရှိအခြေအနေ	လုပ်ငန်းလည်ပတ်နေသည့်အနေအထား
ရေစွန့်ထုတ်မှုစနစ်	စက်ရုံတွင်းရေမြောင်းစနစ် အသုံးပြု၍ လူသုံးစွန့်ပစ် ရေများနှင့် မိုးရေများကိုသာစွန့်ထုတ်သည်။လုပ်ငန်းသုံးရေများစွန့်ထုတ်ခြင်းမရှိပါ
အမှိုက်စွန့်ပစ်မှုစနစ်	စက်ရုံမှ ထွက်ရှိလာမည့် စွန့်ပစ်အမှိုက်နှင့် ဖြတ်စများအားရန်ကုန် မြို့တော် စည်ပင် သာယာရေး ကော်မတီနှင့် စက်မှုဇုန် ကြီးကြပ်ရေး ကော်မတီတို့မှချမှတ်ထားသော အမှိုက်စွန့်ပစ်ခြင်းဆိုင်ရာ နည်းလမ်း များအတိုင်း စွန့်ပစ်သည်။
ဆက်သွယ်ရန်ပုဂ္ဂိုလ်	ဒေါ်နီလာလွင် (မန်နေဂျာ) ၀၉၂၅၄၀၅၅၆၂၉၉၊ ၀၉၉၅၇၈၀၅၅၃၁ email. dreamlovedreamlove758@gmail.com
အလုပ်သမားဦးရေ	နိုင်ငံခြားသား - ၇ မြန်မာနိုင်ငံသား - ၈၂၄ စုစုပေါင်း ၈၃၁

### စီမံကိန်းဒါရိုက်တာ အဖွဲ့ဝင်များ

စဉ်	အမည်	ရာထူး	နိုင်ငံသား
၁	Mr. Zhang Yuqiang	ဒါရိုက်တာ	တရုတ် PP No. E58526898
၂	Mr. Xiao Xiaojun	ဒါရိုက်တာ	တရုတ် PP No. EG8664971

### ၁.၆။ အနီးပတ်ဝန်းကျင်အကြောင်းအရာဖော်ပြချက်

စီမံကိန်းတည်နေရာသည် ရန်ကုန်တိုင်းဒေသကြီး၊ ဒဂုံဆိပ်ကမ်းမြို့နယ်၊ မြေတိုင်းရပ်ကွက် အမှတ် စက်မှုဇုန်(၁)၊ မြေကွက် အမှတ် (၁၉၈/၁၁၊ ၁၉၈/၁၄၊ ၁၉၈/၁၅) ပေါ်တွင်တည်ရှိပြီး စက်ရုံ၏ အနောက်မြောက်ဘက်တွင် Myat Mi Ba Steel Factory စက်ရုံ၊ အရှေ့ဘက်တွင် Myanmar Mercury Garment (clothing) Shope တည်ရှိပြီး အနောက်ဘက်တွင် ကားလမ်းရှိကာ တောင်ဘက်တွင် မြေကွက်လပ်ကြီးတစ်ခု တည်ရှိနေသည်။ စီမံကိန်းလုပ်ကွက်ဧရိယာ၏ အခြေပြသဘာဝ မြေမျက်နှာ သွင်ပြင်၊ ပတ်ဝန်းကျင်၊ လူမှုစီးပွား၊ ယဉ်ကျေးမှုနှင့် မြင်ကွင်းဆိုင်ရာ လက္ခဏာ တို့ကို ဤကနဦးပတ်ဝန်းကျင် ဆန်းစစ်ခြင်း အစီရင်ခံစာအခန်း(၅)တွင် ဖော်ပြ ထားပါသည်။ ဤအခန်းတွင် တင်ပြထားသည့် တဆင့်ခံ အချက်အလက်များ (secondary data)ကို ထုတ်ဝေပြီးသော သတင်းအချက် အလက်များ၊ လုပ်ငန်း ဖော်ဆောင်သူထံမှရရှိသော အချက်အလက်များနှင့် ဒဂုံဆိပ်ကမ်းမြို့နယ် အထွေထွေအုပ်ချုပ်ရေး ဦးစီးဌာနမှ ပြဌာန်းထားသော

မြို့နယ်ဆိုင်ရာ အချက်အလက်များမှ ရယူထားပါသည်။ မူလ လူမှုဆိုင်ရာ နှင့် ပတ်ဝန်းကျင် အခြေခံအချက်အလက်များ (primary data) ဖြစ်သည့် ဆူညံမှု တိုင်းတာခြင်း၊ လေ၊ ရေအရည်အသွေးတိုင်းတာခြင်းတို့ကို ၂၀၂၁ ခုနှစ် နိုဝင်ဘာလ အတွင်း ကွင်းဆင်း ဆောင်ရွက်ခဲ့ပါသည်။ ရရှိလာသော အရည်အသွေး ရလဒ်များသည် အမျိုးသား ပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များနှင့် နှိုင်းယှဉ်ချက်များအရ စံသတ်မှတ်ချက် အတွင်း တည်ရှိနေသည်ကို တွေ့ရှိရပါသည်။ (အသေးစိတ်ကို အခန်း ၅ တွင် ဖော်ပြထားပါသည်)

#### ၁.၇။ သက်ရောက်မှုဖော်ထုတ်ဆန်းစစ်ခြင်းနှင့် ကုစားရန်နည်းလမ်းများ

ဖြစ်ပေါ်လာနိုင်သည့် လူမှုစီးပွားသက်ရောက်မှုများကို ဖော်ထုတ်ရန် စီမံကိန်းလုပ်ငန်းစဉ်များကို သက်ရောက်ခံ ပတ်ဝန်းကျင်နှင့်ချိတ်ဆက်ကာ ဆက်စပ်ဖော်ထုတ်ခဲ့ပါသည်။ စက်ရုံသည် ဆောက်လုပ်ဆဲစက်ရုံမဟုတ်ဘဲ လုပ်ငန်းလည်ပတ်နေသောကြောင့် ဆောက်လုပ်ရေး လုပ်ငန်းခွင်ကြောင့် ဖြစ်ပေါ် တတ်သော သက်ရောက်မှုများ မရှိကြောင်းတွေ့ရသည်။ စီမံကိန်းကြောင့် စီမံကိန်းဧရိယာ၏ ပတ်ဝန်းကျင်တွင် ဖြစ်ပေါ်သည့် ပတ်ဝန်းကျင်နှင့်လူမှုစီးပွားသက်ရောက် များကို ဆန်းစစ်ဖော်ထုတ်ခဲ့ပါသည်။

#### (က) လေထုပတ်ဝန်းကျင်အပေါ်သက်ရောက်မှု

လုပ်ငန်းလည်ပတ်စဉ်တွင် စက်များလည်ပတ်ရာမှ ထွက်ရှိမည့် အမှုန်အမွှားများ၊ သယ်ဆောင်ရေး ယာဉ်များ သွားလာမှု၊ မီးစက် လည်ပတ်မှု စသည်များကြောင့် ပတ်ဝန်းကျင်လေထုအပေါ် ဆိုးကျိုးသက်ရောက်နိုင်ပါသည်။ စီမံကိန်းကြောင့် လေထုအပေါ်သက်ရောက်သည်လည်း အနည်းငယ်သာ ရှိကြောင်း တွေ့ရပါသည်။

သက်ရောက်မှု လျော့ချရန်/ ကုစားရန်

- စက်ရုံအဆောက်အဦးတွင် Funs & Exhaust Fans များတပ်ဆင်သုံးစွဲပါသည်
- ကောင်းမွန်သည့်ယာဉ်နှင့်ယန္တရားများ အသုံးပြုခြင်းနှင့်ပုံမှန်စစ်ဆေးခြင်းပြုလုပ်မည်။
- လေထုထဲသို့ အနံ့သက်ဆိုးများ မရောက်နိုင်အောင် စွန့်ပစ်ပစ္စည်းများကို နေစဉ် ကြပ်မတ် ဆောင်ရွက်ရန်၊ မီးရှို့ဖျက်ဆီးခြင်းကို မပြုလုပ်ဘဲ သတ်မှတ်နေရာများတွင်သာ စနစ်တကျ စွန့်ပစ်ပါမည်။

#### (ခ) ရေထုပတ်ဝန်းကျင်အပေါ်သက်ရောက်မှု

စီမံကိန်းမှ လုပ်ငန်းသုံးရေဆိုးထွက်ရှိမှုမရှိပါ။ သန့်စင်ခန်းများလည်းစနစ်တကျ ဆောက်လုပ်ထားသည်ကိုတွေ့ရှိရပါသည်။ စက်သုံးဆီများဖိတ်စင်ခြင်း၊ စားကြွင်းစားကျန်အမှိုက်များ ကြောင့် ပတ်ဝန်းကျင်ရေနှင့် မြေအောက်ရေပြင်ကို ညစ်ညမ်းစေနိုင်ပါသည်။

သက်ရောက်မှု လျော့ချရန်/ကုစားရန်

- ရေနုတ်မြောင်းများနှင့် အနည်ထိုင်စေမှုထိန်းချုပ်ခြင်းဆိုင်ရာ တည်ဆောက်ထားမှုများအားလုံးကို ပုံမှန်စစ်ဆေးခြင်းနှင့် ပြုပြင် ထိန်းသိမ်းမှုလုပ်ဆောင်ပါမည်။

- စက်ရုံနှင့်လူနေအဆောင်များအတွက် မိလ္လာစနစ်ကိုတည်ဆောက်သွားမည်ဖြစ်သည်။ မိလ္လာရေဆိုးများကို စက်ရုံရေနုတ်မြောင်းစနစ်သို့ မဖောက်ထုတ်မီ လုပ်ငန်းခွင်နေရာမှစီးကျခြင်းနှင့် စွန့်ပစ်ပစ္စည်းစွန့်ထုတ်မှုများနှင့် ပတ်သတ်သော မြန်မာနိုင်ငံ အမျိုးသားပတ်ဝန်းကျင် အရည်အသွေး (ထုတ်လွှတ်မှု)လမ်းညွှန်များ (NEQG) နှင့်အညီ သန့်စင်ဆောင်ရွက်ပါမည်။
- စက်သုံးဆီများကို ဖိတ်စင်မှမရှိအောင် စနစ်တကျ ကိုင်တွယ်အသုံးပြုပါမည်။

#### (ဂ) ဆူညံသံနှင့်တုန်ခါမှု သက်ရောက်မှု

စက်ရုံလည်ပတ်စဉ် အိတ်နှင့်ခါးပတ်များထုတ်လုပ်သည့်စက်များကြောင့် ဆူညံသံသက်ရောက်မှု ဖြစ်ပေါ်နိုင်ပါသည်။ အထူးသဖြင့်သားရေဖြတ်ခြင်း၊ အပ်ချပ်ခြင်း၊ တွယ်စက်ဖောက်စက်များ၊ လေထုတ်ပန်ကာများ လည်ပတ်ခြင်းကြောင့်လည်းကောင်း၊ မီးစက်နှင့် မော်တော်ယာဉ်များ အသုံးပြုခြင်းသည် (တိုတောင်းသော/သက်တမ်းတိုသောဆူညံသံ) ဆူညံသံသက်ရောက်မှု ဖြစ်စေမှုများဖြစ်သည်။

သက်ရောက်မှု လျော့ချရန်/ ကုစားရန်

- အသံထွက်သော မီးစက်များ၊ အင်ဂျင်များတွင် အသံထိန်းစနစ် (Silencer/Muffler) များ တပ်ဆင်အသုံးပြုရန်
- တက်နိုင်သမျှအသံဆူညံသောစက်များ အသုံးမပြုရန်
- အသံဆူညံသောနေရာ၌လုပ်ငန်းများဆောင်ရွက်ရာတွင် သတ်မှတ်နာရီအတွင်းလုပ်ဆောင်ရန်နှင့် အကာကွယ် နားကြပ်တပ်၍ လုပ်ဆောင်ရန်

#### (ဃ) စွန့်ပစ်ပစ္စည်းကြောင့်မြေထုပတ်ဝန်းကျင်အပေါ်သက်ရောက်မှု

အဆိုပြုစက်ရုံသည် IEE အစီရင်ခံစာ ရေးဆွဲချိန်တွင် လုပ်ငန်းများ စတင် စမ်းသပ်လည်ပတ်နေချိန်ဖြစ်ပါသည်။ စီမံကိန်းဧရိယာ၏ (၉၀%)ခန့်သည် အဆောက်အဦးနှင့် ကွန်ကရစ်ဖောင်ဒေးရှင်းခင်းထားပြီး အရှေ့ဘက်၌သာ မြေကွက်လပ်အနည်းငယ်ရှိပါသည်။ လုပ်ငန်းသုံး စွန့်ပစ်ပစ္စည်းများဖြစ်သော သားရေဖြတ်စ၊ စက္ကူစ၊ ပလပ်စတစ်နှင့်ကတ်ထုစများ လူသုံးနှင့်စက်ရုံကုန်းတင်းမှ စွန့်ပစ်အမှိုက်သရိုက်နှင့် စားကြွင်းစားကျန်များ စသည့် ပစ္စည်းများကြောင့် စက်ရုံနှင့်ပတ်ဝန်းကျင် မြေသားများအပေါ် ညစ်ညမ်းမှု ဖြစ်စေနိုင်ပါသည်။ လုပ်ငန်းသုံး စွန့်ပစ်ပစ္စည်းများ၊ အမှိုက်သရိုက်များကို စနစ်တကျ မစွန့်ပစ်ပါက မြေသားများအပေါ် ညစ်ညမ်းမှု ဖြစ်စေနိုင်ပါသည်။ သယ်ယူပို့ဆောင်ရေးအတွက် ယာဉ်ကြီးယာဉ်ငယ်များ အသုံးပြုရသောကြောင့် စက်ဆီယိုဖိတ်မှုများကြောင့်လည်း ညစ်ညမ်းမှု ဖြစ်စေနိုင်ပါသည်။

သက်ရောက်မှုကုစားရန် နည်းလမ်းများ

- လုပ်ငန်းသုံးနှင့် လူသုံး စွန့်ပစ် ပစ္စည်းများကို သတ်မှတ်နေရာတွင် စွန့်ပစ်ပြီး မြို့နယ် စည်ပင်သာယာရေးကော်မတီမှ သတ်မှတ်ထားသော နေရာတွင်သာ စွန့်ပစ်မည်။
- ဒီဇယ်ဆီ ဓါတ်ဆီများကို အသုံးပြုရာတွင် မြေပေါ်သို့ မကျရောက်အောင် စနစ်တကျ သုံးစွဲမည်။

- စွန့်ပစ်ပစ္စည်းများကို ပစ္စည်းအမျိုးအစားအလိုက် သတ်မှတ်နေရာများတွင် စနစ်တကျ စွန့်ပစ်ပါသည်။

### (င) လူမှုစီးပွားရေး

စီမံကိန်းစက်ရုံ လုပ်ငန်းလည်ပတ်ရေးကာလအတွင်း ဒေသခံပြည်သူများမှာ အလုပ်အကိုင် အခွင့်အလမ်းများ ရရှိမည်ဖြစ်သောကြောင့် မိသားစုဝင်ငွေများ တိုးတက်ရရှိလာမည် ဖြစ်ပြီး လူနေမှု အဆင့်အတန်းလည်း မြင့်တက်လာမည်ဖြစ်ပါသည်။

### (စ) ကျန်းမာရေးနှင့် လုပ်ငန်းခွင် ဘေးအန္တရာယ် ကင်းရှင်းရေး

စက်ရုံလုပ်ငန်းခွင် မတော်တဆ ထိခိုက်မှုများနှင့် လုပ်ငန်းသုံး ယာဉ်များသွားလာမှုများမှ မတော်တဆ ဘေးအန္တရာယ်များ ဖြစ်ပေါ်နိုင်သောကြောင့် လုပ်သားများနှင့် ဒေသခံများအပေါ် အန္တရာယ်ရှိနိုင်ပါသည်။ ထို့အပြင် လုပ်သားများမှတစ်ဆင့် ကူးစက်သော ရောဂါများလည်း ပြန့်ပွားခြင်းများ ဖြစ်နိုင်ပါသည်။ အထက်ပါအန္တရာယ်များအတွက် စောင့်ကြပ်ကြည့်ရှုရေး အစီအစဉ်များကိုစနစ်တကျ ရေးဆွဲပြီး အကောင်အထည်ဖော် ဆောင်ရွက်မည် ဖြစ်ပါသည်။

### ၁.၈။ ပြည်သူများနှင့်တွေ့ဆုံဆွေးနွေးခြင်း

အဆိုပြုစီမံကိန်းသည် စက်မှုဇုန်အတွင်းတည်ရှိခြင်းကြောင့် လူထု ပူးပေါင်းပါဝင်မှု အနေဖြင့် အဆိုပြုစက်ရုံလည်ပတ်လျက်ရှိသည့် စက်မှုဇုန်အတွင်းရှိ အနီးအနားစက်ရုံများအား ကွင်းဆင်း လေ့လာမေးမြန်းခြင်း၊ စက်ရုံ တာဝန်ရှိသူများအားမေးမြန်းခြင်း၊ စက်ရုံလုပ်သားများအား မေးမြန်းခြင်း စသည်တို့ကိုလုပ်ဆောင်ခဲ့ပါသည်။ စက်ရုံတွင်း တွေ့ဆုံပွဲအား ၂၀၂၂ ခုနှစ်၊ ဇန်နဝါရီလ ၂၀ ရက်နေ့တွင် စက်ရုံစုဝေးခန်းမ၌ ပြုလုပ်ခဲ့ပြီး စက်ရုံ တာဝန်ရှိသူများ၊ စက်ရုံ လုပ်သားများ တက်ရောက်ခဲ့၍ လုပ်ငန်းအပေါ် သဘောထားစစ်တမ်းများကောက်ယူခဲ့ပါသည် နောက်ဆက်တွဲတွင်ဖော်ပြထား ပါသည်။

### ၁.၉ ။ ပတ်ဝန်းကျင်နှင့်လူမှုရေးဆိုင်ရာ စီမံခန့်ခွဲမှု အကျဉ်းချုပ်

ဤပတ်ဝန်းကျင်နှင့်လူမှုရေးဆိုင်ရာ စီမံခန့်ခွဲမှုအစီအစဉ်သည် အဆိုပြုထားသော စီမံကိန်း၏ ဖြစ်နိုင်ချေရှိသော အပြုသဘောဆောင်သောသဘာဝ ပတ်ဝန်းကျင်ဆိုင်ရာ သက်ရောက်မှုများ အားလုံးကို စနစ်တကျ စူးစမ်းလေ့လာခဲ့ပြီး လုပ်ငန်းလည်ပတ်မှုအဆင့်များတွင် ဖြစ်ပေါ်နိုင်သည့် ဆိုးကျိုးသက်ရောက်မှုများ အပေါ်လျော့ပါးသက်သာစေခြင်းနှင့် စောင့်ကြည့် လေ့လာခြင်း နည်းလမ်းများကို ဖော်ထုတ်ထား ပါသည်။ ပတ်ဝန်းကျင်နှင့်လူမှုရေးဆိုင်ရာ စီမံခန့်ခွဲမှုလုပ်ငန်းများ လုပ်ကိုင်နိုင်ရန်အတွက် နှစ်စဉ် ရန်ပုံငွေ တစ်ရပ်ထားရှိမည်ဖြစ်ပြီး ပတ်ဝန်းကျင်နှင့်လူမှုရေး လုပ်ငန်းများကို စောင့်ကြပ်အဖွဲ့အစည်းများ နှင့်အတူ တိုင်ပင်ဆွေးနွေးကာ ပူးပေါင်း ဆောင်ရွက် သွားမည် ဖြစ်ပါသည်။



**(က) ပတ်ဝန်းကျင်ရေးရာ စောင့်ကြည့် အဖွဲ့**

လုပ်ငန်းအတွက် စီမံခန့်ခွဲမှု (Environmental Management Plan) ကို အောင်မြင်စွာ အကောင်အထည်ဖော် ဆောင်ရွက်နိုင်ရန် အတွက် ပတ်ဝန်းကျင်ရေးရာ စောင့်ကြည့်ရေး အဖွဲ့ကို ဖွဲ့စည်းရန် လိုအပ်မည်ဖြစ်ပါသည်။ စောင့်ကြည့်အဖွဲ့တွင် ဌာနဆိုင်ရာ ကိုယ်စားလှယ်များ၊ ဒေသခံ ကိုယ်စားလှယ် များနှင့် စီမံကိန်း လုပ်ငန်းရှင်ကိုယ်စားလှယ်များ ပါဝင်သင့်ပါသည်။ ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှုအစီအစဉ်ကို အပြည့်အဝ အကောင်အထည်ဖော် ဆောင်ရွက်ရန် လုပ်ငန်းရှင်တွင် တာဝန်ရှိပါသည်။ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်၏ အစိတ်အပိုင်းတစ်ရပ်ဖြစ်သော ပတ်ဝန်းကျင်ဆိုင်ရာ စောင့်ကြည့်တိုင်းတာရေး အစီအစဉ် (Environmental Monitoring Programme) ကို လုပ်ငန်းရှင်က လိုက်နာဆောင်ရွက်ကာ တိုင်းတာတွေ့ရှိချက် အစီရင်ခံစာများ ကို ပတ်ဝန်းကျင်ရေးရာ စောင့်ကြည့်အဖွဲ့မှ အဖွဲ့ဝင်ကိုယ်စားလှယ်များထံ မိတ္တူပေးပို့ရမည် ဖြစ်ပါသည်။ လူမှုစီးပွား တာဝန်သိ အစီအစဉ် (Corporate Social Responsibility) အနေဖြင့် စီမံကိန်းက ဒေသခံများအတွက် ပေးအပ်သော ကူညီထောက်ပံ့မှုများကို လေ့လာ စောင့်ကြည့်ရေး အဖွဲ့ကိုယ်စားလှယ်များမှ တဆင့် ဒေသခံများသို့ ပေးအပ်ရမည်ဖြစ်ပါသည်။ ပတ်ဝန်းကျင် ရေးရာနှင့် စပ်ဆိုင်သော အကြောင်းတစ်စုံ တစ်ရာ ပေါ်ပေါက်ပါက ဒေသခံများ အနေဖြင့် စောင့်ကြည့်အဖွဲ့မှ အဖွဲ့ဝင် ဒေသခံ ကိုယ်စားလှယ်များမှတစ်ဆင့် စီမံကိန်းနှင့် ဆက်သွယ် ဆောင်ရွက်နိုင်မည်ဖြစ်ပါသည်။

**(ခ) လူမှုစီးပွားတာဝန်သိ အစီအစဉ် (CSR)**

အဆိုပြုလုပ်ငန်း မှ CSR ရံပုံငွေအဖြစ် နှစ်စဉ်အမြတ်ငွေ၏ ၂%အား ရန်ပုံငွေ ထားရှိပါမည်။ အဆိုပါ CSR ရန်ပုံငွေ၏ ၂၅ % အား ပညာရေးအတွက်လည်းကောင်း၊ ၂၅% အား ကျန်းမာရေး အတွက်လည်းကောင်း၊ ၂၅ % အား လုပ်ငန်းဆိုင်ရာသင်းတန်းများ အတွက် လည်းကောင်း ကျန် ၂၅% အား လူမှုရေးနှင့် ပတ်ဝန်းကျင် ဖွံ့ဖြိုးရေးလုပ်ငန်းများအတွက် သုံးစွဲမည်ဖြစ်ပါသည်။ အဆိုပါလုပ်ငန်းများ စနစ်တကျ အကောင်အထည်ဖော် ဆောင်ရွက်နိုင်ရန်အတွက် မြို့နယ် အုပ်ချုပ်ရေးမှူး၊ မြို့နယ်ပညာရေးမှူး၊ မြို့နယ်ကျန်းမာရေးမှူးများနှင့် ဒေသအုပ်ချုပ်ရေး၊ ရပ်မိရပ်ဖများဖြင့် အဖွဲ့ဖွဲ့ကာ ဆောင်ရွက်ထားမည်ဖြစ်ပါသည်။

**(ဂ) အလုပ်ခွင်အန္တရာယ်ကင်းရှင်းရေးနှင့် အလုပ်သမားကျန်းမာရေးစီမံချက်**

အလုပ်ခွင်လုံခြုံရေးနှင့် အလုပ်သမားကျန်းမာရေးစီမံချက်သည် လုပ်သားများ၏ ကျန်းမာရေးနှင့် လုပ်ငန်းခွင် လုံခြုံရေးအတွက် လုပ်ငန်းပိုင်ရှင်မှ လုပ်ဆောင်ရန် လိုအပ်သည်များ နှင့် ပြုလုပ်ရမည့် စီမံခန့်ခွဲမှု အား ဖော်ပြထားရှိပါ သည်။

**(ဃ) အရေးပေါ်အခြေအနေစီမံခန့်ခွဲမှု**

အရေးပေါ်အခြေအနေများ အနေဖြင့် လျှပ်စစ်အန္တရာယ်နှင့် မီးဘေးအန္တရာယ်တို့ ဖြစ်ပေါ်နိုင်ပြီး ယခုအစီရင်ခံစာတွင် အရေးပေါ် အခြေအနေတွင်လုပ်ဆောင်ရမည့်အချက်များအား အသေးစိတ် တင်ပြထားပါသည်။

**၁.၁၀။ နိဂုံး**

နိဂုံးချုပ်အနေဖြင့် ကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းအစီအစဉ်လေ့လာမှုတွင် အောက်ဖော်ပြပါ အချက်များကို သတ်မှတ်ဖော်ပြထားပါသည်။

၁။ စီမံကိန်းဖော်ဆောင်သူသည် စီမံကိန်း လည်ပတ်ရာတွင် ခေတ်မီ အဆင့်မြင့်နည်းပညာများ အသုံးပြုပြီး အရည်အသွေးမီ အိတ်နှင့်ခါးပတ်အမျိုးမျိုးထုတ်လုပ်သွားမည်ဖြစ်သည်။

၂။ စီမံကိန်း အကောင်အထည်ဖော်ဆောင်မှု အဆင့်အလိုက် ပတ်ဝန်းကျင် အရည်အသွေး တန်ဖိုးများကို လေ့လာဆန်းစစ်ပြီး အစီရင်ခံစာတွင် အသေးစိတ်ဖော်ပြထားပါသည်။

၃။ ပတ်ဝန်းကျင်နှင့် လုပ်ငန်းခွင်အတွင်းဘေးကင်းစေ၍ အရည်အချင်းပြည့်မီသော ဝန်ထမ်းများဖြင့် စီမံကိန်းကိုအဆိုပြုစီမံခန့်ခွဲမှုအစီအစဉ်များအတိုင်း အကောင်အထည်ဖော်ဆောင်ရွက်သွားမည် ဖြစ်ပါသည်။

ထို့ကြောင့်စီမံကိန်းအဆိုပြု သူအနေဖြင့် ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးနှင့်သက်ဆိုင်သော ဥပဒေ ပြဌာန်းချက် များအား လေးစားလိုက်နာပြီး ယခုကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်း အစီရင်ခံစာတွင် တင်ပြထားသော အဆိုပြုအချက်အလက်များကို အပြည့်အဝလိုက်နာဆောင်ရွက် အကောင်အထည်ဖော်ဆောင်မည်ဖြစ်ကြောင်း၊ ဒေသတွင်း လူမှုစီးပွားရေး တိုးတက်ဖွံ့ဖြိုးစေမည် ဖြစ်ကြောင်း နှင့် နိုင်ငံတော်အတွက် အခွန်ဘဏ္ဍာများ တိုးတက်ရရှိစေမည် ဖြစ်ကြောင်း တင်ပြအပ်ပါသည်။

## **1. EXECUTIVE SUMMARY**

### **1.1 Introduction**

The project proponent, Milestone Leatherware Co., Ltd has retained HRD Environmental Training and Services Co., Ltd to conduct the Initial Environmental Examination (IEE) study for the proposed project. The proposed Factory is located in Plot No. (198/11, 198/14, 198/15) Myay Taing Block No. Industrial Zone (1), Dagon Seikan Township, Yangon Region. It is a manufacturing of various kinds of bags and belts on CMP basis factory. The IEE study for the proposed project was started in October, 2021 and compliance with the Environmental Conservation Law (2012) and Environmental Impact Assessment Procedures (2015).

### **1.2. Objectives**

The IEE report for proposed project is prepared to:

- To assess whether it is in compliance with the existing law and regulation of Myanmar
- assess the project's likely positive and negative, direct and indirect impacts to physical, biological, socioeconomic, and physical cultural resources in the project's area of influence;
- describe the process undertaken during project design to engage stakeholders, and the planned information disclosure measures and the process for carrying out consultation with affected people and facilitating their participation during project implementation;
- present a set of mitigation measures to avoid, reduce, mitigate, or compensate for adverse environmental impacts;

### **1.3. Policy, Legal and Framework**

This IEE for proposed project has been undertaken in accordance with the relevant national laws, rules and environmental legislation including Environmental Impact Assessment Procedure (2015), Myanmar's National Environmental Quality (Emission) (NEQ) Guidelines, World Health Organization Guidelines (WHO) and IFC Guidelines. (See details in Chapter 3)

### **1.4. IEE Study**

This IEE study involves, detailed reconnaissance visit to the site to assess the existing environmental baseline condition of the area, subsequent assessment of potential environmental and social impacts from the construction activity and during the operation phase of the proposed project in order to suggest the necessary mitigation measures, required to be taken for the protection of the environment. The activities involved in the study are; Direct data collection; Interview with individuals or groups; Meeting with local communities; Those who may be affected by the project; Local governance bodies; Community-based organizations; Meetings with civil society organizations; Study only natural resources; Weather conditions; This includes measuring the quality of water, air and soil in and around the project. The study of living resources includes the study of trees that grow at the site of the proposed project; the study of birds, mammals, and aquatic animals. The socioeconomic

status of the population; economic situation; job and the educational situation of the community in the project environment were collected.

### 1.5. Project Description

The type of proposed project is manufacturing of various kinds of bags and belts using the Cut-Make-Pack (CMP) basis. The brief procedure of CMP system is a form of production on consignment in which the raw materials are imported or bought from foreign countries, then cutting, staining, cementing, stitching, checking and packing in proposed factory, after which all of the finished products are exported. The followings are the brief of project description.

Project Descriptions	
Project Developer	Milestone Leatherware Co., Ltd.
Type of Project	Manufacturing of various kinds of bags and belts
Location	Plot No. (198/11, 198/14, 198/15), Myay Taing Block No. Industrial Zone (1), Dagon Seikan Township, Yangon Region
Investment types	Foreign owned investment
Amount of investment	USD 1.219 Million
Investment Period	30 years
Capacity	Approx; (16,600,000 Pes/year)
fossil fuels	Approx- 850 gal/year
Water Requirement	Approx.: 65,000 gal/year
Source of Process Water	Underground (Tube Well), Depth; ~65m (200 ft-400ft)
Power Requirement	Approx- 200,000kW/year
Source of Electrical Power	MEPE
Raw materials	Leather, split leather and related accessories (See details in Chapter 4)
Land used	4.5 Acre (industrial zone)
Effluent	Domestic effluent; Sewage treatment facilities will be provided for all sewage generated on site. Factory effluent; no effluent from factory process
Solid waste management system	Recyclable domestic waste will be recycled. Other domestic waste will be disposed of in a domestic waste disposal site as directed by YCDC
Contact Person / Responsible person	Daw Nilar Lwin (Manager) Phone number 09 254056299, 09 957805531 Email: dreamlovedreamlove758@gmail.com
No. of Workers Used	831 employees

***Director of Milestone Leatherware Company Limited***

<b><i>Name</i></b>	<b><i>Position</i></b>	<b><i>Citizenship</i></b>
Mr. Zhang Yuqiang	Director	Chinese PP No. E58526898
Mr. Xiao Xiaojun	Director	Chinese PP No. EG8664971

**1.6. Description of the Surrounding Environment**

The proposed Factory is located in Plot No. (198/11, 198/14, 198/15) Myay Taing Block No. Industrial Zone (1), Dagon Seikan Township, Yangon Region. Vicinity around the Proposed Project, Myat Mi Ba Steel Factory is located in the northwest of the factory. To the east is the Myanmar Mercury Garment (clothing) Shope, to the west is the ThaMarDi (2) street, and to the south is a large vacant lot. The factory is not under construction and is operating, so there is no impact on the construction site. The baseline components of the project area including physical, biological, socio-economic, cultural and visual are described in the Section-5 of this report. The information provided in this section is based on data collected from primary and secondary sources. Secondary sources include a desktop review of published information, supplemented with information provided by project proponent and township profiles from official township data of Dagon Seikan Township. Primary social data and environmental onsite measurements (noise, air, and water quality) were collected in November 2021. Quality results are found the guideline in accordance with the NEQG.

**1.7 Identification of Impact and Mitigation Measurement**

To identify the potential environmental and social impacts of the project, project activities were correlated with environmental and social receptors and their interactions were identified for potential environmental and social impacts. The factory is not under construction and is operating, so there is no impact on the construction site. IEE study team finds out key environmental and social impacts of the project on its environment.

**(a) Impact on Air Environment**

The proposed project, emissions of air pollutants can occur a little from the activities such as vehicles movement, auxiliary generator running during the operation. So, the project will avoid, minimize, and control adverse impacts to human health, safety, and the environment from emissions of air pollutants. Dust will be generated from factory machine lines such as cutting, trimming; can have a detrimental effect on the surrounding atmosphere.

**(b) Impact on Water Environment**

There is no industrial wastewater from the project. During the operation phase, sanitation/ drainage system will be developed. The other domestic wastewater is storm water discharge. If can not proper management of spill of oil and grease, domestic wastewater and solid wastes, they can contaminate the surrounding water and groundwater.

**(c) Impact on Noise and Vibration**

During the factory operation, noise impact may be a significant impact for bags and belts production sectors. The significant sources of noise impact activities are the operation of various machineries and equipment for production especially leather cutting, sewing, punch machines, building exhaust fans and the emergency use of generator, vehicles and automobile movements (short term noise) will be sources of noise impacts.

**(d) Solid Waste Impact on Land Environment**

The proposed factory was in operation at the time of drafting the IEE study. About 90% of the project area is paved with buildings and concrete foundations, and there is little space on the east side only. During the factory operation, process wastes such as the pieces of leather, paper, plastic and cardboard and domestic waste from canteen and workers such as bottle, tin, food and plastics can pollute the plant and the surrounding soil. During the operation phase domestic and process waste from factory, oil and grease from machine and industrial waste; if garbage is not disposed of properly, it can pollute the soil and land.

**(e) Social Impacts**

There will be more job opportunities for local people during factory operation phase. Due to the potential job opportunities, there will be more income that will improve their standard of living.

**(f) Health and Safety**

Health and safety of the workers can impact from risk of accidents from factory operation workplace and the vehicle traffic/ accidents as well as from the various operation activities. All staffs will have to wear the relevant PPE whenever they are in work site. Moreover, the communicable diseases are expected to transmit on both workers and local community. The appropriate monitoring plan will be implemented systematically for health and safety issues.

**1.8. Public Consultation**

The proposed factory is situated in industrial zone. Different techniques of consultation with public were used during project preparation (interviews, public meetings, group discussions, etc). The factory meeting will be held on 20th January, 2022 at the factory assembly hall. Factory workers attended and conducted a survey on the business. It is mentioned in the appendix.

**1.9. Environmental Management Plan**

This EMP has, in brief, systematically explored all possible positive and negative environmental impacts of the proposed project and identified mitigation and monitoring measures on negative impacts which can be occurred in operation phases.

Environmental and social management needs to be funded annually and environmental and social work will be coordinated with Environmental Monitoring Team.

**(a) Environmental Monitoring Team**

An Environmental Monitoring Team must be established for successful implementation of the environmental management plan. The project proponent is responsible for complete



implementation of the EMP. Proponent will carry out environmental monitoring programme which is part of the EMP and the monitoring report will be distributed to the participants of the monitoring team. Implementation of CSR programme will also be facilitated with the participation of the monitoring team. Local community could communicate with the project for environmental affairs through the monitoring team. The objectives of the Environmental Monitoring Team are as follows:

- To release information on the implementation of EMP for local community continuously
- To distribute information on environmental monitoring to local community
- To create a proper communication channel between the project and local community relating to environmental affairs
- To insert a check and balance action for the management of fund and aids provided by the CSR programme .The team mainly consists of representatives from government departments, the project and local communities. The representatives from local communities must be elected by respective local communities by themselves.

#### **(b) Corporate Social Responsibility (CSR)**

The project will provide 2% of annual net profit for carrying out CSR programs in local community. 25% for Educational sector, 25% for health sector and, 25% for workers training programs and 25% for local society welfare programs will be included in CSR programmes.

#### **(c) Occupational Safety and Health Management Plan**

Occupational safety and health management plan for the proposed factory include potential safety and health impacts on workers and outlines what employers need to do to ensure the health and safety of their employees.

#### **(d) Emergency Response Plan**

Emergency incident response plan for proposed factory is proposed to mitigate harms on humans and environment in the project area and its vicinity in case of incident. Emergencies can lead to electrical and fire hazards, and this report details what to do in an emergency.

### **1.10 Conclusion**

In conclusion, the Initial Environmental Examination (IEE) study identifies the following:

- The project developer will use high technology to produce various kinds of bags and belts during the project's operation
- Environmental quality values for each project implementation phase are analyzed and detailed in the report.
- The project will be implemented in accordance with the proposed IEE with qualified staff for safe environment and workplace

Therefore, the project proponent will fully implement the proposals contained in the Environmental Management Plan report. It should be submitted that it will develop the socio-economic development of the region and increase the revenue for the State.

## 2. INTRODUCTION

Milestone Leatherware Company Limited was established in September, 2020 according to the Certificate of Directorate of Investment and Company Administration. The type of business of the proponent is a 100% foreign investment established under the Myanmar Companies Act. The project proponent requested HRD Environmental Training and Services Co., Ltd. (HRD) (the Consultant) to complete the Environmental Management Plan (IEE) for the proposed Project.

The Project is a factory that manufactures various kinds of bags and belts on CMP basis. The necessary raw materials will be imported from China, Korea, India and other foreign countries. IEE for the Project identifies the principal approaches, procedures and methods to control and minimize the environmental and social impacts of the factory operation. The main objectives of the IEE are (a) to identify environmental impact, (b) to define details of who, what, where and when environmental management and mitigation measures to be implemented and (c) to ensure that the environmental quality of the area does not deteriorate due to the Project.

### 2.1 Category of Project

The Department of Environmental Conservation under the Ministry of Natural Resources and Environmental Conservation (MONREC) has categorized the industries based on the nature of the industry and the volume of the waste disposed into four categories:

1. No environmental assessment is required,
2. Only Environmental Management Plan (EMP) is required,
3. Initial Environmental Examination (IEE) and Environmental Management Plan (EMP) are required, and
4. Detailed Environmental Impact Assessment and Environmental Management Plan (EMP) are required.

So, That Project is Category No (3). According to the ECD law and regulation.

### 2.2. The Aim of the Proposed Project

The developer statements publicly that the proposed project will need in Myanmar due to the following reasons:

- (a) To increase export to foreign countries as enrichment products,
- (b) To acquire new technologies and management knowledge from foreign countries
- (c) To improve employment opportunities for local people
- (d) To improve national foreign currency income,

### 2.3. Brief of the Project Proponent

The followings are the brief of project proponent.

Project promoter	Mr. Zhang Yuqiang (Director)
Citizenship	Chinese Passport No. E58526898
Phone number	+95 421016798

Email	bishen-jun@yixinbag.cn
Address	Plot No. (198/11, 198/14, 198/15), Myay Taing Block No. Industrial Zone (1), Dagon Seikan Township, Yangon Region
Company Name	Milestone Leatherware Co., Ltd.
Type of Project	Manufacturing of various kinds of bags and belts on CMP
Investment types	Foreign owned investment
Amount of investment	USD 1.219 Million
Investment Period	30 years
Contact person	Daw Nilar Lwin (Manager) Phone number 09 254056299, 09 957805531 Email: dreamlovedreamlove758@gmail.com

**(i) Types of business organization to be formed:**

One hundred percent : 100% Foreign Company

**(ii) List of shareholder**

No.	Name of Executives	Citizenship & Passport No.	Share Ratio	Address
	Yixin Leather Products (HK) Co., Limited Representative by;	Hong Kong	100%	6/F, CNT, Commercial Building No. 302, Queen's Road, Central, Hong Kong, China
1.	Mr. Zhang Yuqiang (Director)	Chinese PP No. E58526898		No. 54, Group 8, Xiebutan Village, Anfu Street, Rongchang country, Chongqing, China
2.	Mr. Xiao Xiaojun (Director)	Chinese PP No. EG8664971		No.38, Dutou Natural Village, Dutou Village, Yongyang Town, Ji'an Country, Ji'an City, Jiangxi Province, China

**(iii) Particulars of company incorporation**

- (a) Authorized capital : Private Company Limited by Shares
- (b) Type of share : Ordinary
- (c) Number of share : 10,000
- (d) Profile of Parent Company : Yixin Leather Products (HK) Co., Limited
- (e) Parent Company's Capital Contribution in proposed investment project : USD 1.219 Million

**(iv) Particulars of Paid-up Capital of the Investment**

	US\$ (Millions)
(a) Amount/percentage of local capital to be contributed	Nil
(b) Amount/percentage of foreign capital to be brought in	100% (1.219)
Total	100% (1.219)

## 2.4. Brief of the Environmental Assessment Practitioner

Below is the background information on HRD Environmental Training and Service Co., Ltd., (Third party) who will conduct the ESIA.

HRD Environmental Training and Service Co., Ltd.	
Company Name	HRD Environmental Training and Service Co., Ltd.
Company Registration Number	117441881 3633/2016-2017 (Ygn)
TCR No.	00071
Contact Address	Room.3, Bdg.2, Quarter 3, Insein Road, Mayangon Township, Yangon
Telephone	+95 49201658, +95 9256036414
E-mail	hrd.environment2019@gmail.com, aunglaytin@gamil.com
Contact person	Prof. Dr. Aung Lay Tin Senior ESIA Team Leader 09256036414

### Study Team

This IEE for the Milestone Leatherware Co., Ltd. by HRD Environmental Training and Service Co., Ltd. The environmental study was carried out by the project listed below and following is a summary of team member's responsibilities during the study period. This IEE report represents the objectives, methodology and outcomes of in line with the Environmental Impact Assessment (EIA) Procedure. Below Table presents key team members for the preparation of this IEE.

Sr.	Name	Position	Responsibility
1	Dr.AungLay Tin	Team Leader BE,ME ( Mining, YTU), Ph.D (Mining(Env,YTU)	Management and Others/ Air and Noise
2.	Dr.Kyaw Soe	BE( Metallurgy), YTU,2002 M.Sc Beihang University (China), 2006 Ph.D BeJing University ( China),2011	Emergency Management Plan, Disaster Management Plan, Pollution Control
3.	Dr.Myo Min Htun	Ph.D (Metallurgy)	EMP and Waste Management, Hazard
4.	U Tint Naing Zaw	Team Members , B.Sc. (Forestry) LL.B. P.G.Dip.(Environmental	Legal analysis, Public consultation

		Impact Assessment and Environmental Management System)	
5.	Daw Thazin Htwe	BE.(IT); M.S in EIA/EMS	Occupational Safety and Health
6.	U Phyo Maung Maung	BE(Mining),WYTU,2012	Facilitator, Public Consultation
7.	Mg Kaung Set	BA( Geo) not finised	Air, Noise, HAZ operator
8.	U Si Thu	Team Members ,	Public Consultations

## 2.5 Methodology

The study on existing environmental resources in the project area focused on two main resources-physical and socio-economic resources. The physical resources such as quality of air, noise and water surround the project area are called the primary data which is collected from existing information during site visit in October, 2021. This data collection was done by direct observation, interviews, and environmental quality assessment surveys. Meanwhile, the socio-economic data was collected from interviews.

Additionally, the secondary data are obtained from relevant ministries/bodies and research institutions as reference material for the preparation of the formulation of the IEE report.

## 2.6 Scope of the IEE

The principal objective of this IEE is to satisfy local regulatory requirements, in particular, the requirements related to the proposed project in the EIA Procedure (2015). The IEE covers

- Description of the project activities;
- Provisions of the relevant environmental laws;
- The baseline environmental conditions of the study area;
- Identification and discussion of any adverse impacts to the environment anticipated from the project;
- Appropriate mitigation measures; and
- Provision of an Environmental Management Plan outline.

## 2.7 Purpose of the IEE

This IEE aims to provide environmental and social management frameworks, management measures and monitoring programs. The purpose of the IEE is to:

- Integrate management and mitigation measures in order to reduce potential environmental and social impacts,
- Establish monitoring and mitigation system in order to meet statutory and compliance standards.
- Demonstrate compliance with the relevant Myanmar environmental legislation and best win Myanmar company policies and management systems.

### **3. POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK**

#### **3.1. Corporate Environmental and Social Policies**

Milestone Leatherware Co., Ltd has environmental policy of doing environmentally and socially responsible with minimal impact on the environment. It must follow all laws and regulations prescribed by the Republic of the Union of Myanmar over specified in environmental policy, laws, rules, regulations and other international guidelines.

The company is working with the local committees and government agencies, such as MONREC integrating the environment into its planning, operations and policy decisions. The first and foremost policy is to comply with laws, rules and regulations relating to the physical and social environment. Most of all, it will follow the rules and regulations set up by the ECD, the main agency responsible for environmental management of regional level. The company pledges to do the business that will be environmentally as practical as possible.

Environmental management of the Project/Factory needs to comply with legal requirements of the Environmental Management Plan prescribed in the Environmental Conservation Rules, Notification No. 50/2014 and the EIA Procedure, Notification No. 616/2015.

An IEE is a project document to be prepared according to the requirements and guidance of the Ministry of Natural Resources (MONREC) and Environmental Conservation Department. In order to refrain from, protect against, mitigate and monitor adverse impacts caused by the design, construction, implementation, operation, maintenance, termination, or closure of a project or business or activity; or after its closure, or by any other related cause [Environmental Conservation Rules, 50/ 2014, Chapter I, Article(s) 2g]. An IEE should include programs to manage, implement activities, and monitor changes to the environmental context.

#### ***Corporate Environmental and Social Policies of Project Proponent***

The main policy and commitment of Milestone Leatherware Co., Ltd can be identified in the following points:

- the protection of public safety, the health and safety of the workforce and the local communities
- the protection and promotion of human rights, the economic and social development of local communities;
- the protection of the environment and the conservation of biodiversity and ecosystems;
- the compliance with Myanmar laws, regulations and industrial standards regarding the environment, health, safety and hygiene at work in all of our operations
- visible and active leadership that promotes HSE excellence, which engages and motivates employees and contractors alike to succeed
- manage HSE in order to achieve our objective of incident free operations
- implementing sustainable development principles in our activities



### **3.2. Environmental Policy and Legal Framework in Myanmar**

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.

#### **3.2.1. Myanmar Regulatory Framework**

Myanmar has 25 ministries under the Office of the President as of February 2019. The leading ministries in-charge of environmental and social considerations are the Environmental Conservation Department (ECD) of the MONREC that was reorganized Ministry of Environmental Conservation and Forestry (MOECAF) on 30 March 2016.

#### **3.2.2. Institutional Arrangement**

The Ministry of Environmental Conservation and Forestry (MOECAF) was reformed as the Ministry of Natural Resources and Environmental Conservation (MONREC) on 30<sup>th</sup> March, 2016 in order to undertake both environmental and natural resources conservation and management more effectively. Under Section 3 of the Environmental Impact Assessment Procedure (2015), pursuant to section 21 of the law and Articles 52, 53 and 55 of the Environmental Conservation Rules, all projects and project expansions undertaken by any organization, which may cause impact on environmental quality that, are required to obtain prior permission. This is to be in accordance with section 21 of the Environmental Conservation Law, and Article 62 of the Environmental Conservation Rules, having the potential to cause adverse impacts, that are required to undertake IEE or EIA or to develop an EMP, and to obtain an Environmental Compliance Certificate (ECC) in accordance with this EIA procedure.

#### **3.2.3. Relevant Myanmar Laws and Regulations**

The existing Myanmar laws and regulations relevant to environmental, health and safety issues of this factory are listed below.

- Environmental Conservation Law (30th March, 2012)
- Environmental Conservation Rules (5th June, 2014)
- Environmental Impact Assessment Procedure (29 Dec., 2015)
- Myanmar Investment Law (18th Oct., 2016)
- Foreign Investment Law (2012)
- Myanmar Insurance Law (23rd Jul, 1993)
- Myanmar Insurance Rule (30th Mar., 2017)
- Private Industrial Enterprise Law (26th November, 1990)
- Prevention of Hazard from Chemical and Related Substances Law ( 26th August, 2013)

- Myanmar Fire Brigade Law (17th March, 2015)
- The Petroleum and Petroleum Product Law (1st August, 2017)
- Motor Vehicle Law (7th September, 2015)
- Law on Standardization (3rd July, 2014)
- The Protection and Preservation of Cultural Heritage Regions Law (10th September, 1998)
- The Labour Organization Law (11th October, 2011)
- The Settlement Labour Dispute Law (28th March, 2012)
- The Development and Skillful Development Law (30th August, 2013)
- The Minimum Wage Law (22nd March, 2013)
- The Payment of Wage Act (25th January, 2016)
- The Workmen Compensation act (1951)
- Social Security Law (31th August, 2012)
- The Factories Act (1951)
- The Leave and Holiday Act, 1951 (Law Amended July, 2014)
- Public Health Law (1972)
- The Prevention and Control of Communicable Diseases Law (20th March, 1995)
- The Conservation of water resources and river law (2006, amended in 2017)
- Boiler Law (14th July, 2015)
- Occupational safety and health law (March 15, 2019)
- The Ethnic Right Protection Law (Feb 24, 2015)
- Consumer Protection Law (15<sup>th</sup> March, 2019)
- Inventive Patent Law (11<sup>th</sup> March, 2019)
- Trademark Law (30<sup>th</sup> January, 2019)
- Industrial Design Intellectual Property Right Law (30<sup>th</sup> January, 2019)

***Environmental Conservation Law (30<sup>th</sup> March, 2012)***

Environmental Conservation Law was enacted by the Pyidaungsu Hluttaw in 30<sup>th</sup> March, 2012. This law was approved in section 7 (o) “managing 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. This section was shown in section 14 in which “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.” Further, Section 15 was described in 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. According to section 24, The Ministry may, in issuing the prior permission, stipulate terms and conditions relating to environmental conservation. It may conduct inspection whether or not it is performed in conformity with such terms and conditions or inform the relevant Government departments, Government organizations to carry out inspections. This law was prohibited by section 29, “No one shall violate any prohibition contained in the rules, notifications, orders, directives and procedures issued under this Law”.

#### ***Environmental Conservation Rules (5<sup>th</sup> June, 2014)***

This environmental conservation rule was approved by ministry of environmental conservation and forestry in 5<sup>th</sup> June, 2014. This law was prohibited by this rules section 69, sub-section (a) and (b),

“(a) Any person shall not emit, ask to emit, dispose, ask to dispose, pile and ask to pile, by any means, hazardous waste or hazardous substances stipulated by notification according to any rules in this rule at any place which may affect the public directly or indirectly.

(b) Nobody shall carry out any activity which can damage the ecosystem and the natural environment which is affected due to such system, except for the permission of the Ministry for the interests of the people.”

#### ***Environmental Impact Assessment Procedure (29 Dec., 2015)***

This procedure was enacted by ministry of environmental conservation and forestry in 29 December, 2015. This procedure was directed in responsibility for all adverse impacts in which section 102 to 105;

The Project Proponent shall bear full legal and financial responsibility for:

a) all of the Project Proponent's actions and omissions and those of its contractors, subcontractors, officers, employees, agents, representatives, and consultants employed, hired, or authorized by the Project acting for or on behalf of the Project, in carrying out work on the Project; and

b) PAPs until they have achieved socio-economic stability at a level not lower than that in effect prior to the commencement of the Project, and shall support programs for

livelihood restoration and resettlement in consultation with the PAPs, related government agencies, and organizations and other concerned persons for all Adverse Impacts.

103. The Project Proponent shall fully implement the IEE, all Project commitments, and conditions, and is liable to ensure that all contractors and subcontractors of the Project comply fully with all applicable Laws, the Rules, this Procedure, the IEE, Project commitments and conditions when providing services to the Project.

104. The Project Proponent shall be responsible for, and shall fully and effectively implement, all requirements set forth in the ECC, applicable Laws, the Rules, this Procedure and standards.

105. The Project Proponent shall timely notify and identify in writing to the Ministry, providing detailed information as to the proposed Project's potential Adverse Impacts.

This procedure was also described in monitoring about from section 106 to 110;

106. The Project Proponent shall, during all phases of the Project (pre-construction, construction, operation, decommissioning, closure and post-closure), engage in continuous, proactive and comprehensive self-monitoring of the Project and activities related thereto, all Adverse Impacts, and compliance with applicable laws, the Rules, this Procedure, standards, the ECC, and the IEE.

107. The Project Proponent shall notify and identify in writing to the Ministry any breaches of its obligations or other performance failures or violations of the ECC and the IEE as soon as reasonably possible and in any event, in respect of any breach which would have a serious impact or where the urgent attention of the Ministry is or may be required, within not later than twenty-four (24) hours, and in all other cases within seven (7) days of the Project Proponent becoming aware of such incident.

108. The Project Proponent shall submit monitoring reports to the Ministry not less frequently than every six (6) months, as provided in a schedule in the IEE, or periodically as prescribed by the Ministry.

109. The monitoring reports shall include: a) documentation of compliance with all conditions; b) progress made to date on implementation of the IEE against the submitted implementation schedule;

difficulties encountered in implementing the IEE and recommendations for remedying those difficulties and steps proposed to prevent or avoid similar future difficulties; d) number and type of non-compliance with the IEE and proposed remedial measures and timelines for completion of remediation; e) accidents or incidents relating to the occupational and community health and safety, and the environment; and

f) monitoring data of environmental parameters and conditions as committed in the IEE or otherwise required.

110. Within ten (10) days of completing a monitoring report as contemplated in Article 108 and Article 109 in accordance with the EMP schedule, the Project Proponent shall make such report (except as may relate to National Security concerns) publicly available on the Project's website, at public meeting places (e.g. libraries, community halls) and at the Project offices. Any organization or person may request a digital copy of a monitoring report and the Project shall, within ten (10) days of receiving such request, submit a digital copy via email or as may otherwise be agreed upon with the requestor.

Moreover, in section 113 was shown in,

for purposes of monitoring and inspection, the Project Proponent:

a) shall grant to the Ministry and/or its representatives, at any time during normal working hours, access to the Project's offices and to the Project site and any other location at which the Project activities or activities related to the Project are performed; and

b) from time to time as and when the Ministry may reasonably require, shall grant the Ministry access to the Project's offices and to the Project site and any other location at which the Project activities or activities related to the Project are performed.

Section 115 was prescribed in the event of an emergency, or where, in the opinion of the Ministry, there is or may exist a violation or risk of violation of the compliance by the Project with all applicable environmental and social requirements, the Project shall grant full and immediate access to the Ministry at any time as may be required by the Ministry.

This procedure was that the Project Proponent shall further ensure that the Ministry's rights of access hereunder shall extend to access by the Ministry to the Project's contractors and subcontractors.

### ***Myanmar Investment Law (18<sup>th</sup> Oct., 2016)***

This law was enacted by the Pyidaungsu Hluttaw with the notification number 40/2016 in October 18, 2016. This law was expressed in section 50(d) as the land use right in which the investor shall register the land lease contract at the Office of Registry of Deeds in accordance with the Registration Act. In section 51 had shown that the investor:

(a) may appoint of any citizen who is a qualified person as senior manager, technical and operational expert, or advisor in his investment within the Union in accordance with the laws;

(b) shall appoint them to replace, after providing for capacity building programs in order to be able to appoint citizens to positions of management, technical and operational experts, and advisors;

(c) shall appoint only citizens for works which does not require skill;

(d) shall appoint skilled citizen and foreign workers, technicians, and staff by signing an employment contract between employer and employee in accordance with the labor laws and rules;

(e) shall ensure to obtain the entitlements and rights in the labor laws and rules, including minimum wages and salaries, leave, holidays, overtime fees, damages, compensation of the workman, social welfare, and other insurance related to workers in stipulating the rights and duties of employers and employees and occupational terms and conditions in the employment contract;

(f) shall settle disputes arising among employers, among workers, between employers and workers, and technicians or staff in the investment in accordance with the applicable laws.

According to section 65, the more important to the projects investors responsibilities was directed in sub-section (f) to (q);

(f) shall not make any significant alteration of topography or elevation of the land on which he is entitled to lease or to use, without the approval of the Commission;

(g) shall abide by the applicable laws, rules, procedures and best standards practiced internationally for this investment so as not to cause damage, pollution, and loss to the natural and social environment and not to cause damage to cultural heritage;

(h) shall list and keep proper records in books of accounting and annual financial statements, and necessary financial matters relating to the

investments performed by a Permit or an Endorsement in accordance

with internationally and locally recognized accounting standards;

(i) shall close and discontinue the investment only after payment of compensation to employees in accordance with applicable laws for any breach of employment contracts, closure of investment, sale and transfer of investment, discontinuation of investment, or reduction of workforce;

(j) shall pay wages and salaries to employees in accordance with applicable laws, rules, procedures, directives and so forth during the period of suspension of investment for a credible reason;

(k) shall pay compensation and indemnification in accordance with

applicable laws to the relevant employee or his successor for injury, disability, disease and death due to the work;

(l) shall supervise foreign experts, supervisors and their families, who employ in its investment, to abide by the applicable laws, rules, orders and directives, and the culture and traditions of Myanmar;

(m) shall respect and comply with the labor laws;

(n) shall have the right to sue and to be sued in accordance with the laws;

(o) shall pay effective compensation for loss incurred to the victim, if there is damage to the natural environment and socioeconomic losses caused by logging or extraction

of natural resources which are not related to the scope of the permissible investment, except from carrying out the activities required to conduct investment in a Permit or an Endorsement.

(p) shall allow the Commission to inspect in any places, when the Commission informs the prior notice to inspect the investment;

(q) shall take in advance a Permit or an Endorsement of the Commission for the investments which need to obtain prior approval under the Environmental Conservation Law and the procedures of environmental impact assessment, before undertaking the assessment. Such investments shall be submitted the situation of environmental and social impact assessment to the Commission during the permitted investment period.

Moreover, this law was instructed the investor shall insure the types of insurance stipulated in the provision of the rules at any insurance enterprise which is entitled to carry out insurance businesses within the Union in section 73.

#### ***Myanmar Insurance Law (23<sup>rd</sup> Jul, 1993)***

This law was prescribed by the State Law and Order Restoration Council in 23<sup>rd</sup> July, 1993. This law was directed as a section 15; owners of motor vehicles shall affect compulsory Third Party Liability Insurance with the Myanmar Insurance. An entrepreneur or an organization operating an enterprise which may cause loss to State-owned property or which may cause damage to the life and property of the public or which may cause pollution to the environment shall effect compulsory General Liability Insurance with the Myanmar Insurance under this law according to section 16.

#### ***Myanmar Insurance Rule (30<sup>th</sup> Mar., 2017)***

This rule was prescribed by Ministry of Planning and Finance with notification 30/2017 in 30<sup>th</sup> Mar. 2017. This law was followed the investor must comply with the conditions of the Permit and other applicable laws when making an Investment and shall fully assist while negotiating with the Authority for settling the grievances of the local community that have been effected due to Investments in section 203. According to section 206, If the Investor is desirous to appoint a foreigner as senior management, technician expert or consultant according to section 51 (a) of the Law, it shall submit such foreigner's passport, expertise evidence or degree and profile to the Commission Office for approval. Section 73 was described that every Investor that holds the Permit or Tax Incentives must have taken out the relevant insurance out of the following types of insurance at any insurance business that holds the license in the Union based on the nature of the business:

- (a) Property and Business Interruption Insurance;
- (b) Engineering Insurance;
- (c) Professional Liability Insurance;
- (d) Professional Accident Insurance;

- (e) Marine Insurance; and
- (f) Workmen Compensation Insurance.

***Private Industrial Enterprise Law (26<sup>th</sup> November, 1990)***

This law was enacted by the State Law and Order Restoration Council in 26<sup>th</sup> November, 1990. This law was described in section (4);

(a) Any person desirous of conducting any private industrial enterprise;

(b) Any person conducting any private industrial enterprise on the day this Law is enacted; by using any type of power which is three horsepower and above or manpower of ten wage-earning workers and above shall register under this Law.

According to section 13, some more important duties of the entrepreneur are as follows -

(b) shall abide by the terms and conditions of the registration certificate;

(f) shall shift the place of enterprise, change the nature of enterprise, amalgamate enterprises and split up enterprises only with the approval of the Directorate;

(g) shall abide by the orders and directives issued from time to time by the Ministry and the Directorate;

Moreover, section 15(a) and (b) was described that the entrepreneur has the right to carry out the followings:-

(a) appointing foreign experts and technicians with the approval of the Ministry;

(b) carrying out change of the name of enterprise, transfer of ownership, temporary suspension or permanent closing down of the enterprise in the manner prescribed and with the approval of the Directorate.

***Prevention of Hazard from Chemical and Related Substances Law (26<sup>th</sup> August, 2013)***

This law was enacted by Pyidaungsu Hluttaw with notification number 28/ 2013 in 26<sup>th</sup> August 2013. Section 15 was described as a person who has obtained a licence, before starting the respective chemical and related substances business:-

(a) shall be inspected for the safety and the power of resistance of the machinery and equipments by the respective Supervisory Board and Board of Inspection;

(b) shall be attended the person who serve in the work to the respective foreign trainings or the trainings and the expert trainings on prevention of hazard from the chemical and related substances opened by the government department and the government organizations.

A person who has obtained a licence shall follow under section 16 :

(a) shall abide the licence regulations;



(b) shall perform to abide strictly the instructions for being safety in using the chemical and related substances by himself and also the persons who serve the work;

(c) shall keep the required safety equipments enough in the chemical and related substances businesses, furthermore shall grant the personal protection equipments and dresses free of charge to the working persons;

(d) shall make the course of training and study and instruction if necessary to the working persons for using the occupational safety equipment, the personal protection equipment and the dresses systematically in the chemical and related substances business;

(e) shall be inspected by the respective Supervisory Board and Boards of Inspection in respect of whether or not the hazard may impact on the Human Being and Animals' health and the environment;

(f) shall make medical checkup the working persons who will work in the chemical and related substances business and shall permit to serve in that work after obtaining the recommendation that his health is suitable for that work. This medical check up records shall be kept systematically;

(g) shall send the copy of informative letter of the permission to the respective Department of Township Administration, if the hazardous chemical or related substances are permitted to store;

(h) shall acquire in advance the guidance and agreement of the respective Department of Fire Brigade, if the business that is worried to fire hazard is operated by using the fire hazard substances or the explosive substances;

(i) shall transport only the permitted amount of the chemical and related substances in accordance with the prescriptive stipulations, if they are transported in local;

(j) shall take the permission from the Central Supervisory Board if the chemical and related substance is altered and transferred from one place to any other place which contained in the license;

(k) shall abide and perform in accordance with the related environmental laws not to impact and damage to the environment in operating the chemical and related substances business.

Section 17 was stated a person who has obtained a licence, shall put the insurance in accordance with the prescriptive stipulations to be able to pay the compensation, if the impact and damage is occurred on the Human Being and Animals or the environment in respect of the chemical and related substances businesses. According to section 22, a person who has obtained the registration certificate shall abide the regulations consisted in the registration certificate furthermore shall also abide the order and instructions issued occasionally by the Central Supervisory Board. About the hazard control and decrease had directed in section 27 in which a person who has obtained the licence to be complied the following matters to control and decrease the hazard of the chemical and related substances:-

- (a) classifying the hazard level to protect in advance the hazard according to the properties of the chemical and related substances;
- (b) expressing the Material Safety Data Sheet and Pictogram;
- (c) providing the safety equipments, the personal protection equipments to protect and decrease the accident and attending to the training to be used systematically;
- (d) performing in accordance with the stipulations in respect of transporting, possessing, storing, using, discharging the chemical and related substances;
- (e) not being imported or exported the chemical and related substances banned by the Central Supervisory Board and the machinery and equipments which are used them.

***Myanmar Fire Brigade Law (17<sup>th</sup> March, 2015)***

Myanmar fire brigade law was enacted by the Pyidaungsu Hluttaw in 17<sup>th</sup> March 2015. According to section 25, Any factory, industry, bus stop, airport, port, hotels, motels, guest houses, high rise mixed used buildings, markets, offices, organizations, concerning fire risk owners or management person in accordance with fire department guidance :-

No one can default to compose reserved fire force.

No one can absence to place fire safety equipment.

***The Petroleum and Petroleum Product Law (1<sup>st</sup> August, 2017)***

This law was enacted by the Pyidaungsu Hluttaw with notification number 20/2017 in 1<sup>st</sup> August, 2017. Section 9 was prescribed The Ministry of Transport and Communications shall carry out the following functions relating to the projects in which subsection (a) and (e) to any petroleum and petroleum product;

issuing licence to vehicles, vessels and barges that carry any petroleum and petroleum product;

determining procedures and conditions to be abided by in carrying out transport business except transport by pipeline.

Moreover, section 10 was described; The Ministry of Natural Resources and Environmental Conservation shall carry out the following functions

relating to any petroleum and petroleum product;

a. issuing licence for the right to store for the storage tanks and warehouses;

b. issuing transport permit for the vehicles, vessels and barges that shall carry any petroleum and

petroleum product;

c. determining the period, form and terms and conditions, manners of applying licence, permitting

authority and fees to be assessed, for licence under subsection (a) and permit under subsection (b);

d. if it occurs environmental impacts in carrying out petroleum and petroleum product business activities, taking action, as necessary , in accordance with the existing laws of on-site inspection;

e. determining, in coordination with ministries concerned, procedures and conditions relating to standard and quality of storage tanks and warehouse, and tanks of vehicles, vessels and barges that carry any petroleum and petroleum product.

Section 11 was directed on all receptacles containing any dangerous petroleum and petroleum product, the warning sign of danger by stamping, embossing, painting, printing or any other means shall be expressed. If it is impossible to express as such, similar warning signs of the nature of danger of gasoline, spirit or petroleum shall be expressed in writing at the stensible place in salient words or signs near the receptacle.

### ***Motor Vehicle Law (7 September, 2015)***

This motor vehicle law was enacted by the Pyidaungsu Hluttaw with notification number 55/2015 in 7<sup>th</sup> September 2015. This law was prohibited in section 45, “No one is allowed to drive, request someone to drive, or park, motor vehicles in public places under the following conditions:

(a) The motor vehicle is not registered.

(b) The registration has been suspended, revoked or expired; the registration card is not displayed.

The registration card has been revoked or is expired.”

### ***Law on Standardization (3<sup>rd</sup> July, 2014)***

This law was enacted by the Pyidaungsu Hluttaw with the notification number 28/2014 in 3<sup>rd</sup> July, 2014. According to the section 17, the person who have acquired qualified certificate shall apply to the recognized department or organization of the government department. In section 19, if the qualified person who breaking any relevant certified including rules and disciplines was inspected, the committee could decide any following action.

(a) Notification

(b) Suspension by the limited of the qualified certificate

(c) Decommission of the qualified certificates.

About the Penalties section 26 was prescribed in which any certified person was using the qualified mark on the unfixed products or services, that person should be punished not more than one year prison or one million or both.

***The Protection and Preservation of Cultural Heritage Regions Law (10<sup>th</sup> September, 1998)***

This law was enacted by the State Peace and Development Council with notification number 9/98 in 10<sup>th</sup> September, 1998. Section 13 was described that person desirous of carrying out one of the following shall abide by the provisions of other existing laws and also apply to the Department in accordance with stipulations to obtain prior permission under this Law

(a) within the ancient monumental zone or the ancient site zone:

(1) constructing or extending a building;

(2) renovating the ancient monument or extending the boundary of its enclosure;

(b) within the protected and preserved zone, constructing, extending, renovating a hotel, motel, guest house, lodging house or industrial building or extending the boundary of its enclosure;

(c) within the cultural heritage region

(1) carrying out the renovation and maintenance work of the ancient monument without altering the original ancient form and structure or original ancient workmanship;

(2) carrying out archaeological excavations;

(3) building road, constructing bridge, irrigation canal and embankment or extending the same.

According to section 15, A person desirous of carrying out one of the following shall abide by the provisions of other existing laws and also apply in accordance with the stipulations to the Department to obtain prior permission under this Law:-

(a) renovation of a building other than an ancient monument or extension of the boundary of its enclosure in the ancient monumental zone or the ancient site zone;

(b) within the protected and preserved zone, constructing, extending, renovating a building other than a hotel, motel, guest house, lodging house or industrial building or extending the boundary of its enclosure;

(c) digging well, pond and fish-breeding pond or extending the same within the cultural heritage region.

***The Export and Import Law (17<sup>th</sup> September, 2012)***

This law was enacted by the Pyidaungsu Hluttaw with the notification number 17/2012 in 17<sup>th</sup> September, 2012. This law was prohibited in section 7; a person who obtained any license shall not violate the conditions contained in the license.

***The Labor Organization Law (11<sup>th</sup> October, 2011)***

This law was enacted by the Pyidaungsu Hluttaw with the notification number in 11<sup>th</sup> October, 2011. This law was described in section 3 in which “every worker, who has

attained the age prescribed in respective existing law to work in any trade or activity shall have the right to:

(a) join as a member in a labor organization and to resign from a labor organization according to their own desire;

(b) join as a member only in a labor organization formed according to the category of trade or activity relating to them.”

Moreover, section 18 was prescribed “the labor organization has the right to demand the relevant employer to re-appoint a worker if such worker is dismissed by the employer and if there is cause to believe that the reasons of such dismissal were based on labor organization membership or activities, or were not in conformity with the labor laws.”

### ***The Settlement Labor Dispute Law (28<sup>th</sup> March, 2012)***

This law was enacted by the Pyidaungsu Hluttaw with the notification number 5/2012 in 28<sup>th</sup> March, 2012. This law was described in 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.” According to section 38 and 42, it was prohibited in which:

38. No employer shall fail to negotiate and coordinate in respect of the complaint within the prescribed period without sufficient cause.

42. No person shall prohibit the right to work independently of the workers who are not desirous to participate in the strike nor impede the right of a worker to strike.

### ***The Development and Skillful Development Law (30<sup>th</sup> August, 2013)***

This law was enacted by the Pyidaungsu Hluttaw with the notification number 29/2013 in 30<sup>th</sup> August, 2013. Section 15 was described in “Employer may:-

(a) in implementing programs of training to enhance the skills of workers, conduct in- house/ in- plant training, systematic on-the-job training, send his workers to outside training courses, conduct training by means of information technology either individually or in groups of employers for individual or groups of workers.

(b) employ young persons who have completed (16) years of age as apprentices in accordance with the regulations made by the Skills Development Agency and train them in the various skilled occupations.”

According to section 25, “the worker who has skills recognition certificate is eligible for participation in the relevant local and international skills competitions.”

### ***The Minimum Wage Law (22<sup>nd</sup> March, 2013)***

This law was enacted by the Pyidaungsu Hluttaw with the notification number 7/2013 in 22<sup>nd</sup> March, 2013. Section 12 was described in the duties of the employer in which

(a) shall not pay wage to the worker less than the minimum wage stipulated under this Law;

(b) may pay more than the minimum wage stipulated under this Law;

(c) shall not have the right to deduct any other wage except the wage for which it has the right to deduct as stipulated in the notification issued under this Law;

(d) shall pay the minimum wage to the workers working in the commercial, production and service business in cash. Moreover, if the specific benefits, interests or opportunities are to be paid, it may be paid in cash or partly in cash and partly in property, with prevailing regional price, jointly according to the desire of the worker;

(e) in paying minimum wage to the workers working in the agricultural and livestock business, some cash and some property at prevailing regional price may be paid jointly according to local custom or desire of the majority of workers or collective agreement. Such payment shall be for any personal use and benefit of the worker and his family and the value shall also be considerable and fair.

About the rights of the workers relating to the minimum wage, section 14 (a) was issued that “a worker working in any establishment relating to this law: has the right to obtain the minimum wage stipulated under this Law or, if the employer pay more than the said wage.

### ***The Payment of Wage Act (25<sup>th</sup> January, 2016)***

This law was prescribed by the Pyidaungsu Hluttaw with the notification number in 25<sup>th</sup> January, 2016. This law was described in section 3 and 4 in which methods of payment and time-frame. According to the section 3,

The employer must

(a) Pay in local currency or foreign currency recognized by the Central Bank of Myanmar. This may be in cash, check or deposit into the bank account of Employee.

(b) Moreover, pay can be in the means of...

(1) Totally in cash OR half the cash and half in things set according to the local price to those employees working in trade, manufacturing and service sectors.

(2) Totally in cash OR half the cash and half in things set as local price according to local traditions or common agreement to those working in agriculture and livestock sectors.

But this must be for the sake of the employees and their families. And, it also must be reasonable/fair.

(3) An employee shall receive the payment for 60 days when he/she is in Alternative Civil Service.

Section 4 was described in an employer must pay for-

(a) Part-time, daily, weekly or other part-time job, temporary or piecework when the work is done or at the agreed time.

(b) According to the Article (a), the time frame shall not exceed one month.

(c) Wages for the permanent work must pay per monthly basis. If so...

(1) Must pay at the end of the payment period when there are not more than 100 workers.

(2) If there are 100 workers and above, pay must not be administered later than 5 days after the end of the payment period.

(d) Upon termination, wages must be paid within 2 days from the date of termination.

(e) If a resignation letter is submitted, wages must be paid at the ending day of the payment period.

(f) If an employee dies, wages must be paid to the legally recognized heir within 2 working days after the day he/she has died.

(g) All wages must be paid during the working day.

### ***The Workmen Compensation Act (1951)***

The workmen's compensation act enacted in 1951. This act was described in subsection 2 of section 3, If a workman employed in any employment Involving the handling of wool, hair, bristles, or animal carcasses or parts of such carcasses, or in the loading, unloading or transport of any merchandise, or in any work in connection with animals infected with anthrax, contracts the disease of- anthrax, shall be described in schedule (III) : List of occupational diseases. After sub-section (2), following shall be inserted as subsection (3), provided that the compensation shall be recoverable from the employer who last employed the workman during the said twelve months in the employment to the nature of which the disease was due.

### ***Social Security Law (31<sup>th</sup> August, 2012)***

This law was enacted by the Pyidaungsu Hluttaw with the notification number 15/2012 in 31<sup>th</sup> August, 2015. This law was described in section 9 (a) The Ministry of Labor, to enable to provide health care and medical treatment under this Law:

- i. carrying out assigning duty jointly or transfer or appoint doctors, dental and oral surgeons, nurses, midwives, and technicians who obtain medical practitioner license or registration certificate issued by the Medical Council of the Republic of the Union of Myanmar, the Dental and Oral Medicine Council, and the Nurses and Midwives Council of the Republic of the Union of Myanmar, practitioners of traditional medicine who obtain registration certificate issued by the Indigenous Medicine Council in co-ordination with the Ministry of Health;

- ii. if it is, may appoint doctors, dental and oral surgeons, nurses, midwives, technicians and also practitioners of traditional medicine who obtain medical practitioner license or registration certificate issued by the respective council by hiring for a limited period or concluding agreement and determine the functions thereof.

### ***The Factories Act (1951)***

This act deals with the provisions for the proper disposal of wastes and effluents in factories, treatment of wastewater, regulations for health and cleanliness in factories and prevention of hazards. First aid appliances related to factory are presented in Article 47 and described below.

1. In every factory the manager shall provide and maintain a first-aid box or a cupboard equipped with the prescribed contents in suitable place as may be directed by the Inspector so as to be readily accessible during all working hours, and where more than one maintained for every additional one hundred workers or part thereof.

2. Nothing but the prescribed contents shall be kept in the first-aid boxes or cupboards referred to in sub-section (1), and all such first-aid boxes and cupboard shall be kept in the charge of a responsible who has been trained in first-aid treatment and who shall always be available during working hours.

3. In every factory wherein more than two hundred and fifty workers are employed there shall be provided and maintained a first-aid room or dispensary of the prescribed dimension, containing the prescribed equipment, and shall be kept under the supervision of such medical officer and nursing staff as may be prescribed.

### ***The Leave and Holiday Act, 1951 (Law Amended July, 2014)***

The Leave and Holidays Act was firstly adopted on 1st January 1952, by the International Labor Organization, Myanmar. Recently, the Act was amended in July 2014. The key objectives of this Act are to allow workers (daily wage worker/temporary worker/permanent worker) to have a leave and holiday allowances, religious or social activities with earn allowance, and health insurance allowances.

- The followings describe the right of workers to leave and have a holiday:
- Causal Leave (6 days)
- Earned Leave (10 days)
- Medical Leave (30 days)
- Maternity leave
- Public Holiday (21 days)
- Penalty for Violation



***Public Health Law (1972)***

This law was enacted by the Myanmar State and Revolution Council with the notification number 1/2972. This law was described in chapter 2 about the protection of public health in which section 2, whatever, other existing laws, the government was working to improve the public health, to protect the public health and the following devices to perform for advices, inspection, supervision, repair, prohibition.

- 1) Environmental Health Services
- 2) About the sell and produced food of the people
- 3) About the usage of household and cosmetic products
- 4) About the infectious diseases
- 5) About the private hospital
- 6) About the usage of medicine for the people

***The Prevention and Control of Communicable Diseases Law (20<sup>th</sup> March, 1995)***

This law was enacted by the State Law and Order Restoration Council with the notification no. 1/95 in 20<sup>th</sup> March, 1995. This law was prevented the outbreak of Communicable Diseases, the Department of Health shall implement the following project activities in section 3 :-

- (a) immunization of children by injection or orally;
- (b) immunization of those who have attained majority, by injection or orally, when necessary;
- (c) carrying out health educative activities relating to Communicable Disease.

Section 4 was directed when a Principal Epidemic Disease or a Notifiable Disease occurs:-

- (a) immunization and other necessary measures shall be undertaken by the Department of Health, in order to control the spread thereof;
- (b) the public shall abide by the measures undertaken by the Department of Health under sub-section (a).

Moreover, according to section 11 described in In order to prevent and control the spread of a Principal Epidemic Disease, the Health Officer may undertake the following measures:-

- (a) investigation of a patient or any other person required;
- (b) medical examination;
- (c) causing laboratory investigation of stool, urine, sputum and blood samples to be carried out;

- (d) causing investigation by injection to be carried out;
- (e) carrying out other necessary investigations.

***The Conservation of water resources and river law (2006, amended in 2017)***

This law was enacted in 2006 then amended in 2017 with Pyidaungsu Hluttaw Law no.11. This law was prohibited in section 8(a), No person shall:

(a) carry out any act or channel shifting with the aim to ruin the water resources and rivers and creeks.

Section 11 was also prohibited in no person shall:

(a) 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.

(b) catch aquatic creatures within river-creek boundary, bank boundary or waterfront boundary with poisonous materials or explosives.

(c) dispose of disposal soil and other materials from panning for gold, gold mineral dredging or resource production in the river and creek, into the river and creek or into the water outlet gully which can flow into the river and creek.

According 19 and 21(b), no one shall dispose of any substance into the river-creek that may cause damage to waterway or change of watercourse from the bank or vessel which is plying, vessel which has berthed, anchored, stranded or sunk and

No one shall:

drill well or pond or dig earth without the permission of the Directorate.

Moreover, section 22 and 24 (b) were prohibited that No one shall, without the permission of the directorate, pile sand, shingle and other heavy materials for business purposes in the bank area and waterfront area and no one shall:

(b) violate the conditions prescribed by the Directorate so as not to cause water pollution and change of watercourse in rivers and creeks.

***Boiler Law (14<sup>th</sup> July, 2015)***

This law was enacted by the Pyidaungsu Hluttaw with the notification number 39/2015 in 14<sup>th</sup> July, 2015. This law was directed in section 6, it should be produced according to Myanmar or international rules and regulations. This law was prohibited in section 60, 61 and 62 in which

Section 60: No one prepare to boiler not to have boiler preparation certificate.

Section 61: No one maintain to the handle of boiler without the boiler maintenance certificate.

Section 62: No one prepare and change the allowance pressure over the safety pressure cork to the own desirous or the duty from the owner.

***Occupational safety and health law (March 15, 2019)***

This law has enacted by Pyidaungsu Hluttaw with the notification No. 8/2019 in the Union of Myanmar at 15 March, 2019. The objectives of occupational health and safety law are to implement the safety and health effectively in each sector, to reduce and mitigate suffering from injuries, diseases related to workplaces, to prevent from workplaces hazards, not encouraging workplaces diseases by employer, employee and related to this law, to promote the productivity and to prevent occupational injuries and hazard following by occupational safety and health law, to create safety and health workplace through regard to suitable our national norm compared with international norm and to support the research for occupational health and safety development. The occupational health and safety law prescribed in chapter (6), sub-section (a), "Safety officer should appoint about the workplaces safety and health as a responsible person for safety workers by industry. Moreover, "the employer should manage and evaluate the necessary things in which machinery equipment hazards and dangerous measures," was directed in section 26(a) of chapter (8). Further, this law has shown in section 30 (a),"the employee should be used to right the personal protected equipment and its wearing according to regard of department for occupational safety and health by employer.

***The Ethnic Right Protection Law (Feb 24, 2015)***

This law was enacted by the Pyidaungsu Hluttaw with notification number 8/2015 in Feb 24, 2015. This law was instructed to be informed, coordinated and performed with the relevant local ethnic groups in the case of development works, major projects, businesses and extraction of natural resources will be implemented within the area of ethnic groups according to the section 5.

***Consumer Protection Law (15<sup>th</sup> March, 2019)***

This law was enacted by the Pyidaungsu Hluttaw with the notification number 9/2019 in 15<sup>th</sup> March, 2019. In section 23, it was described that the business owner must include the insurance of trades in the following facts-

- a. The consumer acceptable qualification.
- b. The quality of the products and actually right of weight
- c. Safety for consumer
- d. Suitable for the need of consumer
- e. Include the same described in Sample materials
- f. Getting Spare parts, renewable or exchangeable in the Insurance time or useful period
- g. Compatibility with description in the information of the product mark, advertisement, offer or promotion.

***Inventive Patent Law (11<sup>th</sup> March, 2019)***

This law was enacted by the Pyidaungsu Hluttaw with the notification number in 11<sup>th</sup> March, 2019. This law protected the invention in section 13 in which the invention is

need to fix with the following facts as not to infringe section 14, this patent of invention is protected invention. The following facts are

- (a) New invention
- (b) Including one of the fact inventions
- (c) applying the invention in industrial process

Moreover, the following patent intervention was not protected it in section 14(a), subsection 1, 2 and 8.

- (1) Exploration, scientific theory, and calculation of mathematics.
- (2) Doing business, mentally behaviors, or playing games related to systems, disciplines or modals.
- (8) Heavily damage invention and the invention which is prohibited to apply in the national area by the existing laws for the dignity of the public, staying the peace, being man, animal or plant, health and natural environment.

### ***Trademark Law (30<sup>th</sup> January, 2019)***

This law was enacted by the Pyidaungsu Hluttaw with the notification number 3/2019 in 30th January, 2019. The aims of this law are to protect and develop in investment, trade and commerce, to protect their benefits of rights and owner of trademark, to prohibit the fake products and crate a safety environment for the public and to promote local products into the world market. According to section 34, the trademark of term is to be 10 years to the day started Licence and should be renewed the licence for next term periods.

### ***Industrial Design Intellectual Property Right Law (30<sup>th</sup> January, 2019)***

This law was prescribed by the Pyidaungsu Hluttaw with the notification number 2/2019 in 30th January, 2019. The aim of this law was described in to protect in line with law for the designer owner and right of creators, to support and improve of the design technology, mutually beneficial between the design user and creator about the technological knowledge and socioeconomic development. As a section 42, Industrial Design Intellectual Property Right is a 5 years term and it can be renewed as 5 years for two times.

### **3.3. International Agreements and Conventions**

In addition to the domestic laws listed above, Myanmar is also a signatory to the following international conventions, and these may have relevance to the proposed survey activities. Refer to the following table.

Table 3.1. International Agreements and Conventions Relevant to the Proposed Project

<b>International Agreements and Conventions</b>	<b>Status</b>	<b>Purposes</b>
Vienna Convention for the Protection of the Ozone Layer, 1985	1998	Aims at the protection of the ozone layer, including requirements for limiting the production and use of ozone depleting substances.
Montreal Protocol on	1993	Aims at the protection of the ozone layer, including

Substances that Deplete the Ozone Layer, 1989		requirements for limiting the production and use of ozone depleting substances.
Basel Convention, 1989	2015	The Convention regulates the transboundary movements of hazardous wastes and provides obligations to its parties to ensure that such wastes are managed and disposed of in an environmentally sound manner.
United Nations Framework Convention on Climate Change (UNFCCC), New York, 1992 and Kyoto Protocol 1997	1995 and 2005	Provide a framework for intergovernmental efforts to tackle climate change. Recognises that the climate system is a shared resource whose stability can be affected by industrial and other emissions of carbon dioxide and other greenhouse gases.
Convention on Biological Diversity, Rio de Janeiro, 1992	1994	Aims to promote national policies for the conservation of wild flora, fauna and habitat that needs to be included in planning policies. The three main goals are: (1) the conservation of the biological diversity; (2) the sustainable use of its components; (3) fair and equitable sharing of the benefits.
Asia Least Cost Greenhouse Gas Abatement Strategy (1998 ALGAS)	1998	Develop national and regional capacity for preparation of GHG inventories. Assist in identifying GHG abatement options and preparation of a portfolio of abatement projects for each country.
United Nations Agenda 21	1997	Formed by the National Commission for Environmental Affairs (NCEA) in Myanmar. Provides a framework of programmes and actions for achieving sustainable development in the country. Building on the National Environment Policy of Myanmar, takes into account principles contained in the Global Agenda 21. Myanmar Agenda 21 also aims at strengthening and promoting systematic environmental management in the country.
Relevant ILO Conventions in force in Myanmar <ul style="list-style-type: none"> <li>• C14 Weekly Rest (Industry)</li> <li>• C17 Workmen's Compensation (Accidents)</li> <li>• C19 Equality of Treatment (Accident Compensation)</li> <li>• C26 Minimum Wage</li> </ul>		Sets out legal instruments drawn up by the ILO's constituents (governments, employers and workers) and setting out basic principles and rights for workers.

Fixing Machinery • C29 Forced Labour Convention • C42 Workmen's Compensation • C52 Holidays with Pay		
Workmen's Compensation (Accidents) Convention, 1925	1956	Entered in force 16 February 1956 The Project has risks to occupational health and safety.
Workmen's Compensation (Occupational Diseases) Convention 1925 and its Revision 1934	2016	Entered in force 30 Sept 1927; Revision entered in force 17 May 2016 The Project has risks to occupational health and safety.

### 3.4. International and National Guidelines and Standards

International policies, guidelines and standards relevant to environmental and social impacts of projects that are referred to by most countries are those issued by the National Environmental Quality (Emission) Guideline (NEQG), World Health Organization (WHO), the U.S Environmental Protection Agency (EPA), the World Bank, and the International Finance Corporation (IFC). The policies, guidelines and standards of the World Bank and IFC are cross-referenced and complementary as the IFC is an organization of the World Bank Group. They are also adopted by most development organizations such as the Asian Development Bank, and Japan Bank for International Cooperation. It should be noted that the guidelines and standards recommended by the World Bank and IFC, especially those related to environmental pollution, also provide due consideration to the guidelines and standards of U.S. EPA and WHO.

#### World Bank's Pollution Prevention and Abatement Handbook (1988)

The World Bank's Pollution Prevention and Abatement Handbook (PPAH) is a comprehensive document providing guidelines for industrial pollution control, and it recommends emission and ambient quality standards to be applied in environmental management. These recommends standards have taken into account the standards enforced by U.S.EPA and those recommended by WHO. They are referred to in the IFC's EHS Guidelines. Only those international policies, guidelines and standards relevant to this Project are discussed herein.

#### 3.4.1. IFC's Standards and Guidelines

IFC's standards and guidelines relevant to this project are described in two documents:

- ❖ Performance Standards on Environmental and Social Sustainability, January 1, 2012.
- ❖ Environmental, Health and Safety-General Guidelines, April 30, 2007.

The first document describes eight performance standards on environmental and social sustainability, which IFC requires its clients to apply throughout the project life cycle.

The second document provides general guidelines for environmental, health and safety (EHS) for development projects.

#### IFC EHS Guidelines

The EHS Guidelines<sup>1</sup> by IFC are technical reference documents with general and industry –specific examples of Good International Industry practice (GIIP), as defined in IFC’s Performance Standard 3: Resources Efficiency and Pollution Prevention. The EHS Guidelines contain the performance levels and measures that are normally acceptable to IFC and that considered achievable in new facilities at reasonable costs by existing technology.

There are two kinds of guidelines, General EHS Guidelines and Industry Sector Guidelines. The General EHS Guidelines contain information on cross-cutting environmental, health, and safety issues potentially applicable to all industry sectors in the following section: (1) Environment, (2) Occupational Health and Safety, (3) Community Health and Safety and (4) Construction and Decommissioning. Table shows the contents of the section of Community Health and Safety.

Table 3.2 Community Health and Safety Contents

Contents	Brief Description
Water Quality and Availability	Drinking water sources should at all times be protected so that they meet or exceed applicable national acceptability standards or in their absence the current edition of WHO Guidelines for Drinking-Water Quality.  Project activities should not compromise the availability of water for personal hygiene needs and should take account of potential future increases in demand. The overall target should be the availability of 100 liters per person per day.
Structural Safety of Project Infrastructure	Reduction of potential hazards is best accomplished during the design phase when the structural design, layout and site modifications can be adapted more easily. The following issues should be considered and incorporated. As appropriate into the planning, siting, and design phases. A project of (1) inclusion of buffer strips or other methods of physical separation around project sites to protect the public from major hazards associated with hazardous materials incidents or process failure. (2) incorporation of siting and safety engineering criteria to prevent failures due to natural risks posed by earthquakes, tsunamis, wind, flooding, landslides and fire, and (3) application of locally regulated or internationally recognized building codes, standards and regulations, and mitigation measures.
Traffic Safety	All project personnel should promote traffic safety during displacement to and from the workplace, and during operation of project equipment on private or public roads. Prevention and control of traffic related injuries and

	fatalities should include the adoption of safety measures that are protective of project workers and of road users, including those who are most vulnerable to road traffic accidents.
Transport of Hazardous Materials	Projects should have procedures in place that ensure compliance with local laws and international requirements applicable to the transport of hazardous materials.
Disease Prevention	Recommended interventions against the communicable diseases at the project level include (1) providing surveillance and active screening and treatment of workers. (2) preventing illness among workers in local communities by undertaking health awareness and education initiatives, training health workers in disease treatment and conducting immunization programs for workers, and (3) providing treatment through standard case management in on-site or community health care facilities.
Emergency preparedness and Response	All projects should have an Emergency preparedness and Response Plan that is commensurate with the risks of the facility. In addition, that includes the following basic elements: (1) Administration (policy, purpose, distribution, definitions, etc.) (2) Organization of emergency areas (command centers, medical stations, etc., (3) Roles and responsibilities, (4) Communication systems, (5) Emergency response procedures, (6) Emergency resources, (7) Training and updating, (8) Checklists (role and action list and equipment checklist), and (9) Business Continuity and Contingency.

Source: IFC, Environmental, Health, and Safety (EHS) Guidelines, General EHS Guidelines: Community Health and Safety (April 30.2007)

### 3.4.2. National Environmental Quality (Emission) Guidelines (No. 615/2015) (2015 Dec, 29)

Objective of the guidelines are to provide the basis for regulation and control of noise and vibration, air emissions and effluent discharges from various sources in order to prevent pollution for purpose of protection of human health and ecosystem.

Guidelines application to the project

The project environmental management plan during construction and operation needs to comply with Myanmar National Environmental Quality (Emission) Guidelines (2015) and the others as appropriate. Guidelines for parameters relevant to the Project are shown in Table 3.3 to, Table 3.5 as follows:

Table 3.3 National Guidelines on Noise Level

Receptor	One Hour LAeq (dBA) <sup>a</sup>	
	Daytime 07:00-22:00 (10:00-22:00 for Public holidays)	Night time 22:00-07:00 (22:00-10:00 for Public holidays)
Residential, institutional, educational	55	45
Industrial, commercial	70	70

<sup>a</sup> Equivalent continuous sound level in decibels



Table 3.4 National Guidelines of Air Quality

Parameter	Averaging Period	Guideline Value $\mu\text{g}/\text{m}^3$
Nitrogen dioxide	1-year	40
	1-hour	200
Ozone	8-hour daily maximum	100
Particulate matter PM10a	1-year	20
	24-hour	50
Particulate matter PM2.5b	1-year	10
	24-hour	25
Sulphur dioxide	24-hour	40
	10 -minute	500

Table 3.5 National Guidelines for (Wastewater, Storm Water Runoff, Effluent and Sanitary Discharges (General Application) Operation phase

Parameter	Unit	Guideline Value <sup>a</sup>
5-day Biochemical oxygen demand	mg/l	50
Ammonia	mg/l	10
Arsenic	mg /l	0.1
Cadmium	mg/l	0.1
Chemical oxygen demand	mg/l	250
Chlorine (total residual)	mg/l	0.2
Chromium (hexavalent)	mg/l	0.1
Chromium (total)	mg/l	0.5
Copper	mg/l	0.5
Cyanide (free)	mg/l	0.1
Cyanide (total)	mg/l	1
Fluoride	mg/l	20
Heavy metals (total)	mg/l	10
Iron	mg/l	3.5
Lead	mg/l	0.1
Mercury	mg/l	0.01
Nickel	mg/l	0.5
Oil and grease	mg/l	10
pH	S.U. <sup>a</sup>	6-9
Phenols	mg/l	0.5
Selenium	mg/l	0.1
Silver	mg/l	0.5
Sulphide	mg/l	1
Temperature increase	mg/l	<3 <sup>b</sup>
Total coliform bacteria	mg/l	400
Total phosphorus	mg/l	2
Total suspended solids	mg/l	50
Zinc	mg/l	2

<sup>a</sup> Standard Unit

<sup>b</sup> At the edge of scientifically established mixing zone which takes into account ambient water quality, receiving water use, potential receptors and assimilative capacity; when the zone is not defined, use 100 meters from the point of discharge

## 4. PROJECT DESCRIPTION

### 4.1. Type of Project

The proposed factory is the 100% foreign investment by Milestone Leatherware Co., Ltd. with an estimated capital USD 1.219 Million. The project will be implemented for the long-term 30 years. The factory type of business is manufacturing of various kinds of bags and belts using the Cut-Make-Pack basis (CMP System) and export to other foreign countries. The factory aims to produce approximately (16,600,000) piece per year of leatherwear.

### 4.2 Location of the factory

The proposed factory is located Plot No. (198/11, 198/14, 198/15), Myay Taing Block No. Industrial Zone (1), Dagon Seikan Township, Yangon Region and comprising the land area of 4.5 acres. It is situated at the central coordinates of 16°50'37.89"N Latitude and 96°17'4.77"E Longitude. Project location map is as shown in Figure 4.1.



Figure 4-1 Project Location Map

### 4.3. Proposed Project at a Glance

Particular	Descriptions
Target products	various kinds of bags and belts
Capacity	Approx; (16,600,000 Pes/year)
Water Requirement	Approx.: 65,000 gal/year
Source of Process Water	Underground (Tube Well), Depth; ~65m (200 ft-400ft)
Power Requirement	Approx- 200,000kW/year
Source of Electrical Power	MEPE
Auxiliary Power	Self Diesel Generator (2 Nos. × 315 kVA)
fossil fuels	Approx- 850 gal/year
Effluent	Domestic effluent; Sewage treatment facilities will be provided for all sewage generated on site. Factory effluent; no effluent from factory process
Solid waste management system	Recyclable domestic waste will be recycled. Other domestic waste will be disposed of in a domestic waste disposal site as directed by YCDC
No. of Workers Used	831 employees
No. of Working Days	280 days per year

### 4.4. Factory Layout

The total area of land is 4.5 acres which is equivalent to 18210.9 m<sup>2</sup>. The factory is constructed by three main buildings. They are

- one story factory building (120 ft x 150 ft)
- one storey factory building (120 ft x 150 ft)
- 3 storey dormitory (50 ft x 120 ft)

The front of the factory has security gate and transformer and generator house. The factory are providing domestic tank, toilets, and water purification system. This factory layout plan is shown in Figure 4 2 (a), (b) and 4.3.

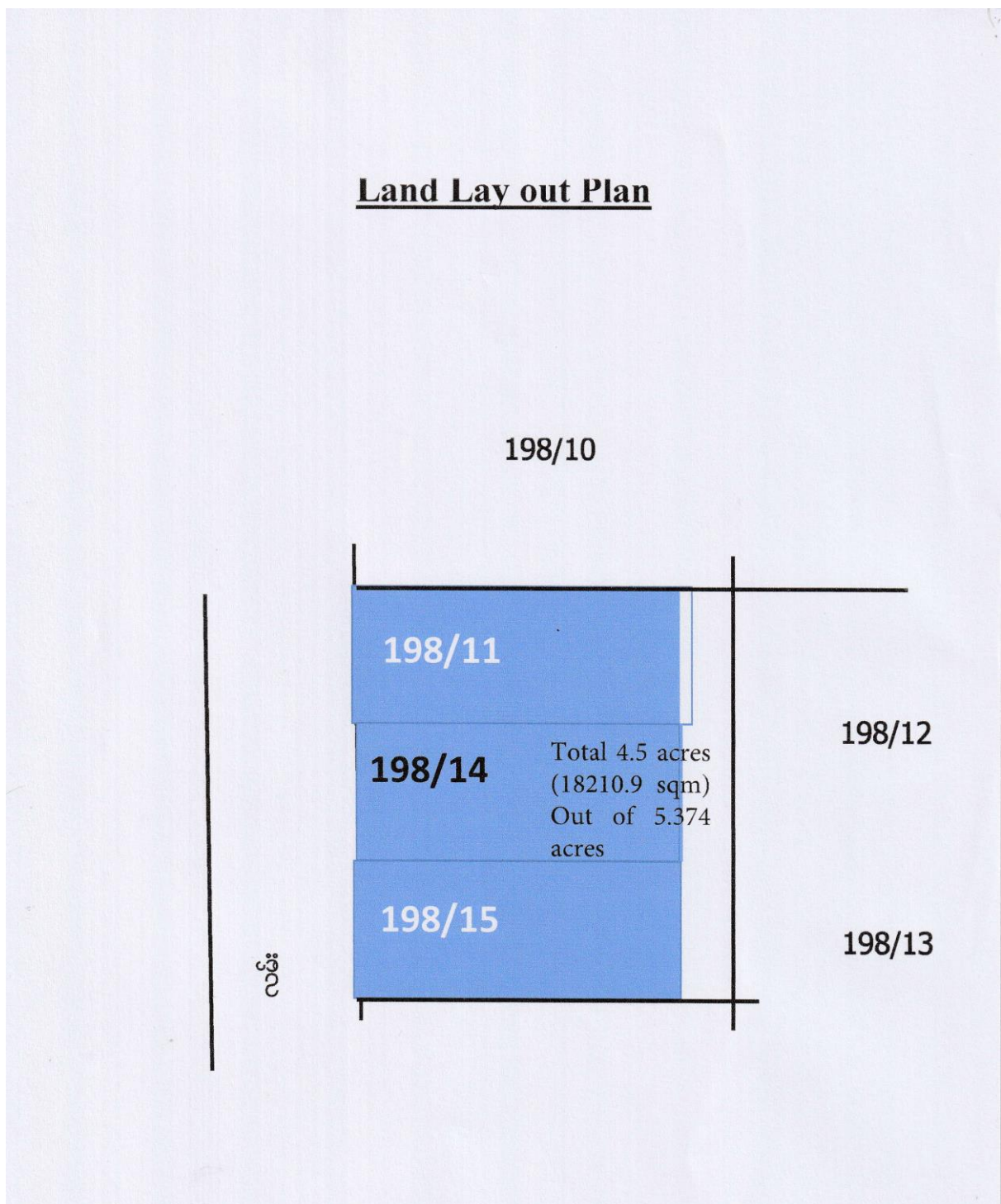


Figure 4-2 (a) Land Layout Plan



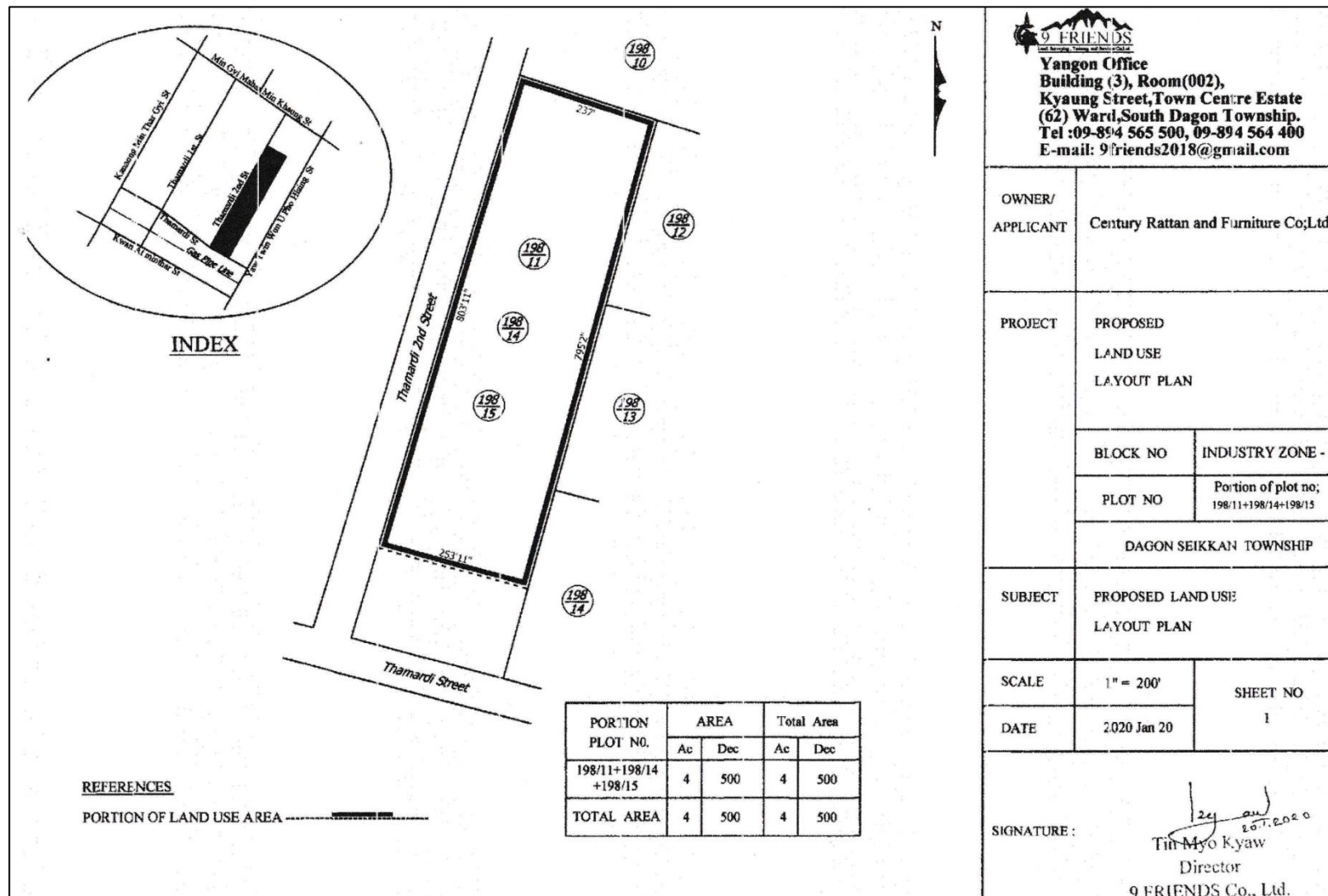


Figure 4-2(b) Land Layout Plan of the proposed factory

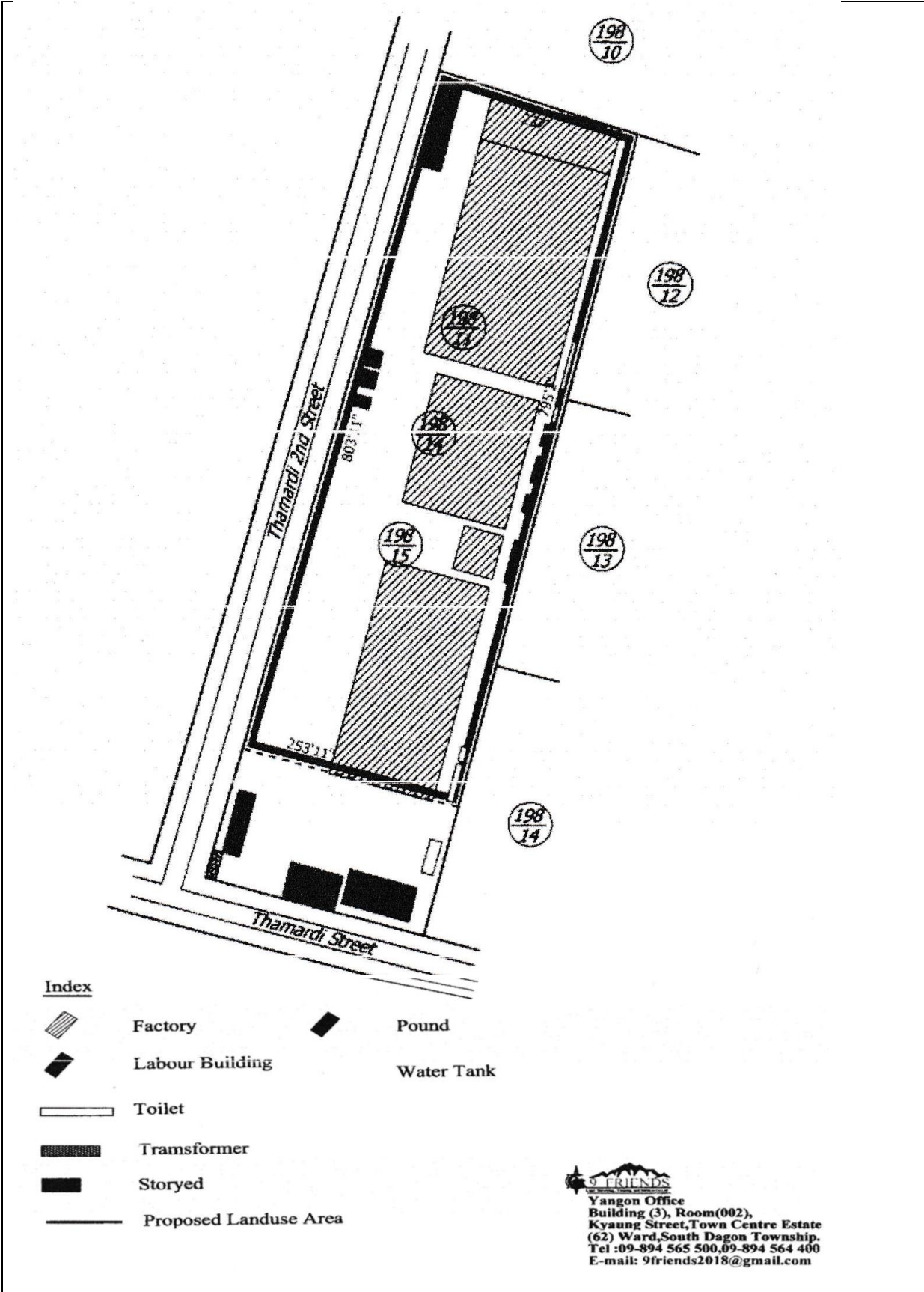


Figure 4-3 Layout Plan of the Factory

#### 4.5. Production Process

As seen in the layout plan, imported raw materials leather will be unpacked and inspected at the first section, “Raw Material Storage Section” of the production building. The raw materials will be cut at the cutting stations in the second section of the building which is the “Cutting Section” that in cutting leather components, linings, foam and reinforcement materials using patterns for making leather goods.

Trimming is the third unit operation after cutting/clicking. it is done to get uniform thickness. Trimming enables reduction in thickness of the leather components to the required degree, which helps easy assembling of the components. Since leather goods are fabricated with varied thickness, it is necessary to split the leather components in the splitting machine according to the requirements. The top grain layer is used and the bottom split is let off. After splitting, the leather components are checked for quality and sent for next unit operation of staining.



Figure 4-4 Process Flow Photo-diagram



Staining is done on articles made by cut edge construction. The edges of the components are smoothened with emery paper first and then stained with water-soluble pigments using a wire brush with an absorbing cotton ball. The staining is done carefully without damaging the surface of the leather components. After drying the edges are wax polished and rubbed with a piece of smooth cloth vigorously for glossiness. In case of bulk production, edge staining machine is used to stain the edges. Cementing plays a vital role in assembling components viz. leather, lining and reinforcements during fabrication of the products. Further strength of the parts can be achieved by stitching.



*Stitching*

In bench work processes, attaching the components are prepared with linings, zips, folding, gussets, piping, handle, etc. for subsequent process of assembling. Some components may need immediate stitching and some may not. The prepared components, which need immediate stitching, are sent for stitching.



*Attaching*



In stitching leather products, two types of stitches are commonly used. They are lock stitches and chain stitches. In lock stitches, the thread from the needle and bobbin lock together and fix firmly in the material. In chain stitching, the stitch is formed by single thread. It is not as strong as lock stitches. When the thread breaks, the seams become weak. The products are stitched care fully. After stitching of the products, they are checked for quality of stitching and then sent for finishing



*Finshed leather Goods Checking*

Finishing is the final process in the manufacture of leather goods. A team of semi-skilled technicians and helpers headed by a quality control supervisor does finishing. The whole product is cleaned both inside and outside with a clean piece of cloth. Before the articles are sent for packing, strict quality control is observed for perfection in assembling, stitching accuracy and smooth functioning of fittings.



*Packing*

The packaged products will finally be transported for export. Production process of the flow chat is shown in Figure 4.5.

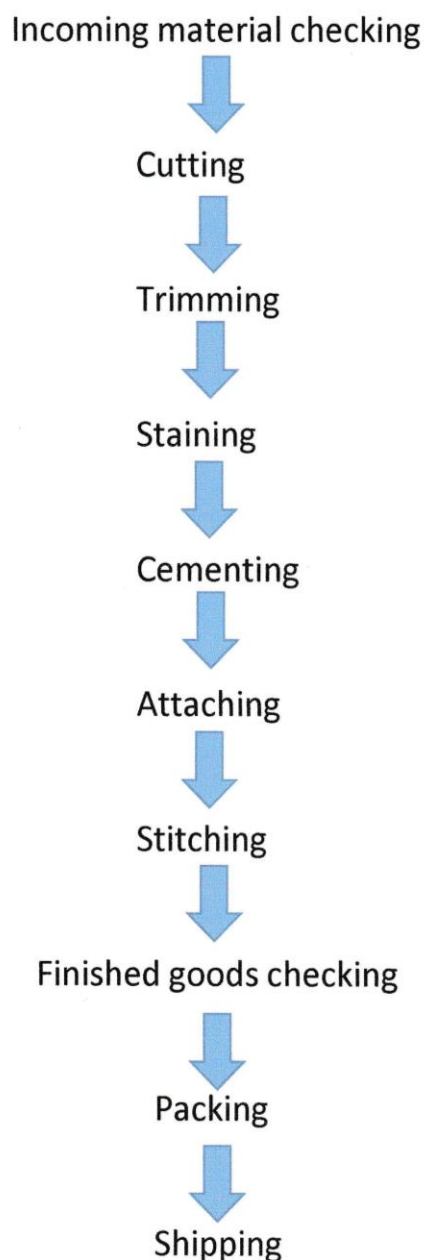


Figure 4-5 Production Process Flow-chart

#### ***Storage Conditions of Raw Materials and Finish Goods***

The main raw materials such as leather and other accessories are imported from China and Korea. The raw materials are ensured the right quantity and quality as well, and then stored in a warehouse in the proper condition before sending to manufacturing section. The final packaged products are stored in Finish Goods storage room.



Figure 4-6 Raw Materials Storage Room



Figure 4-7 Finish Goods Storage Room

#### 4.6. Raw Materials Requirement

The necessary raw materials will be imported from China, Korea, India and other foreign countries. Raw materials requirement for proposed project are shown in the following tables.

Table 4.1 List of Raw Materials for Proposed Factory

No	Particular	HS Code	Unit	Year- 1 to 3 (each 1 year)	Year- 4 to 10 (each 1 year)
1	Pu Material	5903	YARDS	15,000,000	16,500,000
2	Leather	4202	SQFT	183,000,000	201,300,000
3	Split leather	4107	SQFT	183,000,000	201,300,000
4	Canvas	5901	YARDS	16,000,000	17,600,000
5	Denim	5209	YARDS	16,000,000	17,600,000
6	Wetter Pu	8413	YARDS	16,000,000	17,600,000
7	Weave	8446	YARDS	16,000,000	17,600,000
8	Tpu	3909	YARDS	16,000,000	17,600,000
9	Velvet	5801	YARDS	16,000,000	17,600,000
10	Braid Material	5808	YARDS	16,000,000	17,600,000
11	Fabric	5903	YARDS	16,000,000	17,600,000
12	Twill Lining	5211	YARDS	14,300,000	15,730,000
13	TC Lining	5407	YARDS	14,300,000	15,730,000
14	Linen	6302	YARDS	14,300,000	15,730,000
15	Eva	3901	YARDS	11,980,000	13,178,000
16	Salpa	4115	YARDS	11,980,000	13,178,000
17	Pvc	3904	YARDS	11,980,000	13,178,000
18	Non-Woven Fabric	5603	YARDS	11,980,000	13,178,000
19	Transparent Tape	3919	YARDS	11,980,000	13,178,000
20	Elastic Rubber	4016	YARDS	11,980,000	13,178,000
21	Mesh	7314	YARDS	11,980,000	13,178,000
22	Pep Foam	3920	YARDS	11,980,000	13,178,000
23	Pep Foam Tube	4009	YARDS	30,200,000	33,220,000
24	Pu Foam	3926	YARDS	11,980,000	13,178,000
25	Towels	6304	YARDS	19,000,000	20,900,000
26	Velcro	5806	YARDS	18,700,000	20,570,000



No	Particular	HS Code	Unit	Year- 1 to 3 (each 1 year)	Year- 4 to 10 (each 1 year)
27	Metal Zipper	9607	YARDS	33,800,000	37,180,000
28	Nylon Zipper	8479	YARDS	33,800,000	37,180,000
29	Plastic Zipper	3923	YARDS	33,800,000	37,180,000
30	Zipper	9607	YARDS	33,800,000	37,180,000
31	Zip Head	9607	PCS	132,800,000	146,080,000
32	Zip Puller	9607	PCS	132,800,000	146,080,000
33	Lock	8301	SETS	60,400,000	66,440,000
34	D Ring	7318	PCS	60,400,000	66,440,000
35	O Ring	4016	PCS	60,400,000	66,440,000
36	Metal Hook	7315	PCS	40,400,000	44,440,000
37	Square Ring	8308	PCS	100,400,000	110,440,000
38	Buckle	8308	PCS	60,400,000	66,440,000
39	Magnetic Button	9606	SETS	60,400,000	66,440,000
40	Snap Button	9606	SETS	60,400,000	66,440,000
41	Rivets	7318	SETS	251,000,000	276,100,000
42	Slider Buckle	3926	PCS	40,400,000	44,440,000
43	Spring Buckle	9113	PCS	40,400,000	44,440,000
44	Button	9606	PCS	40,400,000	44,440,000
45	Sluds	7318	SETS	366,000,000	402,600,000
46	Handle	8211	PCS	30,200,000	33,220,000
47	Decoration	9505	PCS	74,000,000	81,400,000
48	Ring	9017	PCS	60,400,000	66,440,000
49	Mold	8480	PCS	60,400,000	66,440,000
50	Diamond/Crystal Stud	7113	PCS	151,000,000	166,100,000
51	Pearl	7107	PCS	201,000,000	221,100,000
52	Mobile Phone Shell	3926	PCS	20,200,000	22,220,000

No	Particular	HS Code	Unit	Year– 1 to 3 (each 1 year)	Year- 4 to 10 (each 1 year)
53	Eyelet	8308	SETS	251,000,000	276,100,000
54	Cotton Webbing	5806	YARDS	51,000,000	56,100,000
55	Nylon Webbing	5607	YARDS	51,000,000	56,100,000
56	Rubber Gasket	8484	PCS	151,000,000	166,100,000
57	Metal Logo	9606	PCS	40,400,000	44,440,000
58	Metal Clip	8308	PCS	60,400,000	66,440,000
59	Rubber Logo	4016	PCS	40,400,000	44,440,000
60	Thread	5401	ROLL	4,100,000	4,510,000
61	Elastic Strap	4016	YARDS	18,700,000	20,570,000
62	Webbing Binding	5806	YARDS	33,800,000	37,180,000
63	Lateral Stud	7318	PCS	37,400,000	41,140,000
64	Inviolable Tie	6215	PCS	37,400,000	41,140,000
65	Fabric Labels	5807	PCS	30,200,000	33,220,000
66	Llangtag	4821	PCS	66,400,000	73,040,000
67	Sealing Tape	3919	ROLL	2,230,000	2,453,000
68	Silica Gel	3824	PCS	60,400,000	66,440,000
69	Sticker	3919	PCS	60,400,000	66,440,000
70	PeBag	3923	PCS	30,200,000	33,220,000
71	Carton	4819	PCS	14,200,000	15,620,000
72	Cardboard	4819	PCS	30,200,000	33,220,000
73	Stuffing Paper	4802	KGS	30,200,000	33,220,000
74	Pve Piping	3917	YARDS	21,100,000	23,210,000
75	Pe Board	4811	YARDS	8,180,000	8,998,000
76	Card Board	4819	PCS	30,200,000	33,220,000
77	Chain	7315	YARDS	37,400,000	41,140,000
78	Alarm	9109	PCS	30,200,000	33,220,000

No	Particular	HS Code	Unit	Year- 1 to 3 (each 1 year)	Year- 4 to 10 (each 1 year)
79	Dust Bag	4202	PCS	16,600,000	18,260,000
80	Wax Cord	5607	YARDS	37,400,000	41,140,000
81	Cotton Rope	6307	YARDS	37,400,000	41,140,000
82	Copying Tissue	4818	KGS	878,000	965,800
83	Arogel	5603	KGS	1,870,000	2,057,000
84	Yellow Glue	3506	KGS	1,870,000	2,057,000
85	Universal Glue	4811	KGS	1,870,000	2,057,000
86	Edge Oil	2710	KGS	5,400,000	5,940,000
87	Webbing	5607	YARDS	37,400,000	41,140,000
88	Woven Label	5907	PCS	30,200,000	33,220,000
89	Label	4821	PCS	30,200,000	33,220,000
90	Air Bag	8708	PCS	20,200,000	22,220,000
91	Glue	3506	KGS	1,870,000	2,057,000
92	Plastic Bag	3926	PCS	16,600,000	18,260,000
93	Foam	3921	YARDS	9,240,000	10,164,000
94	Cord	8544	PCS	30,200,000	33,220,000
95	Micro Pack	3920	PCS	30,200,000	33,220,000
96	Antimock Sticker	4821	PCS	30,200,000	33,220,000
97	Paper	4823	KGS	878,000	965,800
98	Paper Pattern	4823	PCS	16,600,000	18,260,000
99	Reinforcement	7214	YARDS	15,800,000	17,380,000
100	PP Board	3926	YARDS	11,900,000	13,090,000
101	Japan Paper	4802	KGS	5,180,000	5,698,000
102	Packing Box	4819	PCS	16,600,000	18,260,000
103	Reinforcing Band	4009	YARDS	18,700,000	20,570,000
104	420D	5407	YARDS	14,300,000	15,730,000

No	Particular	HS Code	Unit	Year– 1 to 3 (each 1 year)	Year- 4 to 10 (each 1 year)
105	The Oil Of Machine	8421	KGS	9,200,000	10,120,000
106	Thread Oil	3403	KGS	9,200,000	10,120,000
107	Chip Board Paper	4823	KGS	4,900,000	5,390,000
108	Paper Pipe	4822	KGS	4,900,000	5,390,000
109	Masking Tape	4811	PCS	16,600,000	18,260,000
110	Self Adhesive Paper	4821	PCS	16,600,000	18,260,000
111	Materials Of Edge Painting	3210	KGS	9,200,000	10,120,000
112	Cleaning Agent	3402	KGS	9,200,000	10,120,000
113	Polyester Fab ric	5407	KGS	9,200,000	10,120,000
114	Plastic Oilcan	3926	PCS	16,600,000	18,260,000
115	Edge Painting Box	3210	PCS	16,600,000	18,260,000
116	Hot Melt Glue	3506	PCS	16,600,000	18,260,000
117	Drying Agent	3824	PCS	16,600,000	18,260,000
118	Poly Tube	3917	KGS	9,200,000	10,120,000
119	Micro fiber	5407	YARDS	16,900,000	18,590,000
120	Wheels	8708	PCS	17,200,000	18,920,000
121	Trolley case	4204	PCS	3,600,000	3,960,000
122	Embroidery panel	5810	PCS	30,200,000	33,220,000
123	Poly wood	4412	PCS	16,600,000	18,260,000
124	Wood mould	4418	PCS	16,600,000	18,260,000
125	Mirror	7009	PCS	16,600,000	18,260,000
126	Plastic buckle	3926	PCS	151,000,000	166,100,000
127	Plastic O ring	3926	PCS	151,000,000	166,100,000
128	Plastic D ring	3926	PCS	151,000,000	166,100,000
129	Plastic speed buckle	3926	PCS	83,000,000	91,300,000
130	Plastic connector	3917	PCS	123,800,000	136,180,000



No	Particular	HS Code	Unit	Year– 1 to 3 (each 1 year)	Year- 4 to 10 (each 1 year)
131	Plastic puller	3926	PCS	123,800,000	136,180,000
132	O shape piping	4016	YARDS	30,200,000	33,220,000
133	P shape piping	7306	YARDS	30,200,000	33,220,000
134	U shape piping	7304	YARDS	30,200,000	33,220,000
135	Bonded leather	4115	YARDS	30,200,000	33,220,000
136	Nylon mesh	5407	YARDS	30,200,000	33,220,000
137	Poly mesh	6006	YARDS	30,200,000	33,220,000
138	Metal Clip	8308	PCS	332,000,000	365,200,000
139	Plastic Clip	3923	PCS	332,000,000	365,200,000
140	Steel wire	7223	YARDS	30,200,000	33,220,000
141	Steel frame	7326	PCS	16,600,000	18,260,000
142	Plastic frame	3926	PCS	16,600,000	18,260,000
143	Hot melt adhesive sheet	3506	YARDS	30,200,000	33,220,000
144	Foil sheet	7607	ROLL	1,660,000	1,826,000
145	Brass emboss mould	8207	PCS	30,200,000	33,220,000
146	Print panel	6307	PCS	30,200,000	33,220,000
147	Toe puffs	6406	YARDS	30,200,000	33,220,000
148	Thermosol sweater	6310	YARDS	30,200,000	33,220,000
149	Needle mangle	7319	YARDS	30,200,000	33,220,000
150	Jersey	6110	YARDS	30,200,000	33,220,000
151	Steel sprint wire	7217	YARDS	30,200,000	33,220,000
152	Silica Plastic	2811	YARDS	16,600,000	18,260,000
153	Zipper stopper	9607	PCS	83,000,000	91,300,000

**Raw Material Photo**



Synthetic Pu Material



Synthetic Leather



Synthetic Split leather



Canvas



Denim



Water Pu



Weave



Tpu



Velvet



Braid Material



Fabric



Twill Lining



TC Lining



Linen



Eva



Salpa



Pvc



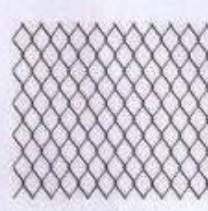
Non-Woven Fabric



Transparent Tape



Elastic Rubber



Mesh



Pep Foam



Pep Foam Tube



Pu Foam





Towels



Velcro



Metal Zipper



Nylon Zipper



Plastic Zipper



Zipper



Zip Head



Zip Puller



Lock



D Ring



O Ring



Metal Hook



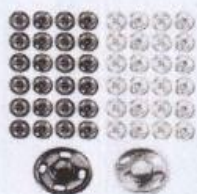
Square Ring



Buckle



Magnetic Button



Snap Button



Rivets



Slider Buckle



Spring Buckle



Button



Studs



Handle



Decoration



Ring





Mold



Diamond/Crystal Stud



Pearl



Eyelet



Cotton Webbing



Nylon Webbing



Rubber Gasket



Metal Logo



Metal Clip



Rubber Logo



Thread



Elastic Strap



Webbing Binding



Lateral Stud



Inviolable Tie



Fabric Labels



Hangtag



Sealing Tape



Silica Gel



Sticker



Pe Bag



Carton



Cardboard





Stuffing Paper



Pvc Piping



Pe Board



Card Board



Chain



Alarm



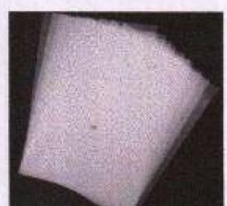
Dust Bag



Wax Cord



Cotton Rope



Copying Tissue



Aroclor



Yellow Glue





Trolley case



Embroidery panel



Poly wood



Wood mould



Mirror



Plastic buckle



Plastic O ring



Plastic D ring



Plastic speed buckle



Plastic connector



Plastic puller



O shape piping



#### 4.7 Machinery and Equipment

The lists of machineries and accessories used in operation process required for the proposed factory are listed in the following Table 4-2

Table 4-2 List of Machinery &amp; Equipment to be Imported

No	Description	HS Code	Unit	Qty	Unit Price	Total Price (US\$)
1	Cutting machine	8441	set	12	6,000	72,000
2	Shift head cutting machine	8479	set	12	4,000	48,000
3	Skive machine	8453	set	1	15,000	15,000
4	Paper cutting machine	8441	set	4	4,800	19,200
5	Edge skive machine	8453	set	20	500	10,000
6	Fold zipper window machine	8453	set	4	2,100	8,400
7	Dry machine	8451	set	1	950	950
8	Gluding Machine	8465	set	10	400	4,000
9	Cutting Ribbing Machine	8451	set	5	400	2,000
10	Coding Machine	8443	set	1	700	700
11	Folder Material Machine	3926	set	20	200	4,000
12	Strip Cutting Machine	8453	set	2	500	1,000
13	Embossed Machine	8479	set	4	850	3,400
	P.T.O					188,650

Table 4.2 (continue)

No	Description	HS Code	Unit	Qty	Unit Price	Total Price (US\$)
	B/F					188,650
14	Pressure Line Machine	9031	set	10	120	1,200
15	Inspection Machine	8451	set	1	1,000	1,000
16	Vacuum Cleaner Of Staking Machine	8479	set	20	120	2,400
17	Dehumidifier	8479	set	6	600	3,600
18	Air Compressor	8414	set	1	6,000	6,000
19	Punch Machine	8462	set	6	1,000	6,000
20	High Frequency	8515	set	2	2,000	4,000
21	Plodder Material	6353	set	1	1,000	1,000
22	Punch Machine	8462	set	2	100	200
23	Edge Folding machine	8451	set	10	230	2,300
24	Cuterbar Machine	8461	set	1	2,400	2,400
25	Slitter	8479	set	1	700	700
	P.T.O					219,450



Table 4.2 (continue)

No	Description	HS Code	Unit	Qty	Unit Price	Total Price (US\$)
	B/F					219,450
	Spare & Supporting Machine					
26	Lompter Sewing Machine	8452	set	160	390	62,400
27	Bartac Machine	8452	set	3	360	1,080
28	Nailing Machine	8463	set	30	400	12,000
29	Porber Machine	8461	set	1	2,000	2,000
30	Digital Paper Pattern cutting Machine	8441	set	1	5,000	5,000
31	Column Sewing Machine	8452	set	15	600	9,000
32	High Chariot Sewing Machine	8452	set	80	600	48,000
33	Edge Painting Machine	8424	set	20	320	6,400
34	Twin Needle Machine	8452	set	10	750	7,500
35	Thread Cutting Machine	8459	set	60	50	3,000
36	Bagger	8215	set	10	30	300
37	Alarm Detector	8531	set	2	370	740
38	Stand Grinder	8460	set	10	300	3,000
	P.T.O					379,870

Table 4.2 (continue)

No	Description	HS Code	Unit	Qty	Unit Price (US\$)	Total Price (US\$)
	B/F					379,870
39	Packing Machine	8422	set	3	440	1,320
40	Locking Machine	8462	set	4	385	1,540
41	Polish Machine	8464	set	10	100	1,000
42	Digital sewing machine	8447	set	60	3,000	180,000
43	360°Sewing machine	8452	set	2	1,500	3,000
44	Air punch machine	8466	set	10	300	3,000
45	Hammer machine	8467	set	10	300	3,000
46	Bench drill	8465	set	2	2,000	4,000
	Total (US\$)					576,730
	Total US\$ in millions					0.577

Electrical Equipment & Accessories (To Be Imported)

No	Description	HS Code	Unit	Qty	Unit Price (US\$)	Total Price (US\$)
1	Electric Welding Machine	8515	set	1	550	550
2	Electric Soldering Iron	8536	Pcs	100	5.00	500
3	Electronic Scale	8423	set	8	80	640
	Total (US\$)					1,690
	Total US\$ in millions					0.002

Factory Accessories (To Be Imported)

No	Description	HS Code	Unit	Qty	Unit Price (US\$)	Total Price (US\$)
1	Fork-Lift	8427	set	4	500	2,000
2	Needle	8482	set	10000	0.05	500
3	Sewing Machine Assessoiiies	8452	set	100	8	800
4	Hammer	8205	set	600	3	1,800
5	Tool / Cutter	8461	set	1000	1	1,000
6	Mold hardware	8480	set	2000	5	10,000
7	Cutter Mold	8480	set	100	20	2,000
8	Materia] Of Cutter Mold	8480	set	150	15	2,250
9	Tool Box	8205	set	15	10	150
10	Print Spooler	7326	set	2	1,000	2,000
11	Photocopier	8443	set	2	1,000	2,000
12	Screw	7318	set	200	0.1	20
13	Hotmelt Glue Gun	3926	Pcs	5	10	50
15	Scissors	8213	Pcs	5	10	50
17	Gule Sprayer	8515	set	4	2,100	8,400
19	Air Filter	8421	set	2	102	204
21	Color Light Box	9405	set	1	300	300
23	Air Brush Tool	8424	set	20	29	580
25	Gas tank	8708	set	1	350	350
	Total (US\$)					34,454
	Total US\$ in millions					0.034

**Milestone Leatherware Co., Ltd.**

**Machine Photos**



Cutting machine



Shift head cutting machine



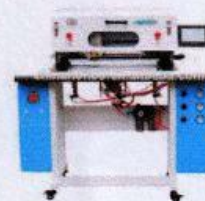
Skive machine



Paper cutting machine



Edge skive machine



Fold zipper window  
machine



Gas tank



Dry machine



Gluding Machine





Cutting Ribbing Machine



Coding Machine



Folder Material  
Machine



Strip Cutting Machine



Embossed Machine



Pressure Line  
Machine



Cloth Inspection Machine



Glue Sprayer



Vacuum Cleaner Of  
Staking Machine



Dehumidifier



Electronic Scale



Air Compressor



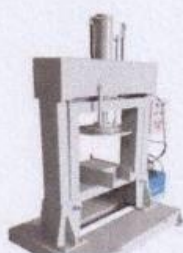
Air Filter



Punch Machine



High Frequency



Plodder Material



Color Light Box



Air Brush Tool



Punch Machine



Edge Folding machine



Cuterbar Machine



Electric Welding Machine



Fork-Lift (0.08 Ton)



Slitter



Lompter Sewing Machine



Bartack Machine



Nailing Machine





Porber Machine



Column Sewing Machine



High Chariot Sewing Machine



Edge Painting Machine



Twin Needle Machine



Thread Cutting Machine



Bagger



Alarm Detector



Stand Grinder



#### 4.8 Production and Distribution Plan

There are (17) items of leather goods are produced in the proposed factory and the production rate of the ten years period is shown in the following tables.

Table 4.3 Production Particular of proposed Factory

No	Particular	Unit	Year– 1 to 3 (each 1 year)	Year- 4 to 10 (each 1 year)
	<b>Production (Total)</b>	Pcs	<b>16,600,000</b>	<b>18,260,000</b>
1	Hand Bag	Pcs	1,000,000	1,100,000
2	Satchel #1	Pcs	1,200,000	1,320,000
3	Backpack #1	Pcs	1,000,000	1,100,000
4	Satchel #2	Pcs	1,200,000	1,320,000
5	Shopping Bag	Pcs	1,500,000	1,650,000
6	Wallet	Pcs	1,500,000	1,650,000
7	Cosmetic Bag	Pcs	1,000,000	1,100,000
8	Backpack #2	Pcs	800,000	880,000
9	Backpack #3	Pcs	800,000	880,000
10	Satchel #3	Pcs	1,200,000	1,320,000
11	Card Insertion	Pcs	1,500,000	1,650,000
12	Briefcase #1	Pcs	800,000	880,000
13	Travel Bag #1	Pcs	500,000	550,000
14	Trolley Case	Pcs	200,000	220,000
15	Belt	Pcs	800,000	880,000
16	Briefcase	Pcs	800,000	880,000
17	Travel Bag #2	Pcs	800,000	880,000



**Milestone Leatherware Co., Ltd.**

**Product Photos**



Hand Bag



Satchel #1



Backpack #1



Satchel #2



Shopping Bag



Wallet



Cosmetic Bag



Backpack #2



Backpack #3



#### 4.9. Employment

The normal working hours of the factory is from 8:00 am to 5:00 pm on Monday to Friday. The break time is 12:00 pm to 1:00 pm. Weekend days and other gazette holidays are closed. There are 824 local workers and 7 foreign technicians are employed in the factory. The factory working time is one shift per day.



Table 4.4- Employee Statement of proposed factory

Sr No	Designation	No. of Employee	
		Local	Foreign
1	HR Manager	1	
2	Shipping Manager	1	
3	Admin Manager	1	
4	Quality Inspection Manager	1	1
5	Production Manager		1
6	Financial Manager		1
7	Secretary		1
8	Accountant		1
9	Warehouse Supervisor		1
10	Fire Safety Officer	1	
11	Machine Repair	1	1
12	Translator	6	
13	Office Clerk	3	
14	Warehouse In & Out of the Clerk	1	
15	Skill labour	699	
16	Unskill labour	100	
17	Cleaner	3	
18	Security	4	
19	Driver	2	
	<b>Sub total</b>	<b>824</b>	<b>7</b>
	<b>Total</b>	<b>831</b>	

#### 4.10. Project Utilities

The main utilities are transformer, generator and factory drainage channel.

##### (1) Water Supply

Domestic water was used for two tubes well; which is ~300 feet depth; installed 4-inch diameter (Ø) pipe and stores in the overhead steel tanks which capacity is about 2,000 gallons. The overhead tank is applied for domestic usage by water purification machine. For emergency fire-fighting, there are two concrete brick tank which holding capacity is about 2,000 gallons each. The annual water consumption is about 65,000 gallon per year. Domestic usage tube well and water storage tank is shown in Figure 4.8.



Figure 4.8 Tubes Well and Overhead Tank

## **(2) Electricity**

There is one transformer with the capacity of 315 kVA. Electricity used in operation process is from township main grid line and connects to own substation transformers, which is situated within the factory compound. The estimated electricity meter unit is about 200,000 kWh per year. The photo of transformer is shown in Figure 4.9.



Figure 4.9 Factory Transformer

### ***(3) Generator***

There are two notes of generator with the capacity of 300 kW and 175 kW used when the electricity breaks down. The estimated consumption of fuel (diesel) is 50 gallons per month. The photos of generators are shown in Figure 4.10.



Figure 4.10 Generators

### ***(4) Ventilation System***

Ventilation System is provided for workers at the operation place and office building. Air-cons, fans, windows, exhaust fan and main doors are provided for workers around the factory.



Figure 4.11 Ventilation System



### ***(5) Drainage Channels***

There are drainage channels installed around the factory compound. All channels are 1 ft wide and 2 ft depth. All staffs and workers in the factory are strictly prohibited to throw solid waste into the drainage channel. Domestic wastewater and recycle waste water that discharged to the factory drainage channel is flowed to the municipal drainage channel which is beside the factory compound.



Figure 4.12 Drainage Channels

### ***(6) Infrastructure Facilities for Workers***

Supporting facilities for workers are purified drinking water supply, accommodation for foreign staff and canteen. The water purifier is installed for the staffs' drinking water. Moreover, there are 6 male toilets and 12 female toilets are provided for workers. The sludge from the septic tank has removed twice a year. The factory is also supported uniforms for employees. The employees are allowed medical leaves when they suffer from personal health diseases according to Factory Act. Based on the performance and the yearly profit of the company, the annual bonus and Thingyan bonus will be announced and paid to each employee every year.



*Dormitory*



*Water Purification system*





*Canteen*



*Toilets*

### ***(6) Safety and Health Facilities***

The factory has provided personal protected equipment (PPE) for worker safety and arrange for the minor injuries with first aid kit. The risk of fire is to be reduced as sufficient numbers of fire extinguishers are to be installed: fire pump and firefighting water tanks. The Emergency exit doors, fire alarm systems, signs and posters for directions for evacuation routes and emergency contact numbers are well placed in case of fire.



*Firefighting system*





*Firefighting water tank*



*Emergency Exit*



#### 4.11. Amount and Types of Waste

##### (a) Solid waste

From the production process, main solid waste such as leather scraps generation will be due to cutting, trimming and packaging activities. Leather and fabric scraps from cutting and trimming, and packing material from activities of receiving raw materials and packaging finished goods will be collected and stored for further use. These waste generations are about 2 bags or 60 kilograms per day in the operation process. Domestic wastes are generated from the workers including from office and canteen. According to the IGES (2016), the estimated amount of waste generation from each person is 0.4 kg/person/day. Currently, there are 831 workers in the factory; the estimated waste generation is around 332 kg/day. To avoid overload and unsanitary bulk storage of wastes i.e., the factory is recommended to practice waste segregation into dry and wet waste with different color garbage bins.

Domestic wastes are generated from the workers including from office and kitchen. Temporary wastes are collected in the municipal waste bins in the factory compound. Domestic wastes are collected by YCDC once per week. Garbage bins is shown in Figure.

##### (b) Liquide waste

There is not water usage in the factory operation process. During the operation phase, sanitation/ drainage system will be developed. Based on the U.S EPA (1978)<sup>1</sup>, the average daily wastewater discharge for a factory worker is 15~20 liter/day/person. Therefore, the estimated wastewater discharge from fully operation of the 831 workers will be around 16620 liter/day (4,390 gallons). Currently, a clean and well-maintained septic tank is also provided sufficiently for the workers. The regular monitoring should be done along with cooperation with YCDC for regular disposal.

The generated wastes and management process of the proposed factory is shown in the following Figure 4.13.

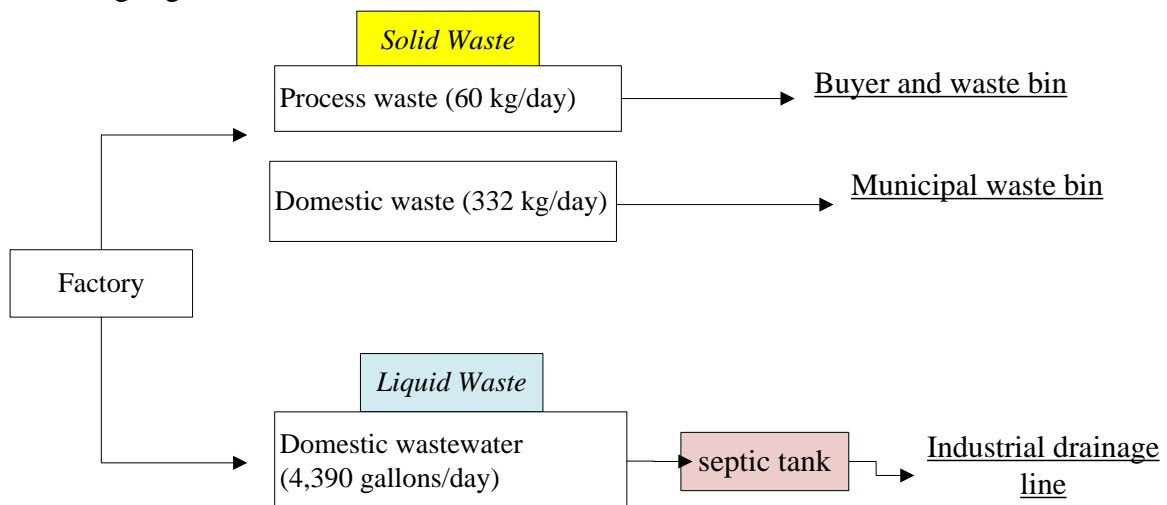


Figure 4.13 – Flow Chart of Generated Wastes and Management in the Factory

<sup>1</sup> U.S.EPA. (1978), Environmental impact statement phase II, Facility Plan Handover Country, Virginia 3<sup>rd</sup> Edition.



Figure 4.14 Waste Bins

## 5.0. DESCRIPTION OF SURROUNDING ENVIRONMENT

The overviews of the environmental and social conditions of the project area are presented in this section. The primary data was collected during environmental baseline sampling conducted for air, noise and water quality in November, 2021. Some data such as socioeconomic conditions, physical/biological environment and weather data are collected from official Township Data and analyzed by the study team. The baseline data of the Dagon Seikan Township was collected from the Township Data published by General Administration Department.

### 5.1 Geographical Study Limit

The geographical study limit is defined as the baseline data surrounding of the project site should be collected. The project site is located Dagon Seikan Township. The project study area refers to the area that needs to be studied in order to adequately understand and describe the baseline conditions likely to be affected by the project. At a minimum, the project study area will encompass the project footprint and around the 500-meter radius of the project site is the geographical study limit of the area of influence.

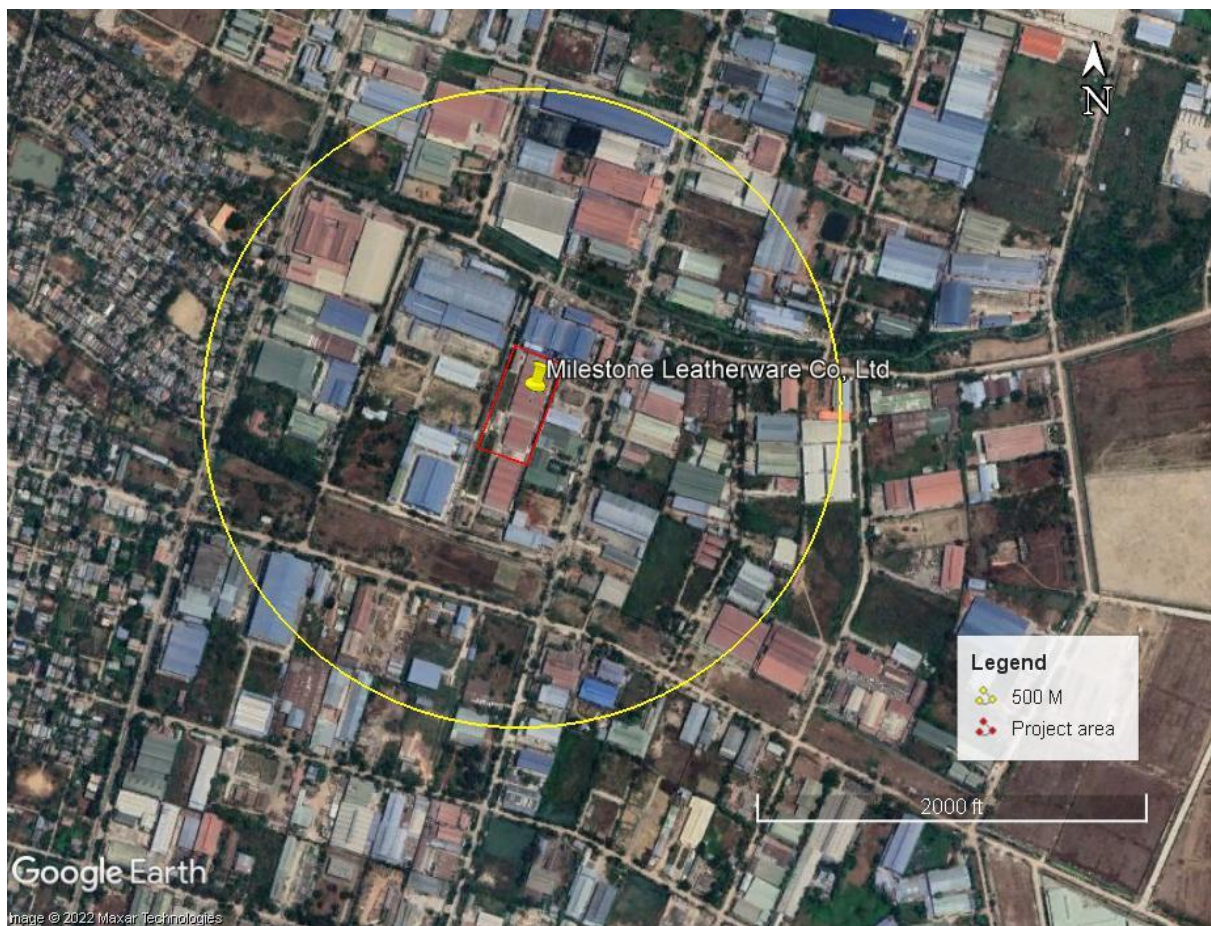


Figure 5.1. Geographical Study Limit Area of Project

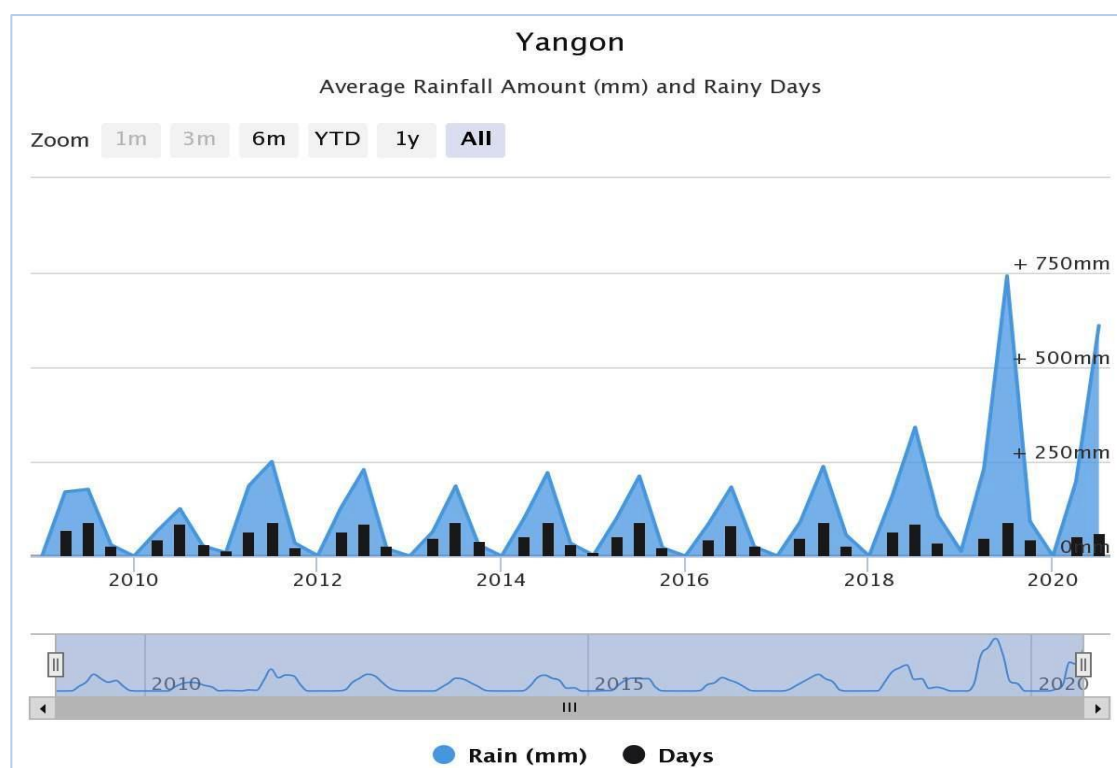
## 5.2. Meteorology and Climatology

The dry season of the area in which the project lies starts in February and ends in May. 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 is 45°C and the lowest temperature is 15°C. Yearly rainfall and temperature are shown in following table.

Table 5.1. Yearly Rainfall and Temperature of Dagon Seikan Township

No.	Year	Rainfall		Temperature	
		Raining Day	Total Rainfall (in)	Highest (°C)	Lowest (°C)
1.	2015	108	136.92	40	16
2.	2016	102	79.20	45	15
3.	2017	101	138.85	42	18
4.	2018	113	134.53	40	12.5
5.	2019	112	122.35	45	15
6.	2020	105	101.85	39	19

Source: Dagon Seikan Township Profiles, General Administrative Department,



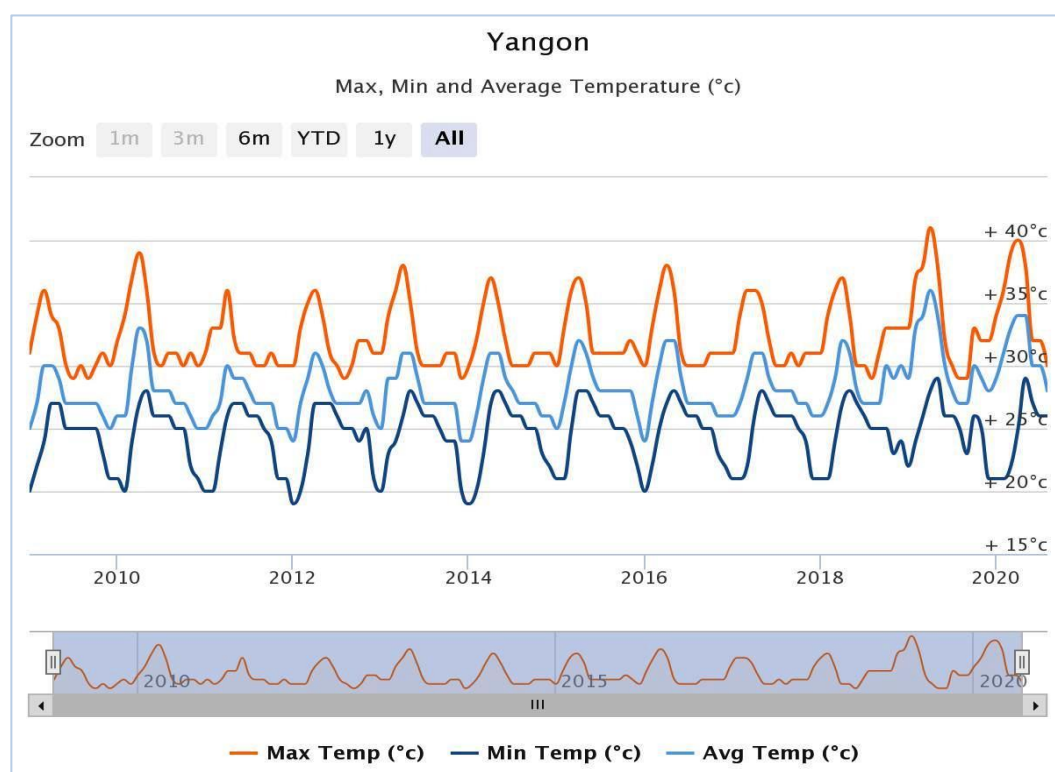
Source: worldweatheronline.com

*Average Rainfall and Rainy Day over Project Area*

### Temperature Trends

It was very clear from temperature trend analysis that the maximum temperature showed increasing trends and decreasing trend for minimum temperature over all parts of the years in the project site.





Source: worldweatheronline.com

*Maximum and Minimum Temperature Deviation Trend over Project Area*

### 5.3. Geology

Yangon area is underlain by alluvial deposits, the non-marine fluvial sediments of Irrawady Formation, and hard, massive sandstone of Pegu Series. The alluvial deposits are composed of gravel, clay, silts, sand and laterite, which lies upon the eroded surface of Irrawady Formation at 4.6 m above mean sea level. The central part of Yangon area is occupied by the anticlinal ridge as a backbone, 30 m above mean sea level and covered with sands, sand rock, soft sandstones, shale, clays, and lateritic of Irrawady Formation. The hard compact sandstone and shale of Pegu series can be found at the northwest corner of Hlawga Lake with NNW–SSE strike dipping to the east. Alluvial deposits are found in the surrounding areas of the ridge whereas lateritic soils can be found along the ridge (Figure 5.2).

In the geological map, two anticlines can be seen trending NNW-SSE direction and are cut by NNE-SSW trending transverse fault (Aung, 2011). From the geological point of view, it can be concerned for the initial review of faster displacement possibility in some area such as in the eastern part of the city where the top soil is clays.

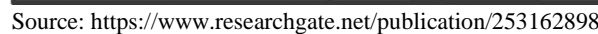


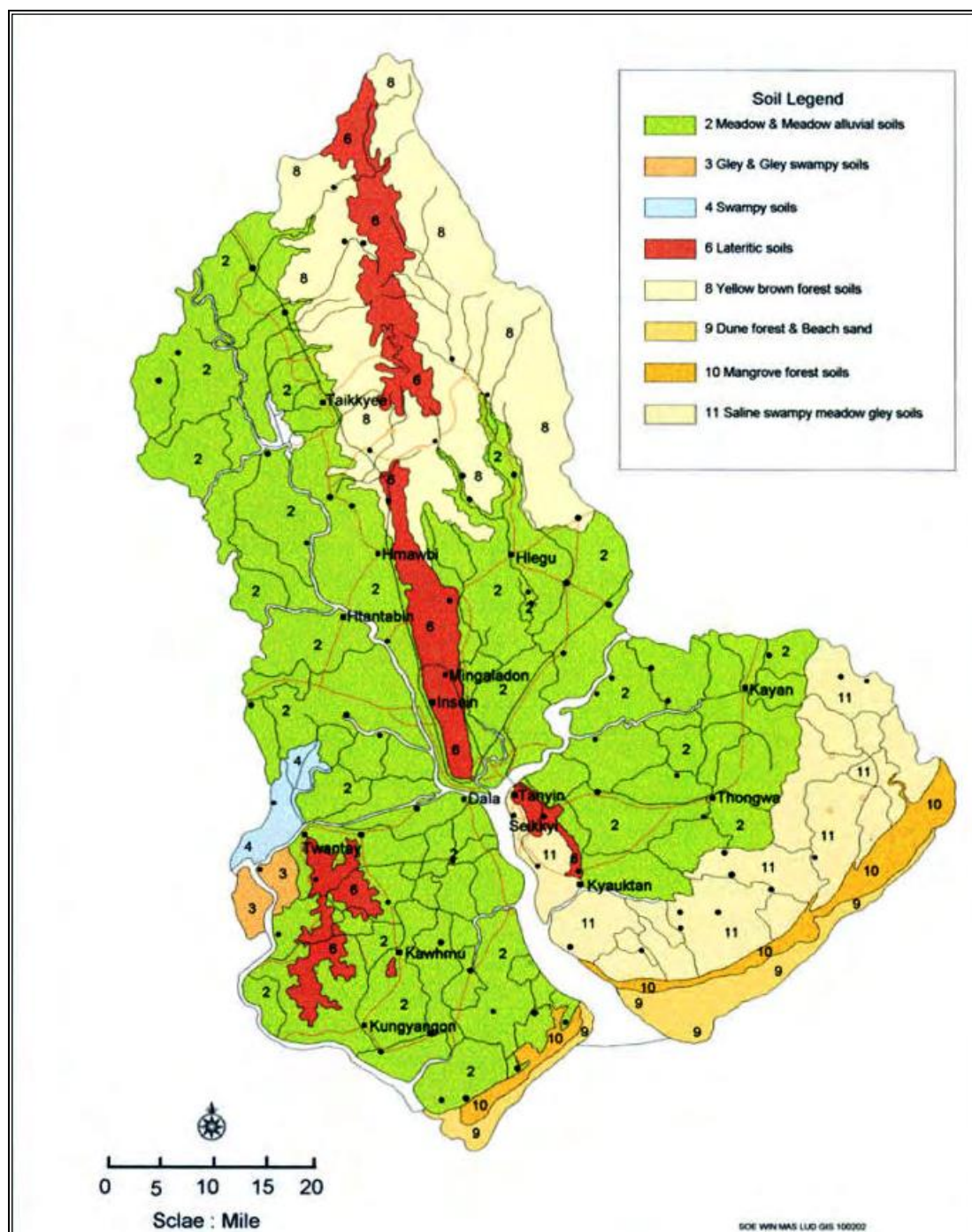
Figure 5.2. Geological map of Yangon Area

## 5.4. Soil Erosion

The different varieties of the individual soil characteristics are Meadow and Meadow Alluvial Soil, Gley and Gley swampy soils, Swampy soils, Lateritic soils, Yellow brown forest soils, Dune forest & Beach sand, Mangrove forest soils and Salineswampy meadow gley soils. The meadow soils which occur near the river plains with occasional tidal floods are noncarbonate.

They usually contain large amount of salts. Meadow Alluvial soils (fluvic Gleysols) can be found in the flood plains. They have the texture of silty clay loam and they have the neutral soil reaction and are rich in available plant nutrients. Meadow Gley soils (Gleysol) and Meadow swampy (Histic Gleysol) occur in the regions of lower depressions where the lands are inundated for more than 6 months in a year. The texture of these soils is clayey to clay and usually having very strong acid reaction, and contain large amount of iron.

Dune forest and Beach sand can be found only at the coastal line of Myanmar. The areas of their occurrence are insignificant. The coastal line should be under wind and water erosion control. Mangrove forest soils occur in very small area along the coastal line of Myanmar, especially in the region of Ayeyarwady Delta. These are marine flat lowlands, which are affected by daily tides. Saline swampy meadow gley soils in Ayeyarwady Delta and along the river bands of the Gulf of Motama and the marine flat lowlands influenced by the tidal sea water, which is always salty.



Source: Land Use Division, Myanmar Agriculture Service

Figure 5.3. Soil map of Yangon Division



### 5.5 Topography

The study area is flat with elevations from 4.5 m (15 ft) above mean sea level. The topography of Dagon Seikan Township is gradually lower from Northern to Southern parts.



Figure 5.4. Digital Elevation Map of Project Area

### 5.6 Seismicity

Myanmar is an earthquake-prone country because it lies in a one of the world major earthquake belt, Alpide Belt, which extends from northern Mediterranean through Iran, Himalaya region and Myanmar. Most of the earthquake in central and delta region of Myanmar have resulted from movement of Sagaing Fault which extends from the northwest of Katha, through Sagaing, along the eastern flank of Pegu Yoma and finally into the western Gulf of Martaban for a distance of about 600 miles. Structurally, Hpa-pon fault and Three - pagoda fault are situated at the northern and southern part of the area and their trend in nearly NW - SE direction. Earthquake intensity in the area can be seen in Figure 5.5.

As per map the proposed project is located within the Zone II (Moderate zone) of earthquake hazard, as shown in Seismic Zone Map of Myanmar showing expected peak ground acceleration (PGA) values with 100% probability in 500 years. In addition, there is no major earthquake recorded in the study area.



Figure 5.5. Seismic Zone Map of Myanmar



## 5.7 Baseline Environmental Quality

### 5.7.1 Air Quality

Emission of air pollutants occur from the operational works since the sampling point is located in the compound of the proposed factory.

#### *Survey Item*

The parameters for air quality survey were SO<sub>2</sub>, NO<sub>2</sub>, CO<sub>2</sub>, CO, H<sub>2</sub>S, PM<sub>2.5</sub>, PM<sub>10</sub>, Wind Speed and Wind Direction.

One survey point for air quality monitoring is located in the compound of the factory. The detail of the location of air quality survey points are presented in figures and table below.

#### *The location of Air Monitoring*

No.	Sample Name	Coordinates		Location
		Latitude (N)	Longitude (E)	
1.	Air Monitoring Point (AS1)	16°50'36.68"N	96°17'3.17"E	In front of the Factory
2	Air Monitoring Point (AS2)	16°50'37.89"N	96°17'4.77"E	Between the Cutting and Trimming Machines Lines, inside of the factory



Figure 5.6 Location of Air Monitoring



Recorded photo of air monitoring point 1

#### *Duration of Air Quality Survey*

Sampling and analysis of ambient air quality was collected at two sample point located in the compound of the factory for 8 hours and 4 hours respectively.

Sampling point	Duration
AS 1	12: 00 to 20: 00 (11.11.2021)
AS 2	8: 00 to 12: 00 (11.11.2021)

#### *Survey Methodology*

Sampling and analysis of ambient air quality were conducted by referring to the recommendation of the United States Environmental Protection Agency (U.S. EPA). The Haz-Scanner Environmental Perimeter Air Station (EPAS) was used to collect ambient air survey data. Sampling rate or air quality data were measured automatically every one minute and directly read and recorded onsite for measured parameters (SO<sub>2</sub>, NO<sub>2</sub>, CO<sub>2</sub>, CO, PM<sub>10</sub>, PM<sub>2.5</sub>). Sampling pump was operated at 2 L/min. Different analysis methods are integrated in the instrument, such as Particulates 90° Infrared Light Scattering for particulate matters (PM<sub>10</sub>, PM<sub>2.5</sub>), electrochemical sensors for toxic gases (SO<sub>2</sub>, NO<sub>2</sub>, CO), NDIR (optional sensor) for (CO<sub>2</sub>).

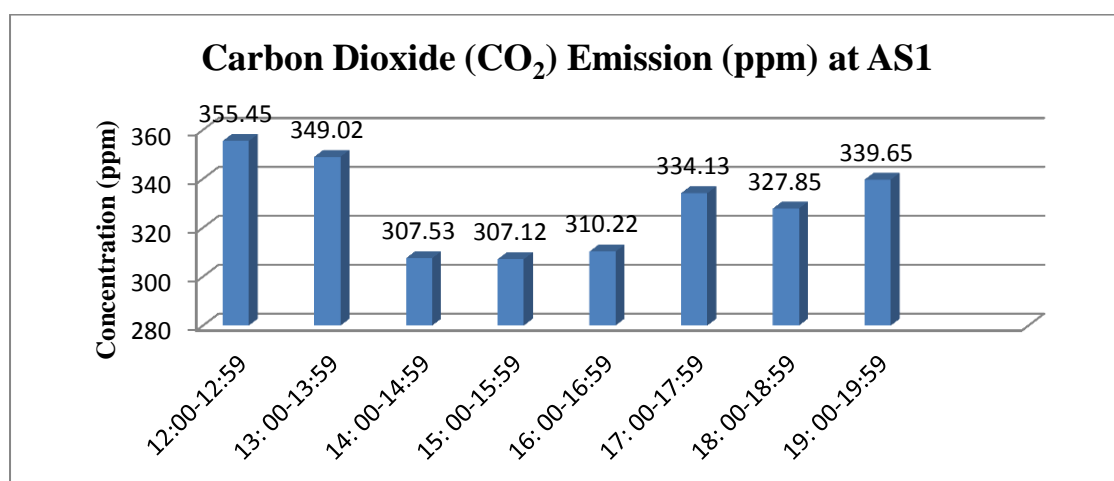
### *Measurement of Air Quality Comparing with the Air Quality Standards and Guidelines*

CO, CO<sub>2</sub>, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> are measured at the proposed factory site. The standards for applicable to the possible air pollutants were determined from review of Myanmar National Environmental Emission Guideline and World Health Organization (WHO) Guideline. The average concentrations of pollutants at the sampling point, for about 8 hours are shown in the table below.

Table 5.2 Average concentrations of pollutants at the sample point (AS 1), for 8 hours

Sample point	Time	Average Value Parameters					
		CO <sub>2</sub> (ppm)	CO (ppb)	SO <sub>2</sub> (ppb)	NO <sub>2</sub> (ppb)	PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )
Air Sample Point AS1	12:00-12:59	355.45	0.000	1	2.04	7.21	5.12
	13: 00-13:59	349.02	0.010	1	2.33	5.11	10.8
	14: 00-14:59	307.53	0.008	1	2.10	4.12	8.16
	15: 00-15:59	307.12	0.009	1	2.28	9.12	6.15
	16: 00-16:59	310.22	0.018	2	3.21	6.16	12.18
	17: 00-17:59	334.13	0.016	1	3.11	2.39	4.20
	18: 00-18:59	327.85	0.009	2	3.04	3.29	5.17
	19: 00-19:59	339.65	0.012	2	2.27	7.36	9.22

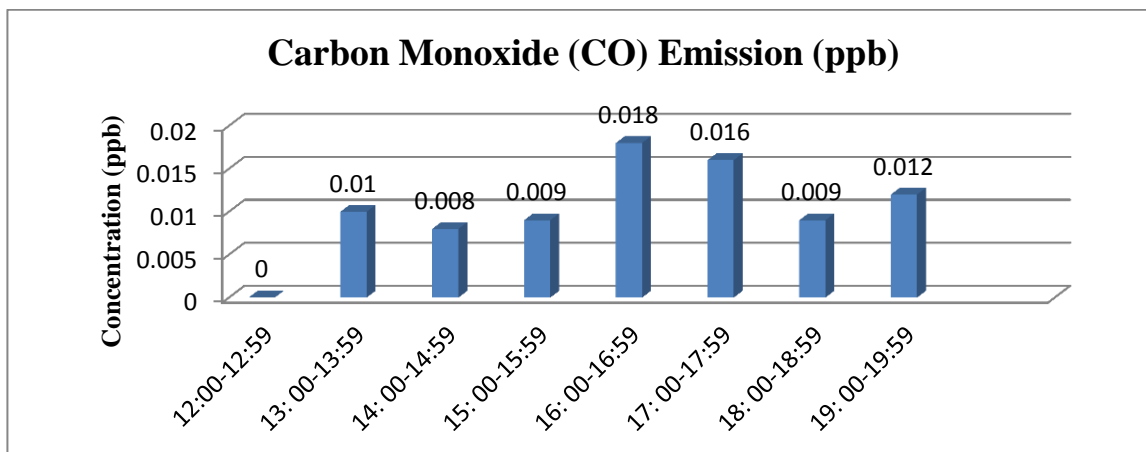
The chart below show that the concentration of Carbon Dioxide (CO<sub>2</sub>) measured in all the sampling times at sampling point was between the ranges of 307 ppm – 356 ppm.



CO<sub>2</sub> value compared with American Conference of Governmental Industrial Hygienists (ACGIH) Guidelines. The concentration of Carbon Dioxide measured in all the sampling times at sampling point was below the (ACGIH) Guidelines, which specifies 5000 ppm for

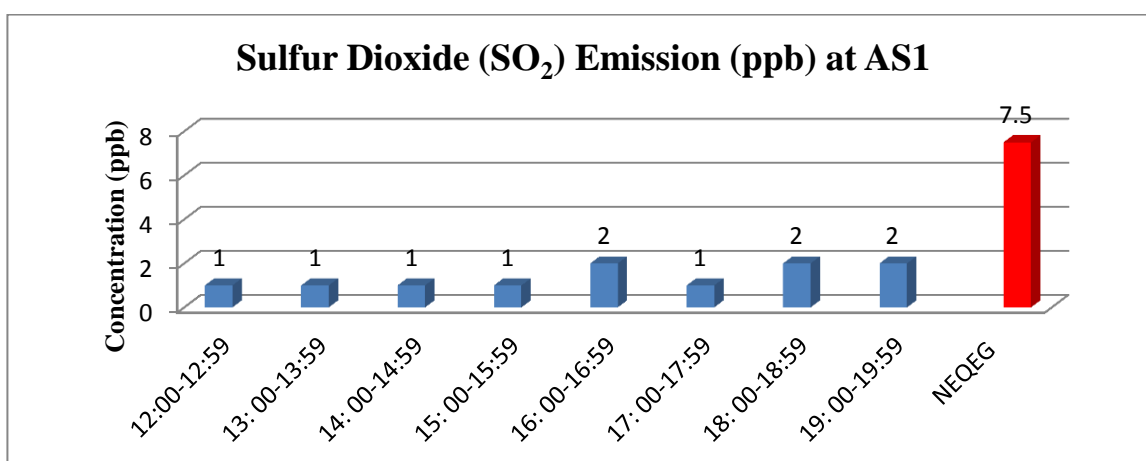
the limitation of CO<sub>2</sub> concentration. CO<sub>2</sub> concentration of 356 ppm was the highest and 307 ppm was the lowest at the proposed area.

The chart below show that the concentration of Carbon Monoxide (CO) measured in all sampling times at sampling point was between the ranges of 0 ppb – 0.18 ppb.



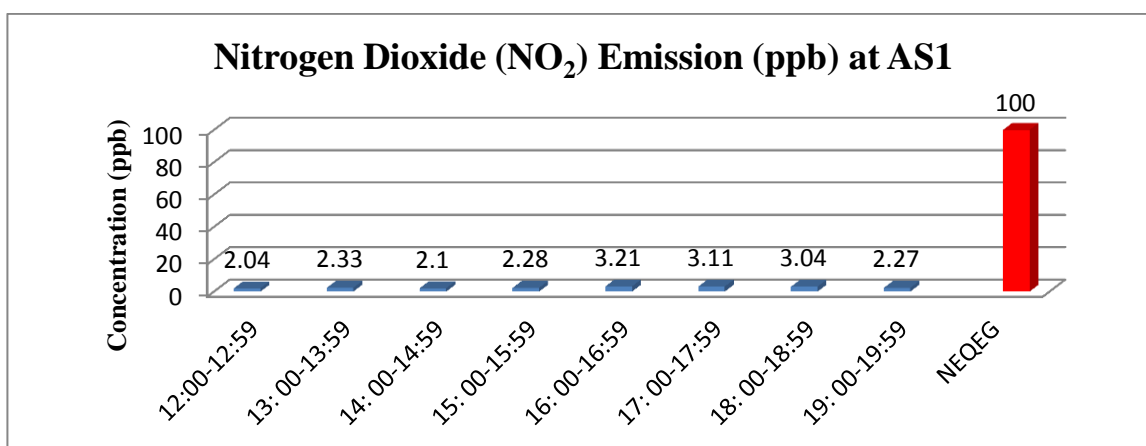
The concentration of Carbon Monoxide measured in all the sampling times at sampling point was below the World Health Organization (WHO) Guidelines, which specifies 9 ppm for the limitation of CO concentration. CO concentration of 0.18 ppb was the highest and 0 ppb was the lowest at the proposed area.

The chart below show that the concentration of Sulfur Dioxide (SO<sub>2</sub>) measured in all sampling times at sampling point was between the ranges of 2 ppm – 1 ppm.



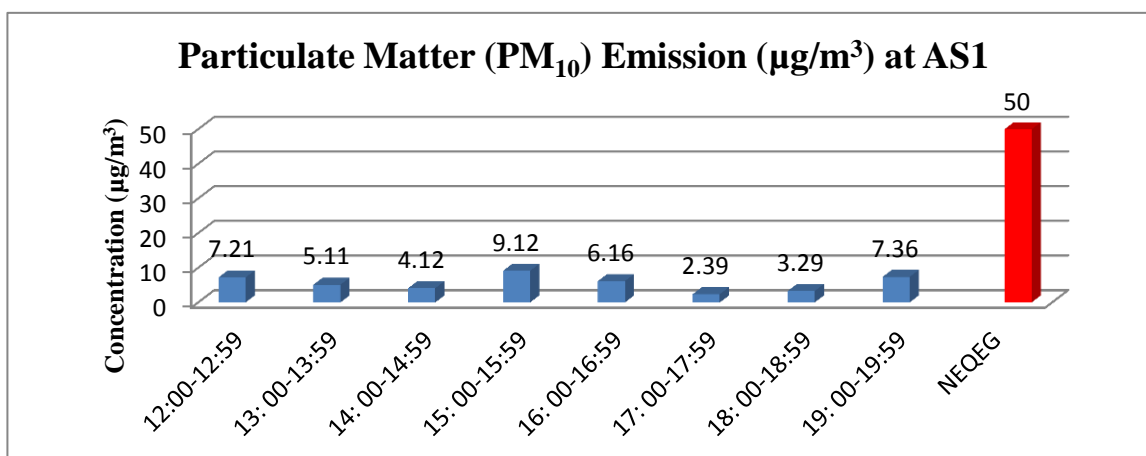
The concentration of Sulfur Dioxide measured in all the sampling times at the sampling point was below the (NEQEG) and World Health Organization (WHO) Guideline, which specifies 20µg/m<sup>3</sup> or 7.5 ppb for the limitation of SO<sub>2</sub> concentration. SO<sub>2</sub> concentration of 2 ppm was the highest and 1 ppm was the lowest at the proposed area.

The chart below show that the concentration of Nitrogen Dioxide (NO<sub>2</sub>) measured in all sampling times at sampling point was between the ranges of 2 ppb – 4 ppb.



The concentration of Nitrogen Dioxide measured in all the sampling times at sampling point was below the Myanmar National Environmental Quality Emission Guideline (NEQEG), which specifies 200 $\mu\text{g}/\text{m}^3$  or 100 ppb for the limitation of NO<sub>2</sub> concentration. NO<sub>2</sub> concentration of 3.21 ppb was the highest and 2.04 ppb was the lowest at the proposed area.

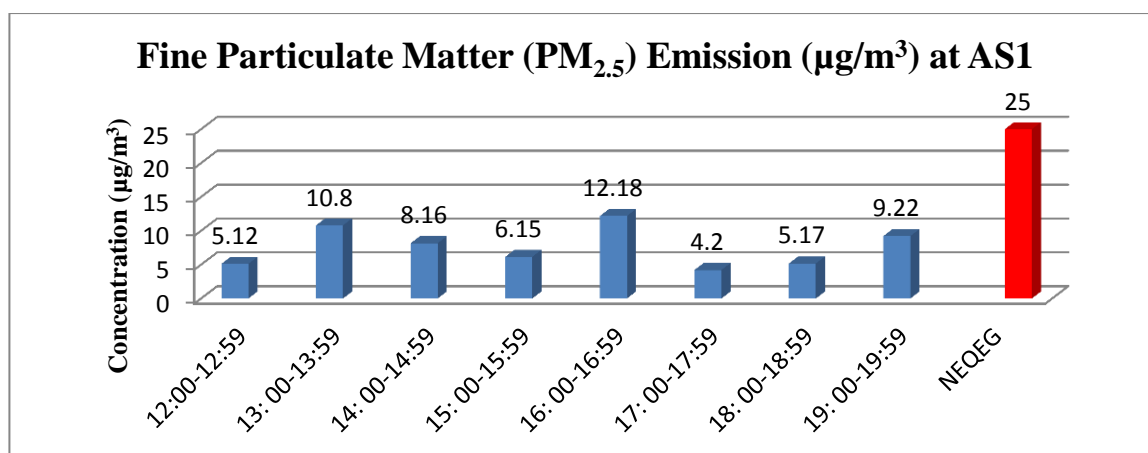
The chart below show that the concentration of Particulate Matter (PM<sub>10</sub>) measured in all sampling times at sampling point was between the ranges of 2.3 $\mu\text{g}/\text{m}^3$  – 9.12 $\mu\text{g}/\text{m}^3$ .



The concentration of Particulate Matter measured at sampling point was below the limit of NEQEG and World Health Organization (WHO) Guideline which specifies 50 $\mu\text{g}/\text{m}^3$  for the limitation of PM<sub>10</sub> concentration. PM<sub>10</sub> concentration of 9.12 $\mu\text{g}/\text{m}^3$  was the highest and 2.39 $\mu\text{g}/\text{m}^3$  was the lowest at the proposed area.



The chart below show that the concentration of Fine Particulate Matter (PM<sub>2.5</sub>) measured in all sampling times at sampling point was between the ranges of 4µg/m<sup>3</sup> – 13µg/m<sup>3</sup>.



The concentration of Fine Particulate Matter measured in all the sampling times at the sampling point was below the (NEQEG) Guideline which specifies 25µg/m<sup>3</sup> for the limitation of PM<sub>2.5</sub> concentration. PM<sub>2.5</sub> concentration of 12.18µg/m<sup>3</sup> was the highest and 4.2µg/m<sup>3</sup> was the lowest at the proposed area.

### Additional Air Monitoring process

Additional air monitoring is proceed in the building of the factory between the cutting section and trimming line in order to determine the concentrations of particulate matters (PM 10 and PM2.5) which are assumed to be emitted from the operational works of the factory machines area. The average concentrations of particulate matters (PM 10 and PM 2.5) at the sampling point, for about 4 hours are shown in the table below.

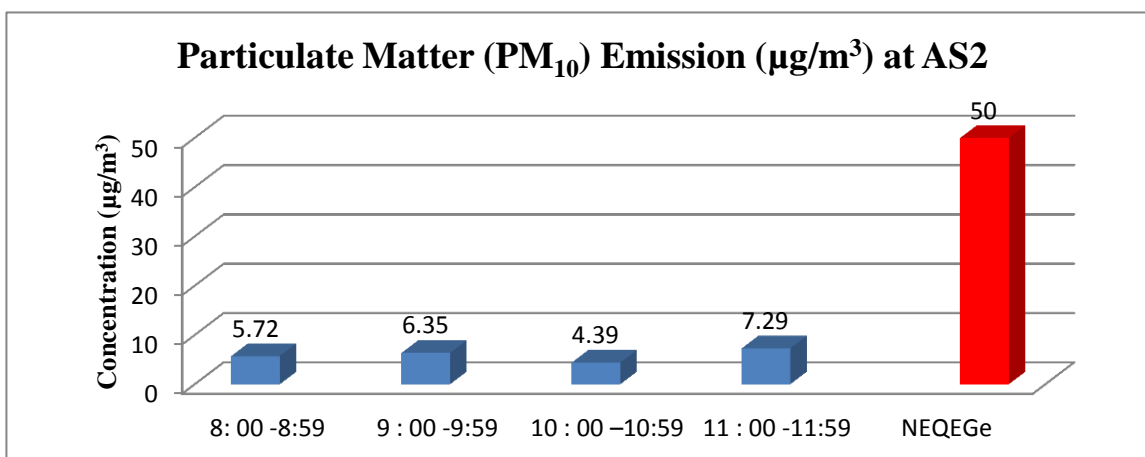
Table 5.3 Average concentrations at the sample point (AS 2), for 4 hours

Date	Sample Point	Time	Average Value Parameter	
			PM <sub>10</sub> (µg/ m <sup>3</sup> )	PM <sub>2.5</sub> (µg/ m <sup>3</sup> )
11.11.2021	AS 2	8: 00 -8:59	5.72	4.16
		9 : 00 -9:59	6.35	7.15
		10 : 00 –10:59	4.39	5.18
		11 : 00 -11:59	7.29	6.42



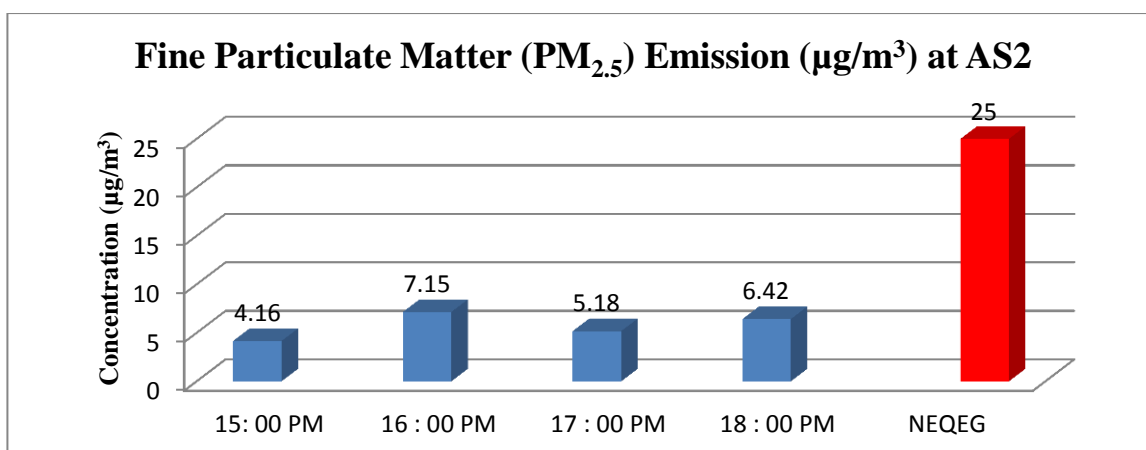
Recorded photo of air monitoring point 2

The chart below show that the concentration of Particulate Matter (PM<sub>10</sub>) measured in all sampling times at sampling point was between the ranges of 4µg/m<sup>3</sup> – 8µg/m<sup>3</sup>.



The concentration of Particulate Matter measured at sampling point was below the limit of (NEQEG) Guideline which specifies 50µg/m<sup>3</sup> for the limitation of PM<sub>10</sub> concentration. PM<sub>10</sub> concentration of 7.29µg/m<sup>3</sup> was the highest and 4.39µg/m<sup>3</sup> was the lowest at the proposed area.

The chart below show that the concentration of Fine Particulate Matter (PM<sub>2.5</sub>) measured in all sampling times at sampling point was between the ranges of 4µg/m<sup>3</sup> – 8µg/m<sup>3</sup>.



The concentration of Fine Particulate Matter measured in all the sampling times at the sampling point was below the (NEQEG) Guideline which specifies 25µg/m<sup>3</sup> for the limitation of PM<sub>2.5</sub> concentration. PM<sub>2.5</sub> concentration of 7.15µg/m<sup>3</sup> was the highest and 4.16µg/m<sup>3</sup> was the lowest at the proposed area.

### 5.7.2 Noise Level

The ambient noise level monitoring was carried out continuously for 16hr along at the same locations as the air monitoring. The detail of the location of air quality survey points are presented in figures and table below.

#### *Noise station Locations for Baseline Survey*

Survey Point	Type of Survey Point	Detailed Description of Survey Point
NS1	Survey point which is excluded from disturbance of any building	About 15 meters away in front of the factory. (16°50'37.42"N 96°17'3.16"E)
NS2	Survey Point inside the factory (only working time)	Near Stitching Section (16°50'36.13"N 96°17'3.99"E)

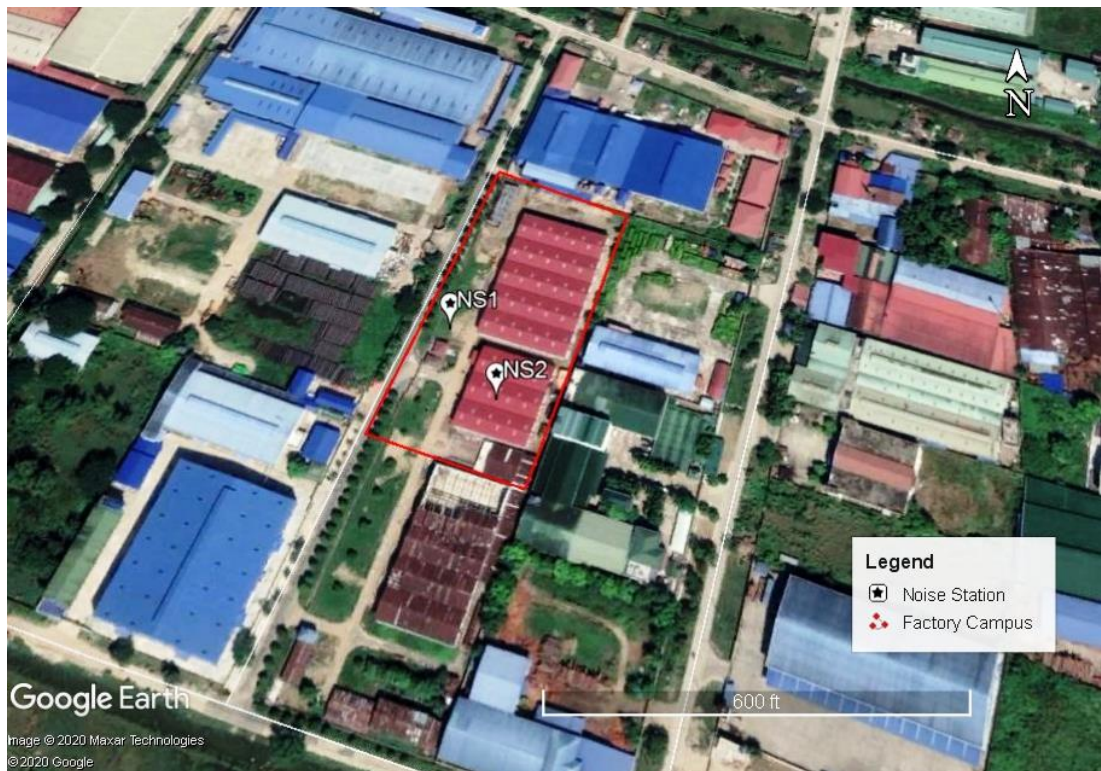


Figure 5.7 Noise station Locations

To monitor the existing noise level, the study team used TES-1353H Integrating Sound Level Meter which is applicable with IEC61672-1: 2003, IEC60651: 1979, ANSI S1.4: 1983 and IEC60804: 1985 standards.



Recorded photo of Noisemonitoring

Table 5.4 Average Values of Noise Level (dB) at the sampling point 1

Noise Sample Point	Time (11.11.2021)	Observed Mean Value	Day/Night	Average (dBA)
NS1 (16°50'37.42"N 96°17'3.16"E) In front of the factory	8:00-8:59	42.4	Day	51.6
	9:00-9:59	46.5	Day	
	10:00-10:59	61.7	Day	
	11:00-11:59	53.9	Day	
	12:00-12:59	49.4	Day	
	13:00-13:59	50.8	Day	
	14:00-14:59	62.1	Day	
	15:00-15:59	45.6	Day	
	16:00-16:59	51.5	Day	
	17:00-17:59	52.7	Day	
	18:00-18:59	50.7	Night	43.9
	19:00-19:59	46.1	Night	
	20:00-20:59	42.3	Night	
	21:00-21:59	40.5	Night	
	22:00-22:59	40.2	Night	

Table 5.5 Average Values of Noise Level (dB) at the sampling point 2

Noise Sample Point	Time (12.11.2021)	Observed Mean Value	Day/Night	Average (dBA)
NS2 (16°50'36.13"N 96°17'3.99"E) Inside the factory (only working time)	8:00-8:59	58.8	Day	58.7
	9:00-9:59	59.4	Day	
	10:00-10:59	60.4	Day	
	11:00-11:59	61.1	Day	
	12:00-12:59	62.8	Day	
	13:00-13:59	60.5	Day	
	14:00-14:59	58.9	Day	
	15:00-15:59	61.7	Day	
	16:00-16:59	60.1	Day	
	17:00-17:59	51.8	Day	
	18:00-18:59	50.4	Day	

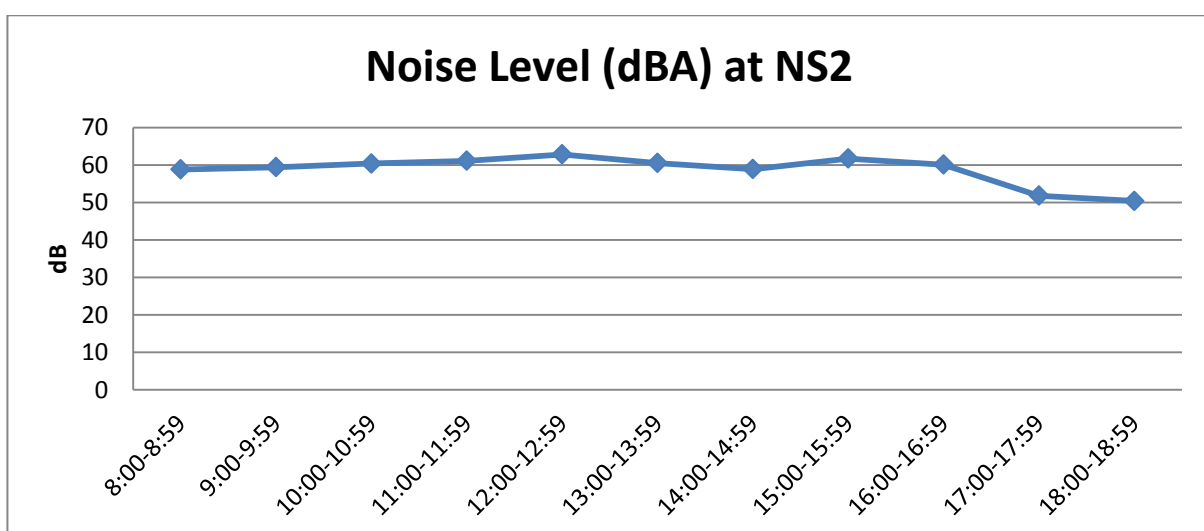
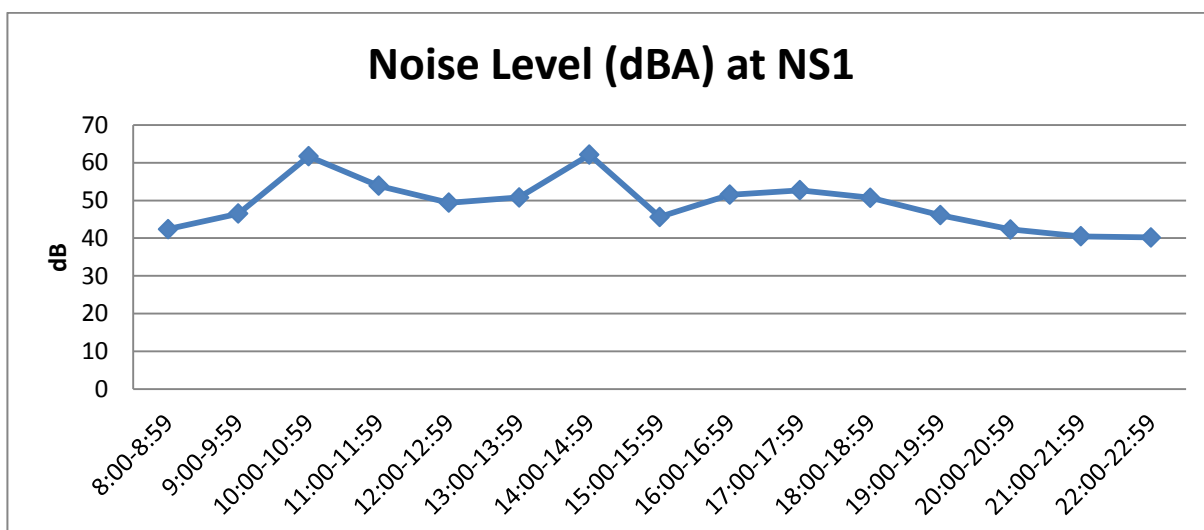


Table 5.6 Ambient Noise level Results from Station Points

Point	Noise level	
	Day Time	Night Time
In front of the factory (NS1)	51.6	43.9
Inside the factory (NS2)	58.7	-
Guideline Values	70	70

The observed values are compared with the National Environmental Quality (Emission) Guidelines which indicates the separate level for industrial points. The proposed factory is located in the industrial area. The observed daytime and night time values of project site are lower than the National Environmental Quality (Emission) Guidelines.



### 5.7.3 Wind Speed and Wind Direction

Wind speeds and wind directions of proposed site had been measured by using EPAS for each 1 time per hour are as follows;

Table 5.7 Wind speed and wind direction of proposed site

Sample point	Time	Wind Speed (km/h)	Wind Direction (degree)	Wind Direction (cardinal point)
Air Sample Point	8:00-8:59	2.6	61°	ENE
	9:00-9:59	3.3	81°	E
	10:00-10:59	2.3	79°	E
	11:00-11:59	2.5	113°	ESE
	12:00-12:59	1.7	97°	E
	13:00-13:59	1.9	69°	ENE
	14:00-14:59	2.0	66°	ENE
	15:00-15:59	1.3	87°	E
	16:00-16:59	1.4	86°	E
	17:00-17:59	2.0	69°	ENE
	18:00-18:59	1.8	66°	ENE
	19:00-19:59	1.6	113°	ESE
	20:00-20:59	2.5	114°	ESE
	21:00-21:59	2.1	112°	ESE
	22:00-22:59	2.0	65°	ENE

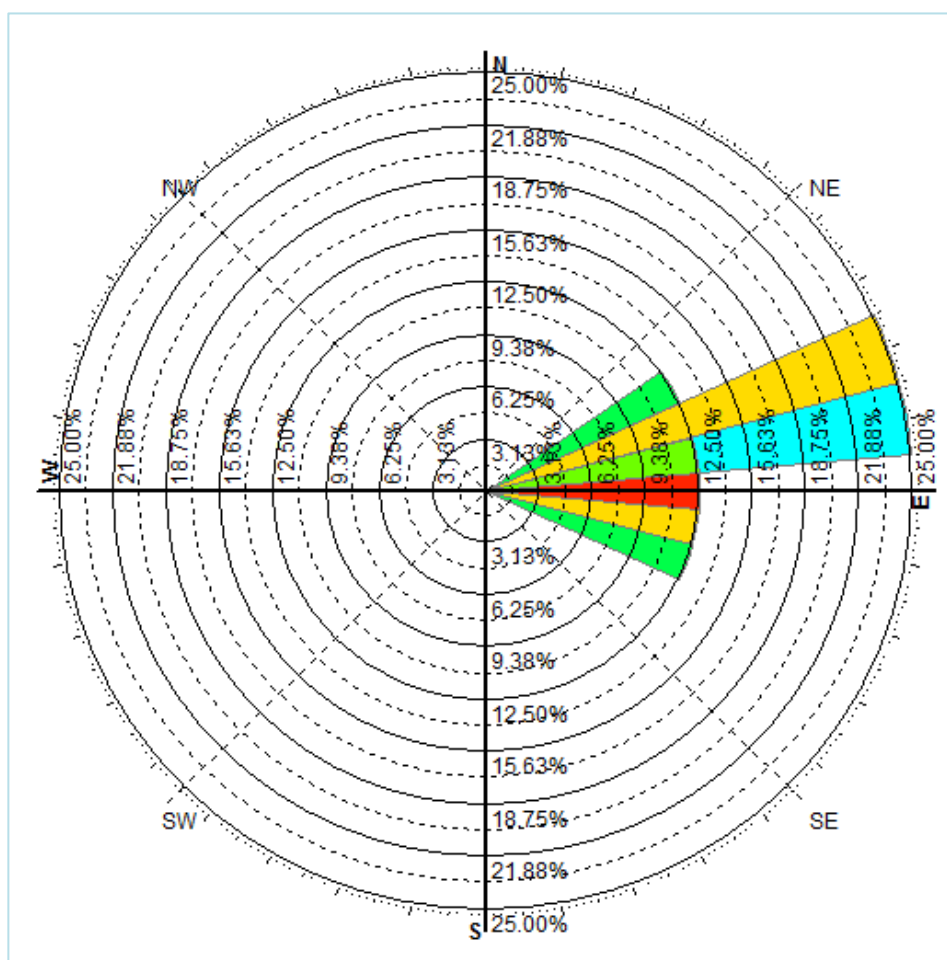


Figure 5.8-Wind speed and wind direction of proposed site

### 5.7.4 Water Quality

#### *Surface Water*

This factory is situated in Industrial Zone (1), Dagon Seikan Township. There is no surface water around the project area. So, Surface water samples were not collected from the proposed factory.

#### *Ground Water*

The proposed factory has 2 tube wells that the one is for firefighting and the other one tube well used for drinking water and domestic water for workers. The ground water quality are tested in Laboratory are shown in Appendix B.

#### *The location of Water sample point of the Project*

No.	Sample Name	Coordinates		
		Latitude (N)	Longitude (E)	
1.	Water Sampling Point (WS)	16°50'36.11"N	96°17'4.98"E	Tube well, beside the factory building

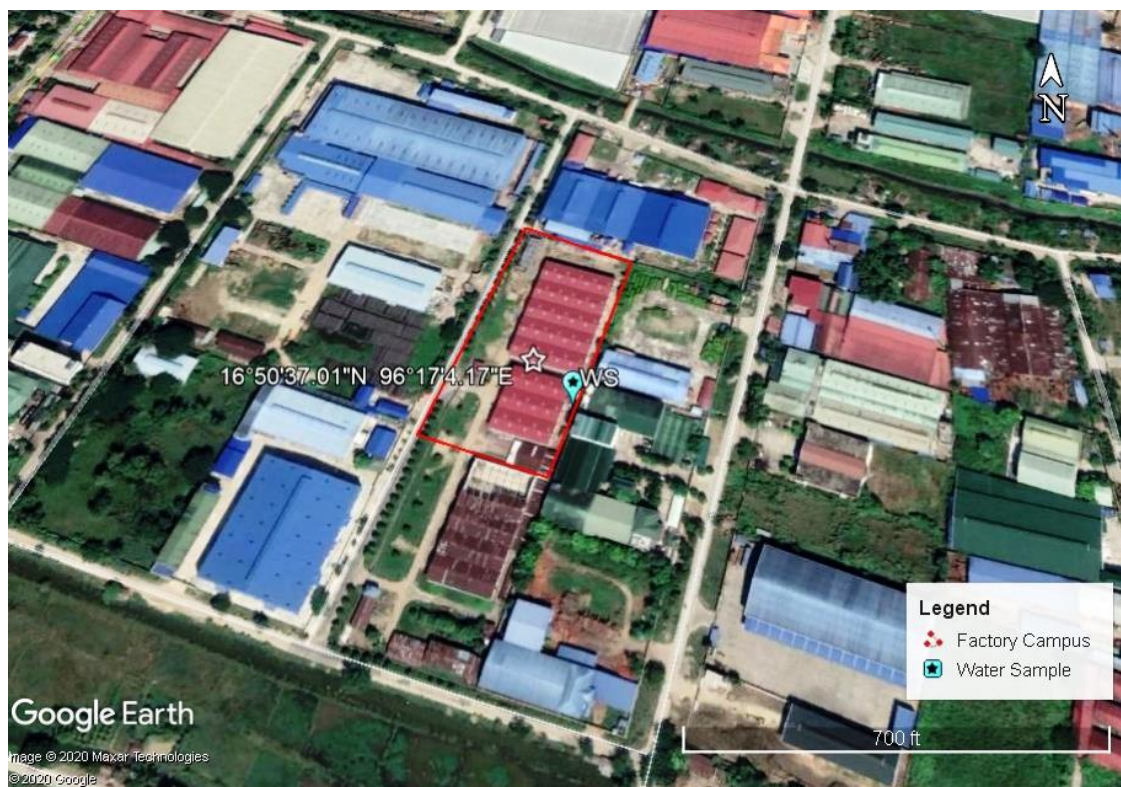


Figure 5.9 Location Points of Water Sampling



*Record Photo for water sampling*

### Water Result

Water samples are collected and some parameters of water quality are measured on site and some parameters are sent to respective laboratories. Water samples are tested for drinking water purpose in ISO-TECH Laboratory.

Table 5.8 Ground Water Quality Testing Results

Parameter	WS	Units	WHO Guidelines
pH	7.1		6.5-9
Colour (True)	Nil	TCU	15
Turbidity	3	NTU	5
Conductivity	688	micro- S/cm	
Total Hardness	164	mg/l as CaCO <sub>3</sub>	500
Iron	0.20	mg/l	1
Chloride (as CL)	210	mg/l	250
Total Alkalinity	52	mg/l as CaCO <sub>3</sub>	
Total Suspended Solids	5	mg/l,	50
Temperature (°C)	25.0	°C	
Nitrate (N.NO <sub>3</sub> )	Nil	mg/l	50
Dissolved Oxygen (DO)	7.0	mg/l	
Chemical Oxygen Demand (COD)	32	mg/l, NEQEG	125
Biochemical Oxygen Demand (BOD) (5 days at 20°C)	6	mg/l, NEQEG	30

### 5.7.5. Soil Quality

In this study, baseline soil and sediment contamination were collected to understand the soil quality of existing conditions. Analyzed results are shown in following table 5.9

#### Soil sampling point

The location map of sampling points is as shown in table and their detail coordinates of each point is described below. The locations were mentioned as follow.

Sr. No.	Sample Name	Coordinates		Geographical Location	Lab
		Latitude (N)	Longitude (E)		
1	SS	16°50'35.93"N	96°17'2.57"E	In the compound of Milestone Leatherware factory	Department of Agriculture (Land Use)





Figure 5.10 Soil Sampling Points at Proposed Factory



*Record Photo for soil sampling*



Table 5.9 Soil Quality Results

Sr No.	Sample plot	Moisture %	pH Soil : Water 1: 2.5	Texture				Organic Carbon %	Humus %	Total N %	CEC meq/ 100gm	Exchangeable Cation meq/100gm						Available Nutrients	
				Sand %	Silt %	Clay %	Total %					Ca <sup>++</sup>	Mg <sup>+</sup>	Na <sup>++</sup>	K <sup>++</sup>	H <sup>++</sup>	Al <sup>++</sup>	P ppm (Bray)	K <sub>2</sub> O mg/ 100gm
1	SS	9.53	6.7	31.85	50.7	15.50	98.05	0.53	0.54	0.09	2.73	5.46	2.01	Not detected	0.05	0.08	0.4	2.79	2.45

Table 5.10 Soil Quality Assessment

Sr No.	Sample	pH	Texture	Organic Carbon	Total N	CEC	Available Nutrients	
							P	K <sub>2</sub> O
1	SS	Natural	Sandy Loam	low	Very low	Very low	Low	Low

## 5.8. Socio-economic Resources

The following are the secondary data of Dagon Seikan Township. Some data are collected from Dagon Seikan Administration Office and some data are sourced from the Department of Population, Ministry of Immigration and Population “The 2014 Myanmar Population and Housing Census– Yangon Region, Eastern District- Dagon Seikan Township Report” October 2017.

### (a) Population

There are about 187,891 people in Dagon Seikan Township as shown in the following Table. The percentage of urban population is about 91.1% in township.

Township	Total (Male/Female)				Total (Urban/Rural)			House-holds
	Male	Female	Total	Sex Ratio	Urban	Rural	Urban Population	
Dagon Seikan	89784	98107	187891	1:1.09	171225	16666	91.1%	43393

Source: Dagon Seikan Township Administrative Offices

### (b) Ethnicity

Most of the people who live in Dagon Seikan are mostly Bamar. A small number of Kayar and Kachin live in Dagon Seikan Township. The races residing in Dagon Seikan Township are shown in the following table.

No.	Race	Number	%
1	Kachin	89	0.05
2	Kayar	69	0.04
3	Kayin	2232	1.19
4	Chin	1316	0.70
5	Mon	492	0.26
6	Bamar	171270	91.15
7	Rakhine	9178	4.88
8	Shan	337	0.18
9	Chinese	165	0.09
10	India	2743	1.46
<b>Total</b>		187891	100

Source: Dagon Seikan Township Administrative Offices, 2019

**(c) Religion**

All of 96% of the people living in the township are Buddhists. There are many religious places in the region including, 2 pagodas and 157 monasteries for Buddhists. The different kinds of religion present in Dagon Seikan Township are shown in in the following Table.

Township	Religion	Buddhist	Christian	Hindu	Muslim	Total
Dagon Seikan	Number	181085	3938	1403	1465	187891
	(%)	96.37	2.09	0.76	0.78	100.0

Source: Dagon Seikan Township Administrative Offices, 2019

**(d) Land Use**

Dagon Seikan Township mainly uses its land for settlement followed by agriculture land. Detailed acres for land uses in Dagon Seikan Township are shown in in the following table.

Land Category	Acres
Agricultural Land	6665
Forest and Natural Area	-
Grazing land	-
Industrial Land	563
Settlement Land	14288
Wastelands	-
Forest wild	-
wild land	1039
Other	36
Total Area	21552

Source: Dagon Seikan Township Administrative Offices, 2019

***(e) Occupation, Education and Healthcare Profile***

Data show that trade is the common livelihood means of households in Dagon Seikan Township. The other main economic activities in the area are industry, government employee, and public services. The summary of Occupation, Education and Healthcare Profile of Dagon Seikan Township are shown in following table.

Socio-Economic Environment		
Occupation		
Economy	Skilled worker	24.5%
	Mobile seller	9.5%
	Casual labor	9.8%
	Permanent Job, employee	20.7%
	Small business	26.2%
	Others	9.3%
Industries	180 Factories (including warehouses) 312 small manufacturing	
Labour Force (aged 15 – 64)	Labour force participation rate 61.8% Unemployment rate 4.2% Employment to population ratio 59.2%	
Average income/year	2,050,690 kyats/year	
Education		
Educational Infrastructure	9 Primary schools 2 Middle schools 7 High schools 1 College	
Educated	Primary	49.3%
	Secondary	34%
	Tertiary	8.8%
	Others	7.8%
Public Health facilities	Urban health care centers -2 Sub Rural health care centers -2 General hospital -1	

***(f) Transportation***

The main mode of transportation within the project area is by road. Major roads running from north to south within the project area are: Ayer Wun road and Bago River road. Ayer Wun road is main connecting road to Dagon Myothit (South). ThanLwin Township is connecting to Bago River road.

***(g) Main Water Source***

The main water source for the whole township is groundwater. Most of the households, factories and industries have their own tube wells for their own water supply. Due to salinity affect, river water cannot be used for households and industries.

***(h) Electricity Supply***

Within Dagon Seikan Township, Yangon Electricity Supply Corporation (YESC) supplies electric power. Total demand of power in the Dagon Seikan Township exceeds 35 MW. (source: [www.ubifrance.com](http://www.ubifrance.com)). The project will also use the electricity distributed by YESC through its own transformer.

**6.9. Vicinity around the Proposed Project**

Since the project site is within the industrial zone there is no cultural and heritage resource within the proposed project area. Most of the areas around the project are factories and warehouses. The nearest areas around the project site are shown in figure below:

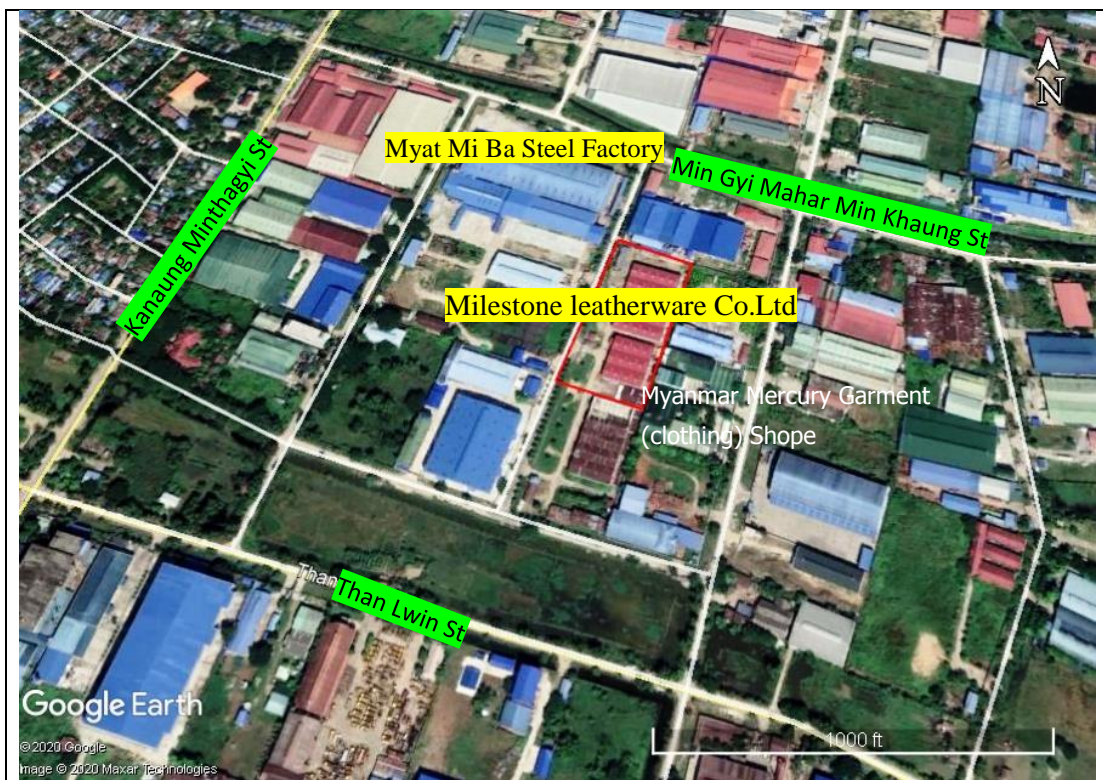


Figure 5.11- Vicinity of the project site



## 6. IMPACT ASSESSMENT AND MITIGATION MEASURES

### 6.1. Impact Assessment Methodology

This chapter provides an assessment of potential impact arising from the project. The methodological approach used for the project impact assessment is adapted from the impact assessment methods recommended by the Canadian Environmental Assessment Agency (1990), by the World Bank (1991) and by the International Finance Corporation (Dec. 1998). Potential negative or positive impacts caused by the project implementation, have been identified by considering the interaction between various project activities) and the affected environmental or social component. The project activities are considered as sources capable of changing one or more environmental or social components, which are considered as sensitive receptors.

The following methodology has been applied to assess the environmental impacts of the factory mainly on air, water, land, biodiversity and including human beings. Each source of impact has been assessed by four parameters such as magnitude, duration, extent and probability and each assess point have 5 scales as mentioned in Table 6.1.

**Table 6-1 Evaluation of Impact Assessment**

Assessment	Scale				
	1	2	3	4	5
<b>Magnitudes</b>	Insignificant	Low and will have no effect on working environment	Medium 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
<b>Duration</b>	0-1year	2-5 years	6-15years	Life of operation	Post Closure
<b>Extent</b>	Site-specific	Local	Regional	National	International
<b>Probability</b>	Very improbable	Improbable	Probable	Highly probable	Definite

#### 6.1.1. Impact Significance

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 following explanation;

< 15	Insignificant
15-29	Low significant
30-44	Moderate significant
45-59	High significant
> 60	Very high significant

### 6.1.2. Impact Mitigation

As part of the IEE process, where the impact assessment identified impacts as potentially arising, mitigation measures were developed (including avoidance, management and monitoring strategies). Where an adverse impact is identified, the next step is to find a way to avoid or minimise the impact.

The process of identifying “design controls” and “mitigation measures” considered the mitigation hierarchy (Figure below), as specified in IFC PS1, which is widely regarded as a best practice approach to managing risks.

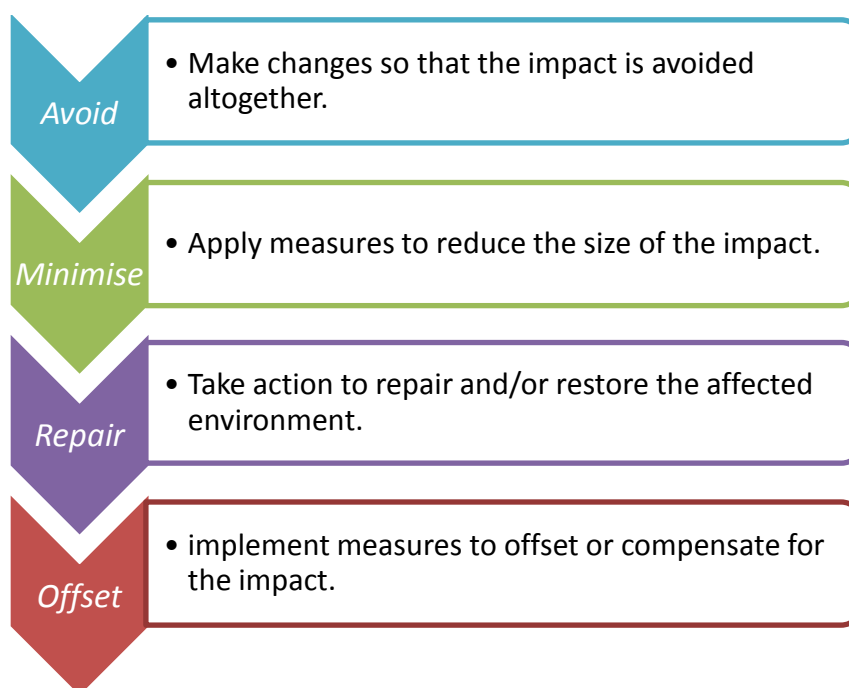


Figure 6.1- The Mitigation Hierarchy

#### ***Avoid***

Avoid at Source: avoiding at source through the design of the project (e.g., avoiding by siting or re-routing activity away from sensitive areas);

#### ***Minimise***

Reduce at Source: reducing at source through the design of the project (e.g., reducing by restricting the working area or changing the time of the activity);

Abate on Site: add something to the design to abate the impact (e.g., pollution control equipment, traffic controls, perimeter screening and landscaping);

Abate at Receptor: if an impact cannot be abated on-site then control measures can be implemented off-site (e.g., noise barriers to reduce noise impact at a nearby residence or fencing to prevent animals straying onto the site);

#### ***Repair***

Repair or Remedy: some impacts involve unavoidable damage to a resource (e.g. agricultural land and forestry due to creating access, work camps or materials storage areas) and these impacts can be addressed through repair, restoration or reinstatement measures; and

***Offset***

Compensate in Kind, Compensate Through Other Means: where other mitigation approaches are not possible or fully effective, then compensation for loss, damage and disturbance might be appropriate (e.g., planting to replace damaged vegetation, financial compensation for damaged crops or providing community facilities for loss of fisheries access, recreation and amenity space).

The priority in mitigation is to first apply mitigation measures to the source of the impact (i.e., to avoid or reduce the magnitude of the impact from the associated Project activity), and then to address the resultant effect to the resource/receptor via abatement or compensatory measures or offsets (i.e., to reduce the significance of the effect once all reasonably practicable mitigation measures have been applied to reduce the impact magnitude).

**6.1.3. Residual Impact Assessment**

Once feasible mitigation measures were identified and agreed, the IEE team reassessed the potential impacts, assuming the mitigation measures were effectively implemented as planned.

In general, impacts with “Not Significant” or “Low” significance residual impact significance were not considered to be of concern to the development of the project. For adverse impacts of “Moderate” and “High” significance, an iterative process is undertaken to further investigate opportunities for mitigation, according to the hierarchy above. Where the significance cannot be further reduced, an explanation is provided of why further reduction is not practicable. Monitoring is required to confirm the measures used to mitigate adverse impacts are working properly and that the impact is not worse than predicted.

**6.2. Potential Environmental Impacts during Opearation Phase**

The proposed factory is already built since 2019 and so impact assessment for pre-construction and construction phases are not effective for this project. The following are the anticipated impacts during operation phase of proposed factory.

- (a) Impacts on Air Quality;
- (b) Impacts of Noise;
- (c) Impacts on Water Environment,
- (d) Impacts of Solid Waste,
- (e) High Utilities Consumption,
- (f) Occupational Health and Safety and
- (g) Impact on Socio-economic

**6.2.1. Potential Impacts on Air Quality**

During the operation phase, air pollution may cause by fugitive dust from loading and unloading of raw material and cleaning floor. The project will involve the movement of vehicles for transporation of raws materials, goods and workers in the factory areas such as trucks and transportation farry etc., which will contribute to gases emissions from the

combustion of fuel. The most prevalent gases emitted from vehicle exhaust by fuel combustion are CO, CO<sub>2</sub>, and NO<sub>x</sub>. In addition, emergency used of generator may generate particulate matters such as PM<sub>10</sub>, PM<sub>2.5</sub>, CO, SO<sub>2</sub>, NO<sub>2</sub>, and CO<sub>2</sub>. However, it can be concluded, as the impact is not significant because the generator and vehicle movements will run only a short time.

#### **Impact Significance on Air Quality**

Sources	Components	Magnitude	Duration	Extent	Probability	Impact Significance
Raw material handling and cutting	Dust, PM	Low (+2)	Long term (+4)	Site (+1)	Highly probable (×4)	Low (28)
Emissions generator and vehicle	CO, SO <sub>2</sub> , NO <sub>x</sub>	Low (+2)	Short term (+1)	Regional (+3)	Probable (×3)	Low (18)

#### **Mitigation Measures for Fugitive Emissions**

- Install exhaust ventilation system at emission / release points of factory room
- Insignificant PPE shall be provided to workers such as facemasks with appropriate filters for dust removal and air purification

#### **Mitigation Measures for Gases Emission**

The following measures will be put in place for the project during operation to reduce gases emissions:

- Regular maintenance of equipment and machines.
- Gases Filters are installed to reduce the GHG emissions from power generator.

#### **6.2.2. Potential Impacts of Noise**

During the factory operation, noise impact may be a significant impact for bags and belts production sectors. The significant sources of noise impact activities are the operation of various machineries and equipment for production especially leather cutting, sewing, punch machines, building exhaust fans and the emergency used of generator, vehicles and automobile movements (short term noise) will be sources of noise impacts. According to the result of noise measurement, noise level of source at the operation area inside the factory is not exceeding the noise level of 70 dBA of NEQG (emission) guideline, so it can be assumed that it may not be affected occupational health and safety of employees and workers at production sector.

#### **Impact Significance of Noise**

Sources	Components	Magnitude	Duration	Extent	Probability	Impact Significance
Factory Machines Operation	Noise	Low (+2)	Long term (+4)	Site (+1)	Definite (×5)	Moderate (35)

generator and vehicle	Noise	Medium (+3)	Short term (+1)	Site (+1)	Highly probable (×4)	Low (20)
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### ***Mitigation Measures for Noise***

At first, the factory should consider the working hour based on the noise level of working area. Avoid the noise pollution the factory should;

- Avoid the use of noise producing machines,
- Give the PPE for noise (earphone) working in noisy area, and
- Give the sufficient time to rest for the workers working in noisy area.
- Provide noise control measures for generator such as silencer and muffler.
- Generator should be housed in a suitable acoustic enclosure.

### **6.2.3. Potential Impacts on Water Quality**

In proposed factory, the production process not used the chemicals and others pollutants that no wastewater effluent from the operation process. The other domestic wastewater is storm water discharge. The most significant wastewater flow generated by operation phase is domestic sewage from bathing and toilet flushing, but important streams are also produced by the laundry and dry-cleaning, housekeeping, maintenance, and canteen. If can not proper management of spill of oil and grease, domestic wastewater and solid wastes, they can contaminate the surrounding water and groundwater.

### **Impact Significance on Water Quality**

Sources	Possibility of Impact	Magnitude	Duration	Extent	Probability	Impact Significance
Domestic wastewater	water pollution	Low (+2)	Long term (+4)	Local (+2)	Probable (×3)	Low (24)

### ***Mitigation Measures for Domestic Wastewater***

The following measures will be put in place for the project during the operation phase:

- Make sure storage and disposal of waste are proper by contacting and cooperating with YCDC.
- Design drainage pipes and culverts for the controlled release of storm flows.
- A sewage system will be constructed for the factory and dormitory building. Sewage should be treated to meet the Myanmar NEQG on Site Runoff and Waste Discharges before drained to the site drainage system.
- All drainage facilities and sediment control structures should be inspected and maintained on a regular basis.



### 6.2.4. Potential Impacts of Solid Waste

#### *Solid waste from industry*

Solid wastes from proposed factory at the operation process are rejected leather goods and scraps & pieces such as leather, fabric, paper, card board, plastic, foam etc.

#### *Solid waste from worker*

During operation phase, solid wastes generated from the workers are plastic, paper, glass and food waste. The solid waste from workers in the project site and operation phase will cause the adverse effects to environment.

#### Impact Significance of Solid Waste

Sources	Possibility of Impact	Magnitude	Duration	Extent	Probability	Impact Significance
Factory process waste Domestic waste	Solid Waste	Medium (+3)	Long term (+4)	Site (+1)	Highly Probable (×4)	Moderate (32)

#### *Mitigation Measures*

- To avoid overload and unsanitary bulk storage of wastes i.e., the factory is recommended to practice waste segregation into dry and wet waste with different color garbage bins and cooperation with YCDC.
- A Waste Management Plan (WMP) for the Project should be developed and implemented covering different aspects of waste management including waste generation, storage, recycling, treatment, transport and disposal.

### 6.2.5. Impacts of Utilities Consumption

The main utilities consumptions of the proposed factory are as follow:

- Electricity consumption, and
- Water consumption.

#### **(a) Electricity Consumption**

The proposed factory processes can account for substantial electricity demand. Although electrical consumption is not directly concerned with impact on nature environmental and local communities, the resource utilization is an issue which should be seen from a sustainable development perspective, scarcity of water resources, combustion of fossil fuels, utilization of raw materials, emission of ozone depletion gases, CO<sub>2</sub>, etc.

Moreover, high electricity demand can also consider negative impact on local uses because the electricity demand of Industrial Zone is higher and higher due to the many of industrial unit and infrastructures.

**Impacts Significance of electricity Consumption**

Sources	Possibility of Impact	Magnitude	Duration	Extent	Probability	Impact Significance
Factory operation Processes	High electricity consumption	High (+4)	Long term (+4)	Regional (+3)	Definite (×5)	High (55)

***Mitigation Measures for Electricity Consumption***

There are several methods that can be employed to help conserve electricity and these include:

- Install energy and water meters to measure and control consumption throughout the facility;
- Implementing good housekeeping measures such as turning off equipment and lights when not in use;
- Use LED lights and/or lower wattage lamps;
- Using more efficient equipment when replacing old equipment (such as motors and heating units);
- Installation of computerized controllers to better regulate motor output;
- Installation of timers and thermostats to control heating and cooling; and
- Preventative maintenance of operational processes and pipes so as to improve efficiency and minimize losses.

**(b) Water Consumption**

Although there are small quantities of good-quality water are needed for proposed factory operation processes, water consumption is related to personal use by workers and domestic facility. Moreover, there are another high quantity ground water using industrial units are not too far and the use of ground water in that Industrial Zone region can be considered as high. The proposed factory will have impact on the use of ground water resources because water consumption will be higher and higher due to the regularly increase of population and industries in that region.

***Impact Significance of Water Consumption***

Sources	Possibility of Impact	Magnitude	Duration	Extent	Probability	Impact Significance
cleaning and domestic uses	water consumption	Medium (+3)	Long term (+4)	Regional (+3)	Definite (×5)	High (50)

***Mitigation Measures for Water Consumption***

As the proposed project uses ground water for drinking (purify water), cleaning and domestic uses, water conservation measures need to be taken. The reduction in the amount of water consumed in a factory will have several environmental and economic benefits, including conservation of water resources, and consequently, lower wastewater discharge volumes.

Domestic water consumption will be minimized by implementing water efficient fixtures such as 3 litres WC flushing cistern, sensor operated urinals and taps to minimize the wastage of water together with other water conservation measures. Furthermore, to ensure ongoing water conservation, an employee education and awareness programme will be introduced for the employee of the factory plant. Dry type urinals will also be used selectively. The following are specific measures:

- (a) Use of water efficient plumbing fixtures (ultra flow toilets and urinals,). Water efficient plumbing fixtures use less water with no marked reduction in quality and service. Install water less W.C. and urinals which will help in conserving sufficient quantity of water leak detection and repair techniques;
- (b) Awareness campaign to disseminate knowledge on strategies and technologies that can be used for water conservation;
- (c) New employees will be issued a standard water information packet. The information should include water conservation plans, water conservation methods being adopted in the complex and a list of essential and non-essential water uses;
- (d) Proper methods of water use will be placed in the toilets and other areas of water consumption.

#### 6.2.6. Impact on Socio-economic

The socio-economic impacts are considered as positive because more jobs opportunities are created about 831 job opportunities during operation phases of the project. The factory workers comprising both skilled and unskilled will recruit from the local community. Increased employment will improve household income levels and livelihood of local people. The proposed project will provide an alternative livelihood to people in the project area. The project proponent will implement the following practices during operation phase:

- Ensure total compliance with national labor and employment laws;
- To avoid exploitation of child labor by contractor and sub-contractor;
- Promote the fair treatment, non-discrimination and equal opportunity for workers; and
- Promote safe and healthy working conditions.

Project Proponent should try to mitigate or minimize negative impacts while enhancing and maximizing the positive impacts to their optimum

#### *Positive Impact significance of Socio-Economic during Operation Phase*

Components	Anticipated Impact	Impact Type	Magnitude	Duration	Extent	Probability	Impact Significance
Job opportunities	Increase in household income	Positive (+)	Medium (+3)	Long term (+4)	Local (+2)	Definite (×5)	Moderate (+45)

### 6.3. Identification of Hazards and Risk Assessment

There are various factors, which can cause hazards in the factory. These hazards are as follows:

- (1) Natural Hazards and Disaster Risk
- (2) Industrial Hazards.

#### 6.3.1. Natural Hazards and Disaster Risk

Typical natural hazards in Myanmar include river floods, storms and cyclones, droughts, landslides, and earthquakes.

Although there was no natural disaster in the project area according to the secondary data collection, flood and storms hazards can be considered as the most possible natural disaster.

#### 6.3.2. Industrial Hazards

##### (i) Fire Outbreak Risk

Fire could start due to many reasons. Potential fire hazard could be from poor electrical connections, improper fuel storage and throwing of smoking cigarettes. Potential sources of fire can be from neighboring factories. Fire in the factory can spread quickly if fire extinguishers or sprinklers are not adequately provided.

##### *Impact Significance*

Sources	Possibility of Impact	Magnitude	Duration	Extent	Probability	Impact Significance
Factory operation	Fire outbreak risk	Medium (+3)	Long term (+4)	Local (+2)	Probable (×3)	Low (27)

#### Management and Mitigation Measures

The workplace should be designed to prevent the start of fires through the implementation of fire codes applicable to industrial settings. Other essential measures include:

- Equipping facilities with fire detectors, alarm systems, and fire-fighting equipment. The equipment should be maintained in good working order and be readily accessible. It shall be adequate for the dimensions and use of the premises, equipment installed, physical and chemical properties of substances present, and the maximum number of people present.
- Provision of manual firefighting equipment that is easily accessible and simple to use
- Fire and emergency alarm systems that are both audible and visible

The factory will also adhere to the fire-fighting regulations of the Ministry of Home Affairs and will collaborate with regional fire brigade in the prevention of fire outbreak and training local fire fighting force.

##### (ii) Occupational Health and Safety

###### (a) *Physical Hazards*

Physical injuries may occur in workplaces such as fall on slippery floors, improper use of machines and tools (e.g., cutting machine and other) and improper product loading and unloading in store.

### Management and Mitigation Measures

- Maintain walking and working surfaces clean and dry by preventing spillages through equipment design and operation, providing workers with anti slip footwear where still necessary
- Maintenance of safety devices (including the proper use of machine safety devices) and personal protective equipment (PPE), such as hearing protection, and gloves, aprons etc. to avoid cuts, amputations, and other sharp instrument traumas;
- Ensure that the process layout reduces opportunities for process activities to cross paths, thus avoiding collisions and falls;
- Demarcate transport corridors and working areas and ensure the proper placement of handrails on platforms, ladders, and stairs;
- Prevent ingress of water;
- Ground all electrical equipment and installations;
- Prepare emergency plans and train staff for emergency situations.

### Lighting and temperature

Factory will use light tubes for general lighting purposes. This includes space lighting and task lighting. Activities of the workers in the operating sector depend on the quality of light; thus, it is important to provide sufficient lighting to those areas.

- Adjustment of work and rest periods according to temperature stress, depending on the temperature and workloads
- Providing temporary shelters to protect against the elements during working activities or for use as rest areas
- Use of protective clothing

The potential health risk may occur in workplaces for transmission of communicable diseases, e.g., Covid-19, respiratory and sexually transmitted infections resulting from the influx of factory labor.

### Impact Significance

Sources	Possibility of Impact	Magnitude	Duration	Extent	Probability	Impact Significance
Factory operation	Occupational Health and Safety	Medium (+3)	Long term (+4)	Site (+1)	Highly Probable (×4)	Moderate (32)

### To prevnt communicable diseases like current health risk of covide 19

The proposed factory must follow the “Guideline for Prevention and Control of Coronavirus Disease 2019(COVID-19), In factories, workplaces and construction sites” release date (19-4-2020) by the Ministry of Health and Sports.

### (iii) Community Health and Safety

Increased incidence of communicable and vector-borne diseases attributable to factory operation activities represents a potentially serious health threat to factory workers and residents of local communities. The potential health risk may occur in workplaces for



transmission of communicable diseases, e.g., Covid-19, respiratory and sexually transmitted infections resulting from the influx of factory labor.

Factory operation activities may result in a significant increase in movement of vehicles for the transport of raw materials and workers increasing the risk of traffic-related accidents and injuries to personnel and local communities.

#### ***Impact Significance***

Sources	Possibility of Impact	Magnitude	Duration	Extent	Probability	Impact Significance
Factory operation	Community Health and Safety	Medium (+3)	Long term (+4)	Local (+2)	Highly Probable (×4)	Moderate (36)

#### **Management and Mitigation Measures**

Impacts on community health and safety can be mitigated through good practices and close cooperation between the Project managers, contractors and local authorities, as below:

- An EHS Management Plan will be developed to reduce potential impacts of operation activities to nearby communities.
- Ensuring health check-ups of all laborers employed at the project site to screen pre-existing communicable diseases.
- The prevention and control of communicable and vector-borne diseases also applicable to operation phase activities
- Prepare and implement a Traffic Management system through a combination of education and awareness-raising, and the adoption of Traffic Safety procedures with in order to reduce risk to the local communities.

#### ***To prevnt communicable diseases like current health risk of covide 19***

- The proposed factory must follow the “Guideline for Prevention and Control of Coronavirus Disease 2019(COVID-19), In factories, workplaces and construction sites” release date (19-4-2020) by the Ministry of Health and Sports.

#### **6.4. Anticipated Impacts and Mitigation measures for Decommissioning Phase**

Although, the proposed project is expected to have an operational life, decommissioning of the project would occur at the end of its lifespan. The goal of project decommissioning will be to remove the concrete and steel structures and equipment for proposed project as a whole and return the site to a condition as close to a pre-construction state as feasible. The physical removal of the structures and equipment will be the reversal of the construction process. All areas disturbed by the proposed project would be restored to pre-project conditions and/or to conditions acceptable to the YCDC. During decommissioning phase, all concrete and steel structures and equipment would be dismantled and removed. The major activities that will be required for the decommissioning of proposed project are:

- (a) Machine, Equipment and electrical system removal
- (b) Building and Steel structures removal, and
- (c) Concrete foundation removal

Impacts during decommissioning are expected to be limited to workers on site. No impacts are anticipated to nearest residences or businesses because all decommissioning activities will be expected to take place during daytime and will only use small number of machineries. Potential environmental impacts due to the decommissioning activities will include the following:

- (a) Impacts on air quality;
- (b) Impacts of noise
- (c) Impacts of waste on soil and ground water environment; and
- (d) Impacts on socio-economic

#### **(a) Impacts on Air Quality during Decommissioning Phase**

During decommissioning some localized increase in dust levels will be unavoidable. The sources gases of dust generation will be vehicle movement and demolishing of buildings. The activities for demolishing process could be considered as a small-scale work. Therefore, the negative impact of air pollution by dust emission cannot be a not major significant impact on the environment.

##### *Impact Significance on Air Quality during decommissioning phase*

Sources	Components	Magnitude	Duration	Extent	probability	Impact Significance
Decommissioning activities	Dust, PM	low (+2)	Short term (+1)	Site (+1)	Highly probable (×4)	Low (16)

#### **Mitigation Measures**

- Sprinkle water around the project site and roads.
- Prohibiting the burning of waste or vegetation on site
- Avoidance of intensive operation of demolition machineries

#### **(b) Impact of Noise**

During decommissioning phase, the use of equipment (steel cutter, hand grinder etc) for structure building demolition works will inevitably generate noise. Another source of noise generation is resulting from the transportation vehicles. These noises may create a nuisance to the surrounding. However, this negative impact will be a temporary or short-term and is not much affected to the environment or local communities in the industrial zone.

##### *Impact Significance of Noise during decommissioning phase*

Sources	Components	Magnitude	Duration	Extent	Impact probability	Impact Significance
Decommissioning activities	Noise	low (+2)	Short term (+1)	local (+2)	Highly probable (×4)	Low (20)

#### **Mitigation Measures**

- Provide adequate ear protection (ear plugs or muffs) to workers working in the excessive noise areas.

- Avoid running demolition machineries at the same time; and also to avoid working at night
- Adoption of good site practices such as well-maintained equipment to be operated on-site, shut down or throttled down between work periods for machines and plant items (e.g. trucks) that may be in intermittent use, reduce the number of equipment operating simultaneously as far as practicable, etc.

### (c) Impacts of Waste

Improper disposal of decommissioning debris such as concrete blocks, steel pieces cabling, scrap metal and drainage from solid waste dump can have potential to soil and ground water pollutions.

*Impact Significance of waste during decommissioning phase*

Sources	Components	Magnitude	Duration	Extent	Impact probability	Impact Significance
Decommissioning activities	waste	low (+2)	Short term (+1)	Site (+1)	Highly probable (×4)	Low (16)

### Mitigation Measures

All the solid and liquid waste produced during decommissioning phase have to disposed according to the rule and regulations of YCDC and a Waste Management Plan (WMP) for the project should be developed and implemented covering different aspects of waste management including waste generation, storage, recycling, treatment, transport and disposal.

### (d) Impacts on Socio-economic during Decommissioning Phase.

In the event of the project closure, there will be potential negative impacts resulting in loss of jobs and indirect employment depending on the garment factory and of associated business enterprises as well as loss of revenues for the government.

### Mitigation Measures

The project proponent, Milestone Leatherware Co, Ltd will have a plan not to close the entire project totally and intend to use another business purposes to retain the loss of job for local people and to keep the revenues for the Government.

Milestone Leatherware Co, Ltd will provide and recommend their employees in applicable jobs at other factories in the region if feasible. If it is not feasible to appoint in other factories, extensive and comprehensive warning to employees to allow them to source alternative livelihood will be taken early and will pay compensation according to the national labour rules and regulations.

## 6.5. Summary of Environmental Impacts of proposed factory

The summary of evaluation and prediction of significant impacts in operation phase of proposed factory before without proper mitigation is shown in Table below:

Table 6.2 Summary of Significant Impacts for Operation Phase

Potential Impacts	Activities and Source	Components	Magnitude	Duration	Extent	Probability	Points	Significant
Air	raw materials handling and cutting	Dust, PM, ,	2	4	1	4	24	Low
	Emissions from generator and vehicle movement	CO, SO <sub>2</sub> , NO <sub>x</sub>	2	1	3	3	18	Low
Noise	Factory machines	Noise level	2	4	1	5	35	Moderate
	Vehicle and Emergency use of diesel generator	Noise level	3	1	1	4	20	Low
Water	Domestic wastewater	Organic Matter in wastewater	2	4	2	3	24	Low
Solid Waste	Factory process waste Domestic waste	Production waste Office waste and human waste	3	4	1	4	32	Moderate
Utilities Consumption	Electricity consumption	Electricity	4	4	3	5	55	High
	Water consumption	Water	3	4	3	5	50	High
Socio-economic	Job opportunities	Increase household income	3	4	2	5	45	Moderate
Risk Industrial Hazards	Fire outbreak risk	Damage and loss of Asset	3	4	2	3	27	Low
	Occupational health and safety	physical injuries and Infectious disease; such as Covid-19, AIDS/HIV, Hepatitis B/C, etc.	3	4	1	4	32	Moderate
	Community health and safety	Traffic accidents and Infectious disease; such as Covid-19,	3	4	2	4	36	Moderate

Table 6.3 Summary of Significant Impacts for Decommissioning Phase

Potential Impacts	Activities and Source	Components	Magnitude	Duration	Extent	Probability	Points	Significant
Air	demolishing process	Dust, PM,	2	1	1	4	16	Low
Noise	Demolishing activities	Noise level	2	1	2	4	20	Low
Solid Waste	demolishing process	Site waste and human waste	2	1	2	4	16	Low



## 7. PUBLIC CONSULTATION AND DEVELOPMENT PROGRAM

### 7.1. Objective of Public Consultation

The main objective of public consultation is to provide project information, production procedures, waste management and potential environmental impacts to the regulators, authorities and stakeholders. During the public consultation, Milestone Leatherware Co., Ltd and HRD (consultant) presented the project background, operation processes, environmental conditions, summary of impacts assessment and proposed mitigation measures. Suggestions and comments from the regulators, authorities and stakeholders incorporated in the IEE report.

### 7.2. Public Meeting

The consultative meeting was organized with the representation from stakeholders and local people. Currently, we have not been able to hold a public meeting due to the COVID-19 disease. The Public meeting will be held on the time after the risk of COVID-19 disease. Therefore, HRD social team interviewed the workers who are representative from every section of factory as the focus group discussion. Structured in-depth interviews were held with key employees in the factory on January 20, 2022 and survey on the project It is mentioned in the appendix.

#### *Key Findings during worker interviews*

- There are many fans and blowhole for good ventilation in the working area. So the workers do not effect by heat.
- There is sufficient light in the working area. For the area which needs more light are fitted by the extra light at the sewing machine.
- No special problem
- A little noise impact
- Do not feel the heat due to the fans.
- There is a dispensary and one nurse for emergency case and for worker health.





Figure 7.1 Some Record Photo of the Interview and meeting

### 7.3. Disclosure Process

As per the requirements of the EIA Procedure, Milestone Leatherware Co., Ltd has disclosed information on the project on their office at Industrial Zone (1), Dagon Seikan Township. Hard copies of the IEE report will be made available at Milestone Leatherware Co., Ltd office at factory in Dagon Seikan.

### 7.4. Implementation Program

#### 7.4.1 Trainings and Capacity Buildings

Training and development programs are essential to capacity building within organizations. To promote products and services, the organization must develop the training and development programs for their employees. Competent employees are valuable and the factory is probably depends on them. Providing training can help to improve the efficiency and productivity of employees. Employees remain up to date with new technology and thus use existing ones in a better way. Employee training includes awareness and competency with respect to:

- Environmental and social impacts that could potentially arise from their activities.

- Roles and responsibilities to achieve that conformity, including with regarded as emergency response.

Operation Manager should take responsible for the coordinating training maintaining employee-training records, and ensuring that monitored and reviewed on a regular basis. Some training requirements are also listed in the following table.

Table 7.1. Description of the Required Trainings

No.	Description	Time	Responsible	Remark
1.	First Aid Training	2 Time/year	HSE Manager	
2.	PPE training	1 Time/year	HSE Manager	
3.	Emergency response training	2 Time/year	HSE Manager	
4.	Basic Fire Fighting training	1 Time/year	Operation Manager	
5.	Machines Safety Training	1 Time/year	Operation Manager	

#### 7.4.2 Corporate Social Responsibility (CSR) Plan

Milestone Leatherware Co., Ltd (MSL) agrees to contribute about 2% of net profit as CSR fund and they granted annual environmental conservation and monitoring costs will not take account of in this CSR fund.

It is important that CSR activities should be accomplished not only by financial assistance but also by technical assistance and manpower in some donations to retain good relation with local communities. Social welfare activities shall include training of employees such as on job training to be more qualified, language (English, Chinese) training on weekends with experienced teachers and providing necessary healthcare such as medical checkups and giving proper medical knowledge about deceases and its prevention. Part of CSR activity such as donations will also contribute to public sohool around the factory. Proposed allocated percent of CSR budget are as follow:

No.	Activities	Proposed allocated per cent of CSR budget
1.	Public schools	25%
2.	Health care facilities	25%
3.	Training program	50%
Total		100%

**Proposed CSR Activities****(a) Education**

Distribution of education materials and financial aid or scholar grants to the students who are economically deprived in the nearest villages of the proposed project will have a great benefit for students. Upgrade and fulfillment of educational requirements and facilities for nearest schools are recommended to be included in CSR program.

**(b) Health Care Facilities**

Health care facilities of proposed project should be assessed to nearest local people with lowest or no charge as part of CSR program. MSL Co. Ltd will contribute for the healthcare which includes medical checkup for the employees and providing health education to workers.

**(c) Training Program**

Training Program include job-related trainings, language trainings and safety trainings. The main objectives of employee trainings are that job skills 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.

**(d) Cooperation with Local NGOs**

MSL Co. Ltd should provide and cooperate with local NGOs and CBOs in the activities to improve regional, religious, and all round developments in Dagon Seikan Region.

## 8. ENVIRONMENTAL MANAGEMENT PLAN

EMP also ensures the project implementation is carried out in accordance with the design by taking appropriate mitigation actions to reduce adverse environmental impacts during its life cycle. EMP for proposed factory will include the following essential parts.

- a. Environmental Impacts and Mitigation Measures;
- b. Environmental Management and Monitoring Plan;
- c. Occupational Health and Safety Plan;
- d. Emergency Management Plan and

### 8.1. Environmental Impacts and Mitigation Measures

Although the Proposed factory has a number of adverse impacts on surroundings, all of the impacts can be reduced to some extent by proper mitigation measures. The environmental impacts during operation phase, proposed mitigation measures and significant of residual impact after mitigations are shown in Table 8.1.

Table 8.1. Environmental Impacts and Mitigation Measures for Proposed factory

Potential Impacts	Source/Components	Impact Significance <sup>1</sup>	Proposed Mitigation Measures	Residual Impact Significance <sup>2</sup>
<b>1. Impacts on Air Environment</b>				
Air Pollution	Dust and PM	Low	Section 6.2.1	Insignificant
	Gases Emissions	Low	Section 6.2.1	Insignificant
<b>2. Impacts of Noise</b>				
Noise	Noise from factory operation	Moderate	Section 6.2.2	Low (Negligible)
	Noise from Vehicle / D.G sets	Low	Section 6.2.2	Insignificant
<b>3. Impacts on Water Environment</b>				
Water pollution	Domestic wastewater	Low	Section 6.2.3	Insignificant
<b>4. Impacts of Solid Wastes</b>				
Potential to soil and water pollutions	Process wastes and Domestic waste	Moderate	Section 6.2.4	Low (Negligible)
<b>5. High Utility Consumption</b>				
High utilities used	Energy consumption	High	Section 6.2.5	Acceptable Limit
	Water consumption	High	Section 6.2.5	Acceptable Limit



Potential Impacts	Source/Components	Impact Significance <sup>1</sup>	Proposed Mitigation Measures	Residual Impact Significance <sup>2</sup>
<b>6. Socio-economic</b>				
Job opportunities	increase household income	Moderate	-	Moderate
<b>7. Risk and Industrial Hazards</b>				
Fire outbreak Risk	Damage and loss of Asset Risk	Low	Section 6.3.2 (i)	Low
Occupational health and safety	physical injuries and Infectious disease	Moderate	Section 6.3.2 (ii)	Low
Community Health and Safety	Traffic accidents and Infectious disease	Moderate	Section 6.3.2 (iii)	Low

<sup>1</sup> Prior to implementation of Proposed Mitigation and Management Control

<sup>2</sup> After implementation of Proposed Mitigation and Management Controls

## 8.2. Environmental Management and Monitoring Plan

Environmental management and monitoring programs for this sector should be implemented to address all activities that have been identified to have potentially significant impacts on the environment.

### 8.2.1. Proposed Environmental Management Cell for Proposed Factory

The proposed project should have the organization to monitor the environmental and social impacts of the proposed project. This organization can audit the proposed project to compliance the Environmental Management Plan (EMP). The environmental management and monitoring team should consist as follow.

Table 8.2. Structure of Environmental Management and monitoring Team (EMM)

No.	Monitoring Team members	Position	No. of member	Remark
1.	Managing Director	Chairman	1	MSL Co, Ltd
2.	Factory Manager	Team leader	1	MSL Co, Ltd
3.	Environmental Officer	Member	1	To be appointed
4.	OHS Officer	Member	1	Doctor (MSL Co, Ltd)
5.	HR Officer	Member	1	MSL Co, Ltd
6.	Supporting staff	Member	>2	MSL Co, Ltd

## Roles and Responsibilities

### *Project Manager*

The major duties and responsibilities of the project manager of proposed factory should be as given below:

- Setting up tools and standards for managing the program;
- Planning, tracking, and reporting on outputs and outcomes;

- Information and logistics management;
- Financial planning and tracking ;
- Risk and Issue tracking;
- Cross-project interdependency management;
- Setting quality control standards and tracking implementation;
- Setting and tracking change control procedures;
- Developing stakeholders' map, defining the interest of each group; and
- Planning and executing communication plans to stakeholders.

***Environmental Officer (EO)***

The Environmental Officer (EO) of the proposed factory should report directly to the Board of Members of the company. The EO should also be a member of technical team of proposed factory and should be responsible for all environmental matters pertaining to the day to day operation of the factory. The main responsibilities and duties of the EO include:

- (a) To implement the environmental management plan,
- (b) To assure regulatory compliance with all relevant rules and regulations,
- (c) To ensure regular operation and maintenance of pollution control devices,
- (d) To minimize environmental impacts of operations by strict adherence to the EMP.
- (e) To initiate environmental monitoring as per approved schedule.
- (f) To assess the compliance of the operation of the factory with environmental quality objectives;
- (g) To monitor and evaluate the effectiveness of mitigation or control measures in achieving environmental protection;
- (h) To carry out and monitor environmental awareness within the plant personnel;
- (i) To recommend amendments in procedures or remedial actions in the event that performance is unsatisfactory;
- (j) To establish and promote good relations with local communities (industrial, residential, etc.) on matter pertaining to environmental protection; and
- (k) Review and interpretation of monitored results and corrective measures in case monitored results are above the specified limit.
- (l) Maintain documentation of good environmental practices and applicable environmental laws as ready reference.
- (m) Maintain environmental related records.
- (n) Coordination with regulatory agencies, external consultants, monitoring laboratories.
- (o) Maintain of log of public inconvenience and the action taken.
- (p) Ready to solve any complaints from local people about environmental and social issues.

***Occupational Health and Safety Officer (OHS Officer)***

The major duties and responsibilities of the OHS officer or person-in-charge for workplace occupational safety and health of proposed factory should be as given below:

- (a) To prevent accidents, injuries and work-related illnesses in the workplace.
- (b) To create and implement health and safety policies in accordance with the latest legislation and to ensure that these policies are implemented by management and employees.

- (c) To draw health and safety policy in place and to create this document and ensure it's regularly updated to reflect any changes to the law.
- (d) To ensure ensure that each member of staff is aware of and adheres to this policy.
- (e) To ensure regular inspections and risk assessments, and ensuring that any hazards or defects are rectified immediately. They will also keep an accident book and must record and thoroughly investigate any accident, recommending any improvements in safety standards if required.
- (f) To train all staff in safety issues, and advising them on protective clothing and equipment where necessary. They also act as a key point of contact for any member of staff who has a query or concern regarding the safety of the workplace.
- (g) To safeguard machinery, fire safety, occupational health, noise, control of hazardous substances, manual handling, working with display screen equipment, and environmental health.

### **8.2.2. Notifications for Environmental Monitoring**

#### **(i) Monitoring Frequency**

If monitoring results show constantly (3 consecutive years) and significantly (e.g. less than 75 percent) better than the required levels, frequency of monitoring can be reduced. (IFC, World Bank, 2007)

#### **(ii) Monitoring Locations**

By studying the metrological data shown in Section (5), the most dominant wind direction in each season can be predicted and monitoring station for dust, noise and gas emissions should be carried out at that dominant wind direction for each season more carefully.

#### **(iii) Monitoring Guidelines and Standards**

As specified in the EIA Procedure, projects shall be responsible for the monitoring of their compliance with the following standard parameters from Myanmar National Environmental Quality (Emission) Guidelines, December 2015. Detail parameters values are showed in the previous section 3.4. Projects shall engage in continuous, proactive and comprehensive self-monitoring of the project and comply with applicable guidelines and standards.

### **8.2.3. Environmental Monitoring Plan**

Monitoring will be conducted to ensure compliance with regulatory requirements as well as to evaluate the effectiveness of operational controls and other measures intended to mitigate potential impacts. The Environmental Monitoring Plan is provided in Table 8.3. Environmental Monitoring Report will be submitted to the ECD on a half-yearly basis during the construction phase to report monitoring findings and environmental and performance of the project.

Table 8.3- Environmental Monitoring Plan for Proposed factory

Impact Source	Monitoring Item	Monitoring Means	Proposed Monitoring Locations	Frequency	Responsibility	Roughly estimated cost (USD)
<b>Operation Phase</b>						
Air Quality	NO <sub>2</sub> , SO <sub>2</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , CO <sub>2</sub>	Site Measurement	In front of factory (16°50'36.68"N 96°17'3.17"E)	Every six months	MSL Co, Ltd	USD 1,500 / survey
Noise	Noise level in dB(A)	Site Measurement	At workplace inside the factory (16°50'36.1"N 96°17'3.99"E)	Every three months	MSL Co, Ltd	USD 250 / survey
Water Quality	Biological Oxygen Demand (BOD), Chemical oxygen demand, Oil and Grease, pH, Total Coliform Bacteria, Total Nitrogen, Total Phosphorous, Total suspended solids	Site Measurement & analysis in Lab	Tube wells (16°50'36.11"N 96°17'4.98"E)	Every six months	MSL Co, Ltd	USD 200 / survey
Accident	Record of information sharing of factory works for safety Record of awareness rising activities for safety Record of traffic accidents	Check records	at factory and along access road to factory transporation	Weekly	MSL Co, Ltd	-
Utilities consumption	Record of water & fuel used	Check records	-	Monthly	MSL Co, Ltd	-
Solid Waste	process and domestic wastes disposed record book	Check records		Weekly	MSL Co, Ltd	

Impact Source	Monitoring Item	Monitoring Means	Proposed Monitoring Locations	Frequency	Responsibility	Roughly estimated cost (USD)
<i>Decommissioning Phase</i>						
Air Quality	NO <sub>2</sub> , SO <sub>2</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , CO <sub>2</sub>	Site Measurement	At demolition works (16°50'36.68"N 96°17'3.17"E)	Every six months	Contractor/ MSL Co, Ltd	USD 1,200 / survey
Noise	Noise level in dB(A)	Site Measurement	At demolition works (16°50'36.68"N 96°17'3.17"E)	Every three months	Contractor/ MSL Co, Ltd	USD 250 / survey



### 8.2.4. Estimated Environmental Monitoring Costs

The following table shows estimated monitoring costs for required monitoring parameters if monitoring is conducted by approved third party monitoring agency.

Table 8.4 Estimated Environmental Monitoring Costs Conducted by Monitoring Agency

No.	Impact Source	Frequency	Estimated Cost per Frequency	Annual Cost
1.	Air	Every six months	1500 US\$	3000 US\$
2.	Noise	Every three months	250 US\$	1000 US\$
3.	Ground water Quality	Every six months	200 US\$	400 US\$
4.	Solid waste	Monthly	-	-
5.	Utilities consumption	Monthly	-	-
Total Estimated Annual Cost				4400 US\$

### 8.2.5. Record Keeping and Reporting

Record keeping and reporting of performance is an important management tool for ensuring sustainable operation. Records should be maintained for regulatory, monitoring and operational issues. Results of recorded in files to monitor and audit monitoring will be carried out strictly as required by the related national regulations. According to the environmental impact assessment procedure, 2015, Article 108, the monitoring results of required parameters will be reported to Environmental Conservation Department (ECD) every six months, as provided in a schedule in the EMP, or periodically as prescribed by the Ministry.

### 8.3. Implementation Budget and Schedule

The project must implement the proposed management programme and monitoring plan for the proposed project. The estimated annual cost for mitigation measures are as follow;

Table 8.5 Implementation Budget for EMP

Item	Estimated Annual Cost (USD)
Management and Mitigation Measures	8,000 USD
Environmental Monitoring	5,000 USD
Emergency Disaster Prevention	2,000 USD
Total Estimated Cost	15,000 USD

The total estimated annual cost is 15,000 USD. If these budgets are not sufficient for the implementation of the EMP, Milestone Leatherware Co., Ltd (MSL) will supplement it.

#### **8.4. Occupational Health and Safety Management Plan**

For the proposed factory, workers are subjected to various types of occupational hazards during operation phase. In most of the cases, injuries are results to unsafe working practices, reluctance to use proper protective clothing and personal protective clothing and personal protective appliances, improper house-keeping, improper guarding of machinery, improper working environment, e.g. poor ventilation and lighting, noise etc, and above all lack of awareness of the employees and workers.

Safety management program for Proposed factory should include the following:

- (a) Emergency and first-aid procedures;
- (b) Medical precautionary measures;
- (c) Maintenance and troubleshooting Precautions;
- (d) House keeping;
- (e) Safety awareness;
- (f) Safety training; and
- (g) Safety guidelines.

##### **(a) Emergency and First-aid Procedures**

First aid is immediate, temporary treatment given in the event of accident or illness.

**Inhalation:** Workers with symptoms of exposure to fumes and gases should go to an uncontaminated area and inhale fresh air or oxygen and call a physician. Administer oxygen by mask if the person is breathing. If breathing has stopped, administer cardiopulmonary resuscitation (CPR), preferably with simultaneous administration of oxygen. Call for emergency assistance.

**Eye:** Contact lenses, if worn, should be removed. Irrigate the eyes immediately with large amounts of water for 15 minutes. Occasionally hold the eyelids apart to insure complete irrigation. Apply a dry protective dressing. Call for emergency medical assistance. Don't remove dust from the eyes yourself. Get medical assistance.

For "flash burns" cover the eye with cold (preferably iced) compresses for 5 to 10 minutes; then repeat. Apply a dry protective dressing. Call a physician. Don't rub the eye. Don't use ointments or drops unless prescribed by a physician.

**Skin:** For skin contact with irritants, flush the areas with large amounts of water, and then wash with soap and water. Remove contaminated clothing. If mucous membranes are irritated, flush with water. Wash cuts and scrapes with mild soap and water. Avoid contamination. Apply a dry sterile dressing.

For thermal burns, cold water is an effective first aid measure. If skin is not broken, immerse burn part in clean cold water or apply clean ice to relieve pain. Do not disturb or open blisters. Prevent contamination. Bandage loosely with a clean dry dressing. Call for emergency medical assistance.

**Electrical Shock and Electrical Burns:** Disconnect and turn off power. Remove victim from contact. Use no conducting materials if the rescuer must resort to pulling the victim from the live contact. The rescuer must first protect himself by use of insulated materials such as gloves. If not breathing, administer CPR as soon as electrical contact is broken. Call for emergency medical assistance. Continue CPR until spontaneous breathing has been restored

or until a physician arrives. Administer oxygen. Keep comfortably warm. Keep horizontal until there is no further evidence of shock. Treat electrical burns as thermal burns. For electrical burns apply clean, cold (iced) compresses. Prevent contamination. Cover with a clean, dry dressing. Call for emergency medical assistance.

**(b) Medical Precautionary Measures**

The following medical precautionary measures are recommended for the Proposed factory.

- a) Periodic health examinations are recommended with the cooperation with Public Health Office (Dagon Seikan).
- b) An effective educational, training, and industrial hygiene program should be instituted. The program should cover the following: (i) the nature and potential hazards; (ii) proper and safe use of equipment; and (iii) emergency and first aid procedures.
- c) Medical personnel should be available on-site or by phone for advice and consultation. Emergency phone numbers should be posted near the telephones.
- d) The following should be readily available: (i) first aid supplies approved by a physician; (ii) stretchers and blankets for transportation; (iii) oxygen inhalation equipment; and (iv) approved instant acting eye washes and showers.
- e) Good personal hygiene practices are very important. Employees should wash their face and hands before eating, and it is recommended they are not be permitted to eat, drink, or smoke in the work area. Food and beverages should not be stored in the work area. Contaminated clothing should be changed.
- f) Protection against skin conditions, such as chemical burns, rashes, and dermatitis can be provided by appropriate protective clothing and equipment, as well as the use of protective creams or lotions.

**(c) Maintenance and Troubleshooting Precautions**

Faulty or improperly maintained equipment can cause property damage, physical injury, or possibly death by fire or electrical shock. Here is a list of some important items to check when troubleshooting or maintaining equipment.

- (a) Stop operating immediately if equipment is malfunctioning.
- (b) Do not perform any maintenance unless you are qualified to perform such work.
- (c) Make test readings carefully.
- (d) Protect the equipment from heat, excessive wet conditions, oil or grease, corrosive atmospheres, and inclement weather.
- (e) Replace parts only with manufacturer's recommended replacement parts.
- (f) Keep all protective devices and covers in position.

**(d) House Keeping**

The following measures shall be practiced at the proposed factory.

- (a) Regular cleaning of the floors with service water.
- (b) Keeping all de-dusting systems in perfect working conditions to avoid dust accumulation inside and outside the plant.

- (c) Avoid dumping of wastes, damaged equipment and items anywhere inside the plant affecting aesthetics and increasing risk of fire and other hazards.
- (d) Keeping ventilation systems of premises in perfect working condition to avoid ingress of dust inside the pressurized room.
- (e) Maintaining hygienic conditions in areas like canteens, near drinking water sources and toilets.
- (f) Maintaining green belt along the factory boundaries to suppress noise, fugitive dust and to improve the aesthetics.
- (g) Developing a positive outlook in the employees for improving the working place, both in factory and office or laboratory clean and well maintained.

#### **(e) Safety Awareness**

Safety awareness must be promoted among project managers and employees by:

- (a) Imparting regular training.
- (b) Installing/displaying safety caution boards and safety posters mentioning Do's & Don'ts at different vulnerable locations.
- (c) Arranging safety & housekeeping competition etc.
- (d) To procure and maintain personal protective equipment in good working condition.

#### **(f) Safety Training**

Training programs in safety and accident prevention will be organized at all levels of employees with a view to familiarize them with the general safety rules, safety procedures in various operational activities and to update their knowledge in safety and accident prevention, industrial hygiene and emergency equipment. These training programmes will be conducted periodically in a planned manner to refresh their knowledge by safety officer. Training shall be imparted for:

- (a) Safe working and maintenance practices.
- (b) Use of proper tools and tackles.
- (c) Use of personal protective equipment.
- (d) Handling emergency situation.

#### **(g) Safety Guidelines**

The factory should have the HSE Officer and Safety committees to can identify and correct factory health and safety issues, increase safety awareness, and improve workers' job satisfaction. The safety committee provides to describe the requirements for employees safety and health in good working condition. The purpose of the Plastic granules factory Safety Committee is to promote a safe working environment and reduce the accidents in working places. The factory provides the required PPE as follow.

Table 8.6 Summary of Recommended Personal Protective Equipment According to Hazard

	<b>Workplace Hazards</b>	<b>Suggested PPE</b>
Eye and face protection	Flying particles, molten metal, gases or vapors, light radiation	Safety glasses with side-shields, protective shades, etc.

Head protection	Falling objects, inadequate height clearance, and overhead power cords	Plastic helmets for top and side impact protection
Hearing protection	Noise	Hearing protectors (ear plugs or ear muffs)
Foot protection	Falling or rolling objects, points objects. Corrosive or hot liquids	Safety shoes and boots for protection against moving and falling objects, liquids and chemicals
Hand protection	Hazardous materials, cuts or lacerations, vibrations, extreme temperatures	Gloves made of rubber or synthetic material (Neoprene), leather, insulation materials, etc.
Respiratory protection	Dust, fogs, fumes, mists, gases, smokes, vapors	Facemasks with appropriate filters for dust removal and air purification (chemical, mists, vapors and gases). Single or multi-gas personal monitors, if available
	Oxygen deficiency	Portable or supplied air (fixed lines). Onsite rescue equipment
Body / leg protection	Extreme temperatures, hazardous materials, biological agents, cutting and laceration	Insulating clothing, body suits, aprons etc. of appropriate materials

### (h) Workplace Lighting

#### *Purpose*

Heavy and scattered light affect the workers' visible eyes and poor lighting or a complete lack of lighting may prevent workers from seeing possible hazards and more emphasized the work for seeing. The purpose of this section is to describe requirements for workplace and emergency lighting to help provide a safe working environment for all factory workers.

The factory provide the 1300 lighter for the employees in the workplace. The factory should be required the following requirements;

1. Factories that have night shifts or low natural lighting levels must provide emergency lighting in case of a power failure.
2. Lighting must meet the following required lux levels in the workplace

#### *IFC Guideline for lighting*

Location	Light Intensity
Emergency light	10 lux
Outdoor non working areas	20 lux
Simple orientation and temporary visits (machine storage, garage, warehouse)	50 lux
Workspace with occasional visual tasks only (corridors,	100 lux



stairways, lobby, elevator, auditorium, etc.)	
Medium precision work (simply assembly, rough machine works, welding, packing, etc.)	200 lux
Precision work (reading, moderately difficult assembly, sorting, checking, medium bench and machine works, etc.), offices.	500 lux
High precision work (difficult assembly, sewing, color inspection, fine sorting etc.)	1000-3000 lux

Source: IFC, World Bank

### (i) Workplace Temperature

#### *Purpose*

The heat from the sun directed towards the factory's window and door which cause the arising the temperature in the factory. The workers may be caused fainting and heat stress by arising the temperature. The following table shows the temperature degree in workplace.

Work/rest periods	Light work	Moderate work	Heavy work
Continuous work	30.0 °C	26.7 °C	25.0 °C
70% work:25%rest	30.6 °C	28.0 °C	25.9 °C
50% work:50%rest	31.4 °C	29.4 °C	27.9 °C
25% work:75%rest	32.2 °C	31.1 °C	30.0 °C

Source: Guideline from American Conference of Governmental Industrial Hygienists (ACGIH)

### (j) Program Strategy for Safety Management

The factory has the HSE Officer or Physician and Environmental Management and Safety Team (EMST) to can identify and correct factory health and safety issues, increase safety awareness, and improve workers' job satisfaction.

Table 8.7. Structure of Environmental Management and Safety Team (EMST)

No.	Team members	Position	No. of member	Remark
1.	Managing Director	Chairman	1	MSL Co, Ltd
2.	OHS/HSE Officer	Team leader	1	Doctor (MSL Co, Ltd)
3.	Supervisor/ Line Leader	Member	1	MSL Co, Ltd
6.	Supporting staff	Member	>2	MSL Co, Ltd

The EMST provides to describe the requirements for employees safety and health in good working condition. The purpose of the EMST is to promote a safe working environment and reduce the accidents in working places. The factory provides the required PPE.

Table 8.8. Program Strategy for Safety Management

Plan	<ul style="list-style-type: none"> <li>- EMST Mission Statement.</li> <li>- EMST approves Mission Statement, appoints Leaders.</li> <li>- Leaders prepare meeting agendas.</li> </ul>
Do	EMST team meets at least once a month to discuss factory safety issues. EMST provides written record of meetings to management & posts a copy that worker population can easily access. Keep records of team meetings for at least five years. Members are trained to inspect factory areas, conduct incident investigations, prioritize and follow-up on corrective actions. EMST conducts the activities described in its Mission Statement and reports to factory management regularly.
Check	Management reviews EMST activities and performance and recommends changes, as necessary.
Act	EMST changes procedures, adopts new tools, etc. to respond to management's feedback and improve its performance.

### 8.5. Emergency Response Plan (EPR)

EMP focused on emergency preparedness and management. The main emergencies arising from the proposed project may be because of an accidental fire. Fire protection systems would be conducted with priority levels for the buildings of factory and office considering the heights, and required suitable provisions and good housekeeping would be done for firefighting. There is also very low probability of an earthquake and the protection of factory is taken care of through the structural design complying with International Standard.

Emergency prevention through good design, operation, maintenance and inspection can reduce the probability of occurrence and consequential effect of such outcomes. Environmental Management and Safety Team (EMST) lead to practice Emergency Response Plan by combining resources of Company and outside services to achieve the followings:

- Localize the emergency
- Minimize effects on property and people
- Effective rescue and medical treatment
- Evacuation

#### **Contact List**

The ERP needs to include information on reportable incident notification, contact information and activation of alarms. Moreover, contain the contact telephone number of fire department, nearest hospital, fire services, etc.

Table 8.9 Some External Resources Contact Lists in Dagon Seikkan Township

No.	Name	phone
1.	General Administration Department (Dagon Seikkan)	01-593360, 01-593361
2.	Myanmar Police Force (Dagon Seikkan)	01-593007
3.	Public Health and Medical Services (Dagon Seikkan)	09-2251215
4.	Fire Station (Dagon Seikkan)	09-73175954
5.	Township Labour Office (Dagon Seikkan)	01-591427

In case any contractor has its own Emergency Response Plan (ERP), it will be reviewed and approved by HSE Manager. The ERP needs to include information on reportable incident notification, contact information and activation of alarms. Moreover, should contain the contact telephone number of fire department, nearest hospital, fire services, etc.

The ERP should contain instructions for support relating to:

- Medical emergencies procedures;
- Social Emergencies Procedures (i.e., protests, vehicle accidents);
- Heavy weather/storms / flood events;
- Chemical substances Spill Emergency Plan;
- Any other emergency response plan required by Myanmar authorities. (e.g. Fire Emergency Plan)

Emergency Response Plan is written documents which include the action to be taken by all staff in the event of fire and the arrangements for calling the fire brigade. General Fire Notice for small premises could take the form of a simple fire action signs which are posted in positions where staff and relevant persons can read it and become familiar with its contents. Staff Fire Notice for high fire risks or large premise will be need more detailed Emergency Response Plan which take account of the findings of the risk assessment. In addition notices giving clear and concise instructions of the routine to be followed in case of fire should be prominently displayed.

In certain cases should nominate persons to implement the fire action plan and give them adequate training in firefighting and evacuation procedures. The following items should be considered where appropriate:

- Fire evacuation strategy
- Action on hearing the fire alarm
- Calling the fire bridge
- Power/process isolation
- Identification of key escape routes
- Fire wardens

- Places of assembly and roll call
- Firefighting equipment provided
- Training required

It needs to consider how to arrange the evacuation of the premises in the light of risk assessment and the other fire precautions. The plan should instruct all personnel upon on hearing the fire alarm to act in accordance with the agreed strategy. The Fire Service should also be informed immediately when person discovering fire, depend on conditions (Work time or other time). In premises, the key escape routes must be identified including schematic drawings and most importantly emergency escape and exist-signs.



Figure 8.1 Placing of General Fire Notice in and around the Factory

The fire wardens who are the responsible person where necessary to safeguard the safety of employees should nominate employees to implement certain fire safety measures. The need for fire wardens depends on the size and complexity of the premises. They also require special training by an external fire training organization. They should be competent in the use of fire extinguishers and be capable of extinguishing small fires. They should have some knowledge of fire prevention and be able to identify possible fire hazards to prevent fire from occurring.

The Emergency Response Plan should be the subject of frequent training so all employees are familiar with its contents and there should be regular fire drills. Fire drills should consider the following points:

- Regular intervals
- Records kept

- There should be drills completed at least once a year
- Fire Alarms and Fire Fighting Equipment should be tested at weekly intervals and records kept
- Fire equipment regularly serviced

### ***Training and Updating***

The emergency preparedness facilities and emergency response plans require maintenance, review, and updating to account for changes in equipment, personnel, and facilities. Training programs and practice exercises provide for testing systems to ensure an adequate level of emergency preparedness. Programs include:

- (i) Identify training needs based on the roles and responsibilities, capabilities and requirements of personnel in an emergency
- (ii) Develop a training plan to address needs, particularly for flood control, fire fighting, spill response, and evacuation. Conduct annual training, at least, and perhaps more frequent training when the response includes specialized equipment, procedures, or hazards, or when otherwise mandated
- (iii) Provide training exercises to allow personnel the opportunity to test emergency preparedness, including:
  - Desktop exercises with only a few personnel, where the contact lists are tested and the facilities and communication assessed.
  - Response exercises, typically involving drills that allow for testing of equipment and logistics and what aspects require improvement.
  - Update the plan, as required, after each exercise. Elements of the plan subject to significant change (such as contact lists) should be replaced.
  - Record training activities and the outcomes of the training.

### ***Activated by the proposed factory***

The factory installed with modern fire hydrant system effectively fighting fires of various proportions and of all classes of fire risks. As the proposed project is a manufacturing factory, fire can be a very serious risk. The risk of fire is to be reduced as sufficient numbers of fire extinguishers are installed: 20, in the production building and 2 fire pump. The forty Emergency exit doors, 12 fire alarm systems, signs and posters for directions for evacuation routes and emergency contact numbers are well placed in case of fire. All rooms and spaces within each story shall be provided with and have access to the minimum number of approved independent exits as required minimum number of approved independent exits as required by the following table based on the occupant load. The emergency exist doors enough for the number of workers according to the following table.

Table 8.10- Minimum Number of Exits for Occupant Loads

Occupant Load	Minimum number of Exits
1-500	2
500-1000	3
More than 1000	4





Figure 8.2 Fire Fighting Equipments

## **9. CONCLUSION AND RECOMMENDATIONS**

### **9.1. Conclusions**

This IEE report reviews the key anticipated environmental and social impacts of proposed project. Moreover, proper mitigation measures for these anticipated impacts and good environmental management practices, which do not reduce factory process, were described in this report. Implementation of appropriate mitigation measures during operation phases will minimize the negative impacts of the Project to acceptable levels. Environmental monitoring of the Project will be undertaken during implementation regularly and through the first five years of its operation by local community to ensure that the measures are being implemented properly. According to the IEE study, all of the major and minor environmental and social impacts can be reduced by proper mitigation measures described in this report. To summarize, it can be concluded that all of the anticipated adverse impacts of the project can be minimized by the proper mitigation measures described in this report. The proposed factory can be allowed to operate with increasing employment opportunities for local people as well as resulting in government revenues if the project proponent will do all of the mitigation and enhancement measures described in this report.

### **9.2. Recommendations**

The IEE commitments should be followed by Milestone Leatherware Co., Ltd.

Further training programs should be done for factory workers and staff to meet the environmental performance.

Follow the comments and suggestions made by ECD after reviewing this IEE report.

In addition, the Milestone Leatherware Co., Ltd should monitor air, noise, and groundwater quality, and waste management at every six months to ensure these in line with the National Environmental Quality (Emissions) Guidelines.

## 10. STATEMENT OF COMMITMENTS

Milestone Leatherware Co., Ltd hereby confirms that:

- This IEE Report is accurate, consolidated and complete;
- This report has been conducted in accordance with relevant laws, including the EIA Procedure (2015).
- The Project will fully follow the commitments, mitigation measures and plans set out in this IEE Report.
- The project will comply damage control plan on environmental and social conditions in the closure stage

### 10.1 List of Commitments

A consolidated summary list of environmental and social impacts and mitigation measures commitments that Milestone Leatherware Co., Ltd. shall be expected to adopt in order to manage and mitigate potential impacts associated with the project development is provided below in Table 10.1


Table 10.1 Project Key Commitments

Commitment	No.	Description	Source
Policy, Legal and Institutional Framework	1	Milestone Leatherware Co., Ltd shall follow applicable legislations, laws, rules and the legal framework of environmental issues past and present environmental legislation of Myanmar.	IEE Report, Chapter 3,
Project Description	2	Milestone Leatherware Co., Ltd shall follow the content of the project including waste management and discharged.	IEE Report, Chapter 4,
implement mitigation measures	3	Milestone Leatherware Co., Ltd shall implement mitigation measures for Potential Environmental Impacts and Risks during the Project Operation.	IEE Report, Chapter 6
Corporate Social Responsibility	4	Milestone Leatherware Co., Ltd agrees to contribute about 2% of net profit as CSR fund for local community development.	IEE Report, Chapter 7
Environmental Management Plan	5	Milestone Leatherware Co., Ltd. shall develop Environmental Management Plan and Sub plan in EMP during the Project Operation.	IEE Report, Chapter 8
Environmental Monitoring Plan	6	Milestone Leatherware Co., Ltd shall develop Environmental Monitoring Plan and biannually monitoring report with monitoring data shall be submitted to the Environmental Conservation Department for renewing the Environmental Clearance Certificate	IEE Report, Chapter 8

## APPENDIXES

## APPENDIX A

### Consultation Questionnaires



**HRD Environmental Training and Services Co., Ltd.**  
Human Resource Development Environmental Training and Services  
Address: No.472, Aung Mya Thee Street, Quarter 2, Insein Road, Mayangon Township, Yangon, Myanmar  
Phone: +95 9256036414, +95 9445070916, +95 969201658  
Email: [hrdtraining@gmail.com](mailto:hrdtraining@gmail.com), [developmenttraining07@gmail.com](mailto:developmenttraining07@gmail.com)

**Stakeholders Consultation Questionnaire**

အမည်... မ.ရှမ်းဝေ..... စီမံကိန်းအမည်... Milestone Leatherware Co., Ltd  
နေ့စွဲ... ၃၀.၁.၂၀၂၃

မေးမြန်းသည့်နေရာ (သို့) ဖြေဆိုသည့်နေရာ... အနောက်ကျွန်း

စဉ်	Environmental and Social Impacts ပတ်ဝန်းကျင်နှင့်လူမှုဘဝဆိုင်ရာအကျိုးအမြတ်ထိခိုက်မှုများ	( Yes/ NO) ဖြစ်နိုင်/ မဖြစ်နိုင်	Comments on Project ထပ်မံရှင်းလင်းချက်
၁	ယနေ့စီမံကိန်းသည် ပတ်ဝန်းကျင်နေထိုင်သူများအတွက် ဆိုးကျိုးများပေးနိုင်သည်ဟု ထင်ပါသလား	No	ဖြည့်စွက်အကြံပြုချက်များ ရေးသားနိုင်ပါသည်
၂	ယနေ့စီမံကိန်းကြောင့် အနီးအနားပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်များကို ထိခိုက်နိုင်ပါသလား	No	
၃	ယနေ့စီမံကိန်းကြောင့် ကျန်းမာရေး၊ လူမှုဘဝဆိုင်ရာအကျိုးအမြတ်ကို ထိခိုက်နိုင်ပါသလား	No	
၄	ယနေ့စီမံကိန်းကြောင့် ဤဒေသ၏ သဘာဝ ပတ်ဝန်းကျင်ကို ထိခိုက်နိုင်ပါသလား	No	
၅	ယနေ့စီမံကိန်းကြောင့် အသံဆူညံမှု၊ တုန်ခါမှု၊ များ ဖြစ်နိုင်ပါသလား	No	
၆	ယနေ့စီမံကိန်းကြောင့် ဤဒေသ၏ လူမှုဘဝဆိုင်ရာ အကျိုးအမြတ်များကို ထိခိုက်နိုင်ပါသလား	Yes	
၇	ယနေ့စီမံကိန်းကြောင့် သယ်ယူပို့ဆောင်ရေးလမ်းကြောင်း သို့မဟုတ် အထောက်အကူပြုလုပ်ငန်းအဆောက်အအုံများကို ပိုမို ဖြတ်သော် ကြည်သွားနိုင်ပါသလား	No	
၈	ယနေ့စီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများကို ကျန်းမာရေးဆိုင်ရာ ဆိုးကျိုးများပေးနိုင်သည်ဟု ထင်ပါသလား	No	
၉	ယနေ့စီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်အခွင့်အလမ်းများကို အနှောင့်အယှက်ဖြစ်စေပါသလား	No	

Signature ( လက်မှတ်)..... မ.ရှမ်းဝေ

Name ( အမည် )..... မ.ရှမ်းဝေ (၁၀၁၇၀၁၂၅၀၁၂၅)

Address ( နေရပ်လိပ်စာ ).....





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အမည်..... Phmar Nye ..... Stakeholders Consultation Questionnaire  
စီမံကိန်းအမည်..... Milestone Leatherware Com. Lt .....  
နေ့စွဲ..... ၃၀.၁၁.၂၀၂၃ .....

မေးမြန်းသည့်နေရာ ( သို့ ) ဖြေဆိုသည့်နေရာ..... သက်သွယ်စက်ရုံ .....

စဉ်	Environmental and Social Impacts ပတ်ဝန်းကျင်နှင့်လူမှုစီးပွားရေးအပေါ်ထိခိုက်မှုများ	( Yes/ NO) ဖြစ်နိုင်/ မဖြစ်နိုင်	Comments on Project ထင်မြင်ချက်
၁	ယနေ့စီမံကိန်းသည် ပတ်ဝန်းကျင်နေထိုင်သူများအတွက် ဆိုးကျိုးများပေးနိုင်သည်ဟု ထင်ပါသလား	No	ဖြည့်စွက်အကြံပြုချက်များ ရေးသားနိုင်ပါသည်
၂	ယနေ့စီမံကိန်းကြောင့် အနီးအနားပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်များကို ထိခိုက်နိုင်ပါသလား	No	
၃	ယနေ့စီမံကိန်းကြောင့် ကျွန်ုပ်တို့၏ လူမှုစီးပွားရေးအခြေအနေအထားကို ထိခိုက်နိုင်ပါသလား	No	
၄	ယနေ့စီမံကိန်းကြောင့် ဤဒေသ၏ သဘာဝ ပတ်ဝန်းကျင်ကို ထိခိုက်နိုင်ပါသလား	No	
၅	ယနေ့စီမံကိန်းကြောင့် အသံဆူညံမှု၊ တုန်ခါမှု၊ များ ဖြစ်နိုင်ပါသလား	No	
၆	ယနေ့စီမံကိန်းကြောင့် ဤဒေသ၏ လူမှုစီးပွားရေး ပိုမိုကောင်းမွန်လာနိုင်ပါသလား	yes,	
၇	ယနေ့စီမံကိန်းကြောင့် သယ်ယူပို့ဆောင်ရေးလမ်းကြောင်း သို့မဟုတ် အထောက်အကူပြုလုပ်ငန်းအဆောက်အအုံများကို ပိုမို မြှင့်တင်နိုင် ကြည့်သွားနိုင်ပါသလား	No	
၈	ယနေ့စီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများကို ကျန်းမာရေးဆိုင်ရာ ဆိုးကျိုးများပေးနိုင်သည်ဟု ထင်ပါသလား	No	
၉	ယနေ့စီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်အခွင့်အလမ်းများကို အနှောင့်အယှက်ဖြစ်စေပါသလား	No	

Signature ( လက်မှတ်)..... Phmar Nye .....

Name ( အမည် )..... Phmar Nye .....

Address ( နေရပ်လိပ်စာ )..... ၇၀၇ ဗဟိုကုန်းကျေးရွာ .....



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**Stakeholders Consultation Questionnaire**

အမည်.....စောဝိသုဉ္ဇာ.....

စီမံကိန်းအမည်.....Milestone Leatherware Co., Ltd.....

နေ့စွဲ.....၂၀.၁.၂၀၂၁.....


မေးမြန်းသည့်နေရာ ( သို့ ) ဖြေဆိုသည့်နေရာ.....အလယ်လမ်းမ.....

စဉ်	Environmental and Social Impacts ပတ်ဝန်းကျင်နှင့် လူမှုစီးပွားရေးအပေါ် ထိခိုက်မှုများ	( Yes/ NO) ဖြစ်နိုင်/ မဖြစ်နိုင်	Comments on Project ထင်မြင်ချက်
၁	ယခုစီမံကိန်းသည် ပတ်ဝန်းကျင်နှင့် လူမှုစီးပွားရေးအပေါ် ထိခိုက်မှုများ ဖြစ်ပေါ်စေနိုင်သည်ဟု ထင်ပါသလား	No	ဖြည့်စွက်အကြံပြုချက်များ ရေးသားနိုင်ပါသည်
၂	ယခုစီမံကိန်းကြောင့် အနီးအနားပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်များကို ထိခိုက်နိုင်ပါသလား	No	
၃	ယခုစီမံကိန်းကြောင့် ကျန်းမာရေး၊ လူမှုစီးပွားရေးအပေါ် ထိခိုက်နိုင်ပါသလား	No	
၄	ယခုစီမံကိန်းကြောင့် ဤဒေသ၏ သဘာဝ ပတ်ဝန်းကျင်ကို ထိခိုက်နိုင်ပါသလား	No	
၅	ယခုစီမံကိန်းကြောင့် အသံဆူညံမှု၊ တုန်ခါမှု၊ များ ဖြစ်နိုင်ပါသလား	No	
၆	ယခုစီမံကိန်းကြောင့် ဤဒေသ၏ လူမှုစီးပွားရေး ပိုမိုကောင်းမွန်လာနိုင်ပါသလား	Yes	
၇	ယခုစီမံကိန်းကြောင့် သယ်ယူပို့ဆောင်ရေးလမ်းကြောင်း သို့မဟုတ် အထောက်အကူပြုလုပ်ငန်းအစောက်အအုံများကို ပိုမို ပြုတ်သိပ် ကြပ်ညှာနိုင်ပါသလား	No	
၈	ယခုစီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများကို ကျန်းမာရေးဆိုင်ရာ ဆိုးကျိုးများပေးနိုင်သည်ဟု ထင်ပါသလား	No	
၉	ယခုစီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်အခွင့်အလမ်းများကို အနှောင့်အယှက်ဖြစ်စေပါသလား	No	

Signature ( လက်မှတ်).....စောဝိသုဉ္ဇာ.....

Name ( အမည် ).....စောဝိသုဉ္ဇာ.....

Address ( နေရပ်လိပ်စာ ).....၃၇၇၊ မြောက်လမ်း၊ ဘုရားတော်လမ်း.....



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**Stakeholders Consultation Questionnaire**

အမည်..... အောင်ကျော် ..... စီမံကိန်းအမည်..... Milestone leatherware co., ltd. .....  
နေ့စွဲ..... ၃၀.၁.၂၀၂၃ .....

မေးမြန်းသည့်နေရာ (သို့) ဖြေဆိုသည့်နေရာ..... ရက်ခန်းလမ်း .....

စဉ်	Environmental and Social Impacts ပတ်ဝန်းကျင်နှင့်လူမှုစီးပွားရေးအပေါ်ထိခိုက်မှုများ	( Yes/ NO) ဖြေနိုင်/ မဖြေနိုင်	Comments on Project ထပ်ပြင်ချက်
၁	ယနေ့စီမံကိန်းသည် ပတ်ဝန်းကျင်နှင့်လူမှုစီးပွားရေးအပေါ်ထိခိုက်မှုများပေးနိုင်သည်ဟု ထင်ပါသလား	No	မြေပုံကောက်ယူခြင်းနှင့်မြေချောင်းဖျက်ခြင်းများ ဖြစ်ပေါ်နိုင်ပါသည်
၂	ယနေ့စီမံကိန်းကြောင့် အနီးအနားပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်များကို ထိခိုက်နိုင်ပါသလား	No	
၃	ယနေ့စီမံကိန်းကြောင့် ဤဒေသ၏ လူထုကလေးများ၏အမြင်များကို ထိခိုက်နိုင်ပါသလား	No	
၄	ယနေ့စီမံကိန်းကြောင့် ဤဒေသ၏ သဘာဝ ပတ်ဝန်းကျင်ကို ထိခိုက်နိုင်ပါသလား	No	
၅	ယနေ့စီမံကိန်းကြောင့် အသံဆူညံမှု၊ တုန်ခါမှု၊ များ ဖြစ်နိုင်ပါသလား	No	
၆	ယနေ့စီမံကိန်းကြောင့် ဤဒေသ၏ လူမှုစီးပွားရေး ဖွံ့ဖြိုးတိုးတက်မှုကို ထိခိုက်နိုင်ပါသလား	No	
၇	ယနေ့စီမံကိန်းကြောင့် သယ်ယူပို့ဆောင်ရေးလမ်းကြောင်း သို့မဟုတ် အထောက်အကူပြုလုပ်ငန်းအစောက်အဖျားများကို ပိုမို မြှင့်တင်ခြင်းဖြစ်နိုင်ပါသလား	No	
၈	ယနေ့စီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများကို ကျန်းမာရေးဆိုင်ရာ ဆိုးကျိုးများပေးနိုင်သည်ဟု ထင်ပါသလား	No	
၉	ယနေ့စီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်အခွင့်အလမ်းများကို အနှောင့်အယှက်ဖြစ်ပေါ်ပါသလား	No	

Signature ( လက်မှတ်)..... အောင်ကျော် .....

Name ( အမည် )..... အောင်ကျော် .....

Address ( နေရပ်လိပ်စာ )..... ရက်ခန်းလမ်း .....





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Advantage Technology Services Ltd.

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## Stakeholders Consultation Questionnaire

စီမံကိန်းအမည်... Mile stone leatherware Com Ltd

தேதி... 20..10.2022

မေမြန်းသည့်နေရာ ( သို့ ) ဖြေဆိုသည့်နေရာ....၈၈၈၇၃၀၁၂

စဉ်	Environmental and Social Impacts ပတ်ဝန်းကျင်နှင့်လူမှုစီးပွားရေးအခေါ်ထိခိုက်မှုများ	( Yes/ NO) ဖြစ်နိုင်/ မဖြစ်နိုင်	Comments on Project ထပ်ပြင်ချက်
၁	ယခုစီမံကိန်းသည် ပတ်ဝန်းကျင်ဆိုင်ရာ သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာ အန္တရာယ်များကို ထိခိုက်နိုင်ပါသလား	NO	ခြေညှိမှုအတွက် အန္တရာယ်များ ရှိသော်လည်း ထိခိုက်မှုမရှိပါ
၂	ယခုစီမံကိန်းကြောင့် အနီးအနားပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်များကို ထိခိုက်နိုင်ပါသလား	NO	
၃	ယခုစီမံကိန်းကြောင့် ကျွန်းပေါ်ရှိ လူမှုစီးပွားရေးအခြေအနေအထားကို ထိခိုက်နိုင်ပါသလား	NO	
၄	ယခုစီမံကိန်းကြောင့် ကျွန်းပေါ်ရှိ သဘာဝ ပတ်ဝန်းကျင်ကို ထိခိုက်နိုင်ပါသလား	NO	
၅	ယခုစီမံကိန်းကြောင့် အသံဆူညံမှု၊ တုန်ခါမှု၊ များ ဖြစ်နိုင်ပါသလား	NO	
၆	ယခုစီမံကိန်းကြောင့် ကျွန်းပေါ်ရှိ လူမှုစီးပွားရေး ဖွံ့ဖြိုးတိုးတက်မှုကို ထိခိုက်နိုင်ပါသလား	Yes	
၇	ယခုစီမံကိန်းကြောင့် သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာ အန္တရာယ်များကို ထိခိုက်နိုင်ပါသလား	NO	
၈	ယခုစီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများကို ကျန်းမာရေးဆိုင်ရာ ဆိုးကျိုးများပေးနိုင်ပါသလား	NO	
၉	ယခုစီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်အခွင့်အလမ်းများကို အနှောင့်အယှက်ဖြစ်စေပါသလား	NO	

Signature ( လက်မှတ်).....

Name ( အမည် ).....မ(ဒေါ်)ခင်အောင်

Address (နေရပ်လိပ်စာ) ...၇၁၆၈၃၂ ရန်ကုန်...အမှတ်ကြီးမားမား(၃၄၅၆၇)





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**Stakeholders Consultation Questionnaire**

အမည်: အောင်မြင်မြင့်မြင့် စီမံကိန်းအမည်: Milestone Leatherware Co., Ltd.  
နေ့စွဲ: ၃၀.၁၁.၂၀၂၃

မေးမြန်းသည့်နေရာ (သို့) ဖြေဆိုသည့်နေရာ: မိလ်စိုက်လုပ်ငန်း

စဉ်	Environmental and Social Impacts ပတ်ဝန်းကျင်နှင့်လူမှုစီးပွားရေးအပေါ်ထိခိုက်မှုများ	( Yes/ NO) ဖြစ်နိုင်/ မဖြစ်နိုင်	Comments on Project ထပ်ပြင်ချက်
၁	ယခုစီမံကိန်းသည် ပတ်ဝန်းကျင်နှင့်လူမှုစီးပွားရေးအပေါ်ထိခိုက်မှုများ ဖြစ်ပေါ်စေနိုင်သည်ဟု ထင်ပါသလား	NO	ခြေစိုက်မှုအကြမ်းဖျင်းများ ရေးသားနိုင်ပါသည်
၂	ယခုစီမံကိန်းကြောင့် အနီးအနားပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်များကို ထိခိုက်နိုင်ပါသလား	NO	
၃	ယခုစီမံကိန်းကြောင့် ကျွန်ုပ်တို့၏ ရေအရင်းအမြစ်များကို ထိခိုက်နိုင်ပါသလား	NO	
၄	ယခုစီမံကိန်းကြောင့် ဤဒေသ၏ သဘာဝ ပတ်ဝန်းကျင်ကို ထိခိုက်နိုင်ပါသလား	NO	
၅	ယခုစီမံကိန်းကြောင့် အသံဆူညံမှု၊ တုန်ခါမှု၊ များ ဖြစ်နိုင်ပါသလား	NO	
၆	ယခုစီမံကိန်းကြောင့် ဤဒေသ၏ လူမှုစီးပွားရေး ဖွံ့ဖြိုးတိုးတက်မှုကို ဖြစ်နိုင်ပါသလား	Yes	
၇	ယခုစီမံကိန်းကြောင့် သယ်ယူပို့ဆောင်ရေးလမ်းကြောင်း သို့မဟုတ် အထောက်အကူပြုလုပ်ငန်းအဆောက်အအုံများကို ပိုမို မြှင့်တင်နိုင်ပါသလား	NO	
၈	ယခုစီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများကို ကျန်းမာရေးဆိုင်ရာ ဆိုးကျိုးများပေးနိုင်သည်ဟု ထင်ပါသလား	NO	
၉	ယခုစီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်အခွင့်အလမ်းများကို အနှောင့်အယှက်ဖြစ်စေပါသလား	NO	

Signature ( လက်မှတ်)..... myeik  
Name ( အမည် )..... အောင်မြင်မြင့်မြင့်  
Address ( နေရပ်လိပ်စာ )..... ဒဂုံမြို့ သာသနာ့ကမ်း၊ သစ်တောရပ်ကွက်၊ ၄၄၇လမ်း



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**Stakeholders Consultation Questionnaire**

အမည်..... Su Hlaing Aye ..... စီမံကိန်းအမည်..... Milestone Leatherware Co., Ltd .....  
နေ့စွဲ..... ၃၀.၁.၂၀၂၃ .....

မေးမြန်းသည့်နေရာ (သို့) ဖြေဆိုသည့်နေရာ..... ဂရက်၊ သာယာဝတီ .....

စဉ်	Environmental and Social Impacts ပတ်ဝန်းကျင်နှင့်လူမှုပတ်ဝန်းကျင်အပေါ်ထိခိုက်မှုများ	( Yes/ NO) ဖြေနိုင်/ မဖြေနိုင်	Comments on Project တင်ပြချက်
၁	ယခုစီမံကိန်းသည် ပတ်ဝန်းကျင်နှင့်လူမှုပတ်ဝန်းကျင်အပေါ်ထိခိုက်မှုများ ဖြစ်ပေါ်စေနိုင်သည်ဟု ထင်ပါသလား	No	မြို့နယ်အုပ်ချုပ်ရေးမှူးများ ချီးမွမ်းနိုင်ပါသည်
၂	ယခုစီမံကိန်းကြောင့် အနီးအနားပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်များကို ထိခိုက်နိုင်ပါသလား	No	
၃	ယခုစီမံကိန်းကြောင့် ကျွန်ုပ်တို့၏ သဘာဝပတ်ဝန်းကျင်ကို ထိခိုက်နိုင်ပါသလား	No	
၄	ယခုစီမံကိန်းကြောင့် ကျွန်ုပ်တို့၏ သဘာဝ ပတ်ဝန်းကျင်ကို ထိခိုက်နိုင်ပါသလား	No	
၅	ယခုစီမံကိန်းကြောင့် အသံရွာညံ့၊ တုန်ခါမှု၊ များ ဖြစ်နိုင်ပါသလား	No	
၆	ယခုစီမံကိန်းကြောင့် ကျွန်ုပ်တို့၏ လူမှုပတ်ဝန်းကျင် ပိုမိုကောင်းမွန်လာနိုင်ပါသလား	Yes	
၇	ယခုစီမံကိန်းကြောင့် သယံဇာတ၊ စွန့်ပစ်ပစ္စည်းများကြောင့် သို့မဟုတ် အထောက်အကူပြုလုပ်ငန်းအစောက်အဆံ့များကို ပိုမို ဖြတ်သိမ်း ကြည့်ရှုနိုင်ပါသလား	No	
၈	ယခုစီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများကို ကျန်းမာရေးဆိုင်ရာ ဆိုးကျိုးများပေးနိုင်သည်ဟု ထင်ပါသလား	No	
၉	ယခုစီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်အခွင့်အလမ်းများကို အနှောင့်အယှက်ဖြစ်စေပါသလား	No	

Signature ( လက်မှတ်)..... Su Hlaing Aye .....

Name ( အမည် )..... Su Hlaing Aye .....

Address ( နေရပ်လိပ်စာ )..... B.No- 101, Ka Naung Housing, Dagon, Seiklan .....



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## Stakeholders Consultation Questionnaire

အမည် (အမည်): ..... စီမံကိန်းအမည်: Milestone Leatherware Co., Ltd

နေ့စွဲ: ၃၀.၁.၂၀၂၂

မေးမြန်းသည့်နေရာ (သို့) ဖြေဆိုသည့်နေရာ: ခရိုင်လမ်းမ


စဉ်	Environmental and Social Impacts ပတ်ဝန်းကျင်နှင့် လူမှုပတ်ဝန်းကျင်ဆိုင်ရာ အကျိုးသက်ရောက်မှုများ	( Yes/ NO) ဖြစ်နိုင်/ မဖြစ်နိုင်	Comments on Project ထပ်မံပြောဆိုချက်
၁	ယခုစီမံကိန်းသည် ပတ်ဝန်းကျင်ဆိုင်ရာ သဘာဝပတ်ဝန်းကျင်ကို ထိခိုက်စေနိုင်ပါသလား	NO	ဖြည့်စွက်အကြံပြုချက်များ ရေးသားနိုင်ပါသည်
၂	ယခုစီမံကိန်းကြောင့် အနီးအနားပတ်ဝန်းကျင်ဆိုင်ရာ သဘာဝပတ်ဝန်းကျင်ကို ထိခိုက်စေနိုင်ပါသလား	NO	
၃	ယခုစီမံကိန်းကြောင့် ကျန်းမာရေး အန္တရာယ်ရှိသည့် အခြေအနေအထားကို ထိခိုက်စေနိုင်ပါသလား	NO	
၄	ယခုစီမံကိန်းကြောင့် ကျွန်ုပ်တို့၏ သဘာဝ ပတ်ဝန်းကျင်ကို ထိခိုက်စေနိုင်ပါသလား	NO	
၅	ယခုစီမံကိန်းကြောင့် အသံဆူညံမှု၊ တုန်ခါမှု၊ များ ဖြစ်နိုင်ပါသလား	NO	
၆	ယခုစီမံကိန်းကြောင့် ကျွန်ုပ်တို့၏ လူမှုပတ်ဝန်းကျင်ဆိုင်ရာ အကျိုးသက်ရောက်မှုများကို ထိခိုက်စေနိုင်ပါသလား	YES	
၇	ယခုစီမံကိန်းကြောင့် သယ်ယူပို့ဆောင်ရေးလမ်းကြောင်း သို့မဟုတ် အထောက်အကူပြုလုပ်ငန်းအစီအစဉ်များကို ပိုမို ပြုတ်လပ် ကြပ်သွားနိုင်ပါသလား	NO	
၈	ယခုစီမံကိန်းကြောင့် ပတ်ဝန်းကျင်ဆိုင်ရာ သဘာဝပတ်ဝန်းကျင်ကို ထိခိုက်စေနိုင်ပါသလား	NO	
၉	ယခုစီမံကိန်းကြောင့် ပတ်ဝန်းကျင်ဆိုင်ရာ သဘာဝပတ်ဝန်းကျင်ကို ထိခိုက်စေနိုင်ပါသလား	NO	

Signature ( လက်မှတ်): .....

Name ( အမည် ): မောင်မောင်

Address ( နေရပ်လိပ်စာ ): ကော့လီ၊ ၁၇၂၊ ၁၇၃၊ ၁၇၄၊ ၁၇၅၊ ၁၇၆၊ ၁၇၇၊ ၁၇၈၊ ၁၇၉၊ ၁၈၀၊ ၁၈၁၊ ၁၈၂၊ ၁၈၃၊ ၁၈၄၊ ၁၈၅၊ ၁၈၆၊ ၁၈၇၊ ၁၈၈၊ ၁၈၉၊ ၁၉၀၊ ၁၉၁၊ ၁၉၂၊ ၁၉၃၊ ၁၉၄၊ ၁၉၅၊ ၁၉၆၊ ၁၉၇၊ ၁၉၈၊ ၁၉၉၊ ၂၀၀





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**Stakeholders Consultation Questionnaire**

အမည်.....မ.ရှင်းယုခိုင်..... စီမံကိန်းအမည်.....Milestone Leatherware Co., Ltd.....  
နေ့စွဲ.....20.10.2022.....

မေးမြန်းသည့်နေရာ (သို့) မြေဆိုသည့်နေရာ.....မ.ရှင်းယုခိုင်.....

စဉ်	Environmental and Social Impacts ပတ်ဝန်းကျင်နှင့်လူမှုစီးပွားရေးအပေါ်ထိခိုက်မှုများ	( Yes/ NO) ဖြစ်နိုင်/ မဖြစ်နိုင်	Comments on Project ထင်မြင်ချက်
၁	ယခုစီမံကိန်းသည် ပတ်ဝန်းကျင်နေထိုင်သူများအတွက် ဆိုးကျိုးများပေးနိုင်သည်ဟု ထင်ပါသလား	NO	ခြေည့်စက်အကြီးကြီးများ ရောင်းချနိုင်ပါသည်
၂	ယခုစီမံကိန်းကြောင့် အနီးအနားပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်များကို ထိခိုက်နိုင်ပါသလား	NO	
၃	ယခုစီမံကိန်းကြောင့် ကျွန်ုပ်တို့၏ လူမှုစီးပွားရေးအခြေအနေအထားကို ထိခိုက်နိုင်ပါသလား	NO	
၄	ယခုစီမံကိန်းကြောင့် ကျွန်ုပ်တို့၏ သဘာဝ ပတ်ဝန်းကျင်ကို ထိခိုက်နိုင်ပါသလား	NO	
၅	ယခုစီမံကိန်းကြောင့် အသံရွည်မှု၊ တုန်ခါမှု၊ များ ဖြစ်နိုင်ပါသလား	NO	
၆	ယခုစီမံကိန်းကြောင့် ကျွန်ုပ်တို့၏ လူမှုစီးပွားရေး ဝိသိကစနစ်များလည်းဖြစ်ပါသလား	NO Yes	
၇	ယခုစီမံကိန်းကြောင့် သယ်ယူပို့ဆောင်ရေးလမ်းကြောင်း သို့မဟုတ် အထောက်အကူပြုလုပ်ငန်းအဆောက်အအုံများကို ဝိမို ညှိတ်သိပ် ကြပ်သွားနိုင်ပါသလား	NO	
၈	ယခုစီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများကို ကျန်းမာရေးဆိုင်ရာ ဆိုးကျိုးများပေးနိုင်သည်ဟု ထင်ပါသလား	NO	
၉	ယခုစီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်အခွင့်အလမ်းများကို အနှောင့်အယှက်ဖြစ်စေပါသလား	NO	

Signature ( လက်မှတ်).....[Signature].....  
Name ( အမည် ).....မ.ရှင်းယုခိုင်.....  
Address ( နေရပ်လိပ်စာ ).....မ.ရှင်းယုခိုင်.....



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### Stakeholders Consultation Questionnaire

အမည်... မ.ရ.အ.န.ရီ ..... စီမံကိန်းအမည်... Maheshwari Waterworks ..... အမည်... အမည် .....  
နေ့စွဲ... ၂၀. ၁၀. ၂၀၂၄ .....

ပေးပြန်သည့်နေရာ ( သို့ ) ဖြေဆိုသည့်နေရာ.....


စဉ်	Environmental and Social Impacts ပတ်ဝန်းကျင်နှင့်လူမှုပတ်ဝန်းကျင်အပေါ်ထိခိုက်မှုများ	( Yes/ NO) ဖြစ်နိုင် / မဖြစ်နိုင်	Comments on Project ထပ်ပြင်ချက်
၁	ယနေ့စီမံကိန်းသည် ပတ်ဝန်းကျင်နှင့်လူမှုပတ်ဝန်းကျင်အပေါ်ထိခိုက်မှုများမရှိစေရန်အတွက် ဆုံးဖြတ်ချက်ချထားပါသလား	မဖြစ်နိုင်	ဖြစ်နိုင်ပါသည်
၂	ယနေ့စီမံကိန်းအတွက် အနီးအနားပတ်ဝန်းကျင်နှင့်လူမှုပတ်ဝန်းကျင်အပေါ်ထိခိုက်မှုများကို ထိခိုက်နိုင်ပါသလား	မဖြစ်နိုင်	
၃	ယနေ့စီမံကိန်းအတွက် ကျန်းမာရေးနှင့် လူမှုပတ်ဝန်းကျင်အပေါ်ထိခိုက်မှုများကို ထိခိုက်နိုင်ပါသလား	မဖြစ်နိုင်	
၄	ယနေ့စီမံကိန်းအတွက် ကျန်းမာရေးနှင့် လူမှုပတ်ဝန်းကျင်အပေါ်ထိခိုက်မှုများကို ထိခိုက်နိုင်ပါသလား	မဖြစ်နိုင်	
၅	ယနေ့စီမံကိန်းအတွက် အသံစည်းများ ထုတ်ပေးမှုများ ဖြစ်နိုင်ပါသလား	မဖြစ်နိုင်	
၆	ယနေ့စီမံကိန်းအတွက် ကျန်းမာရေးနှင့် လူမှုပတ်ဝန်းကျင်အပေါ်ထိခိုက်မှုများကို ထိခိုက်နိုင်ပါသလား	ဖြစ်နိုင်	
၇	ယနေ့စီမံကိန်းအတွက် အသံစည်းများ ထုတ်ပေးမှုများ ဖြစ်နိုင်ပါသလား	မဖြစ်နိုင်	
၈	ယနေ့စီမံကိန်းအတွက် ပတ်ဝန်းကျင်နှင့်လူမှုပတ်ဝန်းကျင်အပေါ်ထိခိုက်မှုများကို ထိခိုက်နိုင်ပါသလား	မဖြစ်နိုင်	
၉	ယနေ့စီမံကိန်းအတွက် ပတ်ဝန်းကျင်နှင့်လူမှုပတ်ဝန်းကျင်အပေါ်ထိခိုက်မှုများကို ထိခိုက်နိုင်ပါသလား	မဖြစ်နိုင်	

Signature ( လက်မှတ်)..... ရီ .....

Name ( အမည် )..... မ.ရ.အ.န.ရီ .....

Address ( နေရပ်လိပ်စာ )..... ကျေးရွာအုပ်စု၊ မ.ရ.အ.န.ရီ .....





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**Stakeholders Consultation Questionnaire**

အမည်.....မိုးမြင့်သန်းကျော်..... စီမံကိန်းအမည်.....Milestone leatherware co., ltd.....  
နေ့စွဲ.....၂၀.၁.၂၀၂၃.....

မေးမြန်းသည့်နေရာ ( သို့ ) မြေဆိုသည့်နေရာ.....ရန်ကုန်မြို့.....

စဉ်	Environmental and Social Impacts ပတ်ဝန်းကျင်နှင့်လူမှုစီးပွားရေးအပေါ်ထိခိုက်မှုများ	( Yes/ NO) ဖြစ်နိုင်/ မဖြစ်နိုင်	Comments on Project တင်ပြချက်
၁	ယခုစီမံကိန်းသည် ပတ်ဝန်းကျင်နှင့်လူမှုစီးပွားရေးအပေါ်ထိခိုက်မှုများ ဖြစ်ပေါ်စေနိုင်သည်ဟု ထင်ပါသလား	မဖြစ်နိုင်	မြေပုံကောက်ယူခြင်းနှင့်မြေအခြေခံချက်များ ရေးသားနိုင်ပါသည်
၂	ယခုစီမံကိန်းကြောင့် အနီးအနားပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်များကို ထိခိုက်နိုင်ပါသလား	မဖြစ်နိုင်	
၃	ယခုစီမံကိန်းကြောင့် ကျွန်ုပ်တို့၏ ရေအရင်းအမြစ်များကို ထိခိုက်နိုင်ပါသလား	မဖြစ်နိုင်	
၄	ယခုစီမံကိန်းကြောင့် ဤဒေသ၏ သဘာဝ ပတ်ဝန်းကျင်ကို ထိခိုက်နိုင်ပါသလား	မဖြစ်နိုင်	
၅	ယခုစီမံကိန်းကြောင့် အသံဆူညံမှု၊ တုန်ခါမှု များ ဖြစ်နိုင်ပါသလား	မဖြစ်နိုင်	
၆	ယခုစီမံကိန်းကြောင့် ဤဒေသ၏ လူမှုစီးပွားရေး ဖွံ့ဖြိုးတိုးတက်မှုကို ထိခိုက်နိုင်ပါသလား	မဖြစ်နိုင်	
၇	ယခုစီမံကိန်းကြောင့် သယ်ယူပို့ဆောင်ရေးလမ်းကြောင်း သို့မဟုတ် အထောက်အကူပြုလုပ်ငန်းအထောက်အကူများကို ပိုမို မြှင့်တင်နိုင် ကြပါသလား	မဖြစ်နိုင်	
၈	ယခုစီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများကို ကျန်းမာရေးဆိုင်ရာ ဆိုးကျိုးများပေးနိုင်သည်ဟု ထင်ပါသလား	မဖြစ်နိုင်	
၉	ယခုစီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်အခွင့်အလမ်းများကို အနှောင့်အယှက်ဖြစ်စေပါသလား	မဖြစ်နိုင်	

Signature ( လက်မှတ် ).....မိုးမြင့်သန်းကျော်.....  
Name ( အမည် ).....မိုးမြင့်သန်းကျော်.....  
Address ( နေရပ်လိပ်စာ ).....ရပ်ကွက် - ၁၁၆၊ အလယ်ကလေး.....



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**Stakeholders Consultation Questionnaire**

အမည် (အမည်အသစ်)..... စီမံကိန်းအမည် Milestone leatherware - com Ltd  
နေ့စွဲ... ၃၀.၁.၂၀၂၃

မေးမြန်းသည့်နေရာ (သို့) မဖြေဆိုသည့်နေရာ... ခက်လွန်းလှန်း


စဉ်	Environmental and Social Impacts ပတ်ဝန်းကျင်နှင့်လူမှုစီးပွားရေးအပေါ်ထိခိုက်မှုများ	( Yes/ NO) ဖြစ်နိုင်/ မဖြစ်နိုင်	Comments on Project တင်ပြချက်
၁	ယနေ့စီမံကိန်းသည် ပတ်ဝန်းကျင်နှင့်လူမှုစီးပွားရေးအပေါ်ထိခိုက်မှုများ ဖြစ်ပေါ်စေနိုင်သည်ဟု ထင်ပါသလား	မဖြစ်နိုင်	မြို့နယ်တစ်ခုလုံးအတွက် လူမှုစီးပွားရေးအသေးစားလုပ်ငန်းများ ဖွင့်လှစ်လာနိုင်ပါသည်
၂	ယနေ့စီမံကိန်းကြောင့် အနီးအနားပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်များကို ထိခိုက်နိုင်ပါသလား	မထိခိုက်နိုင်	
၃	ယနေ့စီမံကိန်းကြောင့် ကျွန်ုပ်တို့၏ လူမှုစီးပွားရေးအသေးစားလုပ်ငန်းကို ထိခိုက်နိုင်ပါသလား	မထိခိုက်နိုင်	
၄	ယနေ့စီမံကိန်းကြောင့် ကျွန်ုပ်တို့၏ သဘာဝ ပတ်ဝန်းကျင်ကို ထိခိုက်နိုင်ပါသလား	မထိခိုက်နိုင်	
၅	ယနေ့စီမံကိန်းကြောင့် အသံဆူညံမှု၊ တုန်ခါမှု၊ များ ဖြစ်နိုင်ပါသလား	မဖြစ်နိုင်	
၆	ယနေ့စီမံကိန်းကြောင့် ကျွန်ုပ်တို့၏ လူမှုစီးပွားရေး ဝိသိသိကောင်းမွန်လာနိုင်ပါသလား	ကောင်းမွန်လာနိုင်	
၇	ယနေ့စီမံကိန်းကြောင့် သတ်ယူပို့ချရေးလုပ်ငန်းကြောင့် သို့မဟုတ် အထောက်အကူပြုလုပ်ငန်းအထောက်အကူများကို ပိုမို မြှင့်တင်နိုင် ကြပါသလား	မဖြစ်နိုင်	
၈	ယနေ့စီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများကို ကျန်းမာရေးဆိုင်ရာ ဆိုးကျိုးများပေးနိုင်သည်ဟု ထင်ပါသလား	မဖြစ်နိုင်	
၉	ယနေ့စီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်အခွင့်အလမ်းများကို အခက်အခဲများဖြစ်ပေါ်စေပါသလား	မဖြစ်နိုင်	

Signature ( လက်မှတ်)..... Heanalar

Name ( အမည် )..... စီမံကိန်းအသစ်

Address ( နေရပ်လိပ်စာ )..... အိဂျီဒါလမ်း၊ မြို့နယ်၊ ဗဟန်းမြို့နယ်၊ ဗဟန်းမြို့နယ်၊ ဗဟန်းမြို့နယ်





**HRD Environmental Training and Services Co., Ltd.**  
Human Resource Development Environmental Training and Services  
Address: No.472, Aung Mye Thar Street, Quarter 2, Bada Road, Myeik Township, Yangon, Myanmar  
Phone : +95 9256036414, +95 9445070015, +95 945201659  
E-mail : [hrdenv@hrdenv.com](mailto:hrdenv@hrdenv.com), [development@hrdenv.com](mailto:development@hrdenv.com)


**Stakeholders Consultation Questionnaire**

အမည်...မခင်မိုးခိုင်... စီမံကိန်းအမည်...Milestone Leatherware Co., Ltd  
နေ့စွဲ...20.1.2022...

မေးမြန်းသည့်နေရာ (သို့) ဖြေဆိုသည့်နေရာ...ရန်ကုန်မြို့...

စဉ်	Environmental and Social Impacts ပတ်ဝန်းကျင်နှင့်လူမှုစီးပွားရေးအပေါ်ထိခိုက်မှုများ	( Yes/ NO) ဖြေနိုင်/ မဖြေနိုင်	Comments on Project ထပ်မြင်ချက်
၁	ယခုစီမံကိန်းသည် ပတ်ဝန်းကျင်နှင့်လူမှုစီးပွားရေးအတွက် ထိခိုက်မှုများပေးနိုင်သည်ဟု ထင်ပါသလား	No	ခြေရာတံတံဆိပ်ရင်းနှီးမြှုပ်နှံမှုများ ရေးသားနိုင်ပါသည်
၂	ယခုစီမံကိန်းကြောင့် အနီးအနားပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်များကို ထိခိုက်နိုင်ပါသလား	No	
၃	ယခုစီမံကိန်းကြောင့် ကျန်းမာရေး သဘာဝပတ်ဝန်းကျင်ကို ထိခိုက်နိုင်ပါသလား	No	
၄	ယခုစီမံကိန်းကြောင့် ဤဒေသ၏ သဘာဝ ပတ်ဝန်းကျင်ကို ထိခိုက်နိုင်ပါသလား	No	
၅	ယခုစီမံကိန်းကြောင့် အသံဆူညံမှု၊ တုန်ခါမှု၊ များ ဖြစ်နိုင်ပါသလား	No	
၆	ယခုစီမံကိန်းကြောင့် ဤဒေသ၏ လူမှုစီးပွားရေး ဦးစီးကောင်းမွန်လာနိုင်ပါသလား	Yes	
၇	ယခုစီမံကိန်းကြောင့် သယ်ယူပို့ဆောင်ရေးလမ်းကြောင်း သို့မဟုတ် အထောက်အကူပြုလုပ်ငန်းအစောက်အဖျားများကို ပိုမို မြှင့်တင်နိုင်ကြပါသလား	No	
၈	ယခုစီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများကို ကျန်းမာရေးဆိုင်ရာ ထိခိုက်မှုများပေးနိုင်သည်ဟု ထင်ပါသလား	No	
၉	ယခုစီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နေထိုင်သူများ၏ အလုပ်အကိုင်အခွင့်အလမ်းများကို အနှောင့်အယှက်ဖြစ်ပေါ်ပါသလား	No	

Signature ( လက်မှတ်).....မခင်မိုးခိုင်.....  
Name ( အမည် ).....မခင်မိုးခိုင်.....  
Address ( နေရပ်လိပ်စာ ).....အလယ်လမ်း၊ အမှတ် ၁၇၂၊ အလယ်လမ်း၊ ရန်ကုန်မြို့.....



**HRD Environmental Training and Services Co., Ltd.**  
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Phone : +95 9254038414, +95 9445070015, +95 945201959  
Email : [hrd@hrdtraining.com](mailto:hrd@hrdtraining.com), [development@hrdtraining.com](mailto:development@hrdtraining.com)

**Stakeholders Consultation Questionnaire**

အမည် (အမည်) : ..... စီမံကိန်းအမည် : Milestone Leatherware Co., Ltd.  
နေ့စွဲ : ၃၀.၁၂.၂၀၂၃


မေးမြန်းသည့်နေရာ (သို့) ဖြေဆိုသည့်နေရာ : အောက်လမ်းအမှတ် ၁၁

စဉ်	Environmental and Social Impacts ပတ်ဝန်းကျင်နှင့် လူမှုပတ်ဝန်းကျင်ဆိုင်ရာ အကျိုးသက်ရောက်မှုများ	( Yes/ NO) ဖြစ်နိုင် / မဖြစ်နိုင်	Comments on Project ထပ်ပြင်ချက်
၁	ယနေ့စီမံကိန်းသည် ပတ်ဝန်းကျင်ဆိုင်ရာ သဘာဝပတ်ဝန်းကျင်ကို ထိခိုက်စေနိုင်သည့် အန္တရာယ်များ ရှိပါသလား	No	ဖြစ်နိုင်ပါသည်။ အန္တရာယ်များ ရှိပါသည်။
၂	ယနေ့စီမံကိန်းကြောင့် အနီးအနား ပတ်ဝန်းကျင်ဆိုင်ရာ သဘာဝပတ်ဝန်းကျင်ကို ထိခိုက်စေနိုင်ပါသလား	No	
၃	ယနေ့စီမံကိန်းကြောင့် ဤနေရာ၏ လူမှုပတ်ဝန်းကျင်ကို ထိခိုက်စေနိုင်ပါသလား	No	
၄	ယနေ့စီမံကိန်းကြောင့် ဤနေရာ၏ သဘာဝ ပတ်ဝန်းကျင်ကို ထိခိုက်စေနိုင်ပါသလား	No	
၅	ယနေ့စီမံကိန်းကြောင့် အသံဆူညံမှု၊ တုန်ခါမှု၊ များ ဖြစ်နိုင်ပါသလား	No	
၆	ယနေ့စီမံကိန်းကြောင့် ဤနေရာ၏ လူမှုပတ်ဝန်းကျင်ကို ထိခိုက်စေနိုင်ပါသလား	Yes	
၇	ယနေ့စီမံကိန်းကြောင့် သယ်ယူပို့ဆောင်ရေးလမ်းကြောင်း သို့မဟုတ် အထောက်အကူပြုလုပ်ငန်းအစောက်အဆံ့များကို ပိုမို မြှင့်တင်နိုင်ပါသလား	No	
၈	ယနေ့စီမံကိန်းကြောင့် ပတ်ဝန်းကျင်ဆိုင်ရာ သဘာဝပတ်ဝန်းကျင်ကို ထိခိုက်စေနိုင်သည့် အန္တရာယ်များ ရှိပါသလား	No	
၉	ယနေ့စီမံကိန်းကြောင့် ပတ်ဝန်းကျင်ဆိုင်ရာ သဘာဝပတ်ဝန်းကျင်ကို ထိခိုက်စေနိုင်သည့် အန္တရာယ်များ ရှိပါသလား	No	

Signature ( လက်မှတ် ) : .....  
Name ( အမည် ) : ဒေါ်အေးအေး  
Address ( နေရပ်လိပ်စာ ) : ဒီဂျစ်လမ်းအမှတ် ၁၁


## APPENDIX B


### Water Quality Result



**ISO  
TECH  
LABORATORY**

Laboratory Technical Consultant: U Saw Christopher Maung  
B.Sc Engg: (Civil), Dip S.E.(Delft) Lecturer of YIT (Retd), Consultant (Y.C.D.C), 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 2

W1121 031

#### WATER QUALITY TEST RESULTS FORM

Client	Milestone Leatherware Co., Ltd.
Nature of Water	Tube Well
Location	Dagon Seikan
Date and Time of collection	12.11.2021
Date and Time of arrival at Laboratory	13.11.2021
Date and Time of commencing examination	14.11.2021
Date and Time of completing	19.11.2021


#### Results of Water Analysis

#### WHO Drinking Water Guideline (Geneva - 1993)

pH	7.1	6.5 - 8.5
Colour (True)	Nil	15 TCU
Turbidity	3	5 NTU
Conductivity	688	micro S/cm
Total Hardness	164	500 mg/l as CaCO <sub>3</sub>
Calcium Hardness		mg/l as CaCO <sub>3</sub>
Magnesium Hardness		mg/l as CaCO <sub>3</sub>
Total Alkalinity	52	mg/l as CaCO <sub>3</sub>
Phenolphthalein Alkalinity		mg/l as CaCO <sub>3</sub>
Carbonate (CaCO <sub>3</sub> )		mg/l as CaCO <sub>3</sub>
Bicarbonate (HCO <sub>3</sub> )		mg/l as CaCO <sub>3</sub>
Iron	0.20	0.3 mg/l
Chloride (as CL)	210	250 mg/l
Sodium chloride (as NaCL)		mg/l
Sulphate (as SO <sub>4</sub> )		500 mg/l
Total Solids		1500 mg/l
Total Suspended Solids	5	mg/l
Total Dissolved Solids		1000 mg/l
Manganese		0.05 mg/l
Phosphate		mg/l
Phenolphthalein Acidity		mg/l
Methyl Orange Acidity		mg/l
Salinity		ppt

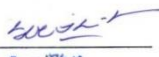
Remark: This certificate is issued only for the receipt of the test sample.

**Tested by**

Signature: 

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

**Approved by**

Signature: 

Name: Soe Thit  
B.E (Civil) 1980  
Technical Officer

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

No.18, Lanthit Road, Nanthargone Quarter, Insein Township, Yangon, Myanmar.  
Ph: 01-640955, 09-73225175, 09-30339681, 01-644506, E-mail: isotechlaboratory@gmail.com, Website: weg-myanmar.com





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 2 of 2

W1121 031

## WATER QUALITY TEST RESULTS FORM

Client Milestone Leatherware Co., Ltd.  
Nature of Water Tube Well  
Location Dagon Seikan  
Date and Time of collection 12.11.2021  
Date and Time of arrival at Laboratory 13.11.2021  
Date and Time of commencing examination 14.11.2021  
Date and Time of completing 19.11.2021

### Results of Water Analysis

### WHO Drinking Water Guideline (Geneva - 1993)

Temperature (°C)	25.0	°C	
Fluoride (F)		mg/l	1.5 mg/l
Lead (as Pb)		mg/l	0.01 mg/l
Arsenic (As)		mg/l	0.01 mg/l
Nitrate (N.NO <sub>3</sub> )		mg/l	50 mg/l
Chlorine (Residual)		mg/l	
Ammonia Nitrogen (NH <sub>3</sub> )		mg/l	
Ammonium Nitrogen (NH <sub>4</sub> )		mg/l	
Dissolved Oxygen (DO)	7	mg/l	
Chemical Oxygen Demand (COD)	32	mg/l	
Biochemical Oxygen Demand (BOD) (5 days at 20 °C)	6	mg/l	
Cyanide (CN)		mg/l	0.07 mg/l
Zinc (Zn)		mg/l	3 mg/l
Copper (Cu)		mg/l	2 mg/l
Calcium (Ca)	20	mg/l	
Silica (Si)		mg/l	

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

#### Tested by

Signature: [Signature]

Name: Zaw Hein Oo

B.Sc (Chemistry)  
Sr. Chemist  
ISO TECH Laboratory

#### Approved by

Signature: [Signature]

Name: Soe Thit


B.E (Civil) 1986  
Technical Officer  
ISO TECH Laboratory

(a division of WEG Co.,Ltd.)

No.18. Lanthit Road, Nanthargone Quarter, Insein Township, Yangon, Myanmar.  
Ph: 01-640955, 09-73225175, 09-30339681, 01-644506, E-mail: isotechlaboratory@gmail.com, Website: weg-myanmar.com

**APPENDIX C**  
**Milestone Leatherware Company Limited Related Documents**



 **DIRECTORATE OF INVESTMENT AND COMPANY ADMINISTRATION**

### Myanmar Companies Online Registry - Company Extract

**Company Name (English)**  
MILESTONE LEATHERWARE COMPANY LIMITED

**Company Name (Myanmar)**  
-

Company Information		
<b>Registration Number</b> 122258483	<b>Registration Date</b> 19/09/2019	<b>Status</b> Registered
<b>Company Type</b> Private Company Limited by Shares	<b>Foreign Company</b> Yes	<b>Small Company</b> No
<b>Principal Activity</b> 15 - Manufacture of leather and related products	<b>Date of Last Annual Return</b> 18/11/2019	<b>Previous Registration Number</b> -

Addresses	
<b>Registered Office In Union</b>	MYAY TAING BLOCK NO. INDUSTRIAL ZONE (1), PLOT NO. 198/11, 198/14, 198/15 DAGON SEIKKAN TOWNSHIP YANGON REGION, Myanmar

Officers			
<b>Name:</b>	XIAO XIAOJUN	<b>Type:</b>	Director
<b>Date of Appointment:</b>	19/09/2019	<b>Date of Birth:</b>	27/10/1983
<b>Nationality:</b>	China	<b>N.R.C./Passport:</b>	E60717329
<b>Gender:</b>	Male	<b>Business Occupation:</b>	-
<b>Name:</b>	ZHANG YUQIANG	<b>Type:</b>	Director
<b>Date of Appointment:</b>	19/09/2019	<b>Date of Birth:</b>	26/04/1982
<b>Nationality:</b>	China	<b>N.R.C./Passport:</b>	E58526898
<b>Gender:</b>	Male	<b>Business Occupation:</b>	-

Ultimate Holding Company		
<b>Name of Ultimate Holding Company</b>	<b>Jurisdiction of Incorporation</b>	<b>Registration Number</b>
-	-	-

Share Capital Structure				
<b>Total Shares Issued by Company</b>		<b>Currency of Share Capital</b>		
10,000		USD		
<b>Class</b>	<b>Description</b>	<b>Total Number</b>	<b>Total Amount Paid</b>	<b>Total Amount Unpaid</b>
ORD	Ordinary	10,000	1,000.00	999,000.00

Members	
<b>Name of Company:</b>	YIXIN LEATHER PRODUCTS (HK) CO., LIMITED

Page 1 of 2  
EXTRACT GENERATED ON 05/02/2020 AT 10:50





**DICA** DIRECTORATE OF INVESTMENT AND COMPANY ADMINISTRATION

### Myanmar Companies Online Registry - Company Extract

<b>Company Name (English)</b>	<b>Company Name (Myanmar)</b>
MILESTONE LEATHERWARE COMPANY LIMITED	-

Registration Number:	69493987-000-06-19-0	Jurisdiction of Incorporation:	Hong Kong
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Class	Description	Total Number	Total Amount Paid	Total Amount Unpaid
ORD	Ordinary	10,000	1,000.00	999,000.00

#### Mortgages and Charges

Form / Filing Type	Effective Date
No records available	

*Details about all mortgages and charges can be accessed from the Company Profile Filing History at no charge.*


  

#### Filing History

Form / Filing Type	Effective Date
C-4   Notice of change of registered office or principal place of business	05/02/2020
AR   Annual Return	18/11/2019
A-1   Application for incorporation as a private company limited by shares	19/09/2019

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編號 2708036  
No.

公 司 註 冊 處  
COMPANIES REGISTRY

公 司 註 冊 證 明 書  
CERTIFICATE OF INCORPORATION

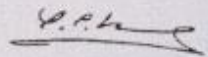
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本人謹此證明  
I hereby certify that

YIXIN LEATHER PRODUCTS (HK) CO., LIMITED  
益鑫皮具(香港)有限公司

於本日根據香港法例第622章《公司條例》  
is this day incorporated in Hong Kong under the Companies Ordinance  
在香港成立為法團，此公司是一間  
(Chapter 622 of the Laws of Hong Kong), and that this company is  
有限公司。  
a limited company.

本證明書於二〇一八年六月十一日發出。  
Issued on 11 June 2018.



香港特別行政區公司註冊處處長鍾麗玲  
Ms Ada L. L. CHUNG  
**Registrar of Companies**  
Hong Kong Special Administrative Region

註 Note  
公司名稱獲公司註冊處註冊，並不表示獲授予該公司名稱或其任何部分的商標權或任何其他知識產權。  
Registration of a company name with the Companies Registry does not confer any trade mark rights or any other intellectual property rights in respect of the company name or any part thereof.