

Myanmar Sakichi Garment Limited

Environmental Management Plan

Manufacturing of Brassieres and Underwears on CMP Basis



Myanwei Environmental Solutions Co., Ltd.

20-Jun-22

Date: 20.6.2022

Attention: Dear Director

Environmental Conservation Department

Subject: Environmental Management Plan (EMP) Report in respect of the Manufacturing of Brassiar and Underwear on CMP Basis by Myanmar Sakichi Garment Limited.

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

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

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



LIN HTET SEIN
DIRECTOR
MYANWEI ENVIRONMENTAL SOLUTIONS
COMPANY LIMITED.

MYANMAR SAKICHI

GARMENT LIMITED

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Date: 20.6.2022

Dear: Director

Environmental Conservation Department

Nay Pyi Taw

Subject: Environmental Management Plan (EMP) Report in respect of the Manufacturing of Brassiar and Underwear on CMP Basis

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

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

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

Myanmar Sakichi Garment Limited will at all times comply fully with all commitment and obligations in the EMP report.

o

We acknowledge and understand that


Mr. Mitsuhiro Kitsuya
Director
Myanmar Sakichi Garment Limited

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အစီရင်ခံစာအကျဉ်းချုပ်

နိဒါန်း

အဆိုပြုလုပ်ငန်းသည် CMP စနစ်ဖြင့် အဝတ်အထည်အမျိုးမျိုး ချုပ်လုပ်ခြင်းလုပ်ငန်းအတွက် ရင်းနှီးမြှုပ်နှံသော ကုမ္ပဏီဖြစ်ပါသည်။ ရင်းနှီးမြှုပ်နှံမှုလိုင်စင်ကို ၂၀၁၉ခုနှစ်၊ ဖေဖော်ဝါရီလ ၂၁ ရက်နေ့တွင် (ထောက်ခံချက်အမှတ် ၁၅၅/၂၀၁၉)ဖြင့် ရန်ကုန်တိုင်းဒေသကြီး ရင်းနှီးမြှုပ်နှံမှုကော်မတီမှ ရရှိပြီးဖြစ်ပါသည်။ လုပ်ငန်းလည်ပတ်ရန်အတွက် မြန်မာနိုင်ငံသယံဇာတနှင့် သဘာဝပတ်ဝန်းကျင် ထိန်းသိမ်းရေးဝန်ကြီးဌာန (MONREC) ၏ အတည်ပြုချက်ရယူရန် လိုအပ်ကြောင်း ကော်မရှင်မှ မှာကြားခဲ့ပါသည်။

ထို့ကြောင့် မြန်မာနိုင်ငံ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေး ဥပဒေ (၂၀၁၂)အရ၊ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် (EMP) ပြုလုပ်ရန်လိုအပ်ကြောင်း ၂၀၁၉ ခုနှစ် ဧပြီလ၊ ၁၀ ရက်နေ့တွင် (စာအမှတ်၊ ရက-၁/၃/၄ (အီးအိုင်အေ) (၆၀၃/၂၀၁၉) ဖြင့် ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန ရန်ကုန်တိုင်းဒေသကြီးမှ သဘောထားမှတ်ချက် ရရှိပြီးဖြစ်ပါသည်။ ထို့ကြောင့် EMP အစီအရင်ခံစာရေးဆွဲရန် တတိယအဖွဲ့အစည်းဖြစ်သော Myanmar Environmental Solutions Co., Ltd.မှ တာဝန်ယူရေးဆွဲခဲ့ပါသည်။

EMP အစီအစဉ်တွင် Myanmar Sakichi Garment Limited ၏ CMP စနစ်ဖြင့် အမျိုးသမီးဝတ် ဘရာစီယာ၊ အတွင်းခံဘောင်းဘီ ချုပ်လုပ်ခြင်းစီမံကိန်းအတွက် Myanmar Environmental Solutions Co., Ltd.မှ ရေးသားပြုစုထားသော ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီရင်ခံစာဖြစ်သည်။ အဆိုပါ လေ့လာဆန်းစစ်ခြင်း၏ ရည်ရွယ်ချက်များမှာ-

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

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

Environmental Management Plan

ဥပဒေနှင့် မူဝါဒဆိုင်ရာ အချက်အလက်များ

EMP ရေးဆွဲခြင်း၏ရည်ရွယ်ချက်မှာ နိုင်ငံတော်နှင့် နိုင်ငံတကာမှ ချမှတ်ထားသော ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးအစီအစဉ်များ၊ စည်းမျဉ်းစည်းကမ်းများ၊ ဥပဒေနှင့် နည်းဥပဒေများကို လိုက်နာပြီး ပတ်ဝန်းကျင်နှင့်လိုက်ရောညီထွေရှိသော ထိခိုက်မှုလျော့ချရေး အစီအစဉ်များပြုလုပ်ရန်ဖြစ်ပါသည်။ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် အစီရင်ခံစာရေးသားပြုစုသူများ၏ ကျွမ်းကျင်မှုနယ်ပယ်ဆိုင်ရာ ဖော်ပြချက်များကို ရေးသားဖော်ပြထားပါသည်။ ဥပဒေနှင့် နည်းဥပဒေ အခန်းတွင် MONREC မှ ထုတ်ပြန်ထားသည့် ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်းများ၊ အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များအပြင် စက်ရုံနှင့်ဆက်စပ်သက်ဆိုင်နေပြီး လိုက်နာရမည့် ဥပဒေနှင့် နည်းဥပဒေများ၊ ဒေသတွင်း သို့မဟုတ် အပြည်ပြည်ဆိုင်ရာ သဘာဝပတ်ဝန်းကျင်နှင့် လူမှုပတ်ဝန်းကျင်ဆိုင်ရာ မူဝါဒများ၊ ဆက်စပ်နေသည့် နိုင်ငံတကာသဘောတူချက်များကို အကျဉ်းချုပ်ရေးသားဖော်ပြထားပါသည်။ စက်ရုံအတွင်းလိုက်နာ ဆောင်ရွက်ရမည့် စည်းမျဉ်းစည်းကမ်းများ၊ လုပ်ငန်းခွင် အန္တရာယ်ကင်းရှင်းရေးနှင့် ကျန်းမာရေးဆိုင်ရာ အခြေခံစည်းမျဉ်းစည်း ကမ်းများလည်း ထည့်သွင်းဖော်ပြထားပါသည်။ Myanmar Sakichi Garment Limited ၏ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဆိုင်ရာ ကတိကဝတ်များအပြင် ပတ်ဝန်းကျင်ထိခိုက်မှုလျော့ချရေး မူဝါဒများကိုလဲ ထည့်သွင်းဖော်ပြထားပါသည်။

စီမံကိန်းဆိုင်ရာအချက်အလက်

အဆိုပြုထားသော စီမံကိန်း	အမျိုးသမီးဝတ် ဘရာဇီယာ၊ အတွင်းခံဘောင်းဘီချုပ်လုပ်ခြင်းလုပ်ငန်း။
ရင်းနှီးမြှုပ်နှံမှုပုံစံ	၁၀၀ % နိုင်ငံခြားသားရင်းနှီးမြှုပ်နှံမှု
ကုမ္ပဏီအမည်	Myanmar Sakichi Garment Limited
အဆိုပြုရင်းနှီးမြှုပ်နှံမှုကာလ	နှစ် ၃၀
စုစုပေါင်းမြေကွပ်ဧရိယာ	၀.၃၄၄ ဧက (၁,၃၉၂.၁၁၈၆ စတုရန်းမီတာ)
မြေနေရာပုံစံ	စက်မှုဇုန်မြေ
တည်ဆောက်မှုကာလ	၁ နှစ်
စီမံကိန်း တည်နေရာ	မြေကွက်အမှတ် (၁၄၁/၁၄၁က)၊ မြေတိုင်းရပ်ကွက်အမှတ်(င)၊ စက်မှု လက်မှုရပ်ကွက်၊ မြောက်ဥက္ကလာပမြို့နယ်၊ ရန်ကုန်တိုင်းဒေသကြီး။
ဆက်သွယ်ရန် ဖုန်းနံပါတ်	ဇာနည်စိုး(စက်ရုံမန်နေဂျာ) ၀၉-၂၆၇၈၁၁၉၄ nini19840821@gmail.com

အဆိုပြုလုပ်ငန်းအတွက် တည်နေရာနှင့် စက်ရုံအတွင်းပါရှိသည့် အဆောင်များ၊ စားသောက်ဆောင်၊ စတိုး၊ ပြုပြင်ထိန်းသေးရေးအခန်း၊ မီးဖိုချောင် အစရှိသည်တို့ကို သီးခြားဖော်ပြထားပါသည်။ထို့အပြင် ထုတ်လုပ်မှုနည်းလမ်းများ၊ လိုအပ်သည့်ကုန်ကြမ်းများ၊ နှစ်စဉ်ထွက်ကုန်များ နှင့် စက်ပစ္စည်းများအား ဖော်ပြထားပါသည်။ အဆိုပြုလုပ်ငန်းအတွက်လိုအပ်သည့် စွမ်းအင်နှင့် အသုံးပြုသည့်ပမာဏများကိုလဲ

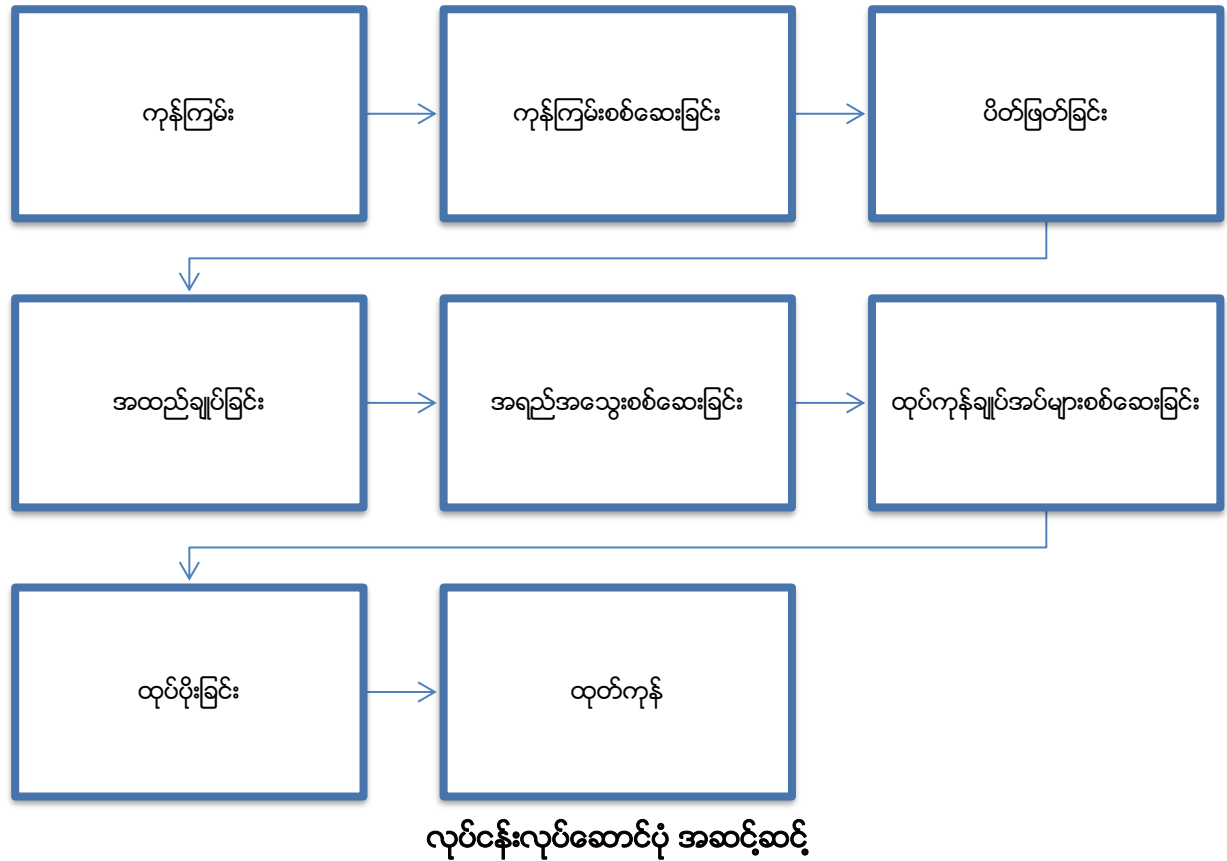
Environmental Management Plan

ထည့်သွင်းဖော်ပြထားပါသည်။ ကျန်လုပ်ငန်းသုံးယာဉ်နှင့် ရုံးသုံးပစ္စည်းများကို ပြည်တွင်းမှ ဝယ်ယူအသုံးပြုပါသည်။ ကုန်ထုတ်လုပ်ခြင်းလုပ်ငန်းမှာ automatic machine နှင့် လူစွမ်းအားကို အသုံးပြုသော လုပ်ငန်းမျိုးဖြစ်ပါသည်။ ထုတ်လုပ်ပုံအဆင့်ဆင့်ကို အောက်ဖော်ပြပါ ပုံပြဇယားဖြင့် ဖော်ပြထားပါသည်။



မီးဖိုချောင်၊ ကန်တင်းနှင့်မီးစက်ခန်းများပြထားသည့်ဓာတ်ပုံ

Environmental Management Plan



လုပ်ငန်းမှ ပထမနှစ်မှ ၁၀ နှစ်အတွင်း အထည်ရေ (၇၀၀,၀၀၀) မှ (၇၇၀,၀၀၀)အထိ တိုးမြှင့်ထုတ်လုပ်သွားမည်ဖြစ်သည်။ နိုင်ငံခြားသားလုပ်သား (၃)ဦး နှင့် နိုင်ငံသား (ပြည်တွင်း)လုပ်သား (၈၇) ဦးဖြင့် ဆောင်ရွက်သွားမည်ဖြစ်သည်။

အနီးပတ်ဝန်းကျင် အခြေအနေ

ကနဦးစစ်တမ်းကောက်ယူခြင်းနှင့် ဒေသဆိုင်ရာမှအချက်အလက်များရယူခြင်းသည် အလွန်အရေးကြီးပါသည်။ ပတ်ဝန်းကျင်အရည်အသွေး တိုင်းတာခြင်းကဲ့သို့သော ကနဦးစစ်တမ်းကောက်ယူခြင်းသည် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီရင်ခံစာတွင် အရေးပါသောအခန်းအဖြစ် တည်ရှိနေသည်။ ထို့အတွက် စီမံကိန်းဒေသသို့ ကွင်းဆင်းလေ့လာမှုများကို ၂၅ ရက်၊ စက်တင်ဘာလ၊ ၂၀၁၉ တွင်လက်တွေ့ကွင်းဆင်းလေ့လာခဲ့ပြီးလိုအပ်သည့် လေအရည်အသွေး၊ ဆူညံမှု၊ အလင်း၊ အပူချိန်နှင့် စိုထိုင်းမှု အစရှိသည့် အချက်အလက်များကို ရယူခဲ့ပါသည်။ ကွင်းဆင်းလေ့လာထားသည့် အချက်အလက်များကို သက်ဆိုင်ရာခေါင်းစဉ်အလိုက် အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များနှင့် နှိုင်းယှဉ်၍ ဖော်ပြထားပါသည်။ ထိုနည်းတူ လျှော့ချရမည့်နည်းလမ်းများကိုလဲ ထည့်သွင်းဖော်ပြထားပါသည်။ စီမံကိန်းတည်ရှိရာဒေသရှိ ရာသီဥတု၊ မိုးရေချိန်၊ လူမှုစီးပွားရေးဆိုင်ရာအချက်အလက်များကိုလဲ ထည့်သွင်းဖော်ပြထားပါသည်။

ပတ်ဝန်းကျင်ထိခိုက်မှုနှင့် လျှော့ချရေး အစီအစဉ်

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

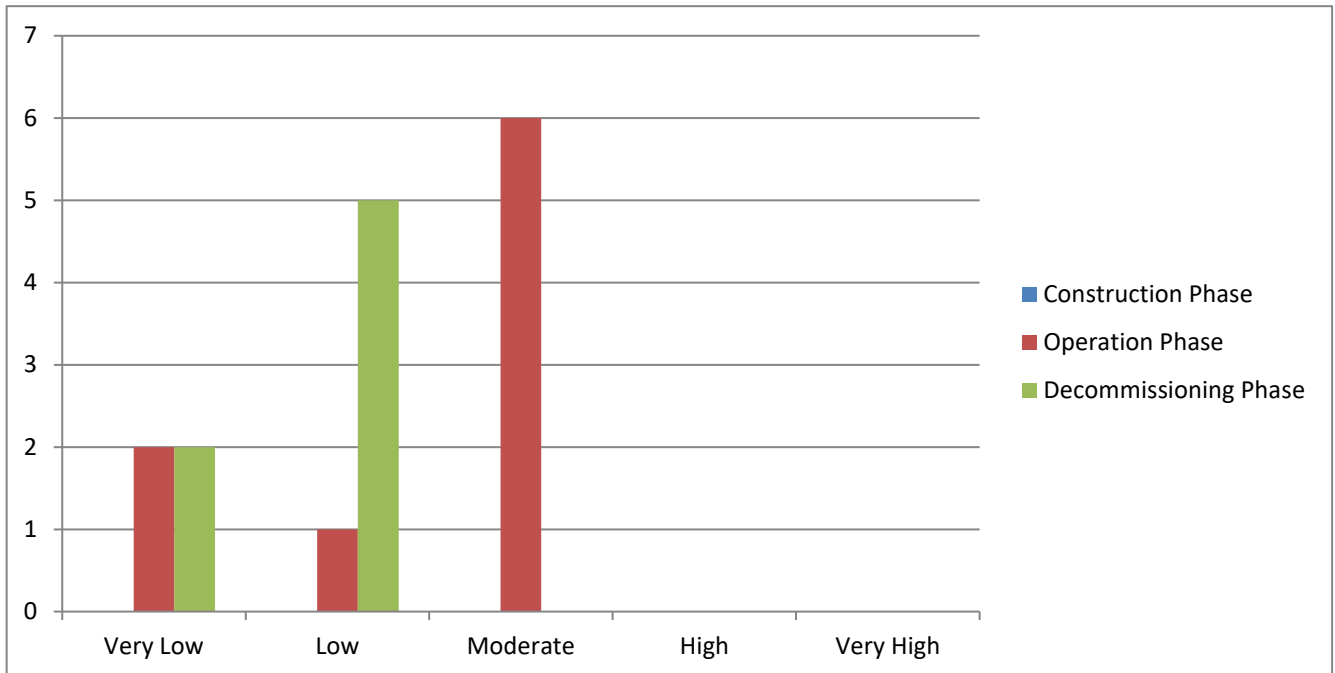
ပတ်ဝန်းကျင် လက္ခဏာ	လုပ်ငန်းလုပ်ဆောင်မှု	ထိခိုက်မှုအဆင့်	လျော့ချရေးနှင့် ထိန်းချုပ်မှု
တည်ဆောက်ရေးကာလ။ ။ပတ်ဝန်းကျင်ထိခိုက်မှုလေ့လာချိန်တွင် စက်ရုံတည်ဆောက်ပြီး လုပ်ငန်းလည်ပတ်နေချိန်ဖြစ်သော်ကြောင့် ဤကာလကိုထည့်သွင်း မစဉ်းစားတော့ပါ။			
လုပ်ငန်းလည်ပတ်ခြင်းကာလ			
လေထုညစ်ညမ်းမှု	<ul style="list-style-type: none"> သယ်ယူပို့ဆောင်ရေးသုံး မော်တော်ယာဉ်တို့ကြောင့် ဖုန်မှုနှင့် ဖန်လုံအိမ်ဓါတ်ငွေ့ထွက်ခြင်း လုပ်ငန်းခွင်အတွင်းဖုန်မှုထွက်ခြင်း အရေးပေါ်သုံးမီးစက်မှာ စွန့်ထုတ်အမှီးအငွေ့ ထွက်ခြင်း 	အသင့်တင့်	<ul style="list-style-type: none"> မီးစက်တွင် မီးခိုးခေါင်းတိုင် တပ်ဆင်ခြင်းဖြင့် အမှီးအ ငွေ့ကြောင့် ပတ်ဝန်းကျင် ထိခိုက်မှုကို လျော့ချခြင်း၊ စက်ရုံအတွင်းနှင့် အနီး အနားတွင် သစ်ပင်ပန်းမံ စိုက်ပျိုးခြင်းဖြင့် carbon ထွက်ရှိမှုကို လျော့ချပေးခြင်း၊ NOx ထွက်ရှိမှုနည်းသော နည်းပညာဖြင့် စက်ပစ္စည်း များသုံးခြင်း၊ စက်ပစ္စည်းများကို ပုံမှန်ပြုပြင်ထိန်းသိမ်းပေးခြင်း။
ရေ	<ul style="list-style-type: none"> မိလ္လာစွန့်ထုတ်ရေ စက်ပစ္စည်း၊ မော်တော်ယာဉ်များမှ ဆီယိုဖိတ်ခြင်း 	အနည်းငယ်	<ul style="list-style-type: none"> လက်ရှိရေဆိုးစွန့်ပစ်မှုပုံစံဖြစ်သော မိလ္လာစနစ်ကို ပုံမှန်စစ်ဆေးပေးခြင်း၊ မိလ္လာကန်နှင့် မိလ္လာ စနစ်ကို လူဦးရေနှင့် သင့်တင့်သည့် ပမာဏ ရှိရန် စီစဉ်ထားခြင်း၊ ပုံမှန်သန့်ရှင်းရေးပြုလုပ်ပေးခြင်း။ စက်ပစ္စည်းများကို ပုံမှန်ပြုပြင်ထိန်းသိမ်းပေးခြင်း။
မြေဆီလွှာညစ်ညမ်းမှု	<ul style="list-style-type: none"> မတော်တစ စက်ပစ္စည်း၊ မော်တော်ယာဉ်များမှ ဆီယိုဖိတ်ခြင်း 	အလွန်နည်း	<ul style="list-style-type: none"> စက်ပစ္စည်းများကို ပုံမှန်ပြုပြင် ထိန်းသိမ်းပေးခြင်း။ မတော်တစမှု မဖြစ်စေရန် ထိန်းသိမ်းခြင်း။
ဆူညံသံ	<ul style="list-style-type: none"> ဘွိုင်လာ၊ မီးစက်၊ လေမှုတ်စက် နှင့် မော်တော် ယာဉ် အသုံးပြု 	အသင့်တင့်	<ul style="list-style-type: none"> ဆူညံသံထွက်သောနေရာများကို အကာအကွယ် ဖြင့်ထားရှိခြင်း

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	မူကြောင့် ပတ်ဝန်းကျင် ဆူညံမှု		<ul style="list-style-type: none"> စက်ပစ္စည်းများကို ပုံမှန်ပြုပြင်ပေးခြင်း
မီးဘေးအန္တရာယ်	<ul style="list-style-type: none"> ကုန်ကြမ်းသိုလှောင်မှု နှင့် လျှပ်စစ်သုံးစွဲ ပေါ့လျော့မှု 	အသင့်တင့်	<ul style="list-style-type: none"> ကုန်ကြမ်းများအား သီးသန့်ထားရှိခြင်း လျှပ်စစ်သုံးစွဲမှုများအား စနစ်တကျ အသုံးပြုစေခြင်း
စွန့်ပစ်အမှိုက်	<ul style="list-style-type: none"> ထုတ်လုပ်ရာတွင် ကျန်ရှိသော ပိတ်စ အပိုင်းအစများ၊ မီးဖိုချောင်နှင့် ရုံးတွင်းစွန့်ပစ်ပစ္စည်းများ 	အသင့်တင့်	<ul style="list-style-type: none"> စွန့်ပစ်အမှိုက်များအား ပြန်လည်သုံးစွဲရန် နှင့် စွန့်ပစ်ရန် အဖြစ်သတ်မှတ်ပြီး သီးခြားစွန့်ပစ်စေခြင်း
စွန့်ပစ်အရည်	<ul style="list-style-type: none"> နေအိမ်၊ စားသောက်ဆောင် တို့မှစွန့်ထုတ်ရေ၊ မိလ္လာကန်စနစ် 	အသင့်တင့်	<ul style="list-style-type: none"> စွန့်ပစ်အမှိုက်များအား ပြန်လည်သုံးစွဲရန် နှင့် စွန့်ပစ်ရန် အဖြစ်သတ်မှတ်ပြီး သီးခြားစွန့်ပစ်စေခြင်း
အန္တရာယ်ရှိအမှိုက်	<ul style="list-style-type: none"> စက်များမှ ဆီယိုစိမ့်မှုများ၊ မော်တော်ယာဉ်များပြုပြင်ထိန်းသိမ်းမှုက ထွက်ရှိသည့်အမှိုက်များ 	အလွန်နည်း	<ul style="list-style-type: none"> စက်သုံးဆီများအားစနစ်တကျ အသုံးပြုစေခြင်း၊ စနစ်တကျသိုလှောင်ခြင်း နှင့် အန္တရာယ်ရှိပစ္စည်းများအား စနစ်တကျထားရှိစေခြင်း
လူမှုစီးပွားဘဝ	<ul style="list-style-type: none"> ဒေသခံပြည်သူများအတွက် အလုပ်အကိုင်အခွင့်အလမ်းများ ရရှိစေခြင်း 		
လုပ်ငန်းပိတ်သိမ်းခြင်းကာလ			
လေထုညစ်ညမ်းမှု	<ul style="list-style-type: none"> အဆောက်အဦများ ဖြိုချမှုများ ဖြိုချပစ္စည်းများ သယ်ယူမှုများ 	အနည်းငယ်	<ul style="list-style-type: none"> NOx ထွက်ရှိမှုနည်းသော နည်းပညာဖြင့် စက်ပစ္စည်း များသုံးခြင်း၊ စက်ပစ္စည်းများကို ပုံမှန်ပြုပြင်ထိန်းသိမ်းပေးခြင်း။
ရေ	<ul style="list-style-type: none"> ဖြိုချပစ္စည်းများနှင့် မိလ္လာဖျက်ဆီးမှုများ 	အနည်းငယ်	<ul style="list-style-type: none"> ပုံမှန်သန့်ရှင်းရေးပြုလုပ်ပေးခြင်း။ စက်ပစ္စည်းများကို ပုံမှန်ပြုပြင်ထိန်းသိမ်းပေးခြင်း။
မြေဆီလွှာညစ်ညမ်းမှု	<ul style="list-style-type: none"> အဆောက်အဦနှင့် ဆက်စပ်ပစ္စည်းများ ဖြိုချပစ္စည်းများ သယ်ယူမှုများ 	အနည်းငယ်	<ul style="list-style-type: none"> မတော်တမူ မဖြစ်စေရန် ထိန်းသိမ်းခြင်း။
အမှိုက်စွန့်ပစ်မှု	<ul style="list-style-type: none"> အဆောက်အဦများ ဖြိုချပစ္စည်းများ သယ်ယူမှုများ 	အလွန်နည်း	<ul style="list-style-type: none"> စွန့်ပစ်အမှိုက်များအား ပြန်လည်သုံးစွဲရန် နှင့် စွန့်ပစ်ရန် အဖြစ်သတ်မှတ်ပြီး သီးခြားစွန့်ပစ်စေခြင်း
အန္တရာယ်ရှိအမှိုက်	<ul style="list-style-type: none"> စက်များမှ ဆီယိုစိမ့်မှုများ၊ မော်တော်ယာဉ်များပြုပြင်ထိန်းသိမ်းမှုက ထွက်ရှိသည့်အမှိုက်များ ဖြိုချပစ္စည်းများ သယ်ယူမှုများ 	အလွန်နည်း	<ul style="list-style-type: none"> စက်သုံးဆီများအားစနစ်တကျ အသုံးပြုစေခြင်း၊ စနစ်တကျသိုလှောင်ခြင်း နှင့် အန္တရာယ်ရှိပစ္စည်းများအား

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			စနစ်တကျထားရှိစေခြင်း
မတော်တဆ ထိခိုက်မှုများ	<ul style="list-style-type: none"> အဆောက်အဦများ ဖြိုချမှုများ ဖြိုချပစ္စည်းများ သယ်ယူမှုများ 	အနည်းငယ်	<ul style="list-style-type: none"> မတော်တဆမှု မဖြစ်စေရန် ထိန်းသိမ်းခြင်း။
လူမှုစီးပွားဘဝ	<ul style="list-style-type: none"> ဒေသခံပြည်သူများအတွက်အလုပ်အကိုင် ခေတ္တရရှိခြင်း 		



ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှု အစီအစဉ်

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

၁။ လေထုညစ်ညမ်းမှုနှင့် ဖုန်မှုန့်ဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်

၂။ ရေသုံးစွဲမှုဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်

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- ၃။ ရေဆိုးစွန့်ပစ်မှုဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်
- ၄။ အမှိုက်စွန့်ပစ်မှုဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်
- ၅။ ဆူညံမှုထိန်းချုပ်ဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်
- ၆။ အရေးပေါ်တုံ့ပြန်ရေး အစီအစဉ်
- ၇။ စောင့်ကြပ်ကြည့်ရှုရေး အစီအစဉ်
- ၈။ လူမှုအကျိုးတူ ပူးပေါင်းပါဝင်မှု အစီအစဉ် CSR Plan
- ၉။ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်အတွက် ငွေကြေးလျာထားမှု
- ၁၀။ မကြေ့နပ်မှု ဖြေရှင်းခြင်း နည်းလမ်း

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

သက်ဆိုင်သူများနှင့် တွေ့ဆုံဆွေးနွေးခြင်း

သက်ဆိုင်သူများနှင့် တွေ့ဆုံဆွေးနွေးခြင်း အစီအစဉ်တွင် စက်ရုံ၏ EMP အစီရင်ခံစာ အကြောင်းကို ရှင်းလင်းတင်ပြခြင်းဖြစ်သည်။ တွေ့ဆုံပွဲကို ၂၇ ရက်၊ နိုဝင်ဘာလ၊ ၂၀၁၉ ခုနှစ်တွင် Sky Hotelတွင် ပြုလုပ်ခဲ့ပါသည်။ တွေ့ဆုံပွဲတွင် စက်ရုံ၏သက်ဆိုင်ရာပုဂ္ဂိုလ်များ၊ အစိုးရအဖွဲ့ရုံးများဖြစ်သော ပတ်ဝန်းကျင်ထိန်းသိမ်းရေး ဦးစီးဌာန၊ စက်မှုကြီးကြပ်နှင့် စစ်ဆေးရေး ဦးစီးဌာန၊ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးနှင့် သန့်ရှင်းရေးဌာ အစရှိသော သက်ဆိုင်ရာဌာနများ၏ တာဝန်ရှိပုဂ္ဂိုလ်များ၊ စက်မှုဇုန်စီမံခန့်ခွဲမှုကော်မတီ၏ တာဝန်ရှိပုဂ္ဂိုလ်များမှ လိုအပ်သည်များကို အကြံပေးခြင်း၊ စီမံကိန်း၏ အစီရင်ခံစာတွင် လိုအပ်သည်များကို ဖြည့်စွက်ပေးရန် အကြံပြုချက်များပေးခဲ့ပါသည်။ ပြုလုပ်ခဲ့သည့် အစီအစဉ်အကျဉ်းကိုပါ ထည့်သွင်းဖော်ပြထားပါသည်။

အချိန်	ဗုဒ္ဓဟူးနေ့၊ ၂၇ ရက်၊ နိုဝင်ဘာလ၊ ၂၀၁၉
နေရာ	Sky Hotel, မြောက်ဥက္ကလာပမြို့နယ်၊ ရန်ကုန်မြို့။
အစီအစဉ်အကျဉ်း	<ul style="list-style-type: none"> • စက်ရုံနောက်ခံအကြောင်း • စက်ရုံလုပ်ငန်းအကြောင်း • ပတ်ဝန်းကျင်ထိခိုက်မှုနှင့် လျော့ချရေးအစီအစဉ် • ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်နှင့် စောင့်ကြပ်ကြည့်ရှုမှုအစီအစဉ် • အမေးအဖြေကဏ္ဍ

နိဂုံး

Environmental Management Plan

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

Environmental Management Plan

Abbreviation

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

EXECUTIVE SUMMARY

Introduction

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

The project is new investment for manufacturing of brassieres and underwear on CMP Basis (100% Export) company from Japan. The project is issued by the Yangon Region Investment Committee (YRIC) on 21 February 2019 with the Endorsement No. (YGN- 155/2019). YRIC notified for the environmental approval and comments of the Ministry of the Natural Resources and Environmental Conservation (MONREC) on the proposed project and had approved the proposal for investment in Manufacturing of Garment on CMP basis under the name of Myanmar Sakichi Garment Limited as a solely owned foreign investment from the Japan.

According to the Myanmar Environmental Conservation Law (2012), it requires that the proponents of every development project in the country submit either an Initial Environmental Examination (IEE) or an Environmental Impact Assessment (EIA) to Ministry of Natural Resources and Environmental Conservation (MONREC). As per the comments of Environmental Conservation Department (ECD), said project requires an Environmental Management Plan (EMP) to meet the environmental assessment requirements of Notification No. Yaka- 1/3/4 (EIA) (603/2019) on 10 April 2019. Therefore, Myanmar Sakichi Garment Limited commissioned Myanwei Environmental Solutions Company Limited for EMP report study. The specific objectives of this study are

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

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

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

Policy, Legal and Institutional Framework

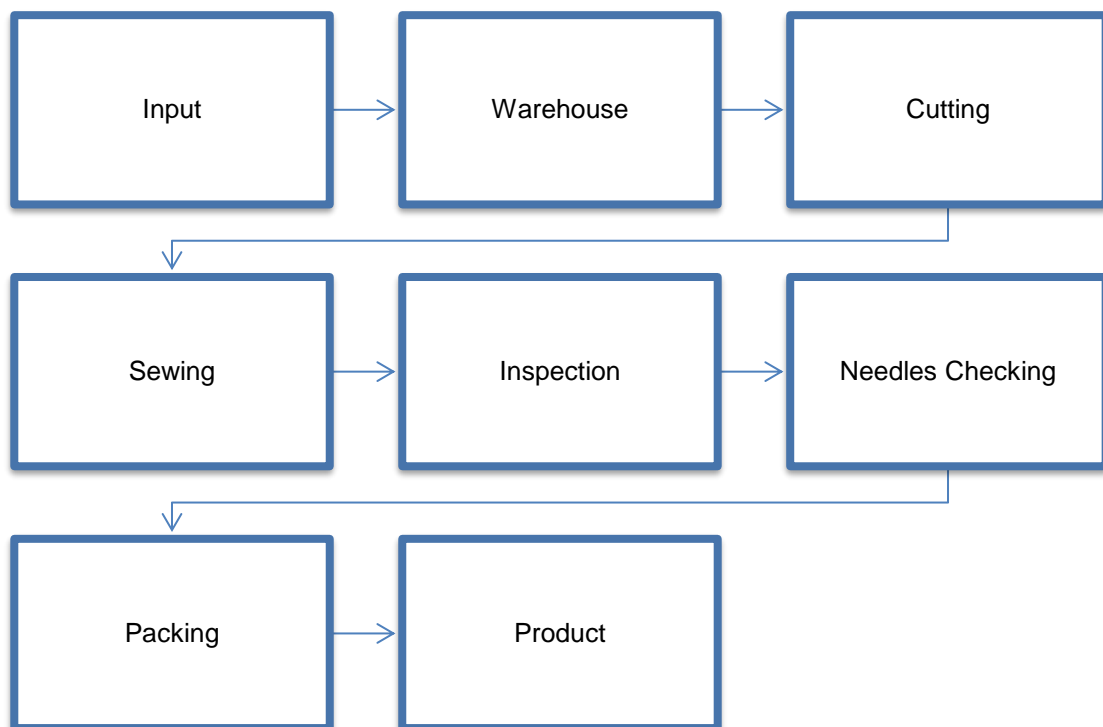
National Laws and Regulations, international guidelines are referred for Environmental Management Plan of the proposed project.

Environmental Management Plan**Project Description**

Type of Proposed Business	Manufacturing of Brassieres and Underwear on CMP Basis (100% Export)
Type of investment	100% Foreign Investment
Name of Company	Myanmar Sakichi Garment Limited
Land lease year	30 years
Total land area	0.344 acres (1,392.1186 sq meter)
Type of land	Industrial Land
Construction Period	1 year
Address of Proposed Project	Plot No. 141 141(KA), Myay Taing Block No.(NGA), Sethmu Lathmu, North Okkalapa Township, Yangon Region
Contact Person	Zar Ni Soe Factory Manager 09-267811194 nini19840821@gmail.com

The proposed project is located at Yangon region. The total area of project site is 0.344 acres (1,392.1186 square meters). Main structure is designed into production area for one building. Transformer room, generator room and water treatment plant are separated by main factory building structure. The factory layout plan which is also can be seen in this report. The main product of the Myanmar Sakichi Garment Limited factory is brassieres and underwear. The Utilities for proposed factory include electrical power, fuel oil for emergency used generator and water for domestic use. Electric power is used for the purpose to provide lighting.



Environmental Management Plan**Kitchen, Canteen and Generator Room Photos****Production Process of Myanmar Sakichi Garment Limited**

Production rate of Myanmar Sakichi Garment Limited is produced between first year of operation and ten years operation as 700,000 to 770,000 pieces annually. It is require of work force (3) foreigners technician and (87) local employees for first year operation to 10 years operation.

Brief Description of Surrounding Environment

Primary data and secondary data collections are very imported to assess environmental impacts. Primary data collections (environmental quality measurements and monitoring) play an important role for conducting EMP. Therefore. Myanwei Environmental Solutions Company Limited conducted air quality, temperature and humidity, noise level measurement and light pollution

Environmental Management Plan

measurement on 25 September 2019 and compared with the National Environmental Quality (Emission) Guidelines and also described how to reduce the impact and how to maintain the pollutions. Also described the weather conditions, rainfalls and socio-economic component of the proposed project.

Environmental Impact and Mitigation Measure

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

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

Evaluation and Perdition of Significant Impacts

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

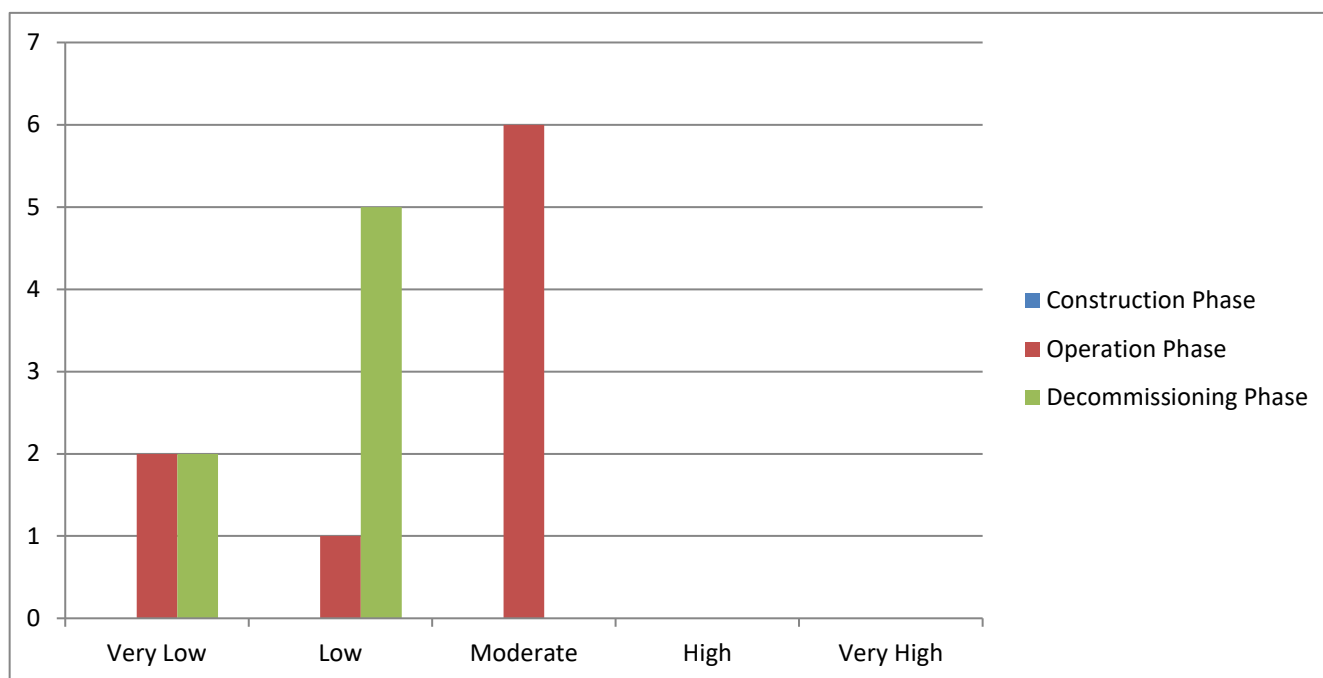
Environmental Impact	Project Activities	Significant of Potential Impacts					Impact Significance
		M	D	E	P	SP	
Construction Phase; It is not assessed in this phase, because of construction is already completed during EMP preparation.							
Operation Phase							
Air pollution	Dust and GHGs emission from vehicles used for transporting raw materials and final products Particulate matters emission from the activities of production process Emission of smoke from kitchen and emergency diesel generator	3	4	2	4	36	Moderate
Water pollution	Sewage disposed of from the toilets Oil spill and grease leaks from transporting vehicles and machinery equipment used in operation phase	2	4	2	3	24	Low
Soil Contamination	Accidental spillage of oil used by vehicles operating	1	4	1	2	12	Very Low
Noise Pollution	Generating noise from the production machinery	3	4	1	4	32	Moderate

Environmental Management Plan

Environmental Impact	Project Activities	Significant of Potential Impacts					Impact Significance
		M	D	E	P	SP	
	Noise from the generating of the emergency generators						
Fire Hazard	Poor electrical installations waste disposed area Raw materials storage	3	5	2	4	48	Moderate
Solid waste	residual pieces of fabric scraps from the production lines Waste from packaging materials Waste from kitchen, dormitory and office.	3	4	1	4	32	Moderate
Liquid waste	Septic system and sewage. Domestic liquid waste disposal from office, kitchen and dormitory.	2	4	2	4	32	Moderate
Hazardous waste	Engine oil leaks, spills at diesel storage and during fuel refueling. Used oil and lubricant discharged from the maintenance of vehicles and machines.	2	4	1	2	14	Very Low
Occupational Health and Safety (Accidents, Injuries)	Accidental cases cause by operating machines. Electricity and emergency diesel generators. Unloading, mixing, cutting, pressing and packaging activities. Accidental cases of thermic fluid heater	3	4	1	4	32	Moderate
Social-economic Condition	Job opportunities for local people	-	-	-	-	-	Positive Impact
Decommissioning Phase							
Air pollution	Decommissioning of buildings and related materials Transportation of demolished materials	3	1	1	4	20	Low
Water pollution	Sewage form decommissioning workers Demolition machinery equipment	3	1	1	3	15	Low
Soil Contamination	Decommissioning of buildings and related materials Transportation of demolished materials	3	1	1	3	15	Low
Noise Pollution	Decommission activities Transportation of demolished materials	3	1	1	3	15	Low
Waste disposal	Sewage system Demolished debris such as bricks, concrete materials	2	1	1	3	12	Very Low
Hazardous waste	Used lubricants from decommissioning vehicles and machines	2	1	1	3	12	Very Low
Occupational Health and Safety	Decommissioning activities	3	1	2	3	18	Low

Environmental Management Plan

Environmental Impact	Project Activities	Significant of Potential Impacts					Impact Significance
		M	D	E	P	SP	
(Accidents, Injuries)	Transportation of demolished materials						
Social-economic Condition	Temporary job opportunities for local people	-	-	-	-	-	Positive Impact

**Impact significance of the proposed factory project****Environment Management Program**

The proposed project of environmental management plan, which need to made the PDCA plan especially Plan-Do-Check-Act cycle. In that plan, it includes not only reducing to the environmental and social-economic impact but also includes the environmental management plan and the monitoring plan. In this EMP to implement the health, safety and occupational for the industry, they need to create a team and to must be implemented that. The EMP for Myanmar Sakichi Garment Limited has been prepared to address potential issues based upon discussion with factory management, workers, local community's view, stakeholder consultation and from the site visit of experts. The EMP is additional to and compliments the factory's safety management system. The following environmental issues that require environmental management plans based upon the potential impacts of activities by for Myanmar Sakichi Garment Limited are as follows:

1. Air pollution/Dust Management plan
2. Water Consumption Management Plan
3. Solid Waste Management Plan
4. Noise Management
5. Emergency Response Plan
6. Environmental Monitoring and Reporting

Environmental Management Plan

7. Corporate Social Responsible (CSR) Plan
8. Budget Plan
9. Grievance Redress Mechanism

Public Consulting

This chapter presents results of public consultation and information disclosure conducted for the Myanmar Sakichi Garment Limited. Public participation can be considered as the required element of the EMP process. In this study various stakeholder's participation were made. Public consultation during preparation of EMP report was conducted on 27, November 2019, following the EIA procedure. The project's stakeholders in this category are key officials or representatives of the regional and local authorities who have direct responsibilities for the administration of the EMP process for environmental and social clearance and issuing operation permits for proposed development projects. For this factory, relevant key offices at the national level are Environmental Conservation Department (ECD) and Industry Supervision and Inspection Department. Relevant key office at the regional level is Yangon City Development Committee (YCDC), General Administrative Department, Fire Department, Factories and General Labor Law Inspection Department, Public Health Department, Industrial Supervision and Inspection Department.

Time and Date	Wednesday, 27 November 2019 10:30-12:30
Venue	Sky Hotel, North Okklapa Township, Yangon.
Agenda	<ul style="list-style-type: none"> • Presentation on the Background Information of Project, • Project Description, • Impact Assessment, Environmental Mitigation • Environmental Management Plan and Monitoring Plan • Received and Answer from feedback of participants

Conclusion & Recommendation

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

This is recommended that;

- All appropriate environmental management measures detailed in this report, together with any other environmental management commitments should be implemented throughout the entire life of the factory
- Solid wastes and liquid wastes need to dispose according to YCDC rules and regulation

Environmental Management Plan

- Workers should be provided proper training and it should be ensured that workers use PPE during factory operation area.
- Daily, monthly and annual action plan shall be formulated based on this EMP and practiced at operation level.
- Keep full records of environmental management activities and present to annual independent third party environment audit.
- Abide environmental policy, laws, rules and instructions of the Republic of the Union of Myanmar.

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

Environmental Management Plan

1. INTRODUCTION

Everyone wants to live in a place that's clean and healthy. That is why one of the world's primary concerns is the environment. As sad as it is, the world today is dying. The environment is slowly decaying, and it's all because of human negligence. Environment Management Plan is required for ensuring sustainable development. It should not affect the surrounding environment adversely. The management plan presented. Which needs to be implemented by the proposed expansion of Myanmar Sakichi Garment Limited. The Environment Management Plan (EMP) aims at controlling pollution at source with available and affordable technology followed by treatment measures. Waste minimization and waste recycling measures are emphasized. In addition to the industry specific control measures, the proposed industry should adopt following guidelines.

1.1. AIM OF ENVIRONMENTAL MANAGEMENT PLAN

- Provide environmental management plan that minimize the environmental impact of the works and identify those responsible for its implementation.
- Define the monitoring program, which assess the implementation.

1.2. OBJECTIVE OF ENVIRONMENTAL MANAGEMENT PLAN

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

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

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graph TD; A([Commitment and Policy]) --> B([Planning]); B --> C([Implementation]); C --> D([Evaluation]); D --> E([Review]); E --> A; E --> A; E --> A
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Continuous Improvement

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

Environmental Management Plan

- **Review** – Top management reviews the results of the evaluation to see if the EMS is working. Management determines whether the original environmental policy is consistent with the organization's values. The plan is then revised to optimize the effectiveness of the EMS. The review stage creates a loop of continuous improvement for a company.

1.2.1. Institutional Requirement

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

1.2.2. Responsibilities of the EMP

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

Myanmar Sakichi Garment Limited: The proponent will be charged with the responsibility for ensuring that the proposed development has been accomplished in an environmentally sound manner. This can be achieved by inclusion of environmental specifications in the tender specifications, selection of environmentally conscious contractors, and supervision to ensure that the objectives of this EMP are met. The implementation of Environmental Management Plan (EMP) process will prepare and follow up by appointed persons for health, safety, and environmental management under the instruction of management team of Myanmar Sakichi Garment Limited for EMP implementation facilities.

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

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

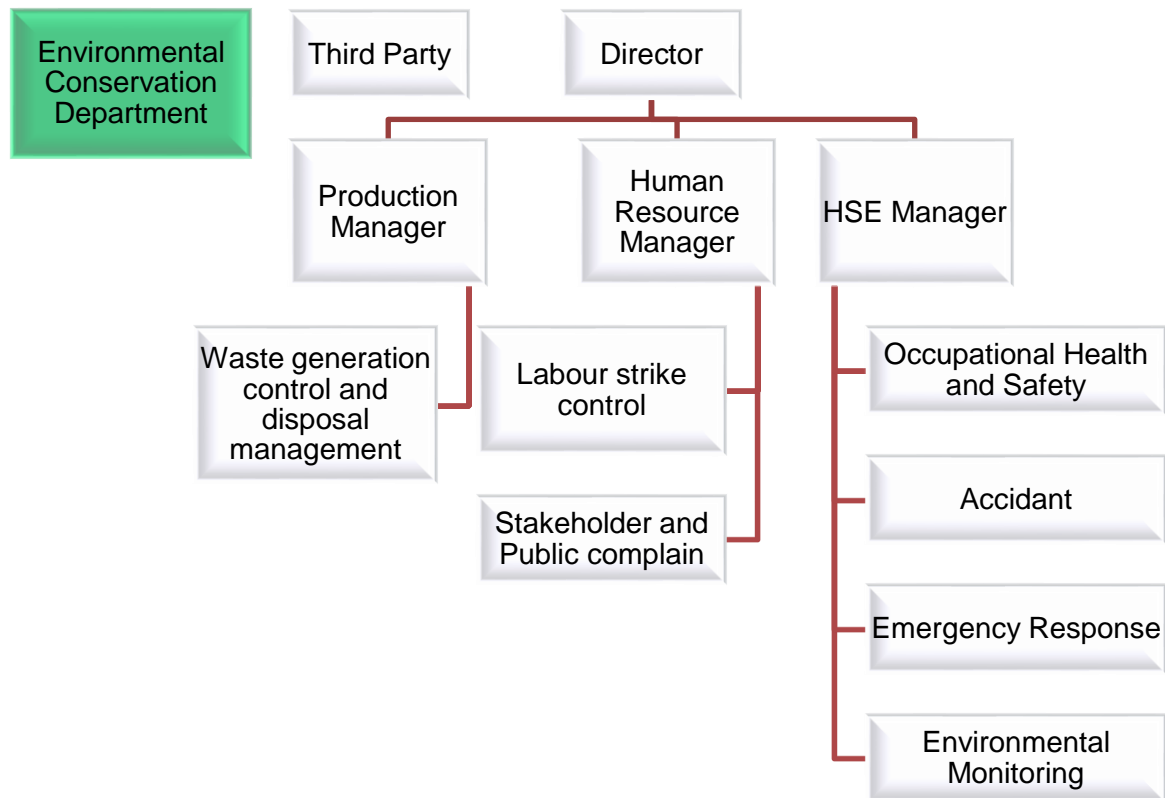
1.2.3. Structure and Responsibilities for the EMP Development and Implementation

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

- Ensure a monitoring system is in place to track and report all health, safety and environmental incidents;

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- Carry out a thorough initial site inspection of environmental controls prior to work commencement;
- Record and provide a written report to the General Manager and production team of non-conformances with the EMP and require the HR supervisor to undertake mitigation measures to avoid or minimize any adverse impacts on environment or report required changes to the EMP.

**Figure 1-2 Organization Structure of Environmental Management Plan****Table 1-1 Responsibilities of HSE Members**

Roles	Responsibilities
General Manager	<p>The General Manager will be assisted by the Operations Manager and also the HR and HSE Officer. In terms of environmental protection commitments, the Operation Manager will be the key driving force and will be responsible for:</p> <ul style="list-style-type: none"> • Establishing overall environmental direction and policy • Ensuring the implementation of the EMP • Ensuring investigation of all environmental incidents are reviewed and that reports are submitted on time • Ensuring an effective system of internal and external communication is in place • Providing advice regarding the environmental program
Operation Manager	<p>The Operation Manager will assist the General Manager in looking into the overall environmental matters during the operational phase of the Project. The Operation Engineer will also be responsible for:</p> <ul style="list-style-type: none"> • Adherence to the overall environmental direction and policy • Ensuring the implementation of the recommended actions in the investigation of all environmental incidents • Managing resources for operation wastes

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Roles	Responsibilities
HR Manager	<p>The HR Manager will carry out the day-to-day management of workers and social issues in the factory. The HR Manager will be responsible for:</p> <ul style="list-style-type: none"> Assisting the management in publicising and implementing corporate and local policies, objectives and programs Maintaining key environmental-related documents and information Communicating/ liaising with the local authorities on environmental issues
HSE Officer	<p>The HSE Officer will be the key person in charge of all environmental matters pertaining to the site. The HSE Officer will be responsible for:</p> <ul style="list-style-type: none"> Coordinating the implementation of environmental programs, including monitoring of the project site environmental performance Performing periodic internal environmental audits and inspections to ensure compliance with the legal environmental requirements Ensure a monitoring system is in place to track and report all health, safety and environmental incidents; Carry out a thorough initial site inspection of environmental controls prior to work commencement; Record and provide a written report to the General Manager and production team of non-conformances with the EMP and require the HR Manager to undertake mitigation measures to avoid or minimize any adverse impacts on environment or report required changes to the EMP.

1.3. PROJECT BACKGROUND

The project is new investment for manufacturing of brassieres and underwears on (CMP) basic company from Japan. The Yangon Region Investment Committee (YRIC) issues the project on 21 February 2019 with the Endorsement No. (YGN- 155/2019). YRIC notified for the environmental approval and comments of the Ministry of the Natural Resources and Environmental Conservation (MONREC) on the proposed project and had approved the proposal for investment in manufacturing of brassieres and underwears on CMP basis under the name of Myanmar Sakichi Garment Limited.

According to the Myanmar Environmental Conservation Law (2012), it requires that the proponents of every development project in the country submit either an Initial Environmental Examination (IEE) or an Environmental Impact Assessment (EIA) to Ministry of Natural Resources and Environmental Conservation (MONREC). As per the comments of Environmental Conservation Department (ECD), said project requires an Environmental Management Plan (EMP) to meet the environmental assessment requirements of Notification No. Yaka- 1/3/4 (EIA) (603/2019) on 10 April 2019. Therefore, Myanmar Sakichi Garment Limited commissioned Myanwei Environmental Solutions Company Limited for EMP report study.

1.3.1. Project Proponent Profile

This is the information of project proponent from the YRIC's registration that is describing in below Table 1-2 and Table 1-3.

Table 1-2 Information of Investor

Investor Name:	Mr. Mitsuhiro Kitsuya
ID No. :	G59799028

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Citizenship:	Japanese
Address of Registration office:	5F 2-2-3, Edge Shinsaleashi, Nishi-Shinsaibashi, Chuo-Ku, Osaka, Japan

1.3.2. Director List

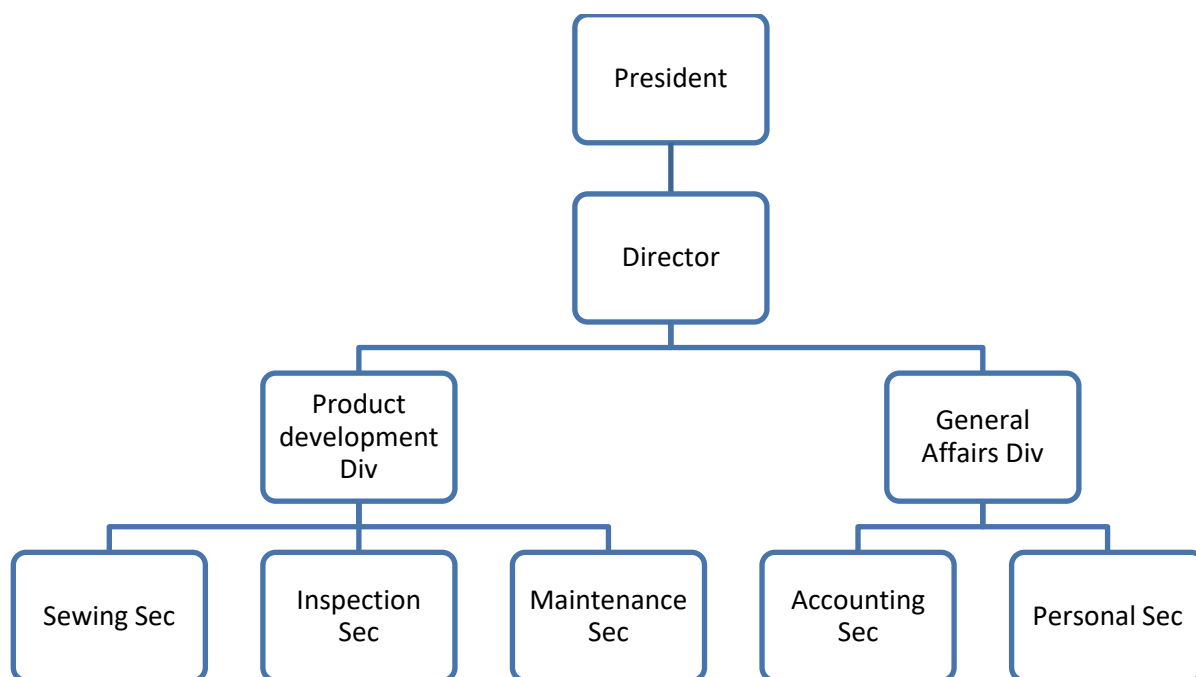
Name of Shareholder	Citizenship	Percentage
Office Sakichi Co,Ltd.	Japanese	100%
Mr. Masakazu Nakamura	Japanese	
Mr. Mitsuhiro Kitsuwa	Japanese	

1.3.3. Investment Plan and Salient Features of the Project

The estimated authorized capital investment is 0.327 Million US Dollar (Table 1-3). Organization chart of Myanmar Sakichi Garment Limited is presented in Figure 1-3.

Table 1-3 Salient features of the project

Type of Proposed Business	Manufacturing of Brassiar and Underwear on CMP Basis (100% Export)
Type of investment	100% foreign investment
Type of Share	Ordinary Share
Type of land	Industrial Land
Total land area	0.344 acres (1,392.1186 sq m)
Total building area	(100 × 100 sq ft) Production building 2 Storey Factory (1) Building
Land lease year	30 years
Construction period	1 years
Operation starting date	30 years investment permit
Address	Plot No.141/141(KA), Myay Taing Block No.(NGA), Sethmu Lathmu, North Okkalapa Township, Yangon Region
Contact person	Zar Ni Soe Factory Manager 09-267811194 nini19840821@gmail.com

Environmental Management Plan**Figure 1-3 Organization chart of Myanmar Sakichi Garment Limited****1.4. ENVIRONMENTAL CONSULT PROFILE**

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

Table 1-4 Member of EMP Study Team

Member List	Responsibility
Dr. Hein Lynn Aung (Director) M.B, B.S (Yangon), Master of Management from Australia	Health Impact Assessment, Mitigation and Monitoring Report Reviewing
Mr. Lin Htet Sein (Environmental Consultant) MSc (Regional Geology) BSc (Hons) Geology	Base Line Data Collecting Management, Project Description, Legal Assessment, Impact Assessment, Mitigation Measure, Monitoring plan, Report Preparation and Reviewing
Mr. Nyein Chan Siat Linn Myo (Fire Safety Manager) BSc Physics DMEI (Diploma in Mechanical Engineering) (UK) (INTI)	Industrial Management Assessment, Fire Safety Training and Management Study
Mr. Sai Poeng Saing Kham (Member)	Report Writing, Secondary Data Study

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B.A History	
Ms. Nan Htet Myintzu (Member) BSc (Hons) Geology	Report Writing, Secondary Data Study
Mr. Kyaw Win Han (Member) B.E. Chemical Engineering B. Tech Chemical Engineering	Baseline Data Monitoring, Site Surveying Communication with Stakeholder in Project Area
Mr. Aung Kyaw Moe (Member) B.E. Chemical Engineering B. Tech Chemical Engineering	Report Writing, Secondary Data Study
Mr. Saw Yan Naung (Member) B.E. Chemical Engineering B. Tech Chemical Engineering	Baseline Data Monitoring, Site Surveying, Communication with Stakeholder in Project Area
Mr. Myat Ko Ko (Member) B.Sc (Hons) Geology M.Sc (Economic & Mining Geology)	Baseline Data Monitoring, Site Surveying, Communication with Stakeholder in Project Area
Mr. C Yan Hein (Member) B.Sc (Geology)	Baseline Data Monitoring, Site Surveying, Communication with Stakeholder in Project Area
Ms. Ei Ei Khin Myo (Member) B.Sc (Geology)	Report Writing, Secondary Data Study
Ms. Khin Thuzar Myint (Member) B.E. Materials and Metallurgy Engineering Diploma in Environmental Planning and Management	Report Writing, Secondary Data Study



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Nu Street, Sanchaung Township, Yangon, Myanmar.

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Environmental Management Plan**2. POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK**

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

2.1. MYANMAR REGULATORY FRAMWORK

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

2.1.1. Laws and Regulations Related to Environmental and Social Considerations

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

Table 2-1 List of Myanmar's Law relating to environmental management

Law and Regulation	Description
National Environmental Policy of Myanmar, (Notification No. 26/94 dated 5 December 1994)	To achieve harmony and balance between socioeconomic, natural resources and environment through the integration of environmental considerations into the development process enhancing the quality of the life of all its citizens.
Environmental Conservation Law, 30 March 2012	
Objectives	to contract a healthy and clean environmental and to conserve natural and cultural heritage for the benefit of present and future generations; to maintain the sustainable development through effective management of natural resources and to enable to promote international, regional and bilateral cooperation in the matters of environmental conversation.
Section 3	c) to enable to emerge a healthy and clean environment and to enable to conserve natural and cultural heritage for the benefit of present and future generations; (d) to reclaim ecosystems as may be possible which are starting to degenerate and disappear; (e) to enable to manage and implement for decrease and loss of natural resources and for enabling the sustainable use beneficially;
Provisions of Duties and Powers relating to the Environmental Conservation of the Ministry: Section 7	(a) To specify categories and classes of hazardous wastes generated from the production and use of chemicals or other hazardous substances in carrying out industry, agriculture, mineral production, sanitation and other activities; (b) To prescribe categories of hazardous substances that may affect significantly at present or in the long run on the environment; (c) To promote and carry out the establishment of necessary factories and stations for the treatment of solid wastes, effluents and emissions which contain toxic and hazardous substances; (j) To prescribe the terms and conditions relating to effluent treatment in industrial estates and other necessary places and buildings and emissions of machines, vehicles and mechanisms; (m) To lay down and carry out a system of EIA and SIA as to whether or not a project or

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	<p>activity to be undertaken by any Government department, organization or person may cause a significant impact on the environment;</p> <p>(o) To manage to cause the polluter to compensate for environmental impact, cause to contribute fund by the organizations which obtain benefit from the natural environmental service system, cause to contribute a part of the benefit from the businesses which explore, trade and use the natural resources in environmental conservation works.</p>
Chapter VI Environmental Quality Standards: Section10	<p>The Ministry may, with the approval of the Union Government and the Committee, stipulate the following environmental quality standards:</p> <p>(a) suitable surface water quality standards in the usage in rivers, streams, canals, springs, marshes, swamps, lakes, reservoirs and other inland water sources of the public;</p> <p>(b) water quality standards for coastal and estuarine areas;</p> <p>(c) underground water quality standards;</p> <p>(d) atmospheric quality standards;</p> <p>(e) noise and vibration standards;</p> <p>(f) emissions standards;</p> <p>(g) effluent standards;</p> <p>(h) solid wastes standards;</p> <p>(i) other environmental quality standards stipulated by the Union Government.</p>
Section 14	A person causing a point source of pollution shall treat, emit, discharge and deposit the substances which cause pollution in the environment in accord with stipulated environmental quality standards.
Section 15	The owner or occupier of any business, material or place which causes a point source of pollution shall install or use an on-site facility or controlling equipment in order to monitor, control, manage, reduce or eliminate environmental pollution. If it is impracticable, it shall be arranged to dispose the wastes in accord with environmentally sound methods.
Section 16	<p>A person or organization operating business in the industrial estate or business in the SEZ or category of business stipulated by the Ministry:</p> <p>(a) is responsible to carry out by contributing the stipulated cash or kind in the relevant combined scheme for the environmental conservation including the management and treatment of waste;</p> <p>(b) shall contribute the stipulated user's charge s or management fees for the environmental conservation according to the relevant industrial estate, SEZ and business organization;</p> <p>(c) shall comply with the directives issued for environmental conservation according to the relevant industrial estate, SEZ or business.</p>
Section 24	The project proponent has to allow relevant governmental organization or department to inspect whether performing is conformity with the terms and condition include in prior permission, stipulated by the ministry, or not.
Section 25	The project proponent has to comply with the terms and conditions include in prior permission.
Section 29	The project proponent has to abide by the stipulations included in the rules, regulations, by-law, order, notification and procedure, which are issued by said law.
Environmental Conservation Rules, 2014	
Rules 58	The Ministry shall form the EIA Report Review Body with the experts from the relevant Government departments, organizations.
Rules 60	The Ministry may assign duty to the Department to scrutinize the report of EIA prepared and submitted by any organization or person relating to EIA and report through the EIA Report Review Body.
Rules 61	The Ministry may approve and reply on the EIA report o IEE or EMP with the guidance of the Committee.

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Sub-rule (a) of rule 69	The project proponent has to avoid emit, discharge or dispose the materials which can pollute to environment, or hazardous waste or hazardous material prescribed by notification in the place where directly or indirectly injure to public.
Sub-rule (b) of rule 69	The project proponent has to avoid performing to damage to ecosystem and the environment generated by said ecosystem.
Environmental Impact Assessment Procedure (December 2015)	
Objectives	<p>The project proponent has to be liable for all adverse impacts caused by doing or emitting of project owner or contractor, sub-contractor, officer, employee, representative or consultant who is appointed or hired to perform on behalf of project owner, under sub-paragraph (a) of paragraph 102.</p> <p>The project proponent has to support, after consulting with effected persons by project, relevant government organization, government department and other related persons, to resettlement and rehabilitation for livelihood until the effected persons by the project receiving the stable socio-economy which is not lower than the status in pre-project, under sub-paragraph (b) of paragraph 102</p> <p>The project proponent has to fully implement all commitments of project and conditions included in EMP. Moreover, the project proponent has to be liable for contractor and sub-contractor who perform on behalf of him/her have to fully abide by the relevant laws, rules, this procedure, EMP and all conditions, under paragraph 103.</p> <p>The project proponent has to be liable and fully & effectively implement all requirements included in ECC, relevant laws and rules, this procedure and standards under rule 104.</p> <p>The project proponent has to inform the completed information, after specifying the adverse impacts caused by the project, from time to time, under paragraph 105.</p> <p>The project proponent has to continuously monitor all adverse impacts in the pre-construction phrase, construction phrase, operation phrase, suspension phrase, closure phrase and post-closure phrase, moreover has to implement the EMP with abiding the all conditions included in ECC, relevant laws & rules and this procedure, under paragraph 106.</p> <p>The project proponent has to submit, as soon as possible, the failures of his or her responsibility, other implementation, ECC or EMP. If dangerous impact caused by this failure or failure should be known by the Ministry the project proponent has to submit within 24 hours and other than this situation has to submit within 7 days from knowing it, under paragraph 107.</p> <p>The project proponent has to submit the monitoring report dually or prescribed time by Ministry in line with the schedule of EMP, under paragraph 108.</p> <p>The project proponent has to prepare the monitoring report in accord with the rule 109.</p> <p>The project proponent has to show this monitoring report in public place such as library, hall and website and office of project for the purpose to know this report by public within 10 days from the date which the report is submitted to the Ministry. Moreover, has to give the copy of this report, by email or other way which way agreed with the asked person, to any asked person or organization, under paragraph 110.</p> <p>The project proponent has to allow inspector to enter and inspect in working time and if it is needed by Ministry has to allow inspector to enter and inspect in the office and work-place of project and other work-place related to this project in any time, under paragraph 113.</p> <p>The project proponent has to allow inspector to immediately enter and inspect in any time if it is emergency or failure to implement the requirements related to social or environment or caused to it, under paragraph 115.</p> <p>The project proponent has to allow inspector to inspect the contractor and sub-contractor who implement on behalf of project, under paragraph 117.</p>
Screening: Section 23	<p>a) The project proponent shall submit the Project Proposal to the Ministry for Screening.</p> <p>b) The Ministry will send the Project Proposal to the Environmental Conservation Department to determine the need for environmental assessment.</p> <p>c) Following the preliminary Screening and verification that the Project Proposal contains</p>

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	<p>all required documents and related materials, subject to Articles 8, 9, 10, 11, 26 and 27 the Department shall make a determination in accordance with Annex 1 – Categorization of Economic Activities for Assessment Purposes, taking into account Article 25 and the additional factors listed in Article 28 in order to designate the Project as one of the following, and then submit it to the Ministry:</p> <p>i) An EIA Type Project, or</p> <p>ii) An IEE Type Project, or</p> <p>iii) A Non IEE or EIA Type, and therefore not required to</p>
National Environmental Quality (Emission) Guidelines (NEQG) (December 2015)	
Objectives	To provide the basis for regulation and control of noise and vibration, air emissions, and liquid discharges from various sources in order to prevent pollution for purposes of protection of human and ecosystem health.
National Environmental Policy of Myanmar (2019)	
National Environmental Policy Vision & mission	<p>Vision</p> <p>A clean environment, with healthy and functioning ecosystem, that ensures includes development and wellbeing for all people in Myanmar.</p> <p>Mission</p> <p>To establish national environmental policy principle for guiding environmental protection and sustainable development and for mainstreaming environmental consideration into all policies, laws, regulation, plans, strategic, programmes and projects in Myanmar.</p>
Foreign Investment Law, 2012	
Section 8	<p>(a) To support the primary objectives of the national economic development plan, and for businesses that cannot yet be run by the State and citizens or businesses that have insufficient funds and technology.</p> <p>(b) Development of employment activities</p> <p>(l) Protection and conservation of the environment.</p> <p>(q) Appearing the required modern services for the Union and citizens.</p>
Section 17	<p>(a) To abide by the existing laws of the Republic of the Union of Myanmar.</p> <p>(b) To carry out the business by forming a company under the existing laws of Myanmar by the investor.</p> <p>(h) To carry out not to cause environmental pollution or damage in accord with existing laws in respect of investment business.</p> <p>(k) To carry out the systematic transfer of high technology relating to the business which are carried out by the investor to the relevant enterprises, departments or organizations in accord with the contract.</p>
Foreign Investment Rule, 2013	
Rule 54	<p>The promoter or investor shall:</p> <p>(a) comply with Environmental Protection Law in dealing with environmental protection matters related to the business;</p> <p>(b) shall carry out socially responsible investment in the interest of the Union and its people;</p> <p>(c) shall co-operate with authorities for occasional or mandatory inspection;</p> <p>(d) shall exercise due diligence to be in conformity and harmony with norms and standards prescribed by relevant Union Ministry in conducting construction of factories, workshops, buildings, and other activities;</p> <p>(e) shall enforce Safety and Health</p>
Myanmar Investment Rules, 2017	

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Rule 202	The project proponent has to comply with the conditions of the permit issued by the MIC and applicable laws when making the investment
Rule 203	The project proponent has to fully assist while negotiating with the authority for settling the grievance of the local community which has been affected due to investment
Rule 206.	The project proponent has to submit the passport, expert evidence or document of degree and profile to the MIC office for approval if decide to appoint a foreigner as senior management, technician expert or consultant according to subsection (a) of section 51 of Myanmar Investment Law
Myanmar Insurance Law (1993)	Section 15 - If the project proponent uses the owned vehicles the project owner has to ensure the insurance for the injured person. Section 16 - The project proponent has to ensure insurance to compensate for general damages because the project may cause damages to the environment and injury to the public.
Payment of Wages Law (2016)	
Section 3 & 4	The project proponent has to pay the wages in accord with section 3 and 4 of said law,
Section 5	The project proponent has to submit with the agreements of employees & reasonable ground to the department if it is difficult to pay because of force majeure included in a natural disaster
Section 7-13	The project proponent has to abide by the provisions of section 7 to 13 in the chapter (3) in respect of deduction from wages.
Section 14	The project proponent has to pay the overtime fees, prescribed by law, to the employees who work over working hours
Yangon City Development Committee Law (2018)	
Section (317)	The proponent shall not block the natural river channel, change the course, and disrupt the water channel, filling with soil within the city boundaries without the consent of the Committee
Section (318)	The project proponent shall not construct buildings, factories, and industries without sewage, toilet, septic tanks, and wastewater treatment system
Section (322)	The project proponent is not allowed to make activities that will produce noise pollution, water pollution, air pollution, and soil pollution to impact the environment within the city's boundaries
The Amended Law for Factories Act, 1951 (2016)	
Hygiene in Working Environment: Section 3	Mentions responsibilities of employer and manager regarding waste disposal, ventilation, extreme temperature, dust and gas generation, minimum space for each worker, lighting, portable drinking water and toilets for employees.
Safety in Working Environment: Section 4	States responsibilities of employer and manager concerning with machine guarding, personal protective equipment, housekeeping, aisles and exits, chemical storage and fire protection system to avoid accident.
The Private Industrial Enterprise Law, 1990	
Basic Principles: Section 3	Private Industrial Enterprises shall be conducted in accordance with the following basic principles:- (a) to enhance the higher proportion of the manufacturing value added in the gross national product and value of services, and to increase the production of the respective economic enterprises which are related to the industrial enterprise; (b) to acquire modern technical know-how for raising the efficiency of industrial enterprises and to establish the sale of finished goods produced by the industrial enterprise not only in the local market, but also in the foreign market;

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	(d) to cause narrowing down of the gap between rural development and urban development by causing the development and improvement of industrial enterprises; (e) to cause opening up of more employment opportunities; (f) to cause avoidance of or reduction of the use of technical know-how which cause environmental pollution; (g) to cause the use of energy in the most economical manner.
The Export and Import Law (2012)	
Objectives	The objectives of this law are as follows: a) To enable to implement the economic principles of the State successfully. b) To enable to lay down the policies relating to export and import that supports the development of the State. c) To cause the policies relating to export and import of the State and activities are to be in conformity with the international trade standards. d) To cause to be streamlined and speedy in carrying out the matters relating to export and import.
Prohibitions: Section 5	No persons shall export or import restricted, prohibited and banned goods.
Prohibitions: Section 6	Without obtaining license, no person shall export or import the specified goods which are to obtain permission.
Prohibitions: Section 5	A person who obtained any license shall not violate the conditions contained in the license.
The Prevention of Hazard from Chemical and Related Substances Law, 2013	
This law was enacted with the objectives of: a. To protect from being damaged the natural environment resources and being hazardous any living beings by chemical and related substances; b. To supervise systematically in performing the chemical and related substances business with permission for being safety; c. To perform the system of obtaining information and to perform widely educative and research for using the chemical and related substance systematically; d. To perform the sustainable development for the occupational safety, health and environmental conservation. Regarding the chemical management and storage, currently, regulations governing chemicals management are divided between various Acts, mostly dating from colonial times; hence the legislation is in many respects related to the British framework. The Factory Act and the Public Health Act contain the provisions for chemicals management and storage. Some chemicals are likely to require permits.	
Underground Water Act	
The underground water act enacted on the date of 21st June in 1930 whereas it is expedient to conserve and protect underground sources of water supply in the Union of Burma. This act prohibits sinking of a tube for the purpose of obtaining underground water except under and in accordance with the terms of a license granted by the water officer. Township Officer or sub-divisional officer had power to close a license tube after exercising jurisdiction over the local area concerned and the expense of such closure shall be recoverable from the owner of the tube as if it were an arrear of land-revenue.	
Myanmar Fire Brigade Law (2015)	
The Pyidaungsu Hluttaw enacted this law by Law No.11/2015 on the date of 17th March, 2015 with the following objectives: (a) to take precautionary and preventive measures and loss of state own property, private property, cultural heritage and the live and property of public due to fire and other natural disasters (b) to organize fire brigade systemically and to train the fire brigade (c) to prevent from fire and to conduct release work when fire disaster, natural disaster, epidemic disease or any kind of certain danger occurs	

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(d) to educate, organize and inside extensively so as to achieve public corporation	
(e) to participate if in need for national security, peace for the citizens and law and order	
Section-8 Fire Safety Procedures	
Rule17	<p>The relevant Government Department or organization shall, for the purpose of precaution and prevention obtain the approval of the Fire Force Department before granting permission for the following cases:</p> <ul style="list-style-type: none"> a. Constructing three-storied and above buildings market and condominium buildings, b. Operating hotel, motel, guest house enterprise c. Constructing factory, workshop, storage facilities and warehouse d. Operating business expose to fire hazard by using in inflammable materials or explosive materials e. Producing and selling fire-extinguishing apparatuses f. Doing transport business, public utility vehicles train, airplane, helicopter, vessel, ship, tonkin tug
Rule18	The relevant government department or organization shall obtain the opinion of the Fire Services Department for the purpose of fire precaution and prevention, when laying down plans for construction for town, village and downtown or village development plans
The Electricity Law (2014)	
<p>In 2014, the new Electricity Law, a comprehensive piece of legislation covering licensing, a new regulatory commission, standards, inspection, tariff, and restrictions, replaced the Electricity Law of 1984. The Electricity Law divides projects into "small" (up to 10 MW), "medium" (between 10 MW to 30 MW) and large (upwards of 30 MW); the states and regions can issue permits for small and medium power plants. In case these plants are not connected to the national grid, the Union Government Ministry is not the primary authority involved. The authorities have a legal right to use land for the purpose of power plants under the Electricity Law, and have the right to expand and maintain their facilities. The law also provides that the authorities can build transmission lines in accordance with existing laws.</p>	
Labor Dispute Settlement Law (28 Mar 2012 replacing 1929 version)	
<p>The Pyidaungsu Hluttaw hereby enacts this Law for safeguarding the right of workers or having good relationship between employer and workers and making peaceful workplace or obtaining the rights fairly, rightfully and quickly by settling the dispute of employer and worker justly.</p>	
The Social Security Law (2012)	
<p>The Social Security Law, enacted in 2012, was amended the Social Security Act in 1954. It stipulates the formation and implementation of social security systems.</p>	
Section 53(a)	<p>The employers and workers shall co-ordinate with the Social Security Board or insurance agency in respect of keeping plans for safety and health in order to prevent employment injury, contracting disease and decease owing to occupation and in addition to safety and educational work of the workers and accident at the establishment;</p>
Labor Dispute Settlement Law (28 Mar 2012 replacing 1929 version)	
<p>This law was enacted for safeguarding the right of workers or having good relationship between employer and workers and making peaceful workplace or obtaining the rights fairly, rightfully and quickly by settling the dispute of employer and worker justly. It stipulates that employer in which more than 30 workers are employed shall form the workplace coordinating committee consisting of the representatives of workers and the representatives of employer.</p>	
Section 23	<p>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.</p>
Section 24	<p>The relevant Conciliation Body shall, in respect of the collective dispute known or received by the complaint of either party, employer or worker, in respect of the dispute; information sent by the Minister or the Region or State Government or any other means,</p>

Environmental Management Plan

	carry out as follows: (a) conciliating so as to be settled within three days, not including the official holidays, from the day of knowing or receipt of such dispute; (b) concluding mutual agreement if the settlement is reached in conciliating under sub-section (a), before the Conciliation Body.
Section 25	The Conciliation Body shall refer the collective dispute which does not reach settlement to the relevant Arbitration Body and inform the persons relating to the dispute.
Section 38	No employer shall fail to negotiate and coordinate in respect of the complaint within the prescribed period without sufficient cause.
Section 39	No employer shall alter the conditions of service relating to workers concerned in such dispute at the consecutive period before commencing the dispute within the period under investigation of the dispute before the Arbitration Body or Tribunal, to affect the interest of such workers immediately.
Section 40	The project proponent has to not close the work without negotiation, discussion on dispute in accord with this law, decision by Tribunal
Section 51	The project proponent has to pay the compensation decided by Tribunal if violates any act or any emission to omission to damage the interest of labour by reducing of product without efficient cause.
Section 46	Any employer who violates any prohibition contained in sections 38 and 39 shall, on conviction, be punished with a fine for a minimum of one-lakh kyats.
The Employment and Skill Development (2013)	
This law was enacted for safeguarding the right of workers or having skillful of workers and making peaceful workplace or obtaining the rights fairly, rightfully and quickly by settling the dispute of employer and worker justly. Employer shall conduct occupational training to enhance the skills of workers.	
Section 5	The project proponent has to appoint employees with the contract in line with the provision of section 5 of said law.
Section 14	Employer shall conduct occupational training to enhance the skills of workers who are to be employed as well as workers who are presently employed in accordance with the requirements of the enterprise and the policy of the Skills Development Agency.
The Worker's Compensation Act, 1923	It stipulates that employer is required to make payments to employees who become injured or who die in any accidents arising during and in consequence of their employment. Such compensation also must be made for diseases which arise as a direct consequence of employment, such as carpal tunnel syndrome.
The Payment of Wages Act, 1936	The Payment of Wage Act defines the payment obligation to the workers employed in the factories or railway administration. It stipulates the method of payment stating that the payment should be made in cash on a regular payday, and allows legal action against delayed payment or un-agreeable deduction.
The Leave and Holidays Act (1951, partially revised in 2014)	This act has been used as the basic framework for leaves and holidays for workers with minor amendment in 2006 and 2014. This defines the public holidays that every employee shall be granted with full payment. It also defines the rules of leaves for workers including medical leave, earned leave and maternity leave.
The Minimum Wage Law (2013)	The minimum wage law, passed in March 2013, was replaced the 1949 Minimum Wage Act. The law provides a framework for minimum wage determination: the presidential office establishing a tripartite minimum wage committee shall decide minimum wage with industrial variation based on a survey on living costs of workers possibly every two years. This also stipulates equal payment.
Public Health Law (1972)	
Objectives	To ensure the public health include not only employees but also resident people and cooperation with the authorized person or organization of health department. This law focuses as follows

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	<p>The project owner has to cooperate with the authorized person or organization in line with the section 3 and 5 of said law.</p> <p>The project proponent has to abide by any instruction or stipulation for public health under the section 3 of said law.</p> <p>The project proponent has to allow any inspection, anytime, anywhere if it is needed under the section 5 of said law.</p>
Prevention and Control of Communicable Disease Law 1995 (Amendment in 2011)	
Chapter 2 Prevention	<p>4. When a Principal Epidemic Disease of a Notifiable Disease occurs;</p> <p>Immunization and other necessary measures shall be undertaken by the Department of Health, in order to control the spread thereof;</p> <p>The public shall abide by measures undertaken by the Department of Health under sub-section (a).</p>
Chapter 4 Environmental Sanitation	<p>For prevention of the outbreak of Communicable Disease and effective control of Communicable Disease when it occurs, the public shall under the supervision and guidance of the Health Officer of the relevant area, undertake the responsibility of carrying out the following environmental sanitation measures;-</p> <p>Indoor, outdoor sanitation or inside the fence outside the fence sanitation;</p> <p>Well, ponds and drainage sanitation;</p> <p>Proper disposal of refuse and destruction thereof by fire;</p> <p>Construction and use of sanitary latrines;</p> <p>Other necessary environmental sanitation measures.</p>
Occupational Safety and Health Law (2019)	
Purpose:	To effectively implement measures related to safety and health in every industry and to set occupational safety and health standards;
Section-26 Sub-section (e)	The project proponent has to provide adequate and relevant personal protective equipment to workers free of charge and make them wear it during work so as not to expose workers to any serious occupational diseases or hazards.
Section-26 Sub-section (1)	The project proponent has to arrange and display occupational safety and health instructions, warning signs, notices, posters, and signboards.
Section-30 Sub-section (a)	The worker shall wear or use at all times any protective clothes, equipment and tools provided by the employer for the purpose of safety and health.
Section-30 Sub-section (d)	The worker shall proper and systematic use any equipment and tools, machines, any parts of the machines, vehicles, electricity and other substances being used at the workplace.
Section-30 Sub-section (e)	The worker shall take reasonable care for the safety and health of himself/ herself and of other persons who may be affected by his/ her acts or omissions at work.
The law on Standardization(2014)	
Objectives	<p>The Objectives of this Law are as follows:</p> <ul style="list-style-type: none"> to enable to determine Myanmar Standard to enable to support export promotion by enhancing quality of production organizations and their product, production processes and services to enable to protect the consumers and user by guaranteeing imports and products are not lower than prescribed standard, and safe from health hazards to enable to support protection of environment related to products, production process and services from impact, and conservation of natural resources to enable to protect manufacturing, distributing and importing the disqualified goods which do not meet the prescribed standard and those which are not safe and endangered to the environment

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	to support on establishing the ASEAN Free Trade Area and to enable to reduce technical barriers to trade to facilitate technological transfer and innovation by using the standards for the development of national economic and social activities in accordance with the national development programme.
Chapter 7 Taking Action by Committee No. 19	The committee may, if it is found out that holder of certificate of certification violates any term or condition contained in the relevant recommendation, pass any of the following administrative order: warning suspending the certificate of certification for limited period cancelling the certificate of certification
လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတက်သောဝတ္ထုပစ္စည်းများဆိုင်ရာဥပဒေ (၂၀၁၈)	
ရည်ရွယ်ချက်	လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတက်သောဝတ္ထုပစ္စည်းများကိုစနစ်တကျပြုလုပ်ခြင်း၊တင်သွင်းခြင်း၊သယ်ယူပို့ဆောင်ခြင်း၊သိုလှောင်ခြင်းနှင့်သုံးစွဲခြင်းတို့ပြုနိုင်ရန်၊ ယမ်းဘီလူးနှင့်ဆက်စပ်သုံးပစ္စည်းများအသုံးပြုသည့်လုပ်ငန်းခွင်ဘေးအန္တရာယ်ကင်းရှင်း၍လုံခြုံမှုရှိစေရန်၊ လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတက်သောဝတ္ထုပစ္စည်းများပြုလုပ်သုံးစွဲမှုများကိုစနစ်တကျကြီးကြပ်နိုင်ရန်။
အခန်းကဏ္ဍ တားမြစ်ချက်များ အမှတ်၁၈	လိုင်စင်ရရှိသူနှင့်ခွင့်ပြုချက်ရရှိသူမည်သူမျှစစ်ဆေးရေးအရာရှိချုပ်သို့မဟုတ်စစ်ဆေးရေးအရာရှိ၏စစ်ဆေးခြင်းကိုခံယူရန်ငြင်းပယ်ခြင်းမပြုရ။
အမှတ်၁၉ (ခ)	ပုဒ်မအရကာကွယ်ရေးဌာနကောင်စီအမှုဆောင်အဖွဲ့၏အတည်ပြုချက်မရရှိဘဲလုပ်ငန်းခွင်ပေါက်ကွဲစေတက်သောဝတ္ထုပစ္စည်းများကိုဖျက်ဆီးခြင်းမပြုရ။
အမှတ်၁၉ (ဂ)	ဤဥပဒေအရထုတ်ပြန်သည့်နည်းဥပဒေ၊စည်းမျဉ်း၊စည်းကမ်း၊အမိန့်ကြော်ငြာစာ၊အမိန့်နှင့်ညွှန်ကြားချက်များနှင့်အညီဆောင်ရွက်ရန်ပျက်ကွက်ခြင်းမရှိစေရ။
Myanmar Insurance Law (1993)	
Chapter VI Effecting Insurance and Granting of Benefits Section 15	Owners of motor vehicles shall effect compulsory Third Party Liability Insurance with the Myanmar Insurance.
Section 16	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 affect compulsory General Liability Insurance with the Myanmar insurance.
The Conservation of Water Resources and River Law (2006)	
Aims	The aims of this Law are as follow: To conserve and protect the water resources and rivers system for beneficial utilization by the public; To smooth and safety waterways navigation along rivers and creeks; To contribute to the development of State economy through improving water resources and river system; To protect environmental impact
Chapter V	No person shall destroy, cause damage or cause collision of vessel with the river training structure either wholly or partly.

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Prohibition Section 9	
Section 11	<p>No person shall;</p> <p>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.</p> <p>Catch aquatic creatures within river-creek boundary, bank boundary or waterfront boundary with poisonous materials or explosives.</p> <p>Dispose of disposal soil and other materials from panning for gold, gold mineral dredging or resource production in the river and creek, into the water outlet gully which can flow into the river and creek.</p>
Section 15	<p>No person shall carry out the construction of switchback, dockyard, wet dockyard, water-tight dockyard, building of jetty, pier, landing stage or vessel landing by drainage in the river-creek boundary, bank boundary and waterfront boundary without the permission of the Directorate.</p>

2.2. NATIONAL ENVIRONMENTAL QUALITY (EMISSION) GUIDELINES

As specified in the EIA Procedure, all projects are obliged to use, comply with and refer to applicable national guidelines or standards or international standards adopted by the Ministry. As specified in the EIA Procedure, following project approval a project shall commence implementation strictly in accordance with the project EMP and any additional requirements set out in the project ECC, which will encompass conditions relating to emissions. While these Guidelines generally apply to all projects subject to the EIA Procedure, it is the prerogative of the Ministry to decide how the Guidelines should be applied to existing projects as referred to in the EIA Procedure.

According to the Environmental Conservation Law, MOECF shall set standards of environmental qualities as agreed by the Union Government and the Environmental Conservation Committee to provide the basis for regulation and control of noise and vibration, air emissions and liquid discharges from various sources in order to prevent pollution for purposes of protection of human and ecosystem health.

2.2.1. General Guidelines

General guidelines of related environmental impact guideline for proposed project are-

2.2.1.1. Air emission

Projects with significant sources of air emissions, and potential for significant impacts to ambient air quality, should prevent or minimize impacts by ensuring that: (i) emissions do not result in concentrations that reach or exceed national ambient quality guidelines and standards, or in their absence current World Health Organization (WHO) Air Quality Guidelines¹ for the most common pollutants as summarized below; and (ii) emissions do not contribute a significant portion to the attainment of relevant ambient air quality guidelines or standards (i.e. not exceeding 25 percent of the applicable air quality standards) to allow additional, future sustainable development in the same air shed. Industry-specific guidelines summarized hereinafter shall be applied by all projects to ensure that air emissions conform to good industry practice. Reference should be made to WHO's Air Quality Guidelines for Europe² for air pollutants not included in the following Table 2-2.

Environmental Management Plan**Table 2-2 WHO's Air Quality Guideline**

Parameter	Averaging Period	Guideline Value
Nitrogen Dioxide	1-year	40
	1-hour	200
Ozone	8-hour	100
Particulate Matter PM10 ^a	1-year	10
	24-hour	50
Particulate Matter PM2.5 ^b	1-year	10
	24-hour	25
Sulfur dioxide	24-hour	20
	10-minute	500

^a Particulate matter 10 micrometers or less in diameter

^b Particulate matter 2.5 micrometers or less in diameter

2.2.2. IFC EHS Guidelines

The EHS Guidelines¹ by International Finance Cooperation (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 are generally considered to be 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 2-3 shows the contents of the section of Community Health and Safety.

Table 2-3 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 of a project (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	Traffic safety should be promoted by all project personnel 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

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Contents	Brief Description
	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 and 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 30.20070)

2.3. INSTITUTIONAL ARRANGEMENT

The Ministry of Environmental Conservation and Forestry (MOECF) was reformed as the Ministry of Natural Resources and Environmental Conservation (MONREC) on 30th 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.

2.4. COMMITMENT OF MYANMAR SAKICHI GARMENT LIMITED

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

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

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Myanmar Sakichi Garment Limited shall be responsible for the environmental assessment of factory development as follows:

- Monitoring the factory area operations according to EMP and Environmental Monitoring Plan (EMoP)
- Submitting environmental monitoring reports to ECD
- Planning and implementation of CSR activities
- To set up welfare plan such as staff medical checkup, training program and public talk for getting knowledge, risk prevention, bonus and social security service
- To carry out fire safety assessment and ensure adequate and appropriate fire safety measures for employees.

3. PROJECT DISCRIPTION

3.1. LOCATION OF PROPOSED PROJECT

The proposed project is located at Latitude 16°54'47.09"N and Longitude 96° 3'35.49", Plot No. 141/141(KA), Myay Taing Block No.(NGA), Sethmu Lathmu, North Okkalapa Township, Yangon Region. The location map of the proposed project size is shown in Figure 3-1.

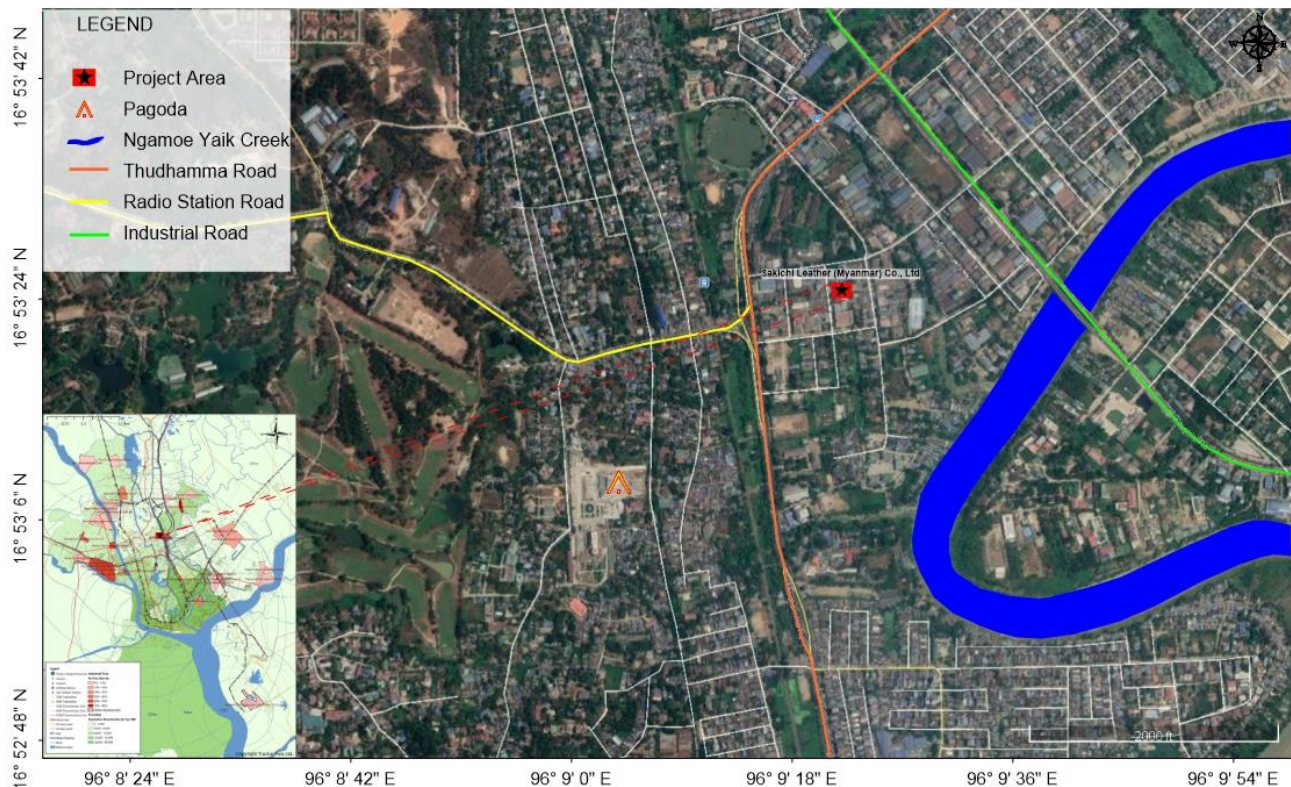


Figure 3-1 Location Map

3.2. OBJECTIVES OF PROPOSED PROJECT

The proposed project intends to manufacture brassieres and underwears on CMP basic and to export 100% of the finished products. DALIAN AYA Trading Company Limited will supply raw materials for garment in People Republic of Japan. DALIAN AYA Trading Company Limited agrees to supply to ready make products and pay CMP charges to Myanmar Sakichi Garment Limited.

3.2.1. Site Description of Proposed project site

The total land area is 0.344 acres and build main factory building, warehouse, kitchen, canteen, maintenance house, etc. which were built on its land area. Also factory layout drawing is able to seen in Figure 3-2 and Figure 3-3.

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Figure 3-2 Factory Layout Map

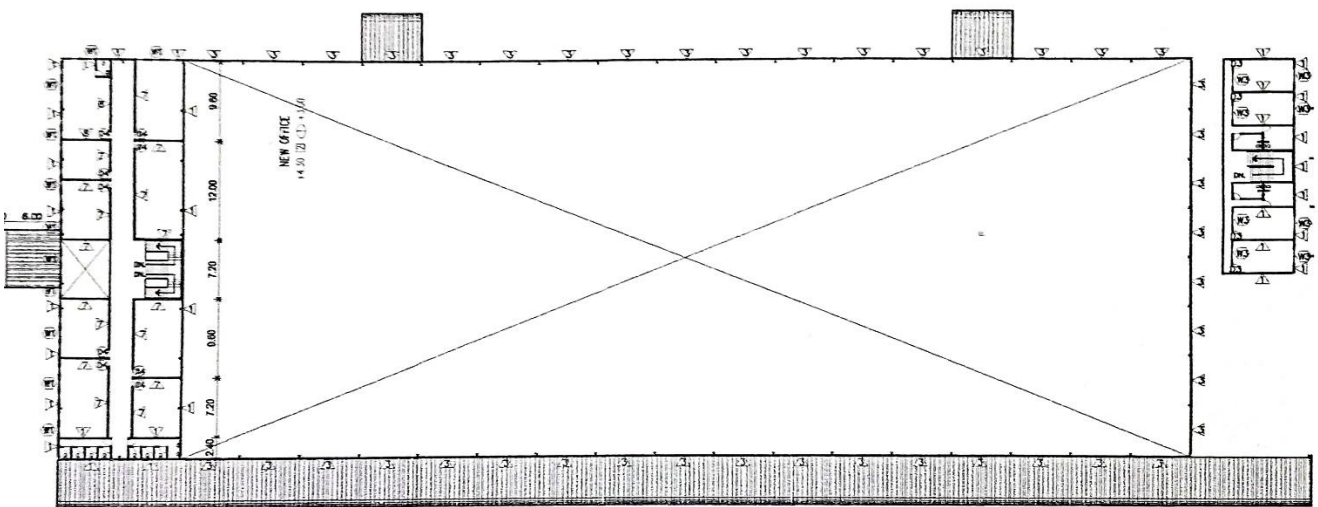


Figure 3-3 Factory Layout Drawing

3.2.2. Production Process

The production process is based on CMP system in which the production on consignment in which the main raw materials (Lace, Stretch Lace, Nylon Fabrics, Cotton Fabrics, etc.) are provided by overseas buyers and imported free of charge, then cut, sewn and packed in the domestic factories, after which all of the finished products are exported. The main operation of the

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proposed factory is sewing. The sewing was operated one and two-needle sewing machine and checked by quality control supervisor on each sewing line. Then garment packing is completed and prior to shipping to destinations. The process flow diagram for garment manufacturing is illustrated in Figure 3-4.

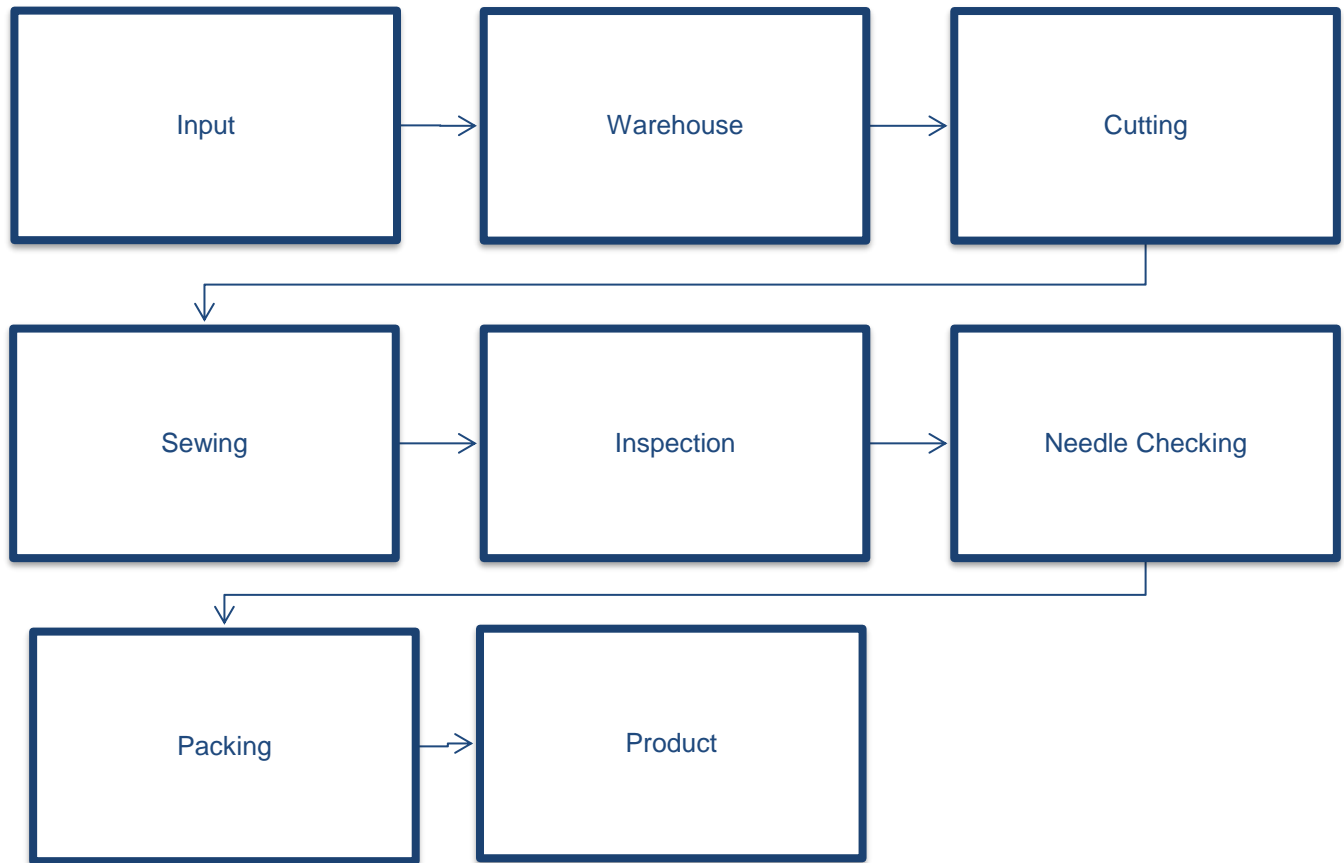


Figure 3-4 Production flow diagram of Myanmar Sakichi Garment Limited

3.2.2.1. Description of Production Process

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

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

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

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

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Warehouse



Cutting



Sewing



Inspection



Needle Checking



Packing

Figure 3-5 Production Photos of Myanmar Sakichi Garment Limited

During operation, the proposed factory is expected to produce garment products as per Table 3-1.

Environmental Management Plan**Table 3-1 Annual Production Rate**

No	Particular	Unit	Year 1-3	Year 4-5	Year 6-10
1	Brassiere	Pcs	200,000	220,000	220,000
2	Shorts	Pcs	500,000	550,000	550,000
Total			700,000	770,000	770,000

**Figure 3-6 Products Photo****3.3. UTILITIES****3.3.1. Raw Material**

The main Raw Materials Are Lace, Stretch Lace, Nylon fabrics, Cotton Fabrics imported from Japan and China. List of Raw materials are described in Table 3-2.

**Figure 3-7 Raw Materials Storage Photo**

Environmental Management Plan**Table 3-2 List of Raw Materials Requirement**

No	Particular	Unit	Year 1-3	Year 4-5	Year 6-10
1.	Lace	Meter	545,600	600,160	600,160
2.	Stretch Lace		418,000	459,800	459,800
3.	Nylon Fabrics	Meter	26,400	29,040	29,040
4.	Non stretch Tape	Meter	11,000	12,100	12,100
5.	Stretch Tape	Meter	1,490,500	1,639,550	1,639,550
6.	Fastener(Nylon/metal)	Pc	440,000	440,000	484,000
7.	Cotton Fabrics	Meter	112,200	123,420	123,420
8.	Cord Tape	Meter	220,000	220,000	242,000
9.	Metallic Parts	Pc	880,000	968,000	968,000
10.	Cup Wire(metal)	Pc	440,000	440,000	484,000
11.	Film Stopper	Pc	440,000	440,000	484,000
12.	Ribbon	Pc	770,000	847,000	847,000
13.	Brand Tag	Pc	1,540,000	1,694,000	1,694,000
14.	Mixing Ratio Tag	Pc	770,000	847,000	847,000

3.3.2. Machinery and Equipment

List of machinery and equipment required for Myanmar Sakichi Garment Limited is following in Table 3-3. The machinery running days of the factory is at least 262 days per year.

Table 3-3 List of Machinery

No.	Particular	Brand	Unit	Quantity
1.	Single Needle Direct Drive Straight Lock Stitcher With Thread Trimmer	Brother	Set	23
2.	Electronic Direct Drive Zigzag Lock Stitcher	Brother	Set	30
3.	Electronic Direct Drive Locks Titch Bar Tacker	Brother	Set	9
4.	Twin Needle Locks Stitcher	Brother	Set	4
5.	2 Needles 4 Threads Overlock	Pegasus	Set	18
6.	3 Needles 5 Threads Flatbed Interlock	Pegasus	Set	8
7.	2 Needles 5 Threads Safety Stitch Machine	Pegasus	Set	4

3.3.3. Human Resource

Human resource required by foreign experts/technicians and local persons for administrative and production process are about 90 persons which are also described in Table 3-4. Currently there are 26 employees.

Environmental Management Plan**Table 3-4 Employment Schedule of Myanmar Sakichi Garment Limited**

No	Position	Local Person	Foreign Technicians
1	Secretary	1	
2	Factory Manager	1	1
3	Production Manager		1
4	Shipping Manager	1	
5	HR Manager	1	
6	Quality Control	10	1
7	Driver	2	
8	Security Staff	1	
9	Skill and Semiskill worker	1	
10	Unskilled worker	60	
11	Translator	2	
12	Technician	1	
13	Fire Safety Officer	1	
14	Cleaner	5	
Total		87	3
		90	

3.3.1. Water Requirement

North Okkalapa industrial zone has no centralized water supply system and the factory gets water from the tube wells installed inside the factory compound. Groundwater from this tube well is pumped in the storage tanks for the factory and domestic use. The main water use in the proposed project is for domestic usage such as for personal washing, food preparation, and washing of utensils. Drinking water will be provided by outsource suppliers. is described by water storage tank and drinking water supply for Myanmar Sakichi Garment Limited. The groundwater stores in the two storage tanks with capacity of 767.5013 gallons, domestics water uses 1.7 m³ and drinking water uses 17 liters per day. There is no wastewater from production process.

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Figure 3-8 Drinking water supply

3.3.2. Electricity and Fuel Requirement

The proposed project intended to get required electricity supply form Yangon City Electricity Supply Board (YESB) and distributed by 100kVA of Transformer and another sources of energy 150 kVA generators which also be kept as the emergency generator if normal electricity supply could not provide for the proposed project. Estimated electricity usage is 271.92 Kilo Watt hour per day (KW.hr/day) (six working days per week) and annual electricity consumption is 81516 kWh.

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Figure 3-9 Electricity Facilities at Myanmar Sakichi Garment Limited

3.4. FACILITY

3.4.1. Liquid waste management facility

Water discharge from the factory site will be treated by silts track tank before discharging. Water effluent levels should be within acceptable limit of the National Environmental Quality (Emissions) Guidelines values. The factory plan has kitchen, canteen and toilet facilities attached in various buildings of the factory. In the kitchen, separated drainage lines are provided to flow wastewater from the activities washing and cooking, etc. And around the compound area of the project area, drainages are also provided and maintain to flow storm water (rain water, snow and surface water). The compound area of the factory is paved with concrete and the drainages are covered and holes are there to flow the storm water. The existing drainage at the project area can be seen in Figure 3-10. Besides, the factory plans to use separate septic type toilet system. Wastewater from the dining room, canteens and toilet facilities are collected in septic tanks which are attached with sewer treatment plant and the proponent will connect and cooperate with YCDC to be carried out for disposing of these septic tank wastes. To mitigate the impact on water, the drainages around the compound area of the factory have to maintain and clean regularly. Spillage and leakages of oil and grease should also be minimized.

Environmental Management Plan**Figure 3-10 Drainage and Toilet Facility Photos****3.4.2. Fire Safety Facility**

The project proponent has provided fire extinguishers, fire hose reels and fire hydrants on the walls of the factory for fire emergency cases. Regular inspection for existing firefighting equipment must be done. In case of fire emergency, water storage tank for fire frightening is also constructed with the capacity of 25,00 gallons at the proposed area. The emergency contact numbers of township and district fire services department must be printed and tagged at easily visible places for fire emergency cases. The emergency fire alarms are installed at the factory for alerting the workers in case of fire. The main entrances and route for emergency cases of the factory must not be blocked with materials or machines for fire emergency cases. In addition, the project proponent has plans to provide trainings on firefighting for the workers by a professional or otherwise by sending to training courses. The plan to install fire alarm system and fire-frightening system are mentioned in Figure 3-11.

Environmental Management Plan**Figure 3-11 Fire Safety Facility Photo****3.4.3. Solid Waste Facility**

The factory provides separate garbage bins at each building. All of the solid wastes will be collected separately in garbage based on their types and stored in relevant separated waste houses: Non-hazardous Waste Production related house, Hazardous Waste Production related house, Non-Hazardous Waste Non-Production related house and Hazardous Waste Non-Production related house and final wastes will be disposed by using YCDC's service.

**Figure 3-12 Solid Waste Facility Photo****3.5. GENERATION OF WASTE, EMISSION AND DISTURBANCES**

Solid waste (recycle waste) such as broken machine parts, paper box, nylon fabrics etc., are hand over to local waste buyer. Although the factory causes some pollution but also has a positive side and that is the factory has created employment for many people, due to this factory local community has built up daily. Total amount of solid waste discharge from factory is maximum 750 kg daily and handover to YCDC two-time per month. Wastes generated from the garment factory are cloth scraps of 50% from cutting section, 35% from sewing section and 15% from packing section. In addition, packing waste of plastic sheet, carton box and fabric paper tube are generated from cutting line and packing

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section. Total amount of waste about maximum 50 kg per day are generated from operation process. And others solid waste from the whole factory (such as from human, kitchen, packing).

3.5.1. Waste Generation

The project will be generated solid waste, liquid waste and hazardous waste from the operation of the Myanmar Sakichi Garment Limited. Detail description of waste generation and waste amount are shown in below.

Table 3-5 Waste Generation & Waste Amount

Waste		Type of wastes	Estimated waste amount	Source of generation
Solid waste	Re-usable	Residual pieces of fabric scraps	10% a roll of fabric (kg)	Production line and cutting line
		Raw material cutting wastes	1,100 kg / month	
		Disposed packaging materials, paper or plastic wrapping	13,200 kg / month	Materials store and supply packaging
	Non-re-usable	Food residues, domestic waste	320 kg / day	Canteen, Kitchens, dormitory
Liquid waste		Sanitary discharge water	90.3 m ³ /day*	Toilet facility, kitchen and canteen
Hazardous waste		Oil leakage and spills		Operation of generator and movements of vehicles

4. BRIEF DESCRIPTION OF SURROUNDING ENVIRONMENT

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

4.1. METHODOLOGY FOR DATA COLLECTION AND ANALYSIS

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

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

4.2. PHYSICAL COMPONENT IN PROJECT AREA

4.2.1. Topography

The proposed project area is situated in North Okkalapa Industrial Zone, North Okkalapa Township, and its topographic condition is flat. The proposed project site is primarily agricultural land, but now is initiated into the industrial zone area.

4.2.2. Geology

Alluvial deposits (Pliocene to Recent), the non-marine fluvial sediments of Irrawaddy formation (Pliocene), and hard, massive sandstone of Pegu series (early-late Miocene) underlie the Yangon area. Alluvial deposits are composed of gravel, clay, silts, sands and laterite which lie upon the eroded surface of the Irrawaddy formation at 3 - 4.6 m above mean sea level (MSL). The rock type in Yangon is mainly soft rocks, which consist of sandstone, shale, limestones and conglomerate. Geological map of Yangon Regional area is shown in Figure 4-1. ^[2]

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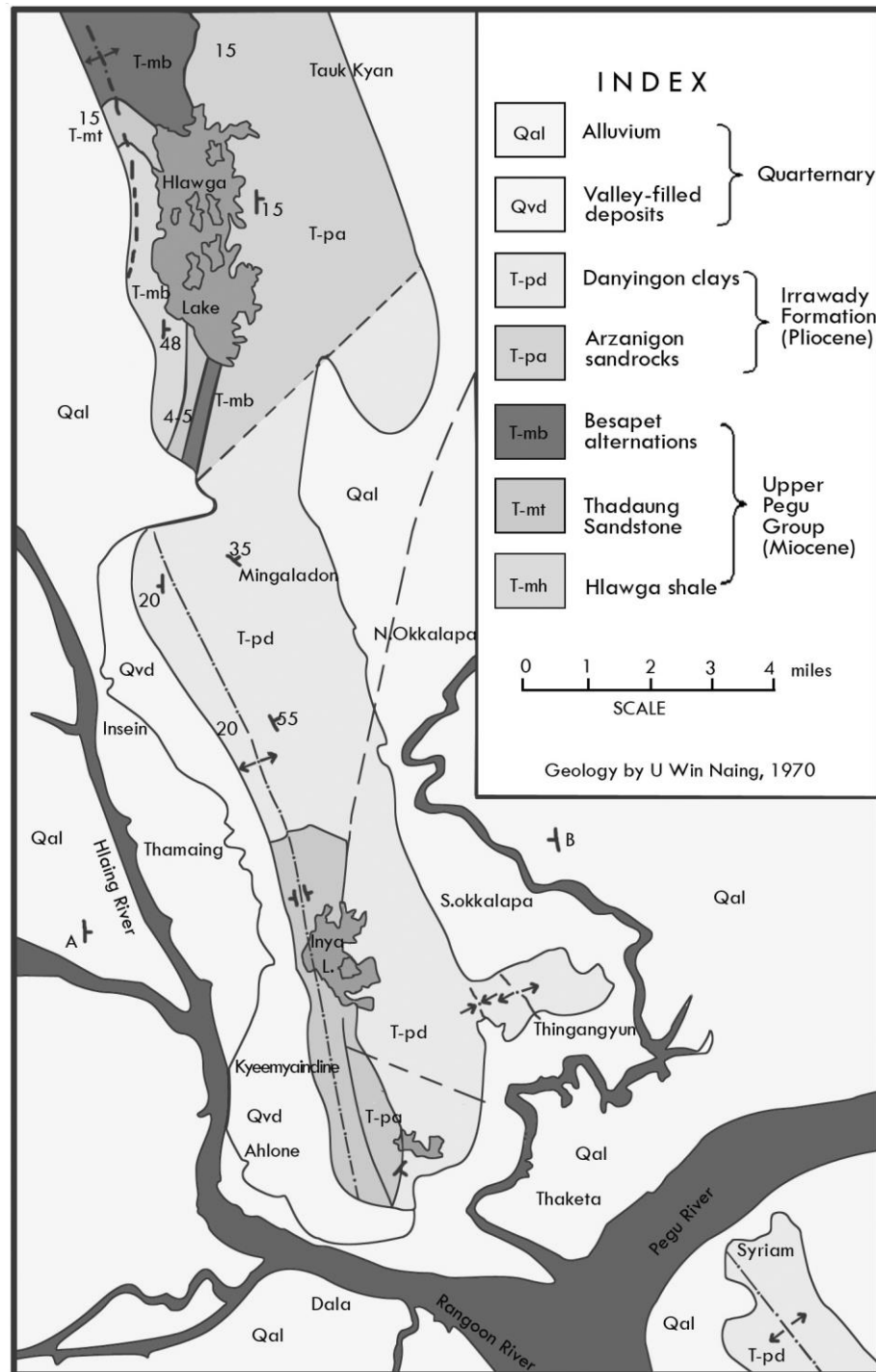


Figure 4-1 Geological Map of Yangon Region

4.2.3. Tectonics

Yangon is situated in the southern part of the Central Lowland which is one of the three major tectonic provinces of Myanmar. The Taungnio Range of the Gyophyu catchments area of Taikkyi District, north of Yangon, through the Thanlyin Ridge, south of Yangon forming a series of isolated hills probably resulted from the progressive deformation of the Upper Miocene rocks as the eastern continuation of the subduction or stretching and compression along the southern part of the Central Basin and regional uplifting of the Pegu Yoma (Aung Lwin 2012). [2]

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4.2.4. Soil

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

Environmental Management Plan

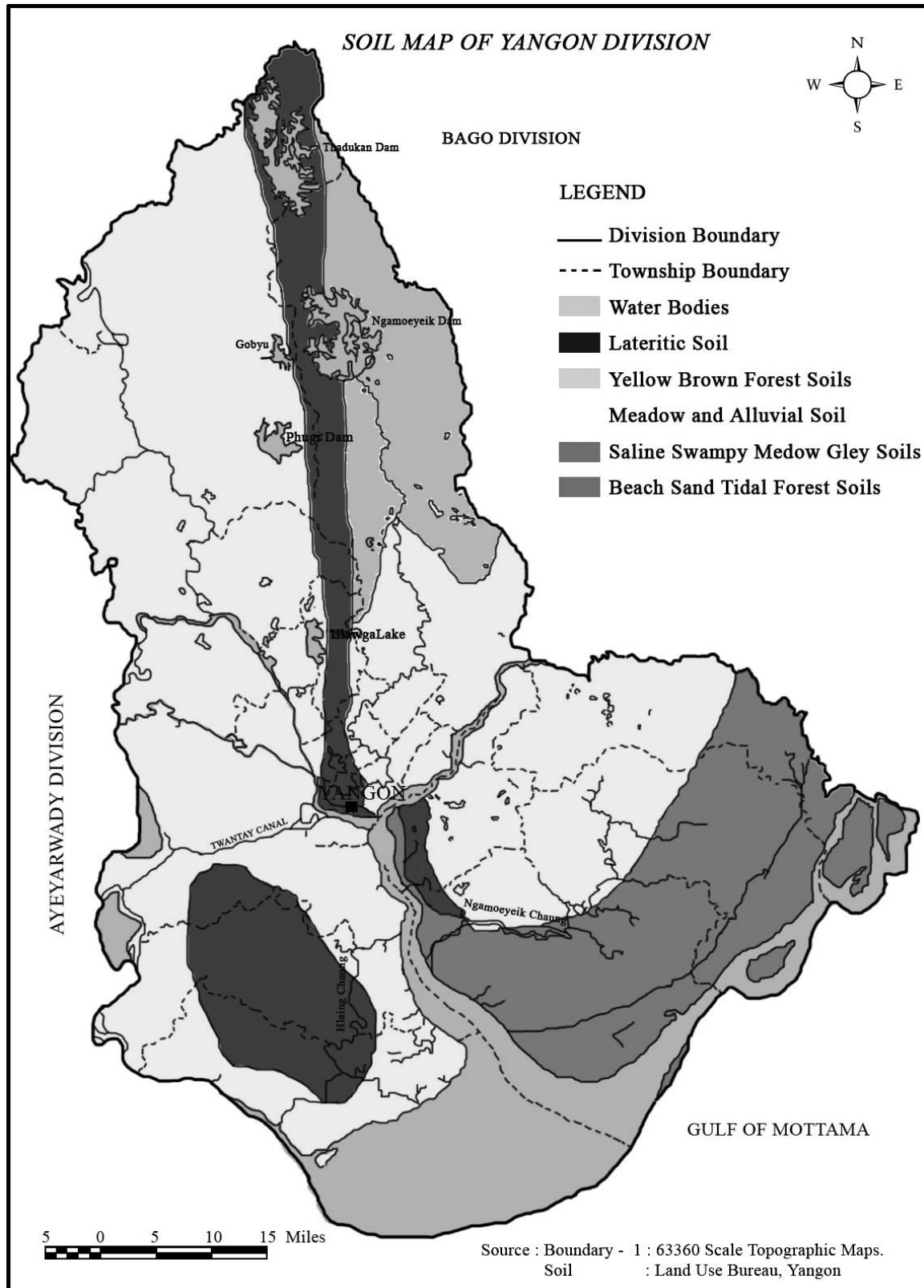


Figure 4-2 Soil map of Yangon (Source: Land use of Bureau of Yangon)

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4.2.5. Hydrogeology

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

Groundwater: Groundwater availability is generally based on the distribution of permeable and relatively impermeable rocks. The nature of openings in the rocks determines permeability of rocks. Based on local geological considerations, potential groundwater source of Yangon can be roughly divided into two sub regions, namely the low potential area and high potential area. Low potential areas are areas with those rock units of Hlawga Shale, Thadugan Sandstones and Basepet Alternation of upper Pegu Group (Miocene epoch) and Danyingon Clays of Irrawaddy rocks. These rocks and formations are a dense, massive and consolidated nature and have impervious characteristic. High potential areas are underlain by Pliocene Series and recent Formations. High potential area covers approximately 85 percent of the Yangon city including Pabedan. Stand pipe piezometers were installed at a depth of up to 30 m from the existing ground level while a pumping well was installed upon completion of the soil investigation works. Based on the results recorded up to the 8th of December 2012, stabilized groundwater level was observed to range between 0.49 m MSL to -1.81 m MSL4.

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

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

4.2.6. Climate and Meteorology

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

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Rainfall and Relative Humidity: The climate of Myanmar follows a typical monsoon pattern. Historically, the average annual mean rainfall for Yangon is 2,681 mm with the annual average rainy days of 129.3 days. During the course of 2013, the Department of Meteorology and Hydrology (Myanmar) reported an annual precipitation of approximately 2,700 mm. The month with the most precipitation was in July. The relative humidity was generally higher from May to October 2013. The dry season occurs from November to April. Based on the historical weather for the last twelve months in Yangon, no precipitation was observed in December 2012, February 2013 and March 2013. The least humid month of the last 12 months was February 2013 with an average daily low humidity of 34%, and the most humid month was September with an average daily high humidity of 80%.

The proposed project is located at North Okkalapa Industrial Zone, North Okkalapa Township and Yangon Region. The climate condition of North Okkalapa Township in which the project lies is the dry season, starts in December and ends in March. The raining season starts in June and ends in September and the cold season follow with the cooler, drier months of October to January. The highest temperature ranging 41°C and low range 24°C reference from Township Meteorology data, Regional Data of North Okkalapa Township. 2015 to 2018 Yearly data of rainfall and temperature is presented in Table 4-1. The weather condition during 25 September 2019 shows the average temperature of 31.73°C while the average humidity is 52.8 percent Table 4-2. ^[1]

Table 4-1 Annual rainfall and temperature

Year	Rainfall		Temperature	
	Raining day	Rainfall value	Summer season Max (°C)	Winter season Min (°C)
2015	80	183	34	24
2016	92	189	41	25
2017	86	188	39	26
2018	16	104	32	24

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

Table 4-2 Relative humidity and temperature measure at factory

Date and Time	Description	Result value	Environmental parameter air station guideline
25 September 2019 (8:00 am to 4:00 pm)	Relative Humidity RH %	52.8(%)	Present condition
	Temperature	31.73°C	Present condition

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

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

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

4.2.7. Air Quality

To determine the existing baseline ambient air quality status within the project site on 25, September 2019, 8-hours of working period air pollutants level, which include dust (PM₁₀ and PM_{2.5}) were measured at the selected site using the HOLDPEAK HP-5800D air monitoring station. To reveal the existing status of baseline air quality, the average ambient air qualities measured were compared with National Environmental Quality (Emission) Guideline and international ambient air quality standard (NAAQS, ACGIH) guidelines. The measurement location point is situated at latitude 16°53'23.16"N and longitude 96°9'21.87"E.

It was observed that particulate matter PM₁₀ is within the National Environmental Quality (Emission) Guideline but particulate matter PM_{2.5} is exceeding the acceptable level National Environmental Quality (Emission) Guideline.^[4]

Table 4-3 Observed air quality results

Parameters	Observed value	Guideline value	Unit	Organization	Period
PM ₁₀	45.7	50	µg/m ³	NEQG	24 hrs
PM _{2.5}	36.4	25	µg/m ³	NEQG	24 hrs

NEQ = National Environmental Quality (Emission) Guideline



Figure 4-3 Air Quality Measurement Photos

4.2.8. Noise

The Noise level was measured by using Digital Sound Level Meter for working hours on 25 September 2019. The average noise level in the project site area is presented in Table 4-4 compared with NEQ guideline. However, according to the Noise source monitoring at operation area (inside the production sector) of noise level is exceeding the acceptable level of National Environmental Quality

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(Emission) Guideline because of the used of generators and vehicle movements in the factory. According to the monitoring results, Myanmar Sakichi Limited the noise level is higher a bit than the NEQ guideline. Therefore, the factory must use the ear protection to all labours. In this way can reduce the noise level.^[4]

Table 4-4 Noise level measurement result

Date and Time	Location	GPS value	Result value	NEQ Guideline
25.9.2019 (1:00 to 4:00)	Production area	16°53'23.16"N 96° 9'21.87"E	76.183	70 dBA

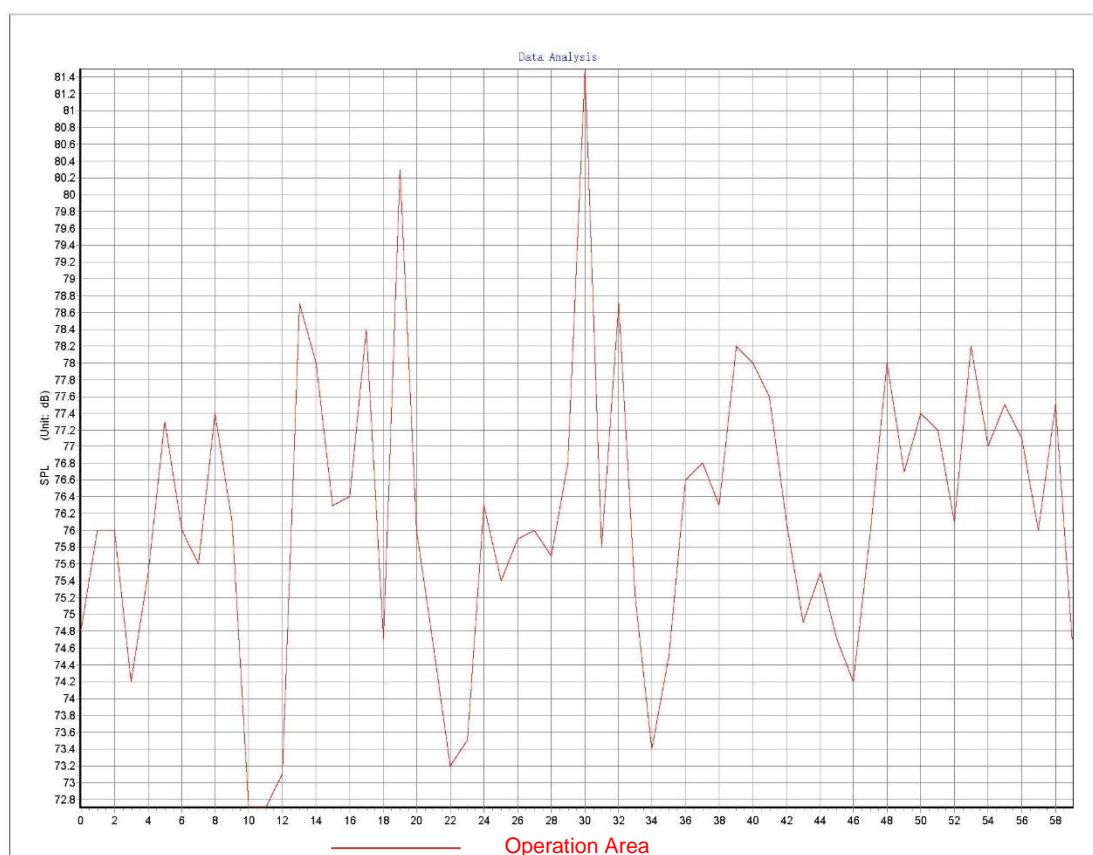
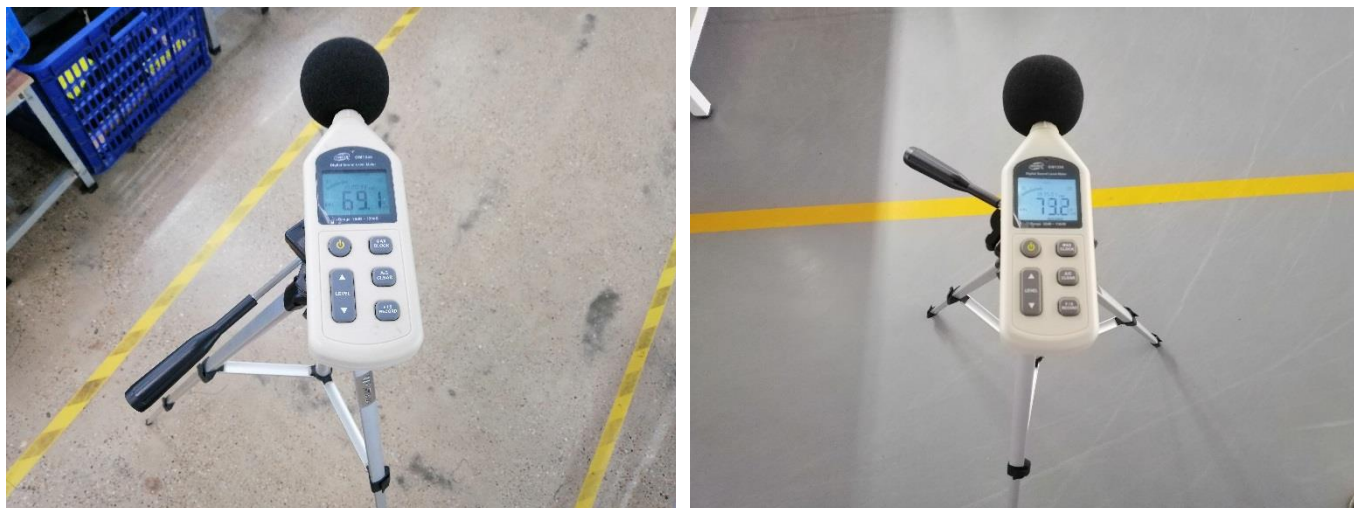


Figure 4-4 Noise level result graph

Environmental Management Plan**Figure 4-5 Noise Level Measurement Photo****4.2.9. Light**

Activities of the workers in the garment factory are highly dependent on the quality of light. Therefore, the consultant conducted the light measurement in the garment factory is presented in Table 4-6. The illustrates the recommended illumination and limiting glare index applicable to typical works (fairly severe to very severe tasks) in garments factory is provided in Table 4-5.

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

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

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

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

Source: Koenigsberger, et al. 1975

Environmental Management Plan**Figure 4-6 Light quality measurement photo****Table 4-6 Result of light measurement in Myanmar Sakichi Garment limited**

No	Location	Measure value (Lux)	Standard*
1	Curing area	625	1300
2	Sewing area	322	600
3	Quality control	778	600
4	Ironing area	362	600
5	Packing area	387	600
6	Drying room	189	500

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

According to the monitoring results, Myanmar Sakichi Garment limited light level is a little bit higher than the lux level (Koenigsberger, et al. 1975) that's why some places need to reduce the light level and must put on the electricity bulb more over the higher places. On the other hand, some places are a bit lower than the lux level that is why which need to change like a more powerful light bulb in that light level lower places. In these ways can adjust the light pollution of this factory.

4.3. BIOLOGICAL COMPONENT

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

4.4. SOCIO-ECONOMIC COMPONENT**4.4.1. Population**

Myanmar Sakichi Garment Limited is located across North Okkalapa Township in Yangon Region. In March 2018, the population of North Okkalapa Township is about 285,848 people as present in Table 4-7. ^[1]

Environmental Management Plan**Table 4-7 Population of Males and Females at NorthOkklapa Township (2017)**

Item	Older 18 year			Younger 18 year			Total		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Urban	88633	103116	191749	47280	46819	94099	135913	149935	285848
rural	-	-	-	-	-	-	-	-	-
Total	88633	103116	191749	47280	46819	94099	135913	149935	285848

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

4.4.2. Religion

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

Table 4-8 Religion in North Okkalapa Township (2017)

Township	Buddhist	Christian	Hindu	Muslim	Other	Total
North Okkalapa	272468	4499	2562	5873	449	285848

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

4.4.3. Local Economy

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

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

4.4.4. Public Infrastructure and Access**4.4.4.1. Communication and Transportation**

Major transportation route in North Okkalapa Township are railway, airport, and car road as presented in Table 4-9. ^[1]

Environmental Management Plan**Table 4-9 Transportation route**

Categories	Township		Miles
	From	to	
Train	Tan Dar Lay station	Way Bar Gi Station	4
Bus line (15,16,17,18,19,36,64) City Bus	North Okkalapa	Downtown area	

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

4.4.4.2. Electricity

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

4.4.4.3. Education

Location of major schools were situated i.e., basic education primary school (B.E.P.S.), basic education middle school (B.E.M.S), basic education high school (B.E.H.S) in the North Okkalapa Township. The name and the located village tract/ ward of schools are described in Table 4-10. ^[1]

Environmental Management Plan**Table 4-10 List of major school in North OkkalapaTownship**

No.	Name of School	Location
1	University of Medicine (2)	Sa-Quarter
2	University of Pharmacy	Way Bar Gi
3	BEHS (1)	No.13. Sa-Thu Nandar Road
4	BEHS (2)	May Yu Road
5	BEHS (3)	Thu Da Mar Road
6	BEHS (4)	No.2, Thu Zi Tar Road
7	BEHS (5)	Thu Nandar Road
8	BEHS (6)	No.14, Shwe Pauk Kan MyoThit
9	BEHS(7)	Palae Road
10	BEMS (Branch) (9)	Sa-Quarter
11	BEMS (Branch) (3)	L-Quarter
12	BEMS (Branch) (12)	No.17, Shwe Pauk Kan Myo Thit
13	BEMS (Branch) (10)	No.15, Shwe Pauk Kan Myo Thit
14	BEMS (Branch) (1)	Ga Nge-Quarter
15	BEMS (Branch) (4)	Ga Gyi-Quarter
16	BEMS (Branch) (8)	Za Myin Zwe-Quarter
17	BEMS (Branch) (2)	Hta Wun Pal-Quarter
18	BEMS (Branch) (7)	Hta Wun Pal-Quarter
19	BEMS (Branch) (6)	One-Quarter
20	BEMS (Branch) (5)	Two-Quarter
21	BEMS (Branch) (11)	Hta Wun Pal-Quarter
22	BEPS (1 to 6)	North Okkalapa

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

4.4.4.4. Health Status

The diseases of high prevalence reported in 2018 are Tuberculosis (TB), followed by Acute Respiratory Infection (ARI), Diarrhea, TB and snakebites. With reference to the Township Health Profile 2018 of North OkkalapaTownship, no accidental work injuries reported to the township hospital in 2018. The common diseases are shown in Table 4-11.

Table 4-11 Common Diseases in the North OkkalapaTownship

Disease	Morbidity	Mortality
Malaria (Per 100000P)	-	-
Dysentery	116	-
Diarrhea (Per 100000P)	14	-
TB (Sputum+)(Per 10000P)	240	-
Hepatitis	-	-

Environmental Management Plan**Table 4-12 Lists of hospital in the North Okkalapa Township**

Hospital Name	Beds/Services	Responsible
Township Hospital	800	Government
Way Bar Gi Hospital	200	Government
OSC	100	Private
Shwe La Min	34	Private
La Ga Bar	32	Private
Thu kha Kyal	16	Private
Thet Lon	20	Private
Chan Thar	26	Private

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

4.5. CULTURAL AND VISUAL COMPONENTS

North Okkalapa Township is growing into a busy and vibrant community. The population fluctuates; however, there has been steady growth over the last decade. It tends to be a stopover on a journey rather than a destination. It has a number of sites that are interesting; however, there is no main attraction. Visitors to the town are generally visiting for work, investment or family reasons. ^[1]

5. ENVIRONMENTAL IMPACT AND MITIGATION MEASURES

5.1. METHODOLOGY FOR THE ASSESSMENTS

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

The following methodology has been applied to assess the environmental impacts of the factory mainly on air, water, land, biodiversity, including human beings. Each source of impact has been assessed by four parameters, magnitude, duration, extent and probability and each assess point have 5 scales as mentioned in Table 5-1.

Table 5-1 Impact assessment parameters and its scale

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

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

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

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

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

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5.2. IMPACT IDENTIFICATION

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

5.2.1. Positive Impact

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

5.2.2. Negative Impact

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

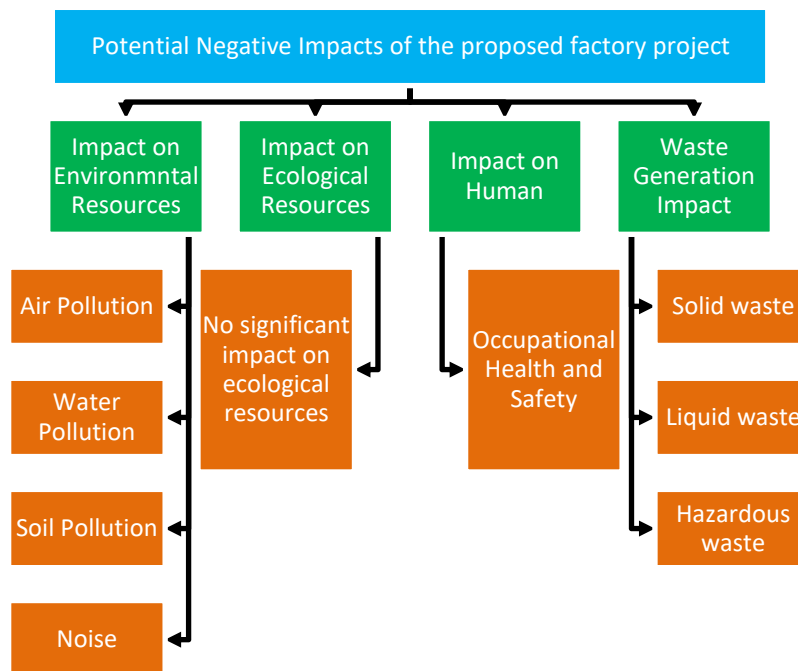


Figure 5-1 Potential negative impact affect from proposed factory project

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5.3. POTENTIAL ENVIRONMENTAL IMPACT DURING CONSTRUCTION & DECOMMISSIONING PHASE

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

Decommissioning phase: The proposed duration of the investment shall be 30 years. The term of the Lease shall be initial 30 years commencing from the date of signing of the Lease Agreement between Local owner and Myanmar Sakichi Garment Limited. for proposed project site for 0.344 acres (1,392.1186 sq m). The project of land and building will be restitution to land owner after close the operation. Therefore, the assessment study cannot be need for environmental impact assessment during decommission phase.

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

5.4. PROJECT ACTIVITIES AND ITS SIGNIFICANT IMPACTS

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

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

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

Categories	Source of Impact	Significant of Potential Impacts					Impact Significance	Reason	Mitigation Measure
		M	D	E	P	SP			
Impact on Environmental Resource									
Air	<ul style="list-style-type: none">Dust and GHGs emission from vehicles used for transporting raw materials and final productsEmission of smoke from emergency diesel generator and vehicle movement	2	4	1	3	21	Low	<ul style="list-style-type: none">Air pollution in atmosphere.Inhaling them can increase the chance you'll have health problems.People with heart or lung disease, older adults and children are at greater risk from air pollution.	<ul style="list-style-type: none">To control air pollution, the vehicles, generators and machineries have to check and maintain regularly.Ensuring vehicles, compressor and generator are well maintained.
Soil	<ul style="list-style-type: none">Engine oil leaks, spills at diesel storage and during fuel refueling.	1	4	1	1	6	Very Low (Insignificant)	<ul style="list-style-type: none">The factory compound area was paved with concrete and hence, contamination due to the oil spillage at this area is insignificant.	<ul style="list-style-type: none">No Mitigation Measure
Noise and Vibration	<ul style="list-style-type: none">Generating noise from the production machinery	2	4	2	2	16	Low	<ul style="list-style-type: none">The factory not operate heavy machinerythe major noise source of CMP basic operation activities	<ul style="list-style-type: none">➤ Should be build individual room like as generator room,➤ Low noise equipment should be used➤ Must provide the noise covering equipment or personal protective

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								such as cutting, stitching/finishing and packaging by respective machines. • There is insignificant impact on surrounding environment.	equipment (PPE)
Impact on Ecological Resources									
Flora and fauna on terrestrial and aquatic life	Operation of the garment factory	1	4	1	1	6	Very Low Insignificant	• Not Significant Impact on Ecological Resources	• No Mitigation Measure
Impact on Human									
Fire	<ul style="list-style-type: none"> Poor electrical installations Waste disposed area raw materials 	4	4	1	4	36	Moderate	<ul style="list-style-type: none"> Serious damage to property and even injury and death 	<ul style="list-style-type: none"> To provide fire extinguishers, fire hose reels and fire hydrants on the walls of the factory for fire emergency cases. Regular inspection for existing firefighting equipment must be done. In case of fire emergency, water storage tank for fire frightening. The emergency fire alarms are installed at the factory for alerting the workers in case of fire. The main entrances and route for emergency cases of the factory must not be blocked with materials or machines for fire emergency cases.

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Occupational Safety	<ul style="list-style-type: none"> Accidental cases cause by operating machines. Unloading, mixing, cutting, pressing and packaging activities. Accidental cases of thermic fluid heater 	3	4	1	4	32	Moderate	<ul style="list-style-type: none"> Accident in workplace (physical injuries or even death) can occur during operation. 	<ul style="list-style-type: none"> First aid training, safety training, firefighting training or other essential training for machinery handling must be provided for emergency cases of workers. According to the observed light intensity values, the proponent provides sufficient lighting for workers for safe working and reducing optical problems of the workers. Personal Protective Equipment (PPEs) like earmuffs, safety gloves, helmets and goggles are provided for each department. To prevent electric shock hazards, electrical maintenance staff (handyman) is to be assigned to do regular inspections and take preventive measures.
Health	<ul style="list-style-type: none"> Influx of people Noise from the generating of the emergency generators 	2	4	1	2	14	Very Low Insignificance	<ul style="list-style-type: none"> Change in demographic structure, new diseases form immigrant workers To cause a range of health problems ranging from stress, poor concentration, productivity losses in the workplace, and communication difficulties and fatigue 	<ul style="list-style-type: none"> Manage the drainage systems of the factory to prevent health risk of the workers. The maximum allowable noise level for workers is 90dB(A) for 8hours exposure a day. Thus, adequate protective noise impact measures in the form of ear muffs/ear plugs to the workers working in high noise areas.

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									from lack of sleep, to more serious issues	
Waste Generation Impact										
Solid Waste	<ul style="list-style-type: none">Residual pieces of fabric scraps from the production linesWaste from packaging materialsWaste from kitchen, dormitory and office.	3	4	1	4	32	Moderate	<ul style="list-style-type: none">Surrounding environmental pollution and soil contamination	<ul style="list-style-type: none">Provides separate garbage bins at each building.All of the solid wastes will be collected separately in garbage based on their types and stored in relevant separated waste storage areaFinal wastes should be disposed by using YCDC's service.	
Liquid Waste	<ul style="list-style-type: none">Septic system and sewage.Domestic liquid waste disposal from office, kitchen and dormitory.	2	4	2	2	16	Low	<ul style="list-style-type: none">Contamination of soil, surface water, ground water	<ul style="list-style-type: none">Regular inspection and cleaning, oil traps, septic tank and adequate covers for all storage and waste disposal areas can decrease these contaminations.	
Hazardous Waste	<ul style="list-style-type: none">Used oil and lubricant discharged from the maintenance of vehicles and machines.	2	4	1	2	14	Very Low Insignificance	<ul style="list-style-type: none">Reduce the risk of contamination from fuels, oils and hazardous wastesResponse effectively to incident and accident	<ul style="list-style-type: none">Proper inspection and maintenance in storage of hazardous waste.Dispose of containers in accordance with occupational health, safety and environmental requirements.The hazardous wastes are transported by specially licensed carriers and disposed in a licensed faculty (eg., DOWA and YCDC)	

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The assessment of each impact is based on consideration of the magnitude, duration, extent and probability of activities, which are going to be carried out during operation phases. In operation phase, there are 3 moderate significance impact on environment and human (Fire, occupational health and safety and hazardous waste). 2 low significant impacts on environment and human (air and liquid waste). 4 very low significant impact on environment and human (water pollution, noise and vibration, health and hazardous waste). In decommissioning phase 2 very low significant impact on environment and human (waste disposal and hazardous waste). 5 low significant impacts on environmental and human (air, water pollution, soil contamination, noise and vibration and occupational health and safety). Significance impacts on environmental and human and detail impact assessment for operation phases and decommissioning can be seen in above tables. All of the impacts during operation phases and decommissioning phase can be minimized by using mitigation measures and implementing Environmental Management Plan.

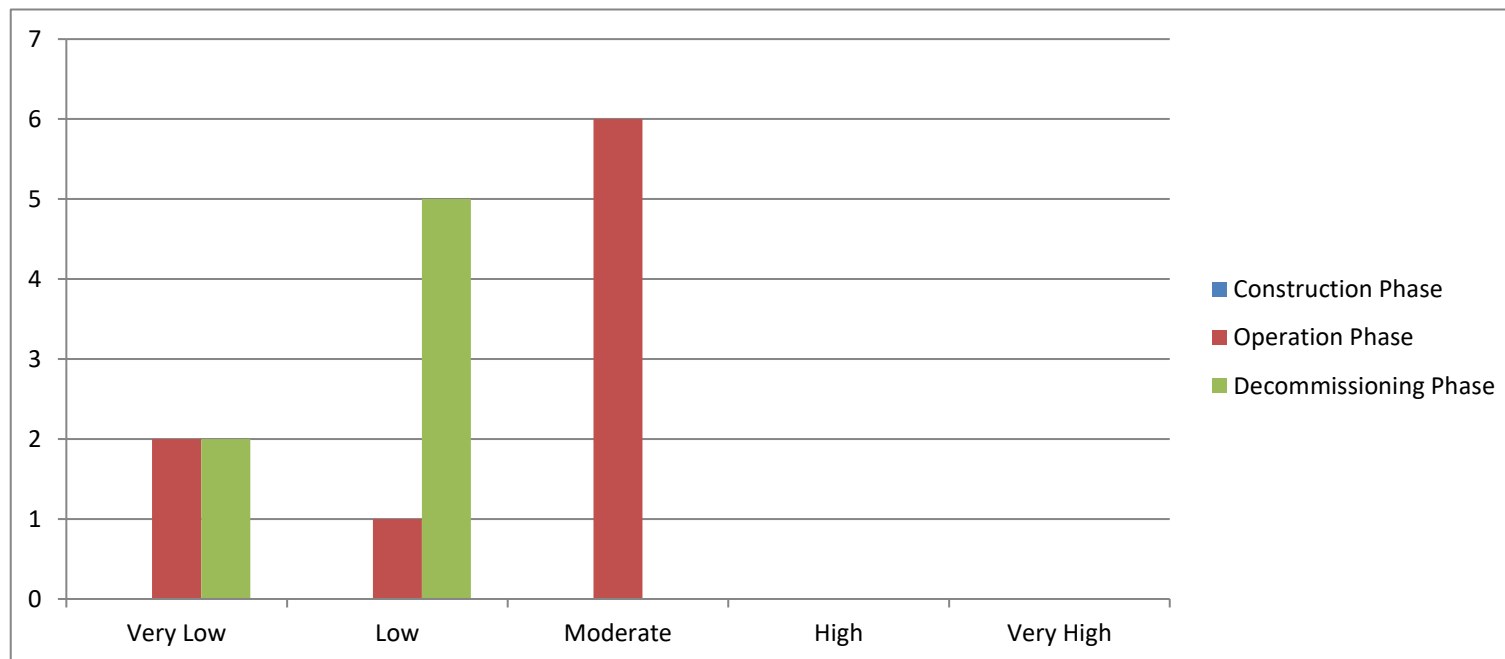


Figure 5-2 Impact significance of the proposed factory project

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6. ENVIRONMENTAL MANAGEMENT ACTION

The EMP for Myanmar Sakichi Garment Limited has been prepared to address potential issues based upon discussion with factory management, workers, local community view, stakeholder consultation and the site visit. The following environmental impact issues which require environmental management plans based upon the potential impact's activities of Myanmar Sakichi Garment Limited are as follows:

6.1. AIR POLLUTION/ DUST MANAGEMENT PLAN

Objective	<ul style="list-style-type: none"> ➤ To minimize the adverse impact to air quality caused by stack gas emission from generator and also dust management generated from vehicular movement. ➤ To comply with relevant government rules
Relevant Government Law and Rule	<ul style="list-style-type: none"> ➤ National Environmental Quality (Emission) Guideline 2015, ➤ Motor Vehicles Act (2015),
Time Frame	➤ Entire life spans of proposed project operation
Management Action	<ul style="list-style-type: none"> ➤ Must be plant around the proposed project to reduce carbon emission ➤ Should be prohibited burning of waste material at the proposed project site ➤ Must be control air pollution, the vehicles, generators and machineries have to check and maintain regularly. ➤ The factory should use chimney for generator through which the flue gas is emitted for reducing the impact of stack emission on environment. ➤ Must be ensuring vehicles, compressor and generator are well maintained.
Monitoring and Reporting	Frequency Biannually
	Monitoring Point Indoor and Outdoor of proposed project
	Parameters PM _{2.5} , PM ₁₀ , SO ₂ , NO ₂ , CO
Estimated Cost	1000000 Kyats per year
Responsible Person	Management of the proposed factory; <ul style="list-style-type: none"> ▪ Head of maintenance: Total implementation of above of air pollution management plan ▪ Production manager: Air quality in the production area is good enough ▪ Manager: To hire organization/ independent third-party testing air

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	<p>quality</p> <ul style="list-style-type: none"> ▪ EHS officer: Monitor the hygiene of ambient air quality in surrounding of the factory
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6.2. NOISE MANAGEMENT PLAN

Objective	➤ To maintain low noise exposures, such that human health and well-being are protected. The specific objectives of noise management are to develop criteria for the maximum safe noise exposure levels, and to promote noise assessment and control as part of environmental health programmes.
Relevant Government Law and Rule	➤ National Environmental Quality (Emission) Guideline 2015
Time Frame	➤ Throughout the project life
Management Action	<ul style="list-style-type: none"> ➤ Building noise insulated generator room and ensure satisfactory maintenance of relevant equipment ➤ Impose speed limit to track and vehicles at the transportation route. ➤ Provide sufficient personal protective equipment (PPE) at the work place ➤ All the related personnel will be provided proper training about the relevant issues and ensure PPE wear during working in noisy area.
Monitoring and Reporting	Frequency Biannually
	Monitoring Point Two points in operation area (especially cutting and sewing)
	Parameters Sound Decibel
Estimated Cost	500000 Kyats per year
Responsible Person	HSE Manager or Environmental Management Team of Myanmar Sakichi Garment Limited.

6.3. FIRE MANAGEMENT PLAN

Objective	➤ To ensure that fire control practices are implemented on site to minimise the risk of fire from site operations and bush fires
Relevant Government Law and Rule	➤ Myanmar Fire Brigade Law 2015
Time Frame	➤ Entire life spans of proposed project operation
Management Action	➤ Must be provide fire extinguishers, fire hose reels and fire hydrants

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	<p>on the walls of the factory for fire emergency cases.</p> <ul style="list-style-type: none"> ➤ Must be indicated the emergency exit and assembly point in public area. ➤ Regular inspection for existing firefighting equipment must be done. In case of fire emergency, water storage tank for fire frightening. ➤ The emergency fire alarms are installed at the factory for alerting the workers in case of fire. ➤ The main entrances and route for emergency cases of the factory must not be blocked with materials or machines for fire emergency cases.
Monitoring and Reporting	To check monthly Visual inspection, Firefighting equipment (fire extinguish, firefighting hose, portable fire pumps, fire hose reels, fire monitor and firefighting nozzles)
Estimated Cost	1200000 Kyats per year
Responsible Person	HSE Manager, Operation Manager or Environmental Management Team of Myanmar Sakichi Garment Limited.

6.4. OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT PLAN

Objective	<ul style="list-style-type: none"> ➤ To provide a broad framework for improving standards of workplace health and safety to reduce work-related injury and illness.
Relevant Government Law and Rule	<ul style="list-style-type: none"> ➤ Public Health Law (1972), Prevention and Control of Communicable Diseases Law 1995 (Amendment 2011), Occupational Safety and Health Law (2019)
Time Frame	<ul style="list-style-type: none"> ➤ Entire life spans of proposed project
Management Action	<ul style="list-style-type: none"> ➤ First aid training, safety training, firefighting training or other essential training for machinery handling must be provided for emergency cases of workers. ➤ According to the observed light intensity values, the proponent provides sufficient lighting for workers for safe working and reducing optical problems of the workers. ➤ Personal Protective Equipment (PPE) like earmuffs, safety gloves, helmets and goggles are provided for each department. ➤ To prevent electric shock hazards, electrical maintenance staff (handyman) is to be assigned to do regular inspections and take preventive measures. ➤ Manage the drainage systems of the factory to prevent health risk of the workers. ➤ The maximum allowable noise level for workers is 90dB(A) for 8hours exposure a day. Thus, adequate protective noise impact measures in

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	the form of ear muffs/ear plugs to the workers working in high noise areas.
Monitoring and Reporting	<ul style="list-style-type: none"> ➤ Weekly check fire extinguishers and water hydrant in position ➤ Daily inspect that all fire exist are open ➤ Servicing fire extinguisher and records accidents
Estimated Cost	1000000 Kyats per year
Responsible Person	HSE Manager, Operation Manager or Environmental Management Team of Myanmar Sakichi Garment Limited.

6.5. SOLID WASTE MANAGEMENT PLAN

Objective	<ul style="list-style-type: none"> ➤ To assess the activities involved for the proposed and determine the type, nature and estimated volumes of waste to be generated ➤ To identify any potential environmental impacts from the generation of waste at the site
Relevant Government Law and Rule	<ul style="list-style-type: none"> ➤ Yangon City Development Committee Law (2018), National Waste Management Strategy and Action Plan (Draft 2018)
Time Frame	<ul style="list-style-type: none"> ➤ Entire life spans of proposed project
Management Action	<ul style="list-style-type: none"> ➤ Must be provides separate garbage bins at each building. ➤ All of the solid wastes will be collected separately in garbage based on their types and stored in relevant separated waste storage area ➤ Final wastes should be disposed by using YCDC's service.
Monitoring and Reporting	<ul style="list-style-type: none"> ➤ Daily waste has to be collected and handover to YCDC waste collector ➤ The inventory record of waste disposal will be maintained as proof for proper management as designed
Estimated Cost	50000 Kyats per month
Responsible Person	Manager (HR) <ul style="list-style-type: none"> ▪ Responsible for overall site cleanliness and waste management ▪ Regular waste collection to minimize excessive waste storage

6.6. HAZARDOUS WASTE MANAGEMENT PLAN

Objective	<ul style="list-style-type: none"> ➤ To avoid environmental pollution and adverse health effects due to its improper handing & disposal.
Relevant Government Law and	<ul style="list-style-type: none"> ➤ Yangon City Development Committee Law (2018), Explosive Ordnance Disposal Law (2018)

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Rule	
Time Frame	➤ Entire life spans of proposed project
Management Action	<ul style="list-style-type: none"> ➤ Proper inspection and maintenance in storage of hazardous waste. ➤ Dispose of containers in accordance with occupational health, safety and environmental requirements. ➤ The hazardous wastes are transported by specially licensed carriers and disposed in a licensed facility (e.g. DOWA and YCDC)
Monitoring and Reporting	Any hazardous materials purchased should include a Material Safety Data Sheet (MSDS), otherwise known as a Safety Data Sheet (SDS) or Product Safety Data Sheet (PSDS). By mandate of the World Health Organization's Inter-Organization Programme for the Sound Management of Chemicals (IOMC), all manufacturers of hazardous materials are required to provide a MSDS so that end users can treat the materials properly.
Estimated Cost	1000000 Kyats per year
Responsible Person	HSE Manager or Environmental Management Team of Myanmar Sakichi Garment Limited.

6.7. ENERGY MANAGEMENT PLAN

Objectives:	➤ To improve energy efficiency, reduce cost, optimize capital investment, reduce environmental and greenhouse gas emissions, and conserve natural resources
Relevant government law and rule	➤ National Energy Management Committee (Myanmar Energy Master Plan 2015)
Time Frame	Once in a year throughout the factory life
Management Action	<ul style="list-style-type: none"> ➤ Installation of timers and thermostats to control heating and cooling ➤ Energy saving light installed in different area of the factory for saving energy ➤ Used of energy saving devices must be installed ➤ Ensure that good housekeeping measures such as turning off equipment and lights when not in use
Monitoring & Reporting	Conduct annual energy efficiency of audit to find out the scope for energy saving
Estimated cost	Approximately 1000000 Kyats per year
Responsibility	<p>Manager</p> <ul style="list-style-type: none"> ➤ To arrange energy, audit technical personnel ➤ To monitor and record electricity consumption, other related energy issues and take necessary actions if any problem arises

6.8. EMERGENCY RESPONSE AND DISASTER MANAGEMENT PLAN

Objectives:	➤ To reduce the harmful effects of all hazards, including disasters. The World
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	Health Organization defines an emergency as the state in which normal procedures are interrupted, and immediate measures (management) need to be taken to prevent it from becoming a disaster, which is even harder to recover from.
Relevant government law and rule	➤ The Employment and Skill Development Law (August 2013), ILO guide to Myanmar Labour Law (2017)
Time Frame	➤ Entire life spans of the factory operation
Management Action	<ul style="list-style-type: none"> ➤ The factory management has taken proper measures to handle any emergency situation like fire, earthquake, flood and storm ➤ Provision and inspection of firefighting equipment and fire hydrant system in all the sections ➤ A detail evaluation plan (fire exist, emergency exit door, etc.) is established and communicated with workers ➤ Periodic inspection of safety relief valve provided with pressure vessels and equipment, preventive maintenance; aware the workers about electric shock by necessary training. ➤ Regular fire drill operation is conducted ➤ Workers are informed about what to do in earthquake like stay in a safe place such as under table of desk, not to try move outside during earthquake, workers who will be outside during earthquake shall remain stay out of the building, trees, lump post, etc. Other relevant safety instruction of emergency situation it informed to workers by training ➤ Workers are aware of dangers from physical hazards such as obstacles covered by floodwater (storm debris, drainage opening, ground erosion) and from displaced reptiles (Snake) or other animals. ➤ A medical team has been prepared for primary treatment (First Aid) ➤ Prepare an emergency contact directory consisting contact numbers of nearest fire service, local police station, hospitals, etc. and display it in a place that everybody can see it easy. ➤ Build a safety committee which from firefighting team, rescue team. The committee arrange a meeting every month to discuss about safety management ➤ Ensure proper training of the employees about the disaster management, fire safety as well as occupational health and safety
Monitoring & Reporting	<p>Weekly check fire extinguishers and water hydrant in position</p> <p>Daily inspect that all fire exist are open</p> <p>Servicing fire extinguisher and records accidents,</p>
Estimated cost	Approximately 1500000 Kyats per year
Responsibility	<p>Manager and EHS officer</p> <ul style="list-style-type: none"> ➤ Arrange firefighting training after every 3 months ➤ Responsible for fire control and response ➤ Monitoring daily danger warning and bans

6.9. ENVIRONMENTAL MONITORING SCHEDULE AND REPORTING

The EMoP cell members responsible may conduct daily, weekly or monthly general inspections of the project are and facilities. The objective is to identify non-compliance to EMoP is provided the environmental monitoring schedule for Myanmar Sakichi Garment Limited. The proposed

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factory submits monitoring report to the Ministry not less frequently than every six (6) months, as provided in a schedule in the EMP,

Table 6-1 Environmental Monitoring Process

Issues	Parameter	Frequency	Area to be monitored	Monitoring cost	Responsible Organization
Operation Phase					
Common	Monitoring of mitigation measures	Yearly (3 years after operation)	The project	2500000 Kyats	Environmental Management Team's Myanmar Sakichi Garment Limited.
Air quality	SO ₂ , NO ₂ , CO, PM _{2.5} , PM ₁₀	Biannually monitoring and reporting to ECD (First 3 years after operation)	Outdoor and Indoor of proposed project	500000 Kyats	Environmental Management Team's Myanmar Sakichi Garment Limited.
Waste Generation	Solid waste, Liquid waste and Hazardous waste	weekly	Recycle house and waste house and at the factory office	100000 Kyats	Environmental Management Team's Myanmar Sakichi Garment Limited.
Fire Hazardous	Visual inspection, firefighting equipment	Monthly	At the factory	500000 Kyats	Environmental Management Team's Myanmar Sakichi Garment Limited.
Light intensity	Illuminance	Monthly	At the production line (especially cutting and QC)	50000 Kyats	Environmental Management Team's Myanmar Sakichi Garment Limited.
Decommissioning Phase					
Air quality	SO ₂ , NO ₂ , CO, PM _{2.5} , PM ₁₀	One time during this phase	One point in the production area	500000 Kyats	Land Owner
Noise	Noise level in decibel (dBA)	One time during this phase	One points in demolishing area	500000 Kyats	Land Owner
Rehabilitation	Recovering and Revegetation		All decommissioning area		Land Owner

6.10. CAPACITY BUILDING AND TRAINING PLAN

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

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

6.10.1. Assignment of Responsibilities

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

6.10.2. Emergency Procedures

Emergency procedures are operating instructions for employees to follow in emergency case







About work safety in the concerned processing, the management team should

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

6.10.3. Training for Emergencies

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

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

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

6.10.4. Fire Prevention and Protection

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

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

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

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

- Emergency plans

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- Alarm systems
- Portable fire extinguishers
- Fire Protection Equipment

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

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

6.10.5. Fire Protection Equipment

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

6.10.6. Fire Safety and Evacuation Plan

Fire Evacuation plans should include the following information

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

Fire Safety Plans should include the following information:

1. Procedure for reporting a fire or other emergency
2. Site plans indicating the following
 - The Occupancy assembly point
 - The locations of fire hydrants
 - The normal routes of fire department vehicles access
3. Floor Plans identifying the locations of the following
 - Exits

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- Primary evacuation routes
- Secondary evacuation routes
- Accessible egress routes
- Areas of refuge
- Exterior area for assisted rescue
- Manual fire alarm boxes
- Portable fire extinguishers
- Occupant-use hose stations
- Fire alarm annunciators and controls

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

Table 6-2 American National Fire Fighting Association (NFFA) Standards

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

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

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

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

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

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

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

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

6.10.7. Employee Information and Training

Employees must be informed about any operations in their work area where hazardous chemicals or materials are present. They must also be informed about the locations and availability of

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the hazard communication program, list of chemicals and MSDSs. Employees must receive training on the following:

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

6.10.8. Health and Safety Training Plan for Worker

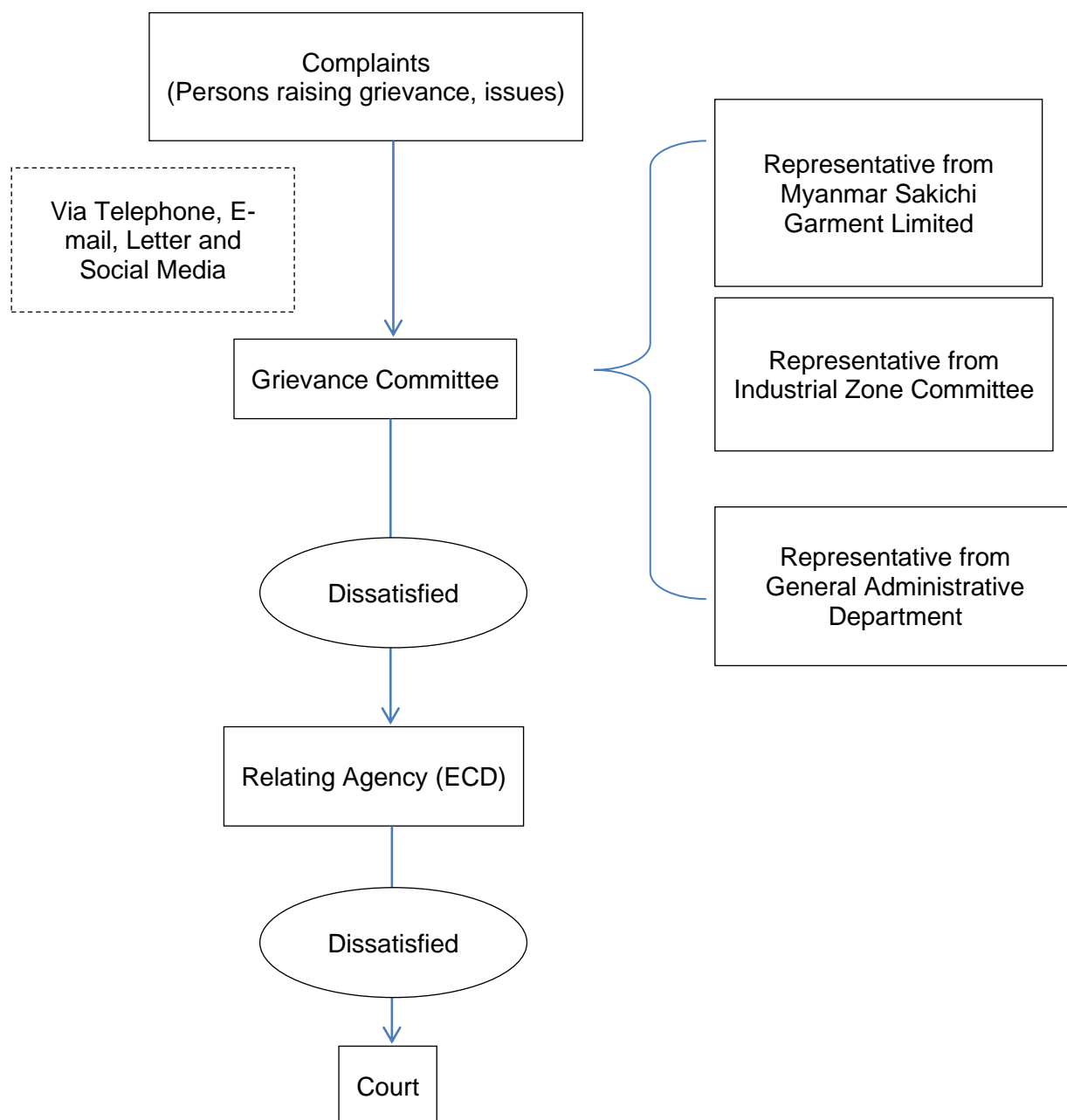
Health and Safety Training plan currently used and provided in Myanmar Sakichi Garment Limited to all employees and workers by trainings internally and externally. Specific trainings are recommended and conducted according to the health and safety guidelines to enhance worker's health and to prevent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

Table 6-3 Training Plan Used

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

6.11. GRIEVANCE REDRESS MECHANISM (GRM)

People who live near the project affected area or stakeholders can complain about the problems and impacts that they suffer; they can complain through Grievance Committee, which includes the responsible persons of Myanmar Sakichi Garment Limited representative from North Oakkalapa Industrial Zone and representative from General Administration Department (North Oakkalapa Township). Small issues will be solved at the Grievance Committee stage and other unsolved problems will be submitted to higher responsible authorities and finally the responsible person decided by the court in legal terms. The following diagram show steps of Grievance Redress Mechanism of Proposed Factory Project.

Environmental Management Plan**Figure 6-1 Grievance Redress Mechanism Flow Diagram****6.12. CORPORATE SOCIAL RESPONSIBILITY (CSR) PLAN**

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

Myanmar Sakichi Garment Limited has a plan to implement and donate 2 percent of the profit per year for Corporate Social Responsibility (CSR) and Employee Welfare Arrangement.

Table 6-4 CSR plan at Myanmar Sakichi Garment Limited

Area	Priority item	Contribution	Detail Targets
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		(%)	
Health	Healthcare for employees and their family	0.5 %	One of our main concerns is the well-being of our employees. We will contribute 0.5 % of our net profit for the healthcare which includes medical checkup for the employees and providing health education to our workers.
Education	Raising awareness education level and human right	0.5%	We will contribute 0.5 % of our net profit to the public school near the factory to be a part of creating the better community. We will also work together with the school to understand more about the needs and we will also ensure that our contributions will be used in the most effective and efficient way for the society.
Community development	Donation to local community	1 %	<p>Donate to local charities with a worthy cause</p> <p>Actively participate in community events</p> <p>Encourage staff to participate, and to form a community engagement team to actively support community events</p> <p>Embedding understanding and consciousness about human rights issues among the employees</p> <p>Development of sexual harassment and power harassment (workplace bullying & harassment) prevention efforts</p>

7. PUBLIC CONSULTATION

7.1. PUBLIC CONSULTATION PROCESS

This chapter presents results of public consultation and information disclosure conducted for the Myanmar Sakichi Garment Limited. Public participation can be considered as the required element of the EMP process. In this study various stakeholder 's participation was made.

Public consultation during preparation of EMP report was conducted on 27, November 2019, following the EIA procedure.

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

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

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

Public consultation carried out after the presentation on the project, followed by questions, answers and discussion. Mr. Saw Yan Naung presented EMP study and findings from Myanmar, after the presentation following question and answer section. Summary of public consultation meeting is presented. Figure 7-1 shown the consultation meeting photo. **(PCM attendant list and presentation power point slide are described in Appendix)**

Table 7-1 Summary of public consultation meeting

Time and Date	Wednesday, 27 November 2019 10:30-12:30
Venue	Sky Hotel, North Okkalapa Township, Yangon.
Agenda	Presentation on the Background Information of Project, Project Description, Impact Assessment, Environmental Mitigation Environmental Management Plan and Monitoring Plan Received and Answer from feedback of participants

7.2. RECOMMEND SUGGESTION AND COMMENT

After the presentation, the floor opened for questions and answers. There is no suggestion and comment for presentation and EMP draft report, because the project is sample manufacturing of brassieres and underwears on (CMP basic). In addition,

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

- To compliance with YCDC procedure for solid waste management and disposed process
- To implement the sufficient septic tank design for workers
- To provide the waste tank for waste water and some used oils

Environmental Management Plan

- To plant the some plants in this factory and
- To make when they wasted at that time to get a bail

Suggestion; Daw Shwe Yee Wint War Soe; Staff Officer (Yangon Environmental Conservation Department)

- Factory workers shall be aware for using the person protective equipment
- To provide long time care of medical checking for workers
- To provide the medicines for aliment and must be enough the medicines for injuries
- To provide the PPE to the employees who work in that factory and
- To provide the nurse who is not only reality nurse but also got the experience in concerning filed.



Environmental Management Plan



Figure 7-1 Public consultation meeting

8. CONCLUSION & RECOMMENDATION

8.1. CONCLUSION

Environmental Management Plan (EMP) has been prepared for Myanmar Sakichi Garment factory is located at Plot No.141.141(KA), Myay Taing Block No.(NGA), SatHmu LatHmu, North Okkalapa Township, Yangon region. The main objective of the study is focused specially on the required environmental management measures or creating environmentally friendly workplace. An EMP has been carried out for the factory according to the requirement of the proponent as it has been made for brassieres and underwear manufacturing factory.

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

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

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

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

8.2. RECOMMENDATION

This is recommended that;

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

Environmental Management Plan

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

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

9. REFERENCE

- [1] General Administrative Department (North Okkalapa Township), North Okkalapa Township Data (2018).
- [2] Hla Hla Aung, "Potential Seismicity of Yangon Region (Geological Approach), "Yangon Surface Displacement As Detected by Insar Time Series Analysis" July 2011.
- [3] Ministry of Natural Resources and Environmental Conservation (MONREC), "Environmental Impact Assessment Procedure" December 2015.
- [4] Ministry of Natural Resources and Environmental Conservation (MONREC), "National Environmental Quality (Emission) Guidelines" December 2015.

APPENDIX A

Company Document's Myanmar Sakichi Garment Limited



THE REPUBLIC OF THE UNION OF MYANMAR
YANGON REGION INVESTMENT COMMITTEE
ENDORSEMENT

ment No. YGN-155/2019

Date 21 February 2019



This endorsement is issued by the Yangon Region Investment Committee according to the section 25, sub-section (d) of the Myanmar Investment Law-

- (1) Name of Investor MR. MITSUHIRO KITSUWA
- (2) Citizenship JAPANESE
- (3) Residence Address 5F 2-2-3, EDGE SHINSAIEASHI, NISHI-SHINSAIBASHI, CHUO-KU, OSAKA, JAPAN
- (4) Name and Address of Principal Organization OFFICE SAKICHI CO., LTD, 3-16-18-509, NANBANAKA, NANIWAKU, OSAKA, JAPAN
- (5) Place of Incorporation JAPAN
- (6) Type of business MANUFACTURING OF BRASSIERES AND UNDERWEARS ON CMP BASIS
- (7) Place(s) of investment Project PLOT NO. 141, 141(KA), MYAY TAING BLOCK NO.(NGA), SETHMU LATHMU, NORTH OKKALAPA TOWNSHIP, YANGON REGION
- (8) Amount of Foreign Capital US\$ 0.327 MILLION
- (9) Period for Foreign Capital to be brought in WITHIN ONE YEAR FROM THE DATE OF ISSUANCE OF ENDORSEMENT
- (10) Total Amount of Capital (Kyat) EQUIVALENT IN KYAT OF US\$ 0.327 MILLION
- (11) Construction/ Preparation Period ONE YEAR
- (12) Validity of Endorsement 30 YEARS
- (13) Form of Investment WHOLLY FOREIGN OWNED
- (14) Name of Company Incorporated in Myanmar MYANMAR SAKICHI GARMENT LIMITED



CF
21/2/2019
(Phyo Min Thein)
Chairman



ပုံစံ (၅-ခ)

ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်
ရန်ကုန်တိုင်းဒေသကြီးရင်းနှီးမြှုပ်နှံမှု ကော်မတီ
အတည်ပြုမိန့်

အတည်ပြုမိန့်အမှတ် ရကတ-၁၅၅ / ၂၀၁၉ ၂၀၁၉ ခုနှစ် ဖေဖော်ဝါရီလ ၂၁ ရက်
ရန်ကုန်တိုင်းဒေသကြီး ရင်းနှီးမြှုပ်နှံမှု ကော်မတီသည် မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှု ဥပဒေ
ပုဒ်မ-၂၅ ပုဒ်မခွဲ (ဃ) အရ ဤအတည်ပြုမိန့်ကိုထုတ်ပေးလိုက်သည် -

- (၁) ရင်းနှီးမြှုပ်နှံသူအမည် MR. MITSUHIRO KITSUWA
- (၂) နိုင်ငံသား JAPANESE
- (၃) နေရပ်လိပ်စာ 5F 2-2-3,EDGE SHINSAIEASHI, NISHI-SHINSAIBASHI, CHUO-KU, OSAKA, JAPAN
- (၄) ပင်မအဖွဲ့အစည်းအမည်နှင့်လိပ်စာ OFFICE SAKICHI CO., LTD. 3-16-18-509, NANBANAKA, NANIWAKU, OSAKA, JAPAN
- (၅) ဖွဲ့စည်းရာအရပ် JAPAN
- (၆) ရင်းနှီးမြှုပ်နှံသည့်လုပ်ငန်းအမျိုးအစား CMP စနစ်ဖြင့် အမျိုးသမီးဝတ်ဘရာစီယာ၊ အတွင်းခံဘောင်းဘီချုပ်လုပ်ငန်းလုပ်ငန်း
- (၇) ရင်းနှီးမြှုပ်နှံသည့်အရပ်ဒေသ(များ) မြေကွက်အမှတ်- ၁၄၁၊ ၁၄၁(က)၊ မြေတိုင်းရပ်ကွက် အမှတ်(င)၊ စက်မှုလက်မှုရပ်ကွက်၊ မြောက်ဥက္ကလာပမြို့နယ်၊ ရန်ကုန်တိုင်းဒေသကြီး
- (၈) နိုင်ငံခြားမတည်ငွေရင်း ပမာဏ အမေရိကန်ဒေါ်လာ ၀.၃၂၇ သန်း
- (၉) နိုင်ငံခြားမတည်ငွေရင်းယူဆောင်လာရမည့်ကာလ အတည်ပြုမိန့် ရရှိသည့်နေ့မှ ၁ နှစ် အတွင်း
- (၁၀) စုစုပေါင်း မတည်ငွေရင်းပမာဏ(ကျပ်) အမေရိကန်ဒေါ်လာ ၀.၃၂၇ သန်းနှင့် ညီမျှသော မြန်မာကျပ်ငွေ
- (၁၁) တည်ဆောက်မှု/ ပြင်ဆင်မှုကာလ ၁ နှစ်
- (၁၂) အတည်ပြုမိန့်သက်တမ်း ၃၀ နှစ်
- (၁၃) ရင်းနှီးမြှုပ်နှံမှုပုံစံ ရာခိုင်နှုန်းပြည့်နိုင်ငံခြားရင်းနှီးမြှုပ်နှံမှု
- (၁၄) မြန်မာနိုင်ငံတွင် ဖွဲ့စည်းမည့် ကုမ္ပဏီအမည် MYANMAR SAKICHI GARMENT LIMITED

YRIC1552019



(ဖြိုးမင်းသိန်း)
ဥက္ကဋ္ဌ

Confidential



THE REPUBLIC OF THE UNION OF MYANMAR
YANGON REGION INVESTMENT COMMITTEE

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



Tel: 01 - 658263

Our ref : YRIC -1 /E-155/2019(129-d)

Fax: 01- 658264

Date : 21 February 2019

Subject: Decision of the Yangon Region Investment Committee on the Endorsement for Manufacturing of brassieres and underwears on CMP Basis under the name of Myanmar Sakichi Garment Limited.

Reference: Myanmar Sakichi Garment Limited's letter dated 11th February 2019

1. The Yangon Region Investment Committee, at its meeting (3/2019) held on 13th February 2019, approved the Endorsement for Manufacturing of brassieres and underwears on CMP Basis under the name of Myanmar Sakichi Garment Limited submitted by Office Sakichi Co., Ltd. (100%) from the Japan as a wholly foreign owned investment in accordance with the Myanmar Investment Law and Rules.

2. The terms and conditions of the "Endorsement" are stated in the following paragraphs:

- (a) The term of an Endorsed project shall be thirty (30) years commencing from the date of the issuance of the Endorsement by the Yangon Region Investment Committee.
- (b) The term of the Lease Agreement for land and buildings shall be initially ten (10) years and extendable for two times for ten(10) years commencing from the date of signing of the Lease Agreement between U Aung Swe (Lessor) and Myanmar Sakichi Garment Limited (Lessee).
- (c) The annual rent for the land and buildings shall be US\$ 24000.00 (United States Dollar twenty-four thousand only)

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calculated at the rate of US\$ 20.688 per square meter per year measuring total area of 1392.1186 square meters (0.344 acres).

- (d) Myanmar Sakichi Garment Limited, which has obtained the Endorsement for enjoyment of exemptions and reliefs under sections 75,77 and 78 of the Chapter XVIII of Myanmar Investment Law, may submit the application form.
- (e) Myanmar Sakichi Garment Limited shall use its best efforts to achieve a timely realization of the work stated in the Endorsement application.
- (f) Myanmar Sakichi Garment Limited shall obey and respect the responsibilities of investors under section 65 of Myanmar Investment Law and Chapter XX of Myanmar Investment Rules.
- (g) Myanmar Sakichi Garment Limited shall carry out prevention, mitigation and monitoring of significant environmental impacts according to the type of investment activities in accordance with the relevant laws, rules, regulations and procedures.
- (h) Myanmar Sakichi Garment Limited shall submit to the Myanmar Investment Commission any transfer of shares or transfer of the business to any person during the investment period in accordance with section 72 of Myanmar Investment Law and rule 191 of Myanmar Investment Rules.
- (i) Myanmar Sakichi Garment Limited, which has benefitted from the Endorsement or enjoyment of exemptions or reliefs, shall submit an annual report in the prescribed form to the Myanmar Investment Commission within three (3) months at the end of the financial year in accordance with rule 196 of Myanmar Investment Rules and shall publish a summary of the report on its website or the Myanmar Investment Commission's website.
- (j) Myanmar Sakichi Garment Limited must, during the operation period under the Endorsement of the Yangon Region Investment

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Committee, submit its operating report quarterly in the prescribed form in accordance with rule 197 of Myanmar Investment Rules.

3. Myanmar Sakichi Garment Limited shall carry out in accordance with the stipulations of the relevant Union Ministries, governmental department and governmental organizations to obtain license, permit or registration as per section 65(d) of Myanmar Investment Law.

4 Myanmar Sakichi Garment Limited shall submit five (5) copies of all approvals, licences, permits and similar authorizations relevant to the initial implementation of the investment and the Lease Agreement for land and building to the Yangon Region Investment Committee.


21/2/2019

(Phyo Min Thein)

Chairman

Myanmar Sakichi Garment Limited

- cc: 1. Ministry of Home Affairs
2. Ministry of Office of the Union Government
3. Office of the Myanmar Investment Commission
4. Ministry of Natural Resources and Environmental Conservation
5. Ministry of Labour, Immigration and Population
6. Ministry of Industry
7. Ministry of Commerce
8. Ministry of Planning and Finance
9. Ministry of Investment and Foreign Economic Relations
10. Chairman, CMP Enterprises Supervision Committee
11. Director General, Department of Environmental Conservation
12. Director General, Directorate of Labour
13. Director General, Department of Immigration
14. Director General, Directorate of Industrial Supervision and Inspection

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15. Director General, Department of Trade
16. Director General, Directorate of Investment and Company Administration
17. Director General, National Archives Department
18. Director General, Customs Department
19. Director General, Internal Revenue Department
20. Monitoring and Supervision Division , Directorate of Investment and Company Administration

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APPENDIX B

Transitional Consultant Registration Certificate



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



CERTIFICATE FOR TRANSITIONAL CONSULTANT REGISTRATION
(ကြားကာလအကြံပေးလုပ်ကိုင်သူမှတ်ပုံတင်ခြင်းအထောက်အထားလက်မှတ်)

No. 00068 Date 24 MAY 2019

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

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

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



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

Areas of Expertise Permitted
(ခွင့်ပြုသည့် ကျွမ်းကျင်မှုနယ်ပယ်များ)

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





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



CERTIFICATE FOR TRANSITIONAL CONSULTANT REGISTRATION

(ကြားကာလအကြံပေးလုပ်ကိုင်သူမှတ်ပုံတင်ခြင်းအထောက်အထားလက်မှတ်)

No.

10048

Date

07 JUL 2017

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

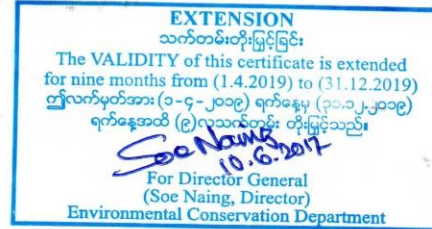
(ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်း၊ အမိန့်ကြော်ငြာစာအမှတ်၊ ၅၁၆/၂၀၁၅ အရ သယံဇာတနှင့် သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာနသည် ဤအထောက်အထားလက်မှတ်ကို လူပုဂ္ဂိုလ်အားထုတ်ပေးလိုက်သည်။)

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

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

Areas of Expertise Permitted
(ခွင့်ပြုသည့် ကျွမ်းကျင်မှုနယ်ပယ်များ)

1. Geology and Soil



APPENDIX C

Monitoring Result

Light Result



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

Project Name:	Myanmar Sakichi Garment Limited
Project Location:	Plot No. 141, 141 (KA), Myay Taing Block No. (NGA), Sethmu Lathmu, North Okkalapa Township, Yangon Region
Sampling Date:	25.9.2019
Sampling Time:	8:00 Am to 4:00 pm
Sampling Condition:	Good
Sampling By:	Environmental Team Represented By Myanwei Consulting Group Company Limited

Instrument	Type	Sampling Rate	Location
Uni-T (Luminometer)	UT380 Series	100 times/second	16°53'22.51"N 96° 9'20.63"E

No	Location	Measure value(Lux)	Standard*
1	Sewing 1	262	600
2	Sewing 2	240	600
3	QC	347	600

IESNA Lighting Handbook

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


 Lin Htet Sein
 Environmental Consultant
 Myanwei Consulting Co., Ltd.

Noise result



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

Project Name:	Myanmar Sakichi Garment Limited
Project Location:	Plot No.141, 141(KA), Myay Taing Block No. (NGA), Sethmu Lathmu, North Okkalapa Township, Yangon region.
Sampling Date:	25.9.2019
Sampling Time:	8:00 Am To 4:00 pm
Sampling Condition:	Good
Sampling By:	Environmental Team Represented By Myanwei Consulting Group Company Limited

Instrument	Type	Sampling Rate	Location
Digital Sound Level Meter	GM 1356 USB	30 -130 dB	16°53'23.16"N and 96° 9'21.87"E

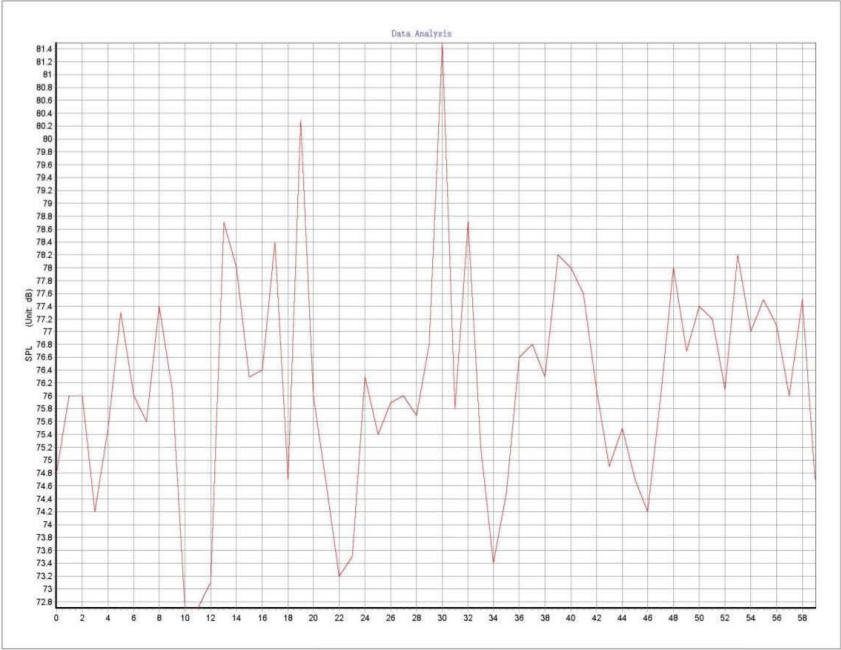
No	Place	Unit	Result	Standard	Remark
1	Operation Area	dBA	76.183	70 dBA	Above

National Environmental Quality (Emission) Guideline

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


Lin Htet Sein
Environmental Consultant
Myanwei Consulting Co., Ltd.

Monitoring Graph



Air result



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

Project Name:	Myanmar Sakichi Garment Limited
Project Location:	Plot No. 141/141(KA), Myay Taing Block No.(NGA), Sethmu Lathmu, NorthOkkalapa Township, Yangon Region
Sampling Date:	25.9.2019
Sampling Time:	11:30 am to 5:00 pm
Sampling Condition:	Good
Sampling By:	Environmental Team Represented By Myanwei Consulting Group Company Limited

Instrument	Type	Sampling Rate	Location
HCHO HP-5800D	PM Detector	0-999.9 (µg/M ³)	Operation Area (Indoor)

National Environmental Quality (Emission) Guideline

Parameter	Averaging period	Guideline value	Unit
PM 10 ^a	1-year	20	(µg/M ³)
	24-hour	50	
PM 2.5 ^b	1-year	10	(µg/M ³)
	24-hour	25	

a. Particulate matter 10 micrometer or less in diameter
b. Particulate matter 2.5 micrometer or less in diameter

Monitoring Result

Location	GPS Value	Parameters	Observed Value	Unit	Guideline Value
Sewing Area (A)	16°53'25.40"N	PM10	45.7	µg/m ³	50
	96°9'23.13"E	PM2.5	36.4		25


Lin Htet Sein
Environmental Consultant
Myanwei Consulting Co., Ltd.

APPENDIX D Public Consultation Meeting

Invitation List

North Okkalapa

တွေ့ဆုံဆွေးနွေးပွဲ အခမ်းအနားသို့ ဖိတ်ကြားထားသူများစာရင်း (မိန့်တော်)

နေ့စွဲ - ၂၂ ရက်၊ နိုဝင်ဘာလ၊ ၂၀၁၉ ခုနှစ်

စဉ် အမည်	ရာထူး	ဌာန / အဖွဲ့အစည်း	ဆက်သွယ်ရန်	လက်မှတ်
၁။	ဖော်လောရေးဇ်	Yangon, ECD	၀၉၄၁၃၀၄၆၈၈၄	
၂။	ဦးလော့ချို	အငါ့ စာအုပ်ရောင်း	၀၉၄၁၃၀၃၃၀၂၃	
၃။	ဒေါ်အေးအေး	ကျေးဇူးတင် / ငှား	၀၉၄၅၄၇၂၂၇၅၄	
၄။	ဒေါ်ဝင်းဝင်း	မြို့နယ်အုပ်ချုပ်ရေးဌာန (အထွေထွေ)	၀၉၄၅၄၇၅၄၇၅	
၅။	ဒေါ်ယုယု	မြို့နယ်အုပ်ချုပ်ရေးဌာန (အထွေထွေ)	၀၉၄၅၄၇၅၄၇၅	
၆။	ဦးအောင်	မြို့နယ်အုပ်ချုပ်ရေးဌာန (အထွေထွေ)	၀၉၄၅၄၇၅၄၇၅	
၇။	Hay Mann Thaw	ရန်ကုန်တိုင်း	၀၉၄၅၄၇၅၄၇၅	
၈။	ဦးမင်းမင်း	မြို့နယ်အုပ်ချုပ်ရေးဌာန (အထွေထွေ)	၀၉၄၅၄၇၅၄၇၅	
၉။		မြို့နယ်အုပ်ချုပ်ရေးဌာန (အထွေထွေ)	၀၉၄၅၄၇၅၄၇၅	

Myanwei Consulting Company Limited

Mindelen

တွေ့ဆုံဆွေးနွေးပွဲ အခမ်းအနားသို့ ဖိတ်ကြားထားသူများစာရင်း (စက်မှုလုပ်ငန်း)

နေ့စွဲ - ၂၂ ရက်၊ နိုဝင်ဘာလ၊ ၂၀၁၉ ခုနှစ်










စဉ်	အမည်	ရာထူး	ဌာန / အဖွဲ့အစည်း	ဆက်သွယ်ရန်	လက်မှတ်
၁။	ဦးစောဝင်း	B.C	ဟောပြောရေးကူ	၀၉၅၀၆၈၆၀၇	
၂။	ဦးအောင်၊ ဦးစော	ဦးစီးဌာန	ရန်ကုန်မြို့နယ်	၀၉-၁၀၇၃၅၅၀၆	
၃။	ဒေါ်သုဇာနည်	ဦးစီးဌာန	ဆွေ/ဆွေ	၀၉-၈၉၉၅၅၅၀၆	
၄။	ဒေါ်ဦးစော	WA	စက်မှုလုပ်ငန်း	၀၉-၇၆၇၇၆၆၃၃	
၅။					
၆။					
၇။					
၈။					
၉။					

Attended List

နေ့စွဲ - ၂၇ ရက်၊ နိုဝင်ဘာလ၊ ၂၀၁၉ ခုနှစ်

တွေ့ဆုံဆွေးနွေးပွဲ အခမ်းအနားသို့ တက်ရောက်သူများစာရင်း

ဒေရာ - Sky Hotel, ခြောက်ဥက္ကလာပမြို့နယ်"

စဉ်	အမည် (Name)	ရာထူး (Designation)	ဌာန / အဖွဲ့အစည်း (Department/Organization)	ဆက်သွယ်ရန် (Address)	လက်မှတ် (Sign)
1.	MAHAKAZU NAKAMURA	Director.	Myanmar National Government		
2.	Zar Ni Soe	Manager	" "		
3.	Thaw Aung Moe	Manager.	Myanmar Investment Group	09250950359587	
4.	Ah irang	production leader.	" "	09250950359587	
5.	Thaw Shwe Hae Wint Ubae Soe	Shift Officer	ECG (Ygn)	09-7645554989	
6.	U Kyaw Kyaw	Assistant Supervisor.	Yedd. Recd.	095098374	
7.	U Myint Soe.	"	"	09451623400	
8.	U Si Thu Myo	Fire Service Department	2-မိတ္ထီလမ်း၊ မိတ္ထီလမ်း	09-69981493	
9.	U La Min Aung	"	မိတ္ထီလမ်း	09-685610337	

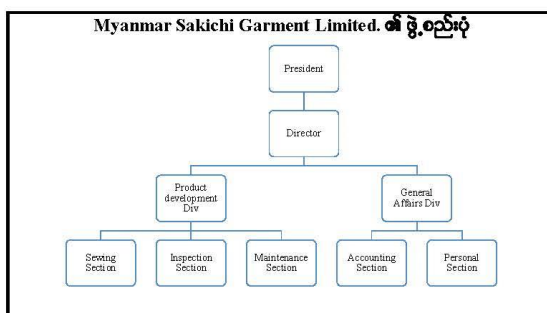
Myanmar Sakichi Garment Co., Ltd (CMP)
စနစ်ဖြင့် အမျိုးသမီးဝတ်ဘရာစီယာနှင့် အတွင်းပံဘောင်းဘီ
ရောင်းလုပ်ခြင်းလုပ်ငန်း

ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် အစီရင်ခံစာ (မူကြမ်း) အတွက်
 သက်ဆိုင်သူများနှင့် တွေ့ဆုံဆွေးနွေးပွဲ အခမ်းအနား။

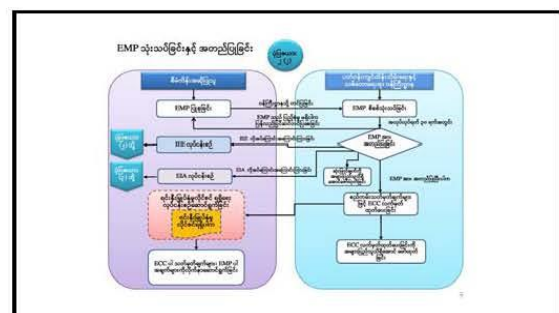
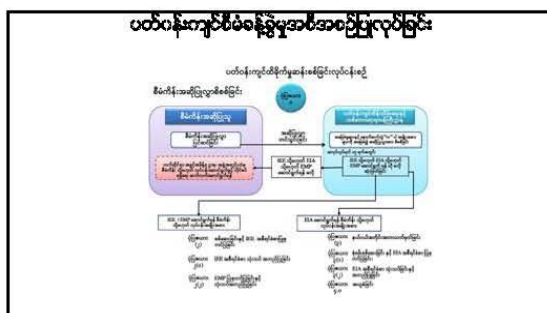
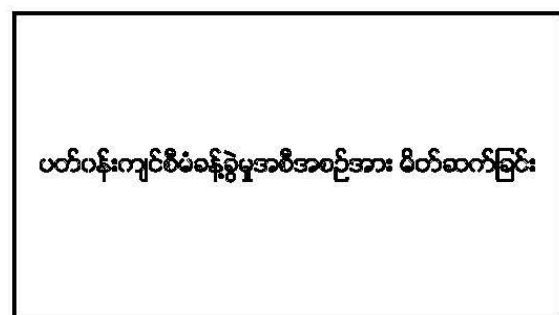
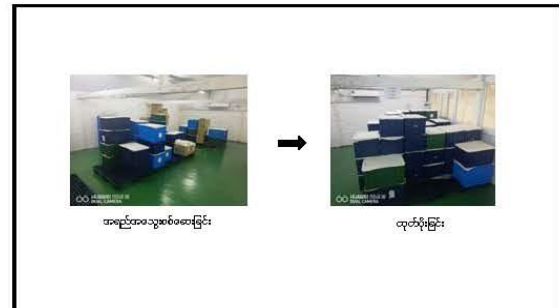
၂၇ ဇူလိုင်၊ နိုဝင်ဘာလ၊ ၂၀၁၉ ခုနှစ်။
 Prepared By
 Myanmar Consulting Co., Ltd.

- အစည်းအဝေး အကြောင်းအရာ**
- ၁။ Myanmar Sakichi Garment Limited အား မိတ်ဆက်ခြင်း
 - ၂။ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်အား မိတ်ဆက်ခြင်း
 - ၃။ သက်ရောက်မှုဆန်းစစ်ခြင်း ရလဒ်များနှင့် ထိခိုက်မှုအဆင့်သတ်မှတ်ချက်များ
 - ၄။ ပတ်ဝန်းကျင်အပေါ် သက်ရောက်မှုများနှင့် မြေလျှော့ရေးနည်းလမ်းများ
 - ၅။ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ် နှင့်
 - ၆။ စက်ရုံ၏ဆောင်ရွက်ချက်များ

Myanmar Sakichi Garment Limited



Myanmar Sakichi Garment Limited	
လုပ်ငန်းအမျိုးအစား	(CMP) လစားစနစ်ဖြင့် အမျိုးသမီးဝတ်ဘရာစီယာနှင့် အတွင်းပံဘောင်းဘီ ရောင်းလုပ်ခြင်းလုပ်ငန်း။
ဖွင့်ပြုနိုင်သည့်အမှတ်	(ဖွင့်ပြုနိုင်သည့်အမှတ်- ၁၇၀/၂၀၁၉) ၂၀၁၉ ခုနှစ်၊ မတ်လ ၁၂ ရက်။
ရင်းနှီးမြှုပ်နှံမှု	၁၀၀ ရာခိုင်နှုန်း နိုင်ငံခြားရင်းနှီးမြှုပ်နှံမှု
မြေဧရိယာ	မြေဧရိယာစုစုပေါင်း = ၀.၃၄၄ ဧက(၁.၃၉၂.၁၁၈၆ စတုရန်းမီတာ)
အဆောက်အဦ	စက်ရုံအဆောက်အဦ (၁၀၀ X ၁၀၀ စတုရန်းပေ)
ရင်းနှီးမြှုပ်နှံသည့်ကာလ	နှစ် ၃၀ ရင်းနှီးမြှုပ်နှံမှု
စက်ရုံလုပ်စာ	မြေကွက်အမှတ်(၁၄၁/၁၄၁က)၊ မြေတိုင်းရပ်ကွက်အမှတ်(၁)၊ စက်မှုလက်မှုဇုန်ကွက်၊ မြောက်ဥက္ကလာပမြို့နယ်၊ ရန်ကုန်တိုင်းဒေသကြီး။





သက်ရောက်မှုဆန်းစစ်ခြင်းရလဒ်များနှင့် ထိခိုက်မှုအဆင့်သတ်မှတ်ချက်များ

စီမံကိန်းပတ်ဝန်းကျင်အနေအထား	
၁။ ကျည်ထောင်စင်္ကြံ	မြောက်လတ္တီကျု ၁၆°၅၄'၄၇.၈၉" နှင့် အရှေ့လောင်ဂျီကျု ၉၆° ၁၃' ၅၅.၄၉"
၂။ ရာသီဥတုအခြေအနေ	မြောက်ဥက္ကလာပဗြဟ္မဒေသနယ်ရှိ ရာသီဥတုအခြေအနေနှင့် ၂၄°C အပူချိန်၊ ၈၀% ဝေ့ဆုံ၊ နှစ်စဉ်ရေခဲရေ ၁၆၆ လက်မ
၃။ ကျွန်းကျွန်းကျွန်းမြေအခြေအနေ	ကျွန်းကျွန်းကျွန်းမြေအခြေအနေနှင့် ၂၄°C အပူချိန်၊ ၈၀% ဝေ့ဆုံ၊ နှစ်စဉ်ရေခဲရေ ၁၆၆ လက်မ
၄။ လမ်းဆုံအခြေအနေ	သုတေသနအရ
၅။ အနီးအနားအခြေအနေ	မရှိ
၆။ သစ်တောအခြေအနေ	မရှိ
၇။ ကျွန်းကျွန်းကျွန်းမြေအခြေအနေ	မရှိ
၈။ တိုင်းတာမှုရလဒ်	<input type="checkbox"/> အညွှန်းတမ်း တိုင်းတာခြင်း <input type="checkbox"/> အလင်းအရောင် တိုင်းတာခြင်း <input type="checkbox"/> အလျှောက်အရောင် အညွှန်း တိုင်းတာခြင်း <input type="checkbox"/> အညွှန်း နှင့် စီမံကိန်း အညွှန်းအရ တိုင်းတာခြင်း

ရည်ညွှန်းတမ်း				
Date/ Time	Measurement Area	GPS value	Measurement Result	NEQ Guideline
25 September (1.00 to 4.00 pm)	Operation Area	16°53'23.16"N 96°09'1.87"E	76.183 dBA	70 dBA

တိုင်းတာမှုရလဒ်သည် National Emission Quality Guideline ထက်ကျော်လွန်မှုအနည်းငယ်ရှိနေသည်ကို လေ့လာတွေ့ရှိရပါသည်။



လုပ်ငန်းခွင်အလင်းရောင်တိုင်းတာမှု				
Date/ Time	Measurement Area	Measurement Result	Standard Value	Remark
25 September, 2019	Cutting Section	625	1000	Below
	Sewing Section	322	400	Below
	Quality Control	778	600	Above
	Ironing Area	362	600	Below
	Packing Area	387	600	Below

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



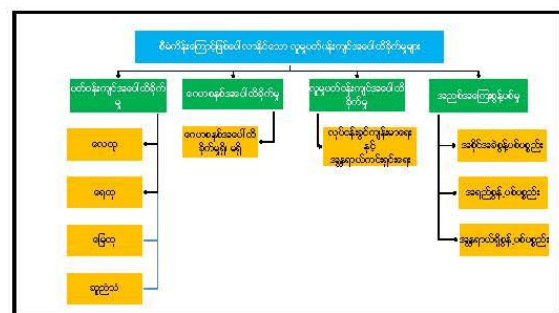
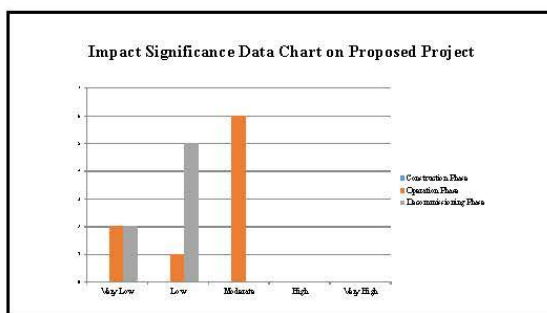
လေထုတိုင်းတာမှု

Date/Time	Parameter	Measurement Area	Result	Guideline Value	Unit	Organization	Period
25 September 2019	PM ₁₀	Project Area	45.7	50	μg/m ³	NEQG	24 hours
	PM _{2.5}		36.4	25	μg/m ³	NEQG	24 hours

စက်မှုဦးစီးဌာန လေထုတိုင်းတာမှု



ပတ်ဝန်းကျင်အပေါ် သက်ရောက်မှုများနှင့် ဖြေလျှော့ရေးနည်းလမ်းများ



သက်တောင့်သက်သာရှိမှု	စီမံကိန်းဆောင်ရွက်ချက်	လေ့လာရန် အရေးကြီးသောချက်
ရည်ရွယ်ချက်	<ul style="list-style-type: none"> မိမိတို့၏ အသုံးပြုပုံစံနှင့် ပတ်သက်သည့် အသုံးပြုမှုကို ပြောင်းလဲပေးရန် 	<ul style="list-style-type: none"> ရည်ရွယ်ချက်အရ လေ့လာရန် လိုအပ်ပါသည်။ စက်မှုလုပ်ငန်းများကို PPE အသုံးပြုမှုအားလုံးကို စောင့်ကြည့်ရန်
မိမိတို့၏အသုံးပြုမှု	<ul style="list-style-type: none"> ကျန်းမာရေးနှင့် လေ့လာမှု နှင့် လုပ်ငန်းသုံးစွဲမှု 	<ul style="list-style-type: none"> ကျန်းမာရေးအား သိသည့်အခါမှစ၍ လုပ်ငန်းသုံးစွဲမှုအား စနစ်တကျ အသုံးပြုရန်
စွန့်ခွဲမှုအစီအစဉ်	<ul style="list-style-type: none"> ထုတ်လုပ်မှုနှင့် ကျန်းမာရေး အသုံးပြုမှု 	<ul style="list-style-type: none"> စွန့်ခွဲမှုအစီအစဉ်ကို စနစ်တကျ စီမံကိန်းရန် လုပ်ငန်းသုံးစွဲမှုအား စနစ်တကျ အသုံးပြုရန်
စွန့်ခွဲမှုအစီအစဉ်	<ul style="list-style-type: none"> ကျန်းမာရေးနှင့် လေ့လာမှု နှင့် လုပ်ငန်းသုံးစွဲမှု 	<ul style="list-style-type: none"> စွန့်ခွဲမှုအစီအစဉ်ကို စနစ်တကျ စီမံကိန်းရန် လုပ်ငန်းသုံးစွဲမှုအား စနစ်တကျ အသုံးပြုရန်
အန္တရာယ်ရှိမှု	<ul style="list-style-type: none"> စက်မှုလုပ်ငန်းနှင့် ကျန်းမာရေး အသုံးပြုမှု 	<ul style="list-style-type: none"> စက်မှုလုပ်ငန်းနှင့် ကျန်းမာရေး အသုံးပြုမှု

ရည်ရွယ်ချက်	စီမံကိန်းဆောင်ရွက်ချက်
ရည်ရွယ်ချက်	<ul style="list-style-type: none"> စီမံကိန်းဆောင်ရွက်ချက်
စီမံကိန်းဆောင်ရွက်ချက်	<ul style="list-style-type: none"> စီမံကိန်းဆောင်ရွက်ချက်

<p>ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်</p>
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ရည်ရွယ်ချက်	စီမံကိန်းဆောင်ရွက်ချက်
ရည်ရွယ်ချက်	<ul style="list-style-type: none"> စီမံကိန်းဆောင်ရွက်ချက်
စီမံကိန်းဆောင်ရွက်ချက်	<ul style="list-style-type: none"> စီမံကိန်းဆောင်ရွက်ချက်

ရည်ရွယ်ချက်	စီမံကိန်းဆောင်ရွက်ချက်
ရည်ရွယ်ချက်	<ul style="list-style-type: none"> စီမံကိန်းဆောင်ရွက်ချက်
စီမံကိန်းဆောင်ရွက်ချက်	<ul style="list-style-type: none"> စီမံကိန်းဆောင်ရွက်ချက်

ရည်ရွယ်ချက်	စီမံကိန်းဆောင်ရွက်ချက်
ရည်ရွယ်ချက်	<ul style="list-style-type: none"> စီမံကိန်းဆောင်ရွက်ချက်
စီမံကိန်းဆောင်ရွက်ချက်	<ul style="list-style-type: none"> စီမံကိန်းဆောင်ရွက်ချက်

[illegible]

ယဝင်ပုံကျပ်ဆိုင်ရာစာရင်းကဏ္ဍ၊ မနုဗုဒ္ဓကျပ်ကုမ္ပဏီလီမိတက်				
ဘဏ္ဍာ	အသုံးပြုသည့်	ပြင်ဆင်	အရက်	တန်ဖိုးကန့်သတ်
ကုန်ပစ္စည်းအသုံးပြုမှု				
မတူဘူး	PM ₁₀ , PM _{2.5} , SO ₂ , NO ₂	တန်ဖိုး ပြန်	တုတ်လုပ်မှု မနုဗုဒ္ဓအသုံးပြု	800000
မတူ	PM ₁₀ , PM _{2.5} , SO ₂ , NO ₂ , PM ₁₀ , PM _{2.5} , SO ₂ , NO ₂ , PM ₁₀ , PM _{2.5} , SO ₂ , NO ₂	တန်ဖိုး ပြန်	အစီအစဉ်	300000
အသုံးပြု	အသုံးပြုသည့်	တန်ဖိုး ပြန်	တုတ်လုပ်မှု မနုဗုဒ္ဓ	200000
အသုံးပြုသည့်	အသုံးပြုသည့်	မတူ	တုတ်လုပ်မှု မနုဗုဒ္ဓအသုံးပြု	50000
ကုန်ပစ္စည်းအသုံးပြုမှု				
မတူဘူး	PM ₁₀ , PM _{2.5} , SO ₂ , NO ₂	ပြင်ဆင်မှု မတူအသုံးပြု	တုတ်လုပ်မှု မနုဗုဒ္ဓအသုံးပြု	1000000
အသုံးပြု	အသုံးပြုသည့်	တုတ်လုပ်မှု မနုဗုဒ္ဓ	တုတ်လုပ်မှု မနုဗုဒ္ဓအသုံးပြု	1000000
ပြင်ဆင်မှုမရှိ	အသုံးပြုသည့်	တုတ်လုပ်မှု မနုဗုဒ္ဓ	တုတ်လုပ်မှု မနုဗုဒ္ဓအသုံးပြု	

လူမှုအကျိုးတူပေးပေါင်း ပါဝင်မှု

Myanmar Sakichi Garment Limited တွင် CSR အတွက် အမြတ်ငွေ၏ ၂% ကို ကျန်းမာရေး၊ ပညာရေးနှင့် နယ်မြေဖွံ့ဖြိုးတိုးတက်ရေးတို့ အတွက် အသုံးပြုသွားမည် ဖြစ်ပါသည်။

ကျန်းမာရေး	ဝန်ထမ်းများ ကျန်းမာရေး စောင့်ရှောက်မှု	၀.၅ %
ပညာရေး	ပညာရေးကဏ္ဍ မြှင့်တင်ရေးနှင့် လူ့အဖွဲ့အစည်း အသိပညာပေးခြင်း	၀.၅ %
နယ်မြေဖွံ့ဖြိုးတိုးတက်ရေး	ဒေသတွင်း လူအပ်သက်သို့ လှူဒါန်းခြင်း	၀ %

စက်ရုံ၏ဆောင်ရွက်ချက်များ



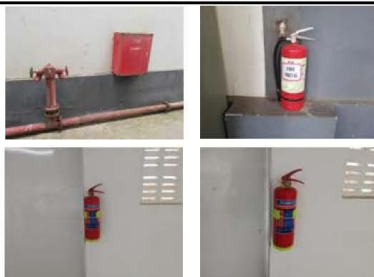
ဂန်ထမ်းများအတွက်သုံးစေသောဆေးရုံ



Myanmar Sakichi Garment Limited ရောင်းချသောအိပ်ခန်းများ



Myanmar Sakichi Garment Limited. ၏ လျှပ်စစ်သုံးစွဲမှု



Myanmar Sakichi Garment Limited. ၏ မီးဘေးအန္တရာယ်အတွက် ထားရှိမှုများ



Myanmar Sakichi Garment Co., Ltd. ၏ မီးဘေးအန္တရာယ်သင်တန်းပို့ချမှုများ

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

APPENDIX E

Fire Safety Training



APPENDIX F

List of Commitment

Myanmar Sakichi Garment Limited ၏ CMP စနစ်ဖြင့် အမျိုးသမီးဝတ် ဘရာဇီယာ၊ အတွင်းခံဘောင်းဘီချုပ်လုပ်ခြင်းလုပ်ငန်းလည်ပတ်ဆောင်ရွက်ခြင်းကြောင့် ဖြစ်ပေါ်လာနိုင်သော သဘာဝပတ်ဝန်းကျင်၊ လူမှုဘဝ နှင့် ကျန်းမာရေး ထိခိုက်မှုများရှိခဲ့ပါက လျော့ချရေး၊ စီမံခန့်ခွဲရေး နှင့် တားဆီးရေး အစီအစဉ် များကို ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် (Environmental Management Plan – EMP) တွင် ပါဝင်ရမည့် အချက်များကို အကောင်အထည်ဖော် စီမံဆောင်ရွက်သွားမည် ဖြစ်ကြောင်း၊ အောက်ဖော်ပြပါ ဇယားဖြင့် အကျဉ်းချုပ် စာရင်းပြုစု ဖော်ပြထားပါသည်။

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာ ပါ ရည်ညွှန်းချက် (အခန်း)
နိဒါန်း	၁	<p>ရည်ရွယ်ချက်</p> <ul style="list-style-type: none"> လုပ်ငန်းလုပ်ဆောင်မှုများကြောင့်ဖြစ်ပေါ်လာသည့် ပတ်ဝန်းကျင်ထိခိုက်မှု အပေါ်လျော့ချရန် ပတ်ဝန်းကျင်စောင့်ကြပ်ကြည့်ရှုမည့်အစီအစဉ်အား အကောင်အထည်ဖော်ခြင်း <p>ရည်မှန်းချက်</p> <ul style="list-style-type: none"> သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာစီမံခန့်ခွဲမှုစနစ်သည် ပတ်ဝန်းကျင်ဆိုင်ရာစွမ်းဆောင်ရည်ကို စဉ်ဆက်မပြတ် ပြန်လည်သုံးသပ်ခြင်း၊ စွမ်းဆောင်ရည်မြှင့်တင်ခြင်း ဖြင့် အောင်မြင်စေရန် လုပ်ဆောင်ပေးသော စနစ်တစ်ခုဖြစ်ပါသည်။ သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာစွမ်းဆောင်ရည်ကို မြှင့်တင်ရန် ပြန်လည်သုံးသပ်ခြင်းနှင့် အကဲဖြတ်ခြင်း သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာစီမံခန့်ခွဲမှုစနစ်သည် 	

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
		သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာစွမ်းဆောင်ရည်ကို မြှင့်တင်ရန် စဉ်ဆက်မပြတ်ပံ့ပိုးပေးသည်။	
	၁.၁	<p>အဆိုပြုလုပ်ငန်း၏နောက်ခံအကြောင်းအရာ Myanmar Sakichi Garment Limited သည် CMP စနစ်ဖြင့် အမျိုးသမီးဝတ် ဘရာစီယာ၊ အတွင်းခံဘောင်းဘီချုပ်လုပ်ပြီး တရုတ် နှင့် ဂျပန်နိုင်ငံသို့ တင်ပို့ရောင်းချသွားမည်ဖြစ်သည်။</p> <p>ရန်ကုန်တိုင်းဒေသကြီးရင်းနှီးမြှုပ်နှံမှုကော်မတီမှထောက်ခံချက်အမှတ်(ရကတ-၁၅၅/၂၀၁၉)</p> <p>ရန်ကုန်တိုင်းဒေသကြီး၊ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန ၏စာအမှတ် ရက-၁/၃/၄ (အီးအိုင်အေ) (၆၀၃/၂၀၁၉)ဖြင့် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်ရေးဆွဲရန် သဘောထားပြန်ကြားခြင်း</p>	
မူဝါဒ၊ ဥပဒေနှင့် အဖွဲ့အစည်းဆိုင်ရာမူဘောင်များ	၂	<p>ပတ်ဝန်းကျင် ထိန်းသိမ်းရေး ဥပဒေ (၂၀၁၂)</p> <p>ပတ်ဝန်းကျင် ထိန်းသိမ်းရေး နည်းဥပဒေ (၂၀၁၄)</p> <p>ပတ်ဝန်းကျင် ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်း (၂၀၁၅)</p> <p>မြန်မာနိုင်ငံမှ ချမှတ်ထားသော စက်ရုံနှင့် သက်ဆိုင်သည့် အခြား လိုက်နာဆောင်ရွက်ရမည့် လုပ်ထုံးလုပ်နည်း၊ ဥပဒေ၊ နည်းဥပဒေ နှင့် မူဝါဒများ</p> <p>အမျိုးသား ပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက် (၂၀၁၅) နှင့် နိုင်ငံတကာ ပတ်ဝန်းကျင်ဆိုင်ရာ စံသတ်မှတ်ချက်များနှင့် ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှုဆိုင်ရာ လမ်းညွှန်ချက်များ</p>	အခန်း (၂)

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
စီမံကိန်းအကြောင်းအရာဖော်ပြချက်	၃	မြေကွက်အမှတ်-၁၄၁၊ ၁၄၁(က)၊ မြေတိုင်း ရပ်ကွက် အမှတ် (င)၊ စက်မှုလက်မှု ရပ်ကွက်၊ မြောက်ဥက္ကလာပမြို့နယ်၊ ရန်ကုန်တိုင်းဒေသကြီး၊ မြေဧရိယာ ၀.၃၄၄ ဧက (၁၃၉၂.၁၁၈၆ စတုရန်းမီတာ)	အခန်းခွဲ (၃.၂.၁)
	၃.၁	အဆိုပြုလုပ်ငန်း၏ရည်ရွယ်ချက် Dalian Aya Trading Ltd မှ ကုန်ကြမ်းပစ္စည်းများကို ရယူပြီး CMP စနစ်ဖြင့် အမျိုးသမီးဝတ် ဘရာစီယာ နှင့် အတွင်းခံဘောင်းဘီချုပ်လုပ်၍ အဆိုပါ လုပ်ငန်းသို့ပြန်လည်ပေးပို့သွားမည်ဖြစ်သည်။	အခန်းခွဲ (၃.၂)
	၃.၂	အဆိုပြုလုပ်ငန်းသည် ပြည်တွင်းလုပ်သား ၈၇ ဦးနှင့် ပြည်ပမှ ပညာရှင် ၃ ဦးဖြင့် အမျိုးသမီးဝတ် ဘရာစီယာနှင့် အတွင်းခံဘောင်းဘီအမျိုးမျိုးတို့ကို ချုပ်လုပ်သွားမည်ဖြစ်သည်။	အခန်းခွဲ (၃.၃.၃)
	၃.၃	အဆိုပြုလုပ်ငန်း၏ အဓိကကုန်ကြမ်းမှာ ဇာ၊ ဆွဲသားဇာ၊ နိုင်လွန်အထည်များ ၊ ချည်ထည် အစရှိသည့် လိုအပ်သော ဆက်စပ်ပစ္စည်းများကို တရုတ် နှင့် နိုင်ငံမှ တင်သွင်းသွားမည်ဖြစ်သည်။	အခန်းခွဲ (၃.၃.၁)
	၃.၄	အဆိုပြုလုပ်ငန်း၏ထုတ်ကုန်မှာ အမျိုးသမီးဝတ် ဘရာစီယာနှင့် အတွင်းခံအမျိုးမျိုး တို့ဖြစ်ပါသည်။	အခန်းခွဲ (၃.၂.၂.၁) ၊ ဇယား (၃-၁)
ပတ်ဝန်းကျင် အရည်အသွေးတိုင်းတာမှု	၄	အမျိုးသား ပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက် (၂၀၁၅) နှင့် နိုင်ငံတကာ ပတ်ဝန်းကျင်ဆိုင်ရာ စံသတ်မှတ်ချက်များနှင့် ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှုဆိုင်ရာ	အခန်း (၄)

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
		လမ်းညွှန်ချက်များကို အခြေခံလေ့လာ တိုင်းတာထားပါသည်။	
ဆူညံသံ	၄.၁	အမျိုးသား ပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက် (၂၀၁၅)၏ အမြင့်ဆုံးလက်ခံနိုင်သည့် ဆူညံသံအဆင့် (Noise level) လမ်းညွှန်သတ်မှတ်ချက် စက်မှုဇုန် ဧရိယာတွင် (70 One hour LAeq (dBA)) ဖြင့်နှိုင်းယှဉ် ဖော်ပြထားပါသည်။	အခန်းခွဲ (၄.၂.၈)
လေအရည်အသွေး	၄.၂	အမျိုးသား ပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက် (၂၀၁၅)၏ ထုတ်လွှတ်အစိုးအငွေ့ (Air emissions) လမ်းညွှန်သတ်မှတ်ချက် (PM10, PM2.5) တို့ဖြင့် နှိုင်းယှဉ် ဖော်ပြထားပါသည်။	အခန်းခွဲ (၄.၂.၇)
စက်ရုံတွင်း အလင်းရောင် ရရှိမှု	၄.၃	Illumination and Limiting Glare Index based on IES Code, 1968 ဖြင့် နှိုင်းယှဉ် ဖော်ပြထားပါသည်။	အခန်းခွဲ (၄.၂.၉)
ဒေသဆိုင်ရာအချက်အလက်များ	၄.၄	အဆိုပြုလုပ်ငန်းတည်ရှိသည့် မြောက်ဥက္ကလာပမြို့နယ်၏ဒေသဆိုင်ရာအချက်အလက်များ	အခန်းခွဲ (၄.၄)
ထိခိုက်မှုဆန်းစစ်ခြင်းနှင့်လျှော့ချရေးနည်းလမ်းများ	၅	ထိခိုက်မှုဆန်းစစ်ခြင်း <ul style="list-style-type: none"> • ကောင်းကျိုး အလုပ်ကိုင်အခွင့်အလမ်းများပေါများလာခြင်း၊ လမ်းပန်းဆက်သွယ်ရေးကောင်းမွန်လာခြင်း၊ နည်းပညာများတိုးတက်လာခြင်း <ul style="list-style-type: none"> • ဆိုးကျိုး သဘာဝပတ်ဝန်းကျင်အရင်းအမြစ်များ၊ ဂေဟစနစ်အရင်းအမြစ်များ၊	အခန်း(၅)

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
		လူသားများအပေါ်ထိခိုက်မှုများ၊ အမှိုက်စွန့်ပစ်ခြင်းကြောင့်ထိခိုက်မှုများ	
	၅.၁	ဆန်းစစ်ခြင်းနည်းလမ်း သိသာထင်ရှားသောသက်ရောက်မှု=(ပမာဏ+အချိန်+ကျယ်ပြန့်မှု) × ဖြစ်နိုင်ချေ	အခန်းခွဲ (၅.၁)
ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှု	၆	Myanmar Sakichi Garment Limited ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ် (EMP) အတွက် စက်ရုံစီမံခန့်ခွဲရေးအဖွဲ့၊ အလုပ်သမားများ၊ ဒေသခံလူထုများ၏ အမြင်၊ သက်ဆိုင်ရာ တာဝန်ရှိသူတို့၏အကြံပြုချက်များနှင့် ကွင်းဆင်းလေ့လာသူများမှ ဆွေးနွေးတိုင်ပင်မှုတို့ အပေါ် အခြေခံပြီး ဆောင်ရွက်သွားမည် ဖြစ်သည်။ EMP တွင် စက်ရုံအတွင်း ဘေးအန္တရာယ် ကင်းရှင်းရေးစီမံခန့်ခွဲမှုများကို လိုက်နာရန်အတွက် ထည့်သွင်းဖော်ပြထားပါသည်။	အခန်း (၆)
လေထုညစ်ညမ်းမှုနှင့် ဖုန်မှုန့်များ	၆.၁	ကာဗွန်ဒိုင်အောက်ဆိုက်လျော့ချရန်အတွက် စက်ရုံအနီးအတွင်း သစ်ပင်ပန်းပင်များစိုက်ပျိုးထားပါသည်။ အဆိုပြုလုပ်ငန်းဧရိယာအတွင်း စွန့်ပစ်ပစ္စည်းများ မီးရှို့ခြင်းကို တားမြစ်ထားပါသည်။ လေထုညစ်ညမ်းမှုလျော့ချရန် လုပ်ငန်းသုံးယာဉ်များ၊ မီးစက်များနှင့် လုပ်ငန်းဆိုင်ရာ စက်ပစ္စည်းများကို ပုံမှန်စောင့်စစ်ဆေးထားပါသည်။ ပတ်ဝန်းကျင်အပေါ် မီးခိုးထွက်ရှိမှုလျော့နည်းစေရန် မီးခိုးခေါင်းတိုင်များ တပ်ဆင်ရမည်။ မော်တော်ယာဉ်များ၊ ရေစုပ်စက်များနှင့် မီးစက်များကို ပုံမှန် ပြုပြင်၊	အခန်းခွဲ (၆.၁)

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
		ထိန်းသိမ်းထားရှိရမည်။	
ဆူညံသံထွက်ရှိမှု	၆.၂	မီးစက်ခန်းများထားရှိခြင်းနှင့် အခြားသက်ဆိုင်သည့် ပစ္စည်းများအား စနစ်တကျ ထိန်းသိမ်းထားရှိပါသည်။ ဝန်ထမ်းများကို သက်ဆိုင်ရာကိစ္စရပ်များနှင့် ပတ်သက်၍ သင့်တော်သော သင်တန်းများပေးခြင်း၊ ဆူညံသံထွက်ရှိသည့်နေရာများတွင် PPE များကို ဝတ်ဆင်ထားပါသည်။	အခန်းခွဲ (၆.၂)
မီးဘေးအန္တရာယ်	၆.၃	မီးအန္တရာယ်အရေးပေါ်အခြေအနေများအတွက် စက်ရုံအတွင်းတွင် မီးသတ်ဆေးဘူးများ၊ မီးသတ်ရေပိုက်များ၊ မီးသတ်ရေကန် ထားရှိပါမည်။ အရေးပေါ်ထွက်ပေါက်များနှင့် စုရပ်နေရာများအား လမ်းညွှန်ပြထားရှိပါသည်။ မီးသတ်ရေလှောင်ကန်များ၊ မီးငြိမ်းသတ်ရေးကိရိယာများကို ပုံမှန်စစ်ဆေးထားပါသည်။ စက်ရုံအတွင်း အရေးပေါ်အချက်ပေးစနစ်များ တပ်ဆင်ထားပါသည်။ အရေးပေါ်ထွက်ပေါက်များတစ်လျှောက်တွင် စက်ပစ္စည်းများနှင့် အခြားသောကုန်ပစ္စည်းများ ပိတ်ဆို့ထားခြင်း မရှိရန် စီစဉ်ထားရမည်။	အခန်းခွဲ (၆.၃)
လုပ်ငန်းခွင်ထိခိုက်မှုနှင့် ကျန်းမာရေး	၆.၄	ရှေးဦးပြုစုနည်း သင်တန်းများ၊ ဘေးအန္တရာယ်ကင်းရှင်းရေး လေ့ကျင့်မှု၊ မီးငြိမ်းသတ်နည်းသင်တန်းများ၊ အခြားလိုအပ်သော လေ့ကျင့်မှုများ၊ စက်ပစ္စည်းများကို စနစ်တကျကိုင်တွယ်မှုများအား သင်တန်းပေးအပ်မည်ဖြစ်ပါသည်။ လုပ်ငန်းခွင်အတွင်း အလုပ်သမားများ	အခန်းခွဲ (၆.၄)

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
		<p>အလင်းရောင်ကောင်းစွာရရှိစေရန်နှင့် အမြင်အာရုံမထိခိုက်စေရန် အလင်းရောင်များကို လုံလောက်စွာ ထားရှိပါသည်။</p> <p>ဌာနတစ်ခုချင်းစီအတွက် တစ်ကိုယ်ရေသုံးကာကွယ်ရေးပစ္စည်းများ ထောက်ပံ့ပေးထားပါသည်။</p> <p>လျှပ်စစ်အန္တရာယ်ကာကွယ်ရန်အတွက် လျှပ်စစ်ထိန်းသိမ်းရေးဝန်ထမ်းများအား ထားရှိ၍ အဆိုင်းခွဲ၍ ပုံမှန်စစ်ဆေးကာကွယ်မှုများပြုလုပ်စေခြင်း</p> <p>ဝန်ထမ်းများ၏ကျန်းမာရေးအတွက် စက်ရုံတွင် စီမံခန့်ခွဲထားပါသည်။</p> <p>လုပ်သားများအတွက် နေရာအတွင်း လက်ခံနိုင်သည့် အမြင့်ဆုံးဆူညံမှုနှုန်းမှာ 90 dB(A) ဖြစ်သည်။ ထို့ကြောင့် အသံဆူညံသည့်နေရာများတွင် အသံလုံသည့် နားကြပ်များ နားအကာအကွယ်ပစ္စည်းများ တပ်ဆင်ထားပါသည်။</p>	
အမှိုက်စွန့်ပစ်မှု	၆.၅	<p>စက်ရုံအတွင်း အမှိုက်ပုံးများထားရှိခြင်း</p> <p>သတ်မှတ်ထားသောနေရာတွင်သာ အမှိုက်စို၊ အမှိုက်ခြောက်များ ခွဲခြားစွန့်ပစ်ပါသည်။</p> <p>အမှိုက်များကို ရန်ကုန်စည်ပင်သာယာရေးကော်မတီနှင့် ချိတ်ဆက်၍စွန့်ပစ်ပါသည်။</p>	အခန်းခွဲ (၆.၅)
အန္တရာယ်ရှိ စွန့်ပစ်ပစ္စည်း	၆.၆	<p>အန္တရာယ်ရှိစွန့်ပစ်ပစ္စည်းများ သိမ်းဆည်းမှုအား ပုံမှန်စောင့်ကြပ်စစ်ဆေးပါသည်။</p> <p>လုပ်ငန်းခွင်ကျန်းမာရေး လုံခြုံမှုနှင့် ပတ်ဝန်းကျင်ဆိုင်ရာ</p>	အခန်းခွဲ (၆.၆)

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
		<p>လိုအပ်ချက်များနှင့် အညီ ဓာတုပစ္စည်းများကို စနစ်တကျစွန့်ပစ်ထားပါသည်။</p> <p>အန္တရာယ်ရှိစွန့်ပစ်ပစ္စည်းများကို ရန်ကုန်မြို့တော်စည်ပင်သာယာရေးကော်မတီ (သို့မဟုတ်) လိုင်စင်ရ အမှိုက်စွန့်ပစ်ရေးဆိုင်ရာ အဖွဲ့အစည်းများ (ဥပမာ DOWA or YCDC)နှင့် ချိတ်ဆက်၍ စွန့်ပစ်ပါသည်။</p>	
စွမ်းအင်	၆.၇	<p>အပူနှင့် အအေးထိန်းရန်အတွက် အချိန်ကန့်သတ်သည့်ကိရိယာနှင့် သာမိုစတပ်များတပ်ဆင်ထားပါမည်။</p> <p>စွမ်းအင်ချွေတာသောကိရိယာများတပ်ဆင်ခြင်း အသုံးမပြုသည့် အချိန်တွင် မီးပိတ်ထားခြင်း၊ စက်ပစ္စည်းများ ရပ်နားထားပါမည်။</p>	အခန်းခွဲ (၆.၇)
အရေးပေါ် အခြေအနေ	၆.၈	<p>မီးဘေး၊ ငလျင်၊ ရေလွှမ်းမိုးမှု၊ မုန်တိုင်း နှင့်အခြားအရေးပေါ်ကိစ္စများကို ပို၍သင့်တော်သော စီမံခန့်ခွဲမှုများပြုလုပ်ထားပါမည်။</p> <p>စက်ရုံ၏ ကဏ္ဍတစ်ခုချင်းတိုင်းတွင် မီးငြိမ်းသတ်ရေးကိရိယာများနှင့် မီးငြိမ်းသတ်ရေးစနစ်များ ထားရှိခြင်းနှင့် စစ်ဆေးခြင်းများပြုလုပ်ပါမည်။</p> <p>မီးဘေးထွက်ပေါက်၊ အရေးပေါ်ထွက်ပေါက် အစရှိသည်တို့ကို အလုပ်သမားများနှင့် တိုင်ပင်ဆွေးနွေးပြီး အသေးစိတ်အကဲဖြတ်ခြင်း မီးငြိမ်းသတ်ခြင်းအား ပုံမှန်လေ့ကျင့်ထားပါမည်။</p> <p>ငလျင်လှုပ်တုအခါ လုံခြုံသည့်နေရာတွင်သာနေရန်၊ အပြင်မထွက်ခြင်း၊ အပြင်တွင်လုပ်ကိုင်ရသည့် လုပ်သားများမှာ သစ်ပင်၊</p>	အခန်းခွဲ (၆.၈)

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
		<p>အဆောက်အဦများကို သတိထားရန်နှင့် သက်ဆိုင်ရာလုံခြုံရေးသင်တန်းများပို့ချထားပါမည်။</p> <p>မုန်တိုင်းတိုက်ခြင်း၊ ရေကြီးခြင်း၊ မြေပြိုခြင်းတို့ကြောင့် မြွေကဲ့သို့သော အခြားအန္တရာယ်ရှိတိရိစ္ဆာန်များအန္တရာယ်များကို သတိပေးခြင်း</p> <p>ရှေးဦးသူနာပြုခြင်းကဲ့သို့သော ကျန်းမာရေးဆိုင်ရာအဖွဲ့အစည်းများ ပြင်ဆင်ထားရှိခြင်းများပြုလုပ်ပါမည်။</p> <p>နီးစပ်ရာ ဆေးရုံ၊ ဆေးခန်း၊ ရဲစခန်း၊ မီးသတ်ဌာနတို့၏ ဆက်သွယ်နိုင်မည့် ဖုန်းနံပါတ်များအား လူအများမြင်သာသည့် နေရာများတွင် ထားရှိခြင်း</p> <p>မီးသတ်အဖွဲ့၊ ကယ်ဆယ်ရေးအဖွဲ့ နှင့် လုံခြုံရေးဟူသော အဖွဲ့များ ထားရှိ၍ လစဉ် လုံခြုံရေးများအတွက် အစည်းအဝေးများပြုလုပ် စီမံခန့်ခွဲခြင်း</p> <p>ဘေးအန္တရာယ်ဆိုင်ရာ သင်တန်းများအား သေချာပြုလုပ်ပါမည်။</p>	
စောင့်ကြပ်ကြည့်ရှုမှု	၆.၉	အဆိုပြုစီမံကိန်းသည် ပတ်ဝန်းကျင်စောင့်ကြပ်ကြည့်ရှုမှု အစီရင်ခံစာအား ၆လ တစ်ကြိမ် ဝန်ကြီးဌာနများသို့ တင်ပြပါမည်။	အခန်းခွဲ (၆.၉)
လေအရည်အသွေး စစ်ဆေးမှု	၆.၁၁	<p>SO₂, NO₂, CO, CO₂, PM_{2.5}, PM₁₀, O₃</p> <p>တစ်နှစ် ၂ ကြိမ် (လုပ်ငန်းစတင်ပြီး ၃နှစ်တွင်)</p> <p>အဆိုပြုလုပ်ငန်း/စက်ရုံဝန်းအတွင်း</p> <p>၅ သိန်း တစ်နှစ်</p>	ဇယား (၆.၁)
စွန့်ပစ်ပစ္စည်းထွက်ရှိမှုအခြေအနေ	၆.၁၂	စွန့်ပစ်ပစ္စည်းအစိုင်အခဲ၊ စွန့်ပစ်ရည်နှင့် အန္တရာယ်ရှိစွန့်ပစ်ပစ္စည်း အပတ်စဉ်	ဇယား (၆.၁)

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
		စက်ရုံအတွင်း ပြန်လည်အသုံးပြုရန်ထားရှိသည့်နေရာနှင့် အမှိုက်ကန်များ ၁ သောင်း (တစ်ကြိမ်)	
မီးဘေးအန္တရာယ် စစ်ဆေးမှု	၆.၁၃	မီးငြိမ်းသတ်ရေးကိရိယာများ လစဉ် စက်ရုံအတွင်း ၅ သိန်း တစ်လ	ဇယား (၆.၁)
စက်ရုံတွင်း အလင်းရောင်အခြေအနေ	၆.၁၄	အလင်းရောင် လစဉ် ကုန်ပစ္စည်းဖြတ်တောက်ခြင်း၊ အရည်အသွေးစစ်ဆေးခြင်းကဲ့သို့သော လုပ်ငန်းများလုပ်ကိုင်သည့် နေရာ ၅ သောင်း တစ်လ	ဇယား (၆.၁)
ဘေးအန္တရာယ်ဆိုင်ရာ သင်တန်းပို့ချခြင်း	၆.၁၅	လုပ်ငန်းခွင်၌ ကြိုတင်ခန့်မှန်းနိုင်သော အရေးပေါ်အခြေအနေများကို အရေးပေါ်တုံ့ပြန်နိုင်ရန် အစီအစဉ်များ ချမှတ်ဆောင်ရွက်ပါမည်။	အခန်းခွဲ (၆.၁၀)
မကျေနပ်မှုများနှင့် ပြဿနာများ ဖြေရှင်းခြင်း	၆.၁၆	စီမံကိန်းအနီးပတ်ဝန်းကျင်နေထိုင်သောသူများ (သို့) သက်ဆိုင်သူများသည် သူတို့ခံစားနေရသော ပြဿနာများနှင့် သက်ရောက်မှုများနှင့် ပတ်သက်၍ ဖြေရှင်းမှုများပြုလုပ်ရန် စက်ရုံ၏ တာဝန်ရှိသူများ၊ စက်မှုဇုန် စီမံခန့်ခွဲရေး ကော်မတီ၊ အုပ်ချုပ်ရေးဦးစီးဌာနတို့ဖြင့် ပူးပေါင်း ချိတ်ဆက် လုပ်ဆောင်ပါမည်။ ကော်မတီအဆင့်တွင် အခြားမဖြေရှင်းနိုင်သော ပြဿနာများကို တာဝန်ရှိအာဏာပိုင်များသို့ တင်ပြပြီး တရားရေးအရ	အခန်းခွဲ (၆.၁၁)

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
		အဆုံးအဖြတ်ပြုလုပ်မည် ဖြစ်သည်။	
လူထုအကျိုးတူပူးပေါင်းပါဝင်မှု	၆.၁၇	အဆိုပြုလုပ်ငန်းသည် လူထုအကျိုးပြုပူးပေါင်းပါဝင်မှုကို ကျန်းမာရေး၊ ပညာရေးနှင့် နယ်မြေဖွံ့ဖြိုးတိုးတက်ရေးအတွက် မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုကော်မရှင်က ချမှတ်သည့် အတိုင်း ကုမ္ပဏီ၏ အကျိုးအမြတ် ၂ ရာခိုင်နှုန်းအား နှစ်စဉ် ထည့်ဝင်သွားမည်။	အခန်းခွဲ (၆.၁၂)
အများပြည်သူနှင့်တိုင်ပင်ဆွေးနွေးခြင်း	၇	သက်ဆိုင်သူများနှင့် တွေ့ဆုံဆွေးနွေးခြင်း အစီအစဉ်ကို ၂၇ ရက်၊ နိုဝင်ဘာလ၊ ၂၀၁၉ ခုနှစ်တွင် Sky Hotelတွင်ပြုလုပ်ခဲ့ပါသည်။ တွေ့ဆုံပွဲ အစည်းဝေးတွင် သက်ဆိုင်ရာ အစိုးရအဖွဲ့ရုံး၏ တာဝန်ရှိပုဂ္ဂိုလ်များ၊ စက်မှုနှင့်စီမံခန့်ခွဲမှုကော်မတီ၏ တာဝန်ရှိပုဂ္ဂိုလ်များမှ လိုအပ်သည်များကို အကြံပေးခြင်း၊ စီမံကိန်း၏ အစီရင်ခံစာတွင် လိုအပ်သည်များကို ဖြည့်စွက်ပေးရန် အကြံပြုချက်များပေးခဲ့ပါသည်။	အခန်း(၇)
နိဂုံးနှင့်သုံးသပ်ချက်	၈	အကျဉ်းချုပ်အားဖြင့် ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်၏ လမ်းညွှန်ချက်များ၊ ပတ်ဝန်းကျင်ဆိုင်ရာ ဥပဒေ၊ နည်းဥပဒေ၊ စည်းမျဉ်းစည်းကမ်းများနှင့် ချမှတ်ထားသော မူဝါဒလမ်းညွှန်ချက်များအတိုင်း ပတ်ဝန်းကျင်ဆိုင်ရာ စီမံခန့်ခွဲမှု အလေ့အကျင့်များ၊ လုပ်ငန်းစဉ်များနှင့် လိုက်နာဆောင်ရွက်ကျင့်သုံးရန်တာဝန်များကို ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်တွင် ဖော်ပြရှင်းလင်းတင်ပြထားပါသည်။	အခန်း (၈)