

Mountain Top Global Limited ၏ CMPစနစ်ဖြင့် စီမံခန့်ခွဲမှု အစီအစဉ် (Environmental Management Plan EMP) အစီရင်ခံစာအား စိစစ်သုံးသပ်ခြင်းနှင့်  
 ရေးဆွဲ တင်ပြလာသော ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ် (Environmental Management Plan EMP) အစီရင်ခံစာအား စိစစ်သုံးသပ်ခြင်းနှင့်  
 ပြန်လည်ပြင်ဆင်ဖြည့်စွက်ရမည့် အချက်များကို ပြန်လည်ဖြည့်စွက်တင်ပြခြင်း

စဉ်		စိစစ်တွေ့ရှိချက်များ	သုံးသပ်အကြံပြုချက်များ	ပြန်လည်ဖြည့်စွက်တင်ပြချက်များ	စာမျက်နှာနံပါတ်များ
က	၁	အတိုကောက်စာလုံးများနှင့် အဓိပ္ပါယ် ဖွင့်ဆိုချက်များ			
		<ul style="list-style-type: none"><li>EMPအစီရင်ခံစာ၏ စာမျက်နှာ(4-5)တွင် အတိုကောက် စာလုံးများနှင့် အဓိပ္ပါယ်ဖွင့်ဆိုချက်ကို ဖော်ပြ ထားသော်လည်း အစီရင်ခံစာ တစ်အုပ်လုံးတွင် ရှိသော အတိုကောက် စာလုံးများ ပါဝင်ခြင်းမရှိကြောင်း စိစစ် တွေ့ရှိရပါသည်။</li></ul>	<ul style="list-style-type: none"><li>အတိုကောက်စာလုံးများနှင့် အဓိပ္ပါယ် ဖွင့်ဆိုချက်ကို EMPအစီရင်ခံစာ တစ်အုပ်လုံးတွင်ရှိသော အတို ကောက်စာလုံးများ (ဥပမာ- PAPs, KII, KVA, OCEANUS, NEPS,.....)စသည့် ကျန်ရှိသော အတို ကောက် စာလုံးများကို အဓိပ္ပါယ် ဖွင့်ဆိုချက်များဖြင့် ဖြည့်စွက်ဖော်ပြရန်</li></ul>	ထပ်မံလိုအပ်သော အတိုကောက်စာလုံးများနှင့် အဓိပ္ပါယ် ဖွင့်ဆိုချက်ကို EMPအစီရင်ခံစာ၏ စာမျက်နှာ- ၅ တွင် ဖော်ပြထားရှိပါသည်။	5
ခ	၂	အကျဉ်းချုပ်အစီရင်ခံစာ (Executive Summary)			
		<ul style="list-style-type: none"><li>အကျဉ်းချုပ်အစီရင်ခံစာ(Executive Summary) ကို EMP အစီရင်ခံစာ၏ စာမျက်နှာ (6-22)တွင် English &amp; Myanmar နှစ်ဘာသာဖြင့် ဖော်ပြ ထားသည်ကို တွေ့ရှိရပါသည်။</li><li>အကျဉ်းချုပ်အစီရင်ခံစာတွင် EMP အစီရင်ခံစာပါ အကြောင်းအရာများကို အကျဉ်းချုပ်ရေးသားထားသော်လည်း အစီရင်ခံစာပါ အကြောင်းအရာများအား အခန်း အလိုက် ပြည့်စုံစွာ ခြုံငုံ ဖော်ပြထားခြင်း မရှိကြောင်း စိစစ်တွေ့ရှိရပါသည်။</li></ul>	<ul style="list-style-type: none"><li>EMP အစီရင်ခံစာအား English ဘာသာဖြင့် ရေးသားဖော်ပြပါက အကျဉ်းချုပ်အစီရင်ခံစာ အတွက် မြန်မာဘာသာဖြင့်သာ ဖော်ပြရန် လိုအပ်ပါသည်။</li><li>အကျဉ်းချုပ်အစီရင်ခံစာတွင် ကတိကဝတ်၊ မူဝါဒ၊ ဥပဒေနှင့် အဖွဲ့အစည်းဆိုင်ရာ မူဘောင် ဘေးအန္တရာယ် ဖြစ်နိုင်ခြေ ဆန်းစစ်ခြင်း စောင့်ကြပ်ကြည့်ရှုမည့် အစီအစဉ် List of commitmentတို့အား အကျဉ်းချုပ် ထည့်သွင်း ရေးသားရန် လိုအပ်ပါသည်။</li></ul>	မြန်မာဘာသာဖြင့် ဖော်ပြထားသော အကျဉ်းချုပ် အစီရင်ခံစာအား EMPအစီရင်ခံစာ၏ စာမျက်နှာ- 18 မှ ၂၆ တွင် ဖော်ပြထားရှိပါသည်။  List of Commitmentအား အင်္ဂလိပ်ဘာသာဖြင့် EMPအစီရင်ခံစာ၏ စာမျက်နှာ- 7 to 11တွင် လည်းကောင်း၊ မြန်မာဘာသာဖြင့် အင်္ဂလိပ်ဘာသာဖြင့် EMPအစီရင်ခံစာ၏ စာမျက်နှာ- 19 to 25 တွင် လည်းကောင်း ဖော်ပြထားရှိပါသည်။	18 to 26  7 to 11  19 to 25
ဂ	၃	နိဒါန်း (Introduction)			
		<ul style="list-style-type: none"><li>နိဒါန်းအား EMP အစီရင်ခံစာ၏ အကျဉ်းချုပ် အစီရင်ခံစာတွင်သာ ဖော်ပြထားသည်ကို တွေ့ရှိရ သော်လည်းစီမံကိန်းရည်ရွယ်ချက်အား ထည့်သွင်း ဖော်ပြ ထားခြင်းမရှိပါ။</li></ul>	<ul style="list-style-type: none"><li>EMP အစီရင်ခံစာတွင်လည်း နိဒါန်းနှင့် စီမံကိန်း ရည်ရွယ်ချက်အား ထည့်သွင်းဖော်ပြရန်။</li></ul>	နိဒါန်းနှင့် စီမံကိန်း ရည်ရွယ်ချက်အား EMPအစီရင်ခံစာ၏ စာမျက်နှာ- 34 to 36 တွင် ဖော်ပြထားရှိပါသည်။	34 to 36
ဃ	၄	ကတိကဝတ် (Commitments)			
		<ul style="list-style-type: none"><li>EMP အစီရင်ခံစာ၏ စာမျက်နှာ 49-51ထိတွင် Proponents's Contractual and other Commitments ခေါင်းစဉ်ဖြင့် စီမံကိန်း အဆိုပြုသူ (project proponent) မှ လိုက်နာရမည့် ပဋိညာဉ်နှင့် အခြားသော ကတိကဝတ်များကို ဖော်ပြထားရာတွင် စီမံကိန်းအဆိုပြုသူမှ ပတ်ဝန်းကျင် ထိန်းသိမ်းရေးဥပဒေ အပါအဝင် သက်ဆိုင်ရာ ဥပဒေ၊ နည်းဥပဒေများ၊</li></ul>	<ul style="list-style-type: none"><li>ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှု အစီအစဉ်သည် တိကျ ခိုင်မာကြောင်းနှင့် ပြည့်စုံကြောင်း၊</li><li>ပတ်ဝန်းကျင်ထိခိုက်မှု ဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်း အပါအဝင် သက်ဆိုင်ရာ ဥပဒေများကို တိကျစွာ လိုက်နာ၍ ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှု အစီအစဉ်ကို ရေးဆွဲထားကြောင်း၊</li><li>စီမံကိန်းသည် ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှု အစီအစဉ်ပါ</li></ul>	စီမံကိန်း အဆိုပြုသူမှ သက်ဆိုင်ရာ ဥပဒေများ၊ ပတ်ဝန်းကျင်ထိခိုက်မှု ဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်းများကို တိကျစွာ လိုက်နာ၍ ပတ်ဝန်းကျင်ထိခိုက်မှု လျော့ချရေး လုပ်ငန်းများနှင့် အစီအစဉ်များကို အပြည့်အဝ အစဉ်အမြဲ လိုက်နာဆောင်ရွက်မည် ဖြစ်ကြောင်း ကတိကဝတ်များကို လက်မှတ်ထိုးထားသည်ကို Appendix-G တွင် ဖော်ပြထားရှိပါသည်။	Appendix-G

Mountain Top Global Limited ၏ CMPစနစ်ဖြင့် စီမံအမျိုးမျိုး ထုတ်လုပ်ခြင်း လုပ်ငန်းအား National Engineering Planning Services Co.,Ltd. မှ ရေးဆွဲ တင်ပြလာသော ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ် (Environmental Management Plan EMP) အစီရင်ခံစာအား စိစစ်သုံးသပ်ခြင်းနှင့် ပြန်လည်ပြင်ဆင်ဖြည့်စွက်ရမည့် အချက်များကို ပြန်လည်ဖြည့်စွက်တင်ပြခြင်း

		<p>လုပ်ထုံး လုပ်နည်းများ NEQEGနှင့် နိုင်ငံတကာ စံချိန်စံညွှန်းများ ပတ်ဝန်းကျင်ထိခိုက်မှု လျော့ချရေး လုပ်ငန်းများကို လိုက်နာဆောင်ရွက်ရမည် ဖြစ်ကြောင်း ဖော်ပြထားသော်လည်း ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှု အစီအစဉ်သည် တိကျနိုင်မာကြောင်းနှင့် ပြည့်စုံကြောင်းကို ထည့်သွင်း ဖော်ပြထားခြင်း မရှိကြောင်း စိစစ်တွေ့ရှိရပါသည်။</p> <ul style="list-style-type: none"><li>• အစီရင်ခံစာ ပြုစုရေးသားသူမှ အစီရင်ခံစာပါ အကြောင်းအရာများသည် တိကျ မှန်ကန်ကြောင်း နှင့်ပြည့်စုံကြောင်း သက်ဆိုင်ရာ ဥပဒေ၊ နည်းဥပဒေများ လုပ်ထုံးလုပ်နည်းများနှင့် အညီ ရေးသားထားကြောင်း ကတိကဝတ်ကို လက်မှတ် ရေးထိုးဖော်ပြထားခြင်း မရှိကြောင်း စိစစ် တွေ့ရှိရပါသည်။</li></ul>	<p>ကတိကဝတ်၊ ပတ်ဝန်းကျင်ထိခိုက်မှု လျော့ချရေး လုပ်ငန်းများနှင့် အစီအစဉ်များကို အပြည့်အဝ အစဉ်အမြဲ လိုက်နာဆောင်ရွက်မည် ဖြစ်ကြောင်း စသည်တို့ကို ဖြည့်စွက်၍ EMP အစီရင်ခံစာ၏ ကတိကဝတ် (Commitments) ခေါင်းစဉ်အောက်တွင် စီမံကိန်း အဆိုပြုသူမှ လက်မှတ်ရေးထိုးဖော်ပြရန်။</p>		
c	၅	<b>မူဝါဒ၊ ဥပဒေနှင့် အဖွဲ့အစည်းဆိုင်ရာ မူဘောင် (policy, Legal and institutional Framework)</b>			
		<ul style="list-style-type: none"><li>• EMP အစီရင်ခံစာ၏ စာမျက်နှာ 46-51ထိတွင် Health policies and commitments, Legal and Institutional Arrangement ခေါင်းစဉ်ဖြင့် စီမံကိန်း အဆိုပြုသူ၏ ပတ်ဝန်းကျင်၊ ကျန်းမာရေးနှင့် လူမှုရေးဆိုင်ရာ မူဝါဒများ (ပတ်ဝန်းကျင် ကာကွယ် ထိန်းသိမ်းခြင်း၊ CSR Fund) လိုက်နာရမည့် ဥပဒေ၊ စည်းမျဉ်းစည်းကမ်းများ၊ အပြည်ပြည်ဆိုင်ရာ လမ်းညွှန်ချက်နှင့် အပြည်ပြည်ဆိုင်ရာ သဘောတူညီချက်များ၊ စီမံကိန်းနှင့် သက်ဆိုင်သည့် International Conventionsများကို ဖော်ပြထားကြောင်း စိစစ်တွေ့ရှိရပါသည်။</li><li>• အစီရင်ခံစာ၏ Appendix-Fတွင် စီမံကိန်းအဆိုပြုသူမှ လိုက်နာ ဆောင်ရွက်မည့် မူဝါဒ၊ ဥပဒေနှင့် အဖွဲ့အစည်းဆိုင်ရာ မူဘောင်များအား ထည့်သွင်း ရေးဆွဲထားသည်ကို တွေ့ရှိရပါသည်။</li></ul>	<p>➢ အထူးသဘောထား မှတ်ချက်ပေးရန် မရှိပါ။</p>		
စ	၆	<b>စီမံကိန်းအကြောင်းအရာ ဖော်ပြချက် (Project Description)</b>			
		<ul style="list-style-type: none"><li>• Project Descriptionကို အစီရင်ခံစာ၏ စာမျက်နှာ 23-45တွင် လုပ်ငန်းနောက်ခံအကြောင်းအရာဖော်ပြချက် (Project Background)ကုန်ကြမ်းပစ္စည်းများ (Raw Materials)ရယူသည့် အရင်းအမြစ် အသုံးပြုသည့်</li></ul>	<p>➢ စီမံကိန်း အကြောင်းအရာ ဖော်ပြချက် (Project Description) ခေါင်းစဉ်အောက်တွင် အောက်ပါ အချက်များ ဖြည့်စွက်ဖော်ပြရန် လိုအပ်ပါသည်။</p> <p>➢ စီမံကိန်းမှ ကုန်ချောထွက်ရှိမှု ပမာဏ(ရက်/လ/နှစ်)</p>		

		<p>ပမာဏ ကုန်ကြမ်းပစ္စည်းသိုလှောင်မည့် storeခန်း၏ မှတ်တမ်းဓာတ်ပုံများ၊ စီမံကိန်းတည်နေရာနှင့် အရွယ်အစား ၎င်း၏ ပတ်ဝန်းကျင်ပြု ပြုလုပ်မှုပုံ (ကိုဩဒိနိတ်)ပါ၊ Project layout plan၊ Electricity Control Room ရှိ ဓာတ်ပုံ၊ Fire Protection Equipmentများ၏ ဓာတ်ပုံ၊ Water Supply မှတ်တမ်းဓာတ်ပုံ၊ Project Site ၏ Masonary Drainageဓာတ်ပုံ၊ Electrical Power Supply၊ လုပ်ငန်း စီမံကိန်းတွင် အသုံးပြုမည့် စက်ပစ္စည်း အမျိုးအစားများနှင့် အရေအတွက်များ အခြေခံအဆောက်အအုံ (အရေအတွက်နှင့် အရွယ်အစား)တို့ကို ဖော်ပြထားသော်လည်း လုပ်ငန်းဆောင်ရွက်ပုံ အဆင့်ဆင့်အား စာသား/Flowchartတို့ဖြင့် ဖော်ပြထားခြင်း မရှိဘဲ ဓာတ်ပုံများဖြင့်သာ ထည့်သွင်း ဖော်ပြထားကြောင်း စိစစ်တွေ့ရှိရပြီး အစီရင်ခံစာ၏ စာမျက်နှာ 69တွင် လုပ်ငန်း ဆောင်ရွက်ပုံ အဆင့်ဆင့်အား Footwear Production ခေါင်းစဉ်ဖြင့် စာသား/Flowchartဖြင့် ဖော်ပြထားသည်ကို စိစစ်တွေ့ရှိရပါသည်။</p> <ul style="list-style-type: none"> <li>စီမံကိန်း အကောင်အထည်ဖော်မည့် အချိန်ဇယား ကုန်ချောထွက်ရှိမှု ပမာဏ (ရက်/လ/နှစ်) ဘေးထွက် ကုန်ပစ္စည်းထွက်ရှိမှု (ရရှိပါက) (ရယူမည့် အရင်းအမြစ်) အလုပ်ချိန် သတ်မှတ်ချက်နှင့် တစ်နှစ်စက်လည်ပတ်ရက်တို့ကို ထည့်သွင်းဖော်ပြထားမှု မရှိခြင်း စီမံကိန်း ဆောင်ရွက်သည့် အဆင့်အလိုက် စွန့်ပစ်ပစ္စည်း (အစိုင်အခဲ၊ စွန့်ပစ်ရေ၊ အခိုးအငွေ့) ထွက်ရှိမှုနှင့် အမျိုးအစားများနှင့် ၎င်းတို့ကို နောက်ဆုံးစွန့်ထုတ်/စွန့်ပစ်မည့် နေရာအား ထည့်သွင်း ဖော်ပြထားခြင်း မရှိကြောင်း စိစစ်တွေ့ရှိရပါသည်။</li> </ul>	<p>အလိုက် ဖော်ပြရန်။</p> <ul style="list-style-type: none"> <li>ဘေးထွက်ကုန်ပစ္စည်း (By Products) ထွက်ရှိမှု (ရရှိပါက) ထည့်သွင်း ဖော်ပြရန်။</li> <li>အလုပ်ချိန် သတ်မှတ်ချက်နှင့် တစ်နှစ်စက်လည်ပတ်ရက်အား ထည့်သွင်းဖော်ပြရန်။</li> <li>စာမျက်နှာ 69ရှိ လုပ်ငန်းဆောင်ရွက်ပုံ အဆင့်ဆင့် (စာသား/ flowchart)ဖြင့် ဖော်ပြထားချက်အား စီမံကိန်း အကြောင်းအရာ ဖော်ပြချက် ခေါင်းစဉ်အောက်တွင် ထည့်သွင်းဖော်ပြရန်။</li> <li>စီမံကိန်းဆောင်ရွက်သည့် အဆင့်အလိုက် စွန့်ပစ်ပစ္စည်း (အစိုင်အခဲ၊ စွန့်ပစ်ရေ၊ အခိုးအငွေ့)ထွက်ရှိမှု နှင့် အမျိုးအစားများနှင့် ၎င်းတို့ကို နောက်ဆုံးစွန့်ထုတ်/စွန့်ပစ်မည့် နေရာအား ထည့်သွင်း ဖော်ပြရန်။</li> </ul>	<ul style="list-style-type: none"> <li>Solid Waste များ စီမံထားရှိမှုများကို EMPအစီရင်ခံစာ၏ စာမျက်နှာ- 61 တွင် ဖော်ပြထားရှိပါသည်။</li> <li>တပတ်လျှင် တရက်နားရက် ရှိပါသည်။ တစ်နှစ်လျှင် စက်လည်ပတ်ရက်မှာ (၃၁၃)ရက် ဖြစ်ပါသည်။ အလုပ်ချိန် သတ်မှတ်ချက်နှင့် တစ်နှစ်စက် လည်ပတ်ရက်များကို EMPအစီရင်ခံစာ၏ စာမျက်နှာ- 40 တွင် ဖော်ပြထားရှိပါသည်။</li> <li>လုပ်ငန်းဆောင်ရွက်ပုံ အဆင့်ဆင့် (စာသား/ flowchart)ဖြင့် ဖော်ပြထားချက်အား EMPအစီရင်ခံစာ၏ စာမျက်နှာ- 42-43 တွင် ဖော်ပြထားရှိပါသည်။</li> <li>လုပ်ငန်းစဉ်များမှ ထွက်ရှိသည့် အမှိုက်များကို ရန်ကုန်မြို့တော် စည်ပင်သာယာရေး ကော်မတီမှ နေ့စဉ် သိမ်းဆည်းပါသည်။ မစွန့်ပစ်မှီ ပြန်လည် အသုံးပြုခြင်း၊ လျော့ချခြင်းနှင့် အသစ်ပြန်လည် အသုံးပြုရန် ခွဲခြားခြင်းအား ဆောင်ရွက်ရန် စက်ရုံဘေးဘက် မြေနေရာ ထားရှိပါသည်။ စီမံကိန်းဆောင်ရွက်သည့် အဆင့်အလိုက် စွန့်ပစ် ပစ္စည်း (အစိုင်အခဲ၊ စွန့်ပစ်ရေ၊ အခိုးအငွေ့)ထွက်ရှိမှု နှင့် အမျိုးအစားများနှင့် ၎င်းတို့ကို နောက်ဆုံးစွန့်ထုတ်/စွန့်ပစ်မည့် နေရာအား EMPအစီရင်ခံစာ၏ စာမျက်နှာ- 61 တွင် ဖော်ပြထားရှိပါသည်။</li> </ul>	<ul style="list-style-type: none"> <li>➤ 61</li> <li>➤ 40</li> <li>➤ 42-43</li> <li>➤ 61</li> </ul>
ဆ	၇	လက်ရှိပတ်ဝန်းကျင် အခြေအနေ (Existing Environment)			
		<ul style="list-style-type: none"> <li>EMP အစီရင်ခံစာ၏ စာမျက်နှာ 52-55ထိတွင် ပတ်ဝန်းကျင် အကြောင်းအရာ ဖော်ပြချက် (Description of the Environment) ခေါင်းစဉ်ဖြင့် Climate and Hydrology, Rainfall and Temperature Pattern, Humidity Pattern နှင့် Wind Speed and Direction Pattern တို့အား 1967မှ</li> </ul>	<ul style="list-style-type: none"> <li>➤ အထူးသဘောထား မှတ်ချက်ပေးရန် မရှိပါ။</li> </ul>		

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		<p>2018ထိ Secondary Data ဖြင့် ဖော်ပြထားပါသည်။</p> <ul style="list-style-type: none"><li>• အစီရင်ခံစာ၏ စာမျက်နှာ 56-60တွင် Physical, Ecological, Social Status of the Environment ခေါင်းစဉ်ဖြင့် Soil Quality, Meteorology, Water Quality, Air and Noise Quality, Sensitive Ecosystem Flora and Fauna Socioeconomic နှင့် Land Useတို့ကို Baseline Dataများနှင့် လက်ရှိ ပတ်ဝန်းကျင် အခြေအနေကို တိုင်းတာဖော်ပြ ထားကြောင်း စိစစ်တွေ့ရှိရပါသည်။</li><li>• အစီရင်ခံစာ၏ Appendix-Eတွင် တိုင်းတာရရှိသော Water Quality Sampling Result (Drinking Water, Domestic Water, Air Quality Sampling Result, Noise Quality)တို့ကို တိုင်းတာ၍ ဓါတ်ခွဲခန်းရလဒ် အဖြေများကို ဖော်ပြထားကြောင်း စိစစ်တွေ့ရှိ ရပါသည်။</li></ul>			
၉	၈	<b>ထိခိုက်မှု ဆန်းစစ်ခြင်းနှင့် လျော့နည်းစေရေး နည်းလမ်းများ (Impact Assessment and Mitigation Measures)</b>			
		<ul style="list-style-type: none"><li>• EMP အစီရင်ခံစာ စာမျက်နှာ 61-67 တွင် Potential Environmental and Social Impact Assessment ခေါင်းစဉ်ဖြင့် သက်ရောက်မှု နယ်ပယ်အနေဖြင့် Direct Impact Zone, Locally Wide Area တို့အပေါ် Duration Magnitude နှင့် သက်ရောက်မှု အဆင့် သတ်မှတ်ခြင်း (Low, Medium, High)တို့ဖြင့် ဖော်ပြထားပါသည်။ ထိခိုက်မှု အဆင့် ခွဲခြားခြင်း (Impact Identification) Impact Assessment Matrix အနေဖြင့် (Surface Water Quality, Groundwater Quality, Drainage Patterns, Risk of soil erosion and siltation, Air Quality, Ambient Noise levels, Aquatic Biota, Terrestrial Biota, Disease Vector populations, Land Cover, Natural heritage site, Involving loss of private assets, Involving loss of cultural heritage, Involving displacement of people, Local traffic patterns, Local wage labour income/ livelihood opportunities, Local trade/ commercial incomes/ opportunities, visual amenity, public</li></ul>	<p>➢ အထူးသဘောထား မှတ်ချက်ပေးရန် မရှိပါ။</p>		



Mountain Top Global Limited ၏ CMPစနစ်ဖြင့် ဖိနှပ်အမျိုးမျိုး ထုတ်လုပ်ခြင်း လုပ်ငန်းအား National Engineering Planning Services Co.,Ltd. မှ ရေးဆွဲ တင်ပြလာသော ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ် (Environmental Management Plan EMP) အစီရင်ခံစာအား စိစစ်သုံးသပ်ခြင်းနှင့် ပြန်လည်ပြင်ဆင်ဖြည့်စွက်ရမည့် အချက်များကို ပြန်လည်ဖြည့်စွက်တင်ပြခြင်း

		<p>infrastructure, community resources)စသည်တို့ အပေါ် ပြောင်းလဲမှုနှင့် သက်ရောက်အဆင့် (Low, medium) ခွဲခြားခြင်း စသဖြင့် ထိခိုက်မှုအဆင့်များ သတ်မှတ်၍ ဆန်းစစ်ထားသည်ကို တွေ့ရှိရပါသည်။</p> <ul style="list-style-type: none"> <li>• အစီရင်ခံစာ၏ စာမျက်နှာ 70-79တွင် Dust, Chemical, Noise, Heat, Lighting, Waste Disposal, Roof, Floor and Drainage, Fire Prevention, seats, Ergonomic Working Surface, Work Tools, Welfare Facilities-Drinking Water, Welfare Facilities-food Hygiene, Personal Protective Equipment (PPE), Work Organization-Work/Reset Cycles, Work Organization-skills Development and Training, Interaction and Communication, Health Promotion-Safety and Health Committee, Health Promotion-First Aid, Health Promotion-Health Service စသည်တို့ အပေါ် သက်ရောက်နိုင်မှုနှင့် လျော့နည်းစေရေး နည်းလမ်းများ (Mitigation Measures) နည်းလမ်းများကို ဆန်းစစ်ဖော်ပြထားပါသည်။</li> <li>• စာမျက်နှာ 79တွင် စီမံကိန်း လုပ်ငန်း ဆောင်ရွက်ခြင်းကြောင့် Noise and vibration generation, Dust, odor and exhaust emissions, Impacts on water quality, Temporary Flooding, Impacts on factory performance, Impact on utilities, Public and worker health and safety စသည်တို့အပေါ် ထိခိုက်မှုများ (Impacts)အပေါ် လျော့နည်းစေရေး နည်းလမ်းများ (Mitigation Measures) အား Environmental Mitigation Plan ဖြင့် ဖော်ပြထားကြောင်း စိစစ်တွေ့ရှိရပါသည်။</li> <li>• စာမျက်နှာ 80-82 တွင် EMP Organization အား ဖွဲ့စည်းထားပြီး Environmental Management Officer (EMO) ၏ Roles and Responsibilities နှင့် Environmental Site officer (ESO)၏ Roles and Responsibilities တို့ကို ဖော်ပြထားပါသည်။</li> <li>• ပတ်ဝန်းကျင်အပေါ် ထိခိုက်မှုအား သိသာထင်ရှားစွာ</li> </ul>		
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		ထိခိုက်မှု (Significance Impact)နှင့် သာမန်ထိခိုက်မှု တို့အား လုပ်ငန်းတစ်ခုချင်းအလိုက် ဆန်းစစ် ဖော်ပြထားသည်ကို စိစစ်တွေ့ရှိ ရပါသည်။			
ဈ	၉	ဒေသခံပြည်သူများနှင့် တိုင်ပင်ဆွေးနွေးခြင်း (Public Consultation)			
		<ul style="list-style-type: none"> <li>အစီရင်ခံစာ၏ စာမျက်နှာ 89-90တွင် Community Engagement and Development Plan ခေါင်းစဉ်ဖြင့် Objective, Legal Requirements, Implementation Schedule, Management Action, Monitoring Plan, Location, Frequency, Budget Allocation နှင့် တာဝန်ယူ ဆောင်ရွက်မည့် အဖွဲ့အစည်း (Responsibilities) တို့ကို ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှု စောင့်ကြပ်ကြည့်ရှုခြင်းနှင့် ရန်ပုံငွေ လျာထားချက် (Environmental Management, Monitoring and Budget Allocation) ခေါင်းစဉ်အောက်တွင် ဖော်ပြ ထားသော်လည်း ဒေသခံပြည်သူများနှင့် တိုင်ပင် ဆွေးနွေးခြင်း (Public Consultation) နည်းလမ်းနှင့် ချဉ်းကပ်ဆောင်ရွက်မှု ဆွေးနွေးခဲ့သည့် နေ့ရက်၊ နေရာ၊ အကြိမ်အရေအတွက်၊ တက်ရောက်သူ ဦးရေ (တက်ရောက် သူစာရင်း-Listပါ) နှင့် ဆွေးနွေးသည့် အကြောင်းအရာ အကျဉ်းချုပ်တို့အား ထည့်သွင်း ဖော်ပြထားခြင်း မရှိကြောင်း စိစစ်တွေ့ရှိရပါသည်။</li> <li>စီမံကိန်းပိုင်ရှင်မှ ဆွေးနွေးသည့် အချက်အလက်များ အပေါ် တုံ့ပြန်ဆောင်ရွက်ထားမှုများကို ထည့်သွင်း ဖော်ပြထားခြင်း မရှိကြောင်း စိစစ်တွေ့ရှိရပါသည်။</li> </ul>	<ul style="list-style-type: none"> <li>➢ ဒေသခံပြည်သူများနှင့် တိုင်ပင်ဆွေးနွေးခြင်း (Public Consultation) ခေါင်းစဉ်ဖြင့် စီမံကိန်းမစတင်မီနှင့် စီမံကိန်း လည်ပတ်ဆောင်ရွက်နေစဉ် ကာလအတွင်း ဒေသခံပြည်သူများနှင့် တိုင်ပင်ဆွေးနွေးခြင်း (Public Consultation)ပြုလုပ်ရာတွင် ဆွေးနွေးသည့် နေ့ရက်၊ အကြိမ်အရေအတွက်၊ တက်ရောက်သူဦးရေ (Listပါ)တို့ကို ဆွေးနွေးခဲ့သည့် ဓါတ်ပုံမှတ်တမ်း များနှင့်တကွ ဖြည့်စွက်ဖော်ပြရန်။</li> <li>➢ စီမံကိန်းပိုင်ရှင်မှ ဆွေးနွေးချက်များအပေါ် တုံ့ပြန် ဆောင်ရွက်ထားမှု တို့ကို ဖြည့်စွက်ရေးသား ဖော်ပြရန်။</li> </ul>	၂၀၂၁ခုနှစ် စက်တင်ဘာလတွင် ဆောင်ရွက်ခဲ့သည့် Stakeholder Engagementနှင့် ပတ်သက်၍ အခန်း (၈.၃)တွင် ဖော်ပြထားပါသည်။ ကိုဗစ်-၁၉ ပျံ့နှံ့သည့် ကာလဖြစ်သည့် အားလျောစွာ စီမံကိန်းနှင့် ပတ်သက်ဆက်စပ်သူများ စုံလင်စွာ တက်ရောက်နိုင်ခြင်း မရှိခဲ့ပါ။ သို့ဖြစ်ပါ၍ အခန်း(၈.၆)တွင် Community Engagement and Development Plan အရ ရှေ့လုပ်ငန်းစဉ်များတွင် အသေးစိတ် ထည့်သွင်း ဆောင်ရွက်သွားပါမည် ဖြစ်ပါသည်။	
ည	၁၀	ဘေးအန္တရာယ် ဖြစ်နိုင်ခြေ ဆန်းစစ်ခြင်း (Risk Assessment)			
		<ul style="list-style-type: none"> <li>ဘေးအန္တရာယ် Risk Assessmentနှင့် ပတ်သက်၍ အကျဉ်းချုပ် အစီရင်ခံစာ (Executive Summary) အပါအဝင် EMP အစီရင်ခံစာတွင် သီးခြားခေါင်းစဉ်ဖြင့် ထည့်သွင်းဖော်ပြထားခြင်း မရှိကြောင်း စိစစ် တွေ့ရှိရပါသည်။ သို့သော် EMP အစီရင်ခံစာ၏ စာမျက်နှာ 68-82ရှိ Components of Environmental Management and Mitigation Measures ခေါင်းစဉ်အောက်တွင် စီမံကိန်းဆောင်ရွက်ခြင်းကြောင့် ထွက်ရှိလာမည့် Hazardous Chemicals, Noise,</li> </ul>	<ul style="list-style-type: none"> <li>➢ ဘေးအန္တရာယ် ဖြစ်နိုင်ခြေ ဆန်းစစ်ခြင်း (Risk Assessment)နှင့် ပတ်သက်၍ ဖြစ်နိုင်ပါက သီးခြားခေါင်းစဉ်ဖြင့် Fire, explosions, Chemical spills, Leakages and other unintended release of chemicals or radioactive materials, Electrical Failures, equipment malfunctioning, and Mechanical and Structure Failures and equipment malfunction စသည်တို့ကို ဆန်းစစ် ဖော်ပြရန်။</li> </ul>	ဘေးအန္တရာယ် ဖြစ်နိုင်ခြေ ဆန်းစစ်ခြင်းဆိုင်ရာ အသေးစိတ် ဆန်းစစ်ထားမှုများကို EMPအစီရင်ခံစာ၏ စာမျက်နှာ- ၉၀ မှ ၁၀၃ တွင် ဖော်ပြထားရှိပါသည်။	90 မှ 103

Mountain Top Global Limited ၏ CMPစနစ်ဖြင့် မိနပ်အမျိုးမျိုး ထုတ်လုပ်ခြင်း လုပ်ငန်းအား National Engineering Planning Services Co.,Ltd. မှ  
ရေးဆွဲ တင်ပြလာသော ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ် (Environmental Management Plan EMP) အစီရင်ခံစာအား စိစစ်သုံးသပ်ခြင်းနှင့်  
ပြန်လည်ပြင်ဆင်ဖြည့်စွက်ရမည့် အချက်များကို ပြန်လည်ဖြည့်စွက်တင်ပြခြင်း

		Heat, Lighting, Waste Disposal, Fire Prevention စသည်တို့နှင့် ပတ်သက်၍ ထိခိုက်နိုင်မှုနှင့် လျော့ချမည့် နည်းလမ်းများကို ဖော်ပြထားကြောင်း စိစစ်တွေ့ရှိ ရပါသည်။			
၆	၁၁	<b>ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှု အစီအစဉ် (Environmental Management Plan)</b>			
		<ul style="list-style-type: none"> <li>EMP အစီရင်ခံစာ၏ စာမျက်နှာ 83-108 ထိတွင် Environmental Management, Monitoring and Budget Allocation ခေါင်းစဉ်ဖြင့် Water quality Management Plan, Drainage Management plan, Air Quality Management Plan, Waste Management, Traffic Management Plan, Community Engagement and Development Plan, Occupational Health and Safety, Emergency and Rescue Plan, Corporate Social Responsibilities (CSR) and Funding Restoration and Replantation Plan, Environmental Monitoring Plan နှင့် ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှု အစီအစဉ်အား စောင့်ကြပ်ကြည့်ရှုမည့် ကုန်ကျစရိတ် (Monitoring Cost) တို့ကို ရည်ရွယ်ချက် (Objective) တာဝန်ယူ၊ တာဝန်ခံ ဆောင်ရွက်မည့် ပုဂ္ဂိုလ်/ အဖွဲ့အစည်းနှင့် ကုန်ကျစရိတ်တို့ကို တိုင်းတာ/စောင့်ကြပ်ကြည့်ရှုမည့် လုပ်ငန်း အစီအစဉ်များအလိုက် ရေးဆွဲထားသည်ကို စိစစ်တွေ့ရှိရပါသည်။</li> <li>စီမံကိန်းဆောင်ရွက်မှုကြောင့် ထွက်ရှိလာမည့် ဘေး အန္တရာယ်ရှိ ဓါတုပစ္စည်းများ (Hazardous Chemicals) များအပေါ် စီမံခန့်ခွဲမှု အစီအစဉ်အား ရေးဆွဲထားခြင်း မရှိကြောင်း စိစစ်တွေ့ရှိရပါသည်။</li> </ul>	<ul style="list-style-type: none"> <li>စီမံကိန်းဆောင်ရွက်မှုကြောင့် ထွက်ရှိလာမည့် ဘေးအန္တရာယ်ရှိ ဓါတုပစ္စည်းများ (Hazardous Chemicals) ထွက်ရှိမှုရှိပါက စီမံခန့်ခွဲမှု အစီအစဉ်အား ဆန်းစစ်ခြင်း ဖော်ပြရန်။</li> </ul>	<ul style="list-style-type: none"> <li>စီမံကိန်းဆောင်ရွက်မှုကြောင့် ထွက်ရှိလာမည့် ဘေးအန္တရာယ်ရှိ ဓါတုပစ္စည်းများ (Hazardous Chemicals) ထွက်ရှိမှုရှိပါက စီမံခန့်ခွဲမှု အစီအစဉ်အား EMPအစီရင်ခံစာ၏ စာမျက်နှာ- ၁၁၃ မှ ၁၁၄ တွင် ဖော်ပြထားရှိပါသည်။</li> </ul>	113 to 114
၅	၁၂	<b>စောင့်ကြပ်ကြည့်ရှုမည့် အစီအစဉ် (Monitoring Plan)</b>			
		<ul style="list-style-type: none"> <li>စောင့်ကြပ်ကြည့်ရှုမည့် အစီအစဉ်အား အစီရင်ခံစာ၏ စာမျက်နှာ 83-100 တွင် Water quality Management Plan, Drainage Management plan, Air Quality Management Plan, Waste Management, Traffic Management Plan, Community Engagement and Development Plan,</li> </ul>	<ul style="list-style-type: none"> <li>အထူးသဘောထား မှတ်ချက်ပေးရန် မရှိပါ။</li> </ul>		

Mountain Top Global Limited ၏ CMPစနစ်ဖြင့် ဖိနပ်အမျိုးမျိုး ထုတ်လုပ်ခြင်း လုပ်ငန်းအား National Engineering Planning Services Co.,Ltd. မှ ရေးဆွဲ တင်ပြလာသော ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ် (Environmental Management Plan EMP) အစီရင်ခံစာအား စိစစ်သုံးသပ်ခြင်းနှင့် ပြန်လည်ပြင်ဆင်ဖြည့်စွက်ရမည့် အချက်များကို ပြန်လည်ဖြည့်စွက်တင်ပြခြင်း

		<p>Occupational Health and Safety, Emergency and Rescue Plan တို့အတွက် စောင့်ကြပ်ကြည့်ရှုမည့် ရည်ရွယ်ချက် ဆောင်ရွက်မည့် ပုဂ္ဂိုလ်/ အဖွဲ့အစည်း ကုန်ကျစရိတ် စောင့်ကြပ်ကြည့်ရှုမည့်နေရာ အကြိမ်ရေ Parameterတို့ကို ဖော်ပြထားကြောင်း စိစစ်တွေ့ရှိရပါသည်။</p> <ul style="list-style-type: none"><li>• EMP အစီရင်ခံစာ၏ Appendix-Eတွင် Environmental Quality, Monitoring Report ခေါင်းစဉ်ဖြင့် outdoor air quality, outdoor air quality measurement location, Noise Quality Measurement Station, Monitoring Measurement of Noise, Water Quality စသည်တို့အား တိုင်းတာသည့် နေရာများ စောင့်ကြပ်ကြည့်ရှုမည့်နေရာများနှင့် လေအရည်အသွေး၊ သောက်သုံးရေ အရည်အသွေး တို့၏ ဓါတ်ခွဲခန်း ရလဒ်များကို WHO Standard (၂၀၁၈)ဖြင့် နှိုင်းယှဉ်ဖော်ပြထားကြောင်း စိစစ်တွေ့ရှိရပါသည်။</li></ul>			
၃	၁၃	List of Commitments			
		<ul style="list-style-type: none"><li>• စီမံကိန်း အဆိုပြုသူသည် (Project Proponent)မှ ရေးဆွဲတင်ပြလာသော EMP အစီရင်ခံစာ၏ စာမျက်နှာ 49-51တွင် Proponent's Contractual and other Commitments ခေါင်းစဉ်ဖြင့် စီမံကိန်း အဆိုပြုသူ၏ ကတိကဝတ်များကို ဖော်ပြထားသော်လည်း EMP အစီရင်ခံစာပါ အခန်းတခန်းချင်းစီအလိုက် ကတိကဝတ် ပြုချက်များကို ဇယားဖြင့် ဖော်ပြထားခြင်း မရှိကြောင်း စိစစ်တွေ့ရှိရပါသည်။</li></ul>	<p>➢ စီမံကိန်း အဆိုပြုသူ (Project Proponent) မှ EMP အစီရင်ခံစာပါ အခန်းတခန်းချင်းစီအလိုက် ကတိကဝတ်ပြုချက်များ စာရင်း ( List of Commitments) ကို ဇယားဖြင့် ထည့်သွင်းဖော်ပြရန်။</p>	<p>စီမံကိန်း အဆိုပြုသူ (Project Proponent) မှ EMP အစီရင်ခံစာပါ အခန်းတခန်းချင်းစီအလိုက် ကတိကဝတ်ပြုချက်များ စာရင်း ( List of Commitments) ကို ဇယားအား EMPအစီရင်ခံစာ၏ စာမျက်နှာ- ၆၈ မှ ၇၂ တွင် ဖော်ပြထားရှိပါသည်။</p>	68 to 72
	၁၄	နိဂုံး သုံးသပ်ချက် (Conclusion and Recommendation)			
		<ul style="list-style-type: none"><li>• Mountain Top Global Limited ၏ CMP စနစ်ဖြင့် ဖိနပ် အမျိုးမျိုး ထုတ်လုပ်ခြင်း လုပ်ငန်းအား National Engineering and Planning Services Co.,Ltd. မှ ရေးဆွဲတင်ပြလာသော ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှု အစီအစဉ် (Environmental Management Plan EMP) အစီရင်ခံစာတွင် စီမံကိန်းလုပ်ငန်း ဆောင်ရွက်ခြင်းကြောင့် ဖြစ်ပေါ်လာနိုင်မည့် သဘာဝပတ်ဝန်းကျင်နှင့် လူမှုပတ်ဝန်းကျင်အပေါ် သက်ရောက်မှုများအား</li></ul>	<p>➢ ပြန်လည် ပြင်ဆင် ဖြည့်စွက် တင်ပြမည့် EMP အစီရင်ခံစာတွင် ယခုပေးပို့သော အကြံပြုချက် တစ်ခုချင်းစီကို ဖြေရှင်းစဉ်းစား၍ EMPအစီရင်ခံစာ၏ မည်သည့် အပိုင်းတွင် ရေးသားထားသည်ကို ဖော်ပြသော (Comment Response Table)ကို ဖော်ပြရန်။</p>	<p>ပြင်ဆင် တင်ပြအပ်ပါသည်။</p>	

Mountain Top Global Limited ၏ CMPစနစ်ဖြင့် ဖိနပ်အမျိုးမျိုး ထုတ်လုပ်ခြင်း လုပ်ငန်းအား National Engineering Planning Services Co.,Ltd. မှ ရေးဆွဲ တင်ပြလာသော ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ် (Environmental Management Plan EMP) အစီရင်ခံစာအား စိစစ်သုံးသပ်ခြင်းနှင့် ပြန်လည်ပြင်ဆင်ဖြည့်စွက်ရမည့် အချက်များကို ပြန်လည်ဖြည့်စွက်တင်ပြခြင်း

		အစီရင်ခံစာပါ ထိခိုက်နိုင်မှုနှင့် လျော့နည်းစေရေး လုပ်ငန်းများကို အပြည့်အဝ အစဉ်အမြဲ လိုက်နာ ဆောင်ရွက်မည်ဆိုပါက သိသာထင်ရှားသော ပတ်ဝန်းကျင်နှင့် လူမှုရေးအပေါ် ဆိုးကျိုးသက်ရောက် မှုများ မဖြစ်ပေါ်စေဘဲ အကောင်အထည်ဖော် ဆောင်ရွက်နိုင်မည် ဖြစ်ကြောင်း သုံးသပ်ရပါသည်။			
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➤ Mountain Top Global Limited ၏ CMP စနစ်ဖြင့် ဖိနပ် အမျိုးမျိုး ထုတ်လုပ်ခြင်း လုပ်ငန်းအား National Engineering and Planning Services Co.,Ltd. မှ ရေးဆွဲတင်ပြလာသော ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှု အစီ အစဉ် (Environmental Management Plan EMP) အစီရင်ခံစာတွင် မူဝါဒ၊ ဥပဒေနှင့် အဖွဲ့အစည်းဆိုင်ရာ မူဘောင်၊ လက်ရှိပတ်ဝန်းကျင် အခြေအနေ၊ ထိခိုက်မှု ဆန်းစစ်ခြင်းနှင့် လျော့ကျစေရေး နည်းလမ်းများ၊ စောင့်ကြပ်ကြည့်ရှုမည့် အစီအစဉ် စသည်တို့တွင် အထူးသဘောထား မှတ်ချက်ပေးရန် မရှိသော်လည်း အတိုကောက်စာလုံးများနှင့် အဓိပ္ပါယ်ဖွင့်ဆိုချက်များ၊ အကျဉ်းချုပ် အစီရင်ခံစာ၊ နိဒါန်း၊ ကတိကဝတ်၊ စီမံကိန်းအကြောင်းအရာ ဖော်ပြချက်၊ ဒေသခံ ပြည်သူများနှင့် တိုင်ပင်ဆွေးနွေးခြင်း၊ ဘေးအန္တရာယ်ဖြစ်နိုင်ခြေ ဆန်းစစ်ခြင်း ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်နှင့် List of Commitments တို့တွင် ဤစိစစ်ချက်ဇယား၏ သုံးသပ်အကြံပြုချက် ဇယားတွင် ပါဝင်သော ပြန်လည် ပြင်ဆင်ဖြည့်စွက်ရမည့် အချက်များကို ပြန်လည်ဖြည့်စွက် တင်ပြရန် လိုအပ်မည် ဖြစ်ကြောင်း စိစစ်တွေ့ရှိရပါသည်။

**MOUNTAIN TOP GLOBAL LIMITED**

## **ENVIRONMENTAL MANAGEMENT PLAN**

**FOR**

### **FOOTWEAR MANUFACTURING FACTORY PROJECT, PLOT NO.(176), BLOCK NO.(49), WATAYAR INDUSTRIAL ZONE, SHWEPYITHAR TOWNSHIP, YANGON REGION**



**September 2022**



**National Engineering & Planning Services Co., Ltd, Myanmar**

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## **ABBREVIATIONS AND ACRONYMS**

Abbreviations	
BPC	Bio-Physical and Chemical
CO	Carbon Monoxide
CO <sub>3</sub>	Carbon Dioxide
CSR	Corporate Social Responsibility
CMP	Cutting, Making and Packing
EERT	External Emergency Response Team
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EMO	Environmental Management Officer
ERT	Emergency Response Team
ERTL	Emergency Response Team Leader
ESO	Environmental Site Officer
GoM	Government of Myanmar
HSE	Health, Safety and Environment

IFC	International Finance Corporation
ESIA	Environmental and Social Impact Assessment
NEQEG	National Environmental Quality Emission Guideline
MONREC	Ministry of Natural Resources and Environmental Conservation
MOEE	Ministry of Electricity and Energy
NEPS	National Engineering and Planning Services
O <sub>3</sub>	Ozone
OH & S Code	Occupational Health and Safety Code
PCM	Public Consultation Meeting
KII	Key Informant Interview
pH	Measurement of Acidity and Alkalinity
PM <sub>10</sub>	Particulate Matter < 10 µ m
PM <sub>2.5</sub>	Particulate Matter < 2.5 µ m
RO	Reverse Osmosis
SO <sub>2</sub>	Sulfur Dioxide
SIA	Social Impact Assessment
PAPs	Project Affected Persons
TSP	Total Suspended Particulate
TDS	Total Dissolved Solid
VOCs	Volatile Organic Compounds
KVA	Kilo Volt per Ampere
OCEANUS	Outdoor Air Quality Measurement Devices Name (OCEANUS-AQM09)

## ***APPENDICES***

<i>Appendix A</i>	<i>: Permit Order and Certificates</i>
<i>Appendix A-1</i>	<i>: Land release of Project area</i>
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<i>Appendix G</i>	<i>: Commitment Letter of Project Proponent</i>

# **ENVIRONMENTAL MANAGEMENT PLAN (EMP) REPORT ON FOOTWEAR MANUFACTURING FACTORY PROJECT, WATAYAR INDUSTRIAL ZONE, SHWEPYITHAR TOWNSHIP, YANGON REGION**

## **1. EXECUTIVE SUMMARY**

### **1.1 Summary of Project Description**

The Project Proponent “Mountain Top Global Limited” is situated at Plot No. 176, Block No. 49, Wartayar Industrial Zone, Shwepyithar Township, Yangon Region for manufacturing all kinds of footwear products on CMP (Cutting-Making-Packing) basis with client-ordered design.

Amount of foreign capital investment for Mountain Top Footwear Manufacturing Factory Project is 2.922 Million USD (100% Foreign Investment Company Mountain Top Global Limited). Land and buildings are leased by the project proponent with an initial thirty (30) years and extendable for two times for ten (10) years counting from the date of signing the Lease Agreement between Daw Thi Thi Han (Lessor) and Mountain Top Global Limited (Lessee).<sup>1</sup>

For manufacturing of varieties of shoes to be exported on CMP System, the factory infrastructures have already been constructed and its completion of construction phase is 100% now. Infrastructures constructed at project site which is an area of 2.752 acres (11136 m<sup>2</sup>) includes:

- Warehouse Factory A (94,500 mm x 35,000 mmm) two storey building;
- Warehouse Factory B (94,500 mm x 41,000 mm) two storey building;
- Dormitory Building (8,000 mm x 35,000 mm) three storey building.

The machinery, spare parts, raw materials and other accessories are intended to be imported from foreign country to produce the finished products at this factory. These raw materials are certified to ensure safe transportation to the project site as non-hazardous materials. Moreover, total types of 67 machineries will be used for production of footwear.

At the project site, Tube well water is being treated by RO treatment plant and is supplied from purified water distribution to the entire project site. The required electrical power supply is from the National Grid Line (33KV) with 2000 KVA transformer and also a generator is being installed for emergency cases. Furthermore, the factory has health clinic for workers and for those who are sick, they are sent to Social Welfare Hospital for care.

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<sup>1</sup> Appendix A: Project Document, the Yangon Region Investment Committee at its meeting (2/2019) held on 23<sup>rd</sup> Jan 2019.

The project has completed the construction phase of all infrastructures including warehouse, dormitory, factory and offices. Now it is in its operational phase. Emergency Response Procedures and Fire Fighting and Prevention Equipment are being supplied and carried out systematically.

## **1.2 Policy, Legal and Institutional Framework**

Background information of legal aspects on environmental conservation in Myanmar relating to water treatment and supply are found in Port Act, 1908. They are observed throughout the years and are still active at present. The following existing major Myanmar Laws with regard to Water and Environmental Conservation are outlined below:

1. The Environmental Conservation law, 2012
2. The Environmental Conservation Rule, 2014
3. EIA Procedure(2015)
4. National Environmental Quality (Emissions) Guidelines(2015)
5. Myanmar Investment Law (2016), The Pyidaungsu Hluttaw Law No. 40/2016
6. Myanmar Investment Rules, Notification No.35/2017
7. The Import and Export Law 2012
8. The Forest Law (2018)
9. Conservation of Water Resources and Rivers Law (2006)
10. The Protection and Preservation of Antique Objects Law (2015)
11. The Protection and Preservation of Ancient Monuments Law (2015)
12. Myanmar Fire Force Law (2015)
13. Prevention from Danger of Hazardous Chemical and Associated Material Law (Pyidaungsu Hluttaw Law No. 28/2013)
14. Myanmar Insurance Law (1993)
15. The Law on Standardization (2014)
16. Motor Vehicle Law (2015)
17. Public Health Law (1972)
18. The Protection and Prevention of Communicable Disease Law (1995)
19. The control of smoking and Consumption of Tobacco Product Law (2006)
20. Employment and Skill Development Law (2013)

21. The Settlement of Labour Dispute Law (2012)
22. The Workmen Compensation Act, 1923 (amended 2005)
23. Labour Organization Law, 2011
24. Minimum Wages Law, 2013
25. Payment of Wages Law, 2016
26. Social Security Law, 2012
27. Law Protecting Ethnic Right, 2015
28. Leaves and Holidays Act, 1951
29. Occupational Safety and Health 2019 (Pyidaungsu Hluttaw Law No.8.2019)
30. IFC Environmental, Health and Safety Guidelines

Table of Commitments

No.	Brief commitments	Descriptions of Commitment	Reference Chapter
1.	<ul style="list-style-type: none"> <li>Correctness and acknowledgement</li> </ul>	<ul style="list-style-type: none"> <li>The Mountain Top Global Limited (Project Proponent) acknowledged all the correctness of all the description being described.</li> <li>The Project Proponent committed to take any obligation and responsibility being described.</li> </ul>	Chapter.1 Executive Summary
2.	<ul style="list-style-type: none"> <li>Correctness and acknowledgement</li> </ul>	<ul style="list-style-type: none"> <li>The Mountain Top Global Limited (Project Proponent) acknowledged all the correctness of all the description being described for the context of the project.</li> </ul>	Chapter.2 Introduction
3.	<ul style="list-style-type: none"> <li>Acknowledgement and obligations</li> </ul>	<ul style="list-style-type: none"> <li>The Mountain Top Global Limited (Project Proponent) acknowledged all the policies being explored in this report and committed to comply to undertake.</li> <li>The Mountain Top Global Limited (Project Proponent) committed to comply which are applicable and relevant to the activities which will be undertaken although not explored in this report.</li> <li>The Mountain Top Global Limited (Project Proponent) committed to comply policies which will be prepared and undertaken by the government authorities for the state requirements.</li> <li>The Mountain Top Global Limited (Project Proponent) acknowledged all the acts, rules, regulations, procedures, directives being explored in this report and committed to comply to undertake.</li> <li>The Mountain Top Global Limited (Project Proponent) committed to comply which are applicable and relevant to the activities</li> </ul>	Chapter.3 Policy, Legal and institutional framework

		<p>which will be undertaken although not explored in this report.</p> <ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) committed to comply rules, regulations, procedures, directives which will be prepared and prescribed by the government authorities for the state requirements.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged all the acts, rules, regulations, procedures concerning environmental conservation and committed to comply and implement the project as per those prescriptions.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged emission standards and committed to comply to undertake the project activities to meet the requirements.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged the institutional arrangement and committed to comply.</li> </ul>	
4.	<ul style="list-style-type: none"> <li>• Correctness and acknowledgement</li> </ul>	<ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged all the correctness of all the description being described.</li> <li>• The Project Proponent committed to take any obligation and responsibility being described.</li> </ul>	Chapter.4 Project description and alternative
5.	<ul style="list-style-type: none"> <li>• Correctness and acknowledgement</li> <li>• Commitment for control measure</li> </ul>	<ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged all the correctness of all the description being described.</li> <li>• The Project Proponent committed to take any obligation and responsibility being described.</li> <li>• The Mountain Top Global Limited (Project Proponent) committed to comply the control measures being explored for reducing pollution.</li> </ul>	Chapter.5 Description of Physical and Social Environmental Condition
6.	<ul style="list-style-type: none"> <li>• Correctness, acknowledgement</li> <li>• Commitment for social performances requirements</li> </ul>	<ul style="list-style-type: none"> <li>• The Resources Group Logistics Company Limited (Project Proponent) acknowledged all the correctness of all the description being described.</li> <li>• The Project Proponent committed that all project activities undertaken to meet social performances requirements</li> </ul>	
7.	<ul style="list-style-type: none"> <li>• Correctness and acknowledgement</li> <li>• Commitment for EMP, mitigation measures, HSE, Monitoring, stakeholder</li> </ul>	<ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged all the correctness of all the description being described.</li> <li>• The Project Proponent committed that all the impacts being explored in this report are being reduced as per EMP.</li> </ul>	Chapter.6 Potential environmental and social impacts

	engagement, Emergency/Response Procedure	<ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged all the mitigation measures being described and committed to comply.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged to comply and undertake the mitigation measures which are not being explored but will be arisen upon the requirements.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged all the requirements to implement the EMP being explored and committed to undertake the EMP in line with project activities.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged all the requirements concerning health, safety and environment and committed to comply as per those being explored in this reported and those which may arise to be complied upon the situations.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged all the requirements to implement the Environmental Monitoring being explored and committed to undertake.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged all the codes of practices being explored and committed to undertake.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged and committed to undertake the project as per management plans being explored for caring traffic, fire, disaster, earthquakes.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged and committed to implement the Grievance Redress Mechanism-GRM as a part of requirements for stakeholder engagement.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged and committed to undertake Community Development Plan for implementing CSR activities.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged and committed to undertake Socio-economic development Program.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged and committed to undertake as per Emergency/Incident Response Procedures being explored.</li> </ul>	
8.	• Commitment for Monitoring Report	<ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged to undertake</li> </ul>	Chapter.7 and 8 Environmental

	<ul style="list-style-type: none"> <li>• Commitment for Environmental and Social Monitoring Program</li> <li>• Commitment to allocate Environmental Monitoring cost</li> </ul>	<p>environmental performance monitoring and committed to submit the monitoring report to the Ministry as per schedules being explored in Environmental Management Plan.</p> <ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged and committed to comply to undertake the Environmental and social Monitoring Program.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged and committed to allocate the cost for the implementing of Environmental Monitoring.</li> </ul>	Management & Monitoring, Mitigation Measures
9.	<ul style="list-style-type: none"> <li>• Acknowledgement and commitment for social and environmental finding</li> </ul>	<ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged the finding concerning environmental and social and committed to comply the recommendation being explored.</li> </ul>	Chapter.9 Recommendation and Conclusion

### 1.3 Summary of Baseline Physical and Social Environment

**Soil Quality:** The soil types and the soil characteristics of representative soils in the project area are available in detail respectively. According to soil types and soil characteristics of Myanmar, Ministry of Agriculture and Irrigation, March 2004, the soils of the project area are Lateritic soils which are prominent and Meadow and Meadow alluvial soils at 10 km range of the project site. The area demarcated as Wartayar Industrial Zone has lateritic soil which is a zone soil, formed in warm, temperature and tropical regions and rich in iron and aluminum, low in silica and chemically acidic. Meadow soil which occur near the river plains with occasional tidal flood are non-carbonate and contain more plant nutrient than that of upper Myanmar.

**Meteorology:** Climate of the project area is subtropical climate; hot and humid weather with recorded maximum temperature of 41°C and recorded minimum temperature of 30°C.

Annual rainfall over the area averages 67.67 inches (171.90 mm) during the past four years. Most rainfall results from tropical systems during the period of May and October. Annual wind speed at Shwe Pyi Thar, generally ranges from maximum wind speed of 2.9 kmph and minimum wind speed of 1.8 kmph with mean annual relative humidity of 79%.

**Water Quality:** Since the production process is a dry process, the water sample was collected from drinking water pipe for workers at the project site and it was tested in Pro Lab Analytical Laboratory in 27<sup>th</sup> September, 2021. Water quality assessment parameters are pH, acidity, alkalinity, electric conductivity, total dissolved solid, total suspended solids, calcium hardness, chloride, carbonate, magnesium hardness, manganese, phosphate, iron, salinity, sodium chloride, sulfate and turbidity. The analyzed parameters are compared with WHO Drinking Water Guidelines. According to the test result, all of the chemical and physical parameters are within the limit range of WHO Standards, 2018. Therefore, the water quality assessment



indicated that the water is chemically fit for drinking purposes or industrial uses.

**Air Quality**<sup>2</sup>: Environmental quality monitoring, i.e., ambient air pollution and noise level tests at the project area was conducted by the Hexagonal Angle Consulting Team on 25<sup>th</sup> September of 2021. The OCEANUS<sup>TM</sup> AQM-09 was used for air measuring survey and the measurement station is located at the project area and monitoring point is located in the loading / uploading place between two production factories. During the assessment, the average temperature was 30.2°C and relative humidity was 76.6%. The measured parameters are dust particles such as TSP, PM<sub>10</sub>, PM<sub>2.5</sub>, and the gaseous pollutants such as NO<sub>2</sub>, SO<sub>2</sub>, CO and O<sub>3</sub>, relative humidity, air pressure and temperature etc., for outdoor air quality. Measurements were recorded in the operation with duration of 24 hours between consecutive measurements and the results are compared with National Environmental Quality (Emission) Guideline and World Health Organization Guideline. According to the result, the observed level of the ambient air quality parameters meet permissible limits of both Guidelines, making environmentally safe for the workers.

**Noise Quality**: Baseline noise quality was measured at loading and uploading place in the shoe factory using BENTECH GM 1356 Digital Sound Level Meter. At present sound level results of minimum is 44.7 dBA and maximum is 85.1 dBA with average noise level of 64.25 dBA during day time. For industrial and commercial area, the maximum permissible sound level hourly by day and night is 70 dBA respectively. Noise levels at the site and in nearby areas are also found to be within the permissible limits as National Environmental Quality (Emission) Guideline for Industrial Area.

**Sensitive Ecosystem**: Except from Hlawgar National Park, which is situated at about 5 km from the project site, there is no sensitive ecosystem including wildlife sanctuaries, migratory routes of wildlife, biosphere reserve, tiger reserve, elephant reserve, and wetlands are present in this township. University of Computer Studies and Hlawga National Park at its eastern part and West Yangon University and Shwe Lin Ban Industry Zone at its southwest which are within 10 km range of the project site.

**Flora and Fauna**: There is no significant flora and fauna observed around the vicinity area. The native plants of Shwe Pyi Thar Township are ma-gyi, ta-ma, kokku, mayzali, pine and other green trees. However, the specific study area has already been urbanized with human activities and land used over the past years. Nowadays, the site within the industrial area has no significant vegetation or habitat for wildlife and its vegetation mainly comprises of the road side vegetation and prominent vegetation pattern is bushy and continuous on both sides of the road.

**Socioeconomic Data**: The proposed site is located in Shwe Pyi Thar Township, Yangon Region, Myanmar and the site is bordered by four townships namely: Mingalardon Township

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<sup>2</sup> Appendix E Environmental Quality Monitoring Report: Ambient Air Quality Analysis Results

to its east, Hthantabin Township and Hlaing River to its west, Insein Township to its south and Hmawbi Township to its north. Since the project site falls administratively on the west part of Shwe Pyi Thar Township in the Watayar Industrial Zone, most of the surrounding areas are occupied by factories and there is no human settlement inside and around the environment.

**Socio-Economic Status<sup>3</sup>:** According to 2019 social study, the total population of the study area is 284922 with total household of 61496. Male female ratio of the study area is 1:1.14 as of 2019. The ethnicity of almost 94% is Bamah and others make less than 6% including foreigners. Out of the total population, the number of people who can work is 135028 and the unemployment rate is 13.53%. Main livelihoods are government services, industrial worker, merchant, livestock breeding, agriculture, casual labor and others.

This township is a developing township in economic status. The important sectors for the economic development of the vicinity area are industrial worker and merchant. Commodities are the major productions of this township which are mainly exported to the vicinity townships and most of the materials are imported from Yangon. There are many water resources in this township and most of water supply for the township is mainly from surface water. The township has 13 waste trucks with 118 municipal workers. Major crop productions are paddy (monsoon/ summer) and beans. The project area has good transportation and can be accessed through railway and roads. There are hospital, clinics and rural healthcare centers, and INGO and NGO in this township. Three well-known pagodas and one monastery are in this township; however, there are no main historical and archeological structures with 10 km range of the project site.

**Land use:** The total land use area in Shwe Pyi Thar Township is 16484 acres. Almost 72% of its total area covers urban and built-up area, 0.36% of grassland, 11.27% of agriculture land, 15.88% of industrial area and 1.18% of religious land area. Forest area percentage in this township is deemed negligible.

#### **1.4 Summary of Direct Environmental Impacts resulting from the Project Operation, Mitigation and Management Plan**

The impacts have been assessed according to four parameters: Extent, Duration, Magnitude and Probability. These four parameters of environmental significance are assigned a score from 1 to 3 based on a grading, which is illustrated in the table below; this then allows an assessment of overall significance to emerge.

SCORE	Extent	Duration	Magnitude	Probability
1	Direct impact zone: Within the works/site area or immediate surroundings	Short: The impact is short term (0- 12 months) or intermittent	Low: No or negligible alterations to No or minimal change to socio-economic condition	Low

<sup>3</sup> 2019 Shwe Pyi Thar Township Data

2	Locally: Effects measurable/noticeable outside the works area and immediate surroundings	Medium: Medium term (1-2 years)	Medium: Natural ecosystems are modified Changes are experienced to socio-economic	Medium
3	Wide Area: The activity has impact on a larger scale	Long: the impact persists beyond the construction phase for years or the operational life of the project area may be continuous	High: Environmental functions altered Socio-economic conditions highly modified. Effects may be permanent or irreversible	High

Based on the scores related to extent, duration, magnitude and probability of a specific impact, the significance of the impact is expressed as an indicator given by:

$$\text{Significance indicator} = (\text{Extent} + \text{Duration} + \text{Probability}) \times \text{Magnitude}$$

***The Summary of the Impact Assessment for the Bio-Physical and Chemical, Socio-Economic and Cultural parameters are as follows:***

Operational Phase		
Ref.	Impact/Issue	Significance
<b>Bio-Physical &amp; Chemical</b>		
BPC/1	Changes in surface water quality	low
BPC/2	Changes in groundwater quality	low
BPC/3	Changes to drainage patterns	low
BPC/4	Risk of Soil erosion and siltation	low
BPC/5	Changes to air quality	medium
BPC/6	Changes to ambient noise levels	low
BPC/7	Changes to aquatic biota	low
BPC/8	Changes to terrestrial biota	low
BPC/9	Changes to disease vector populations	medium
BPC/10	Changes to land cover	low
BPC/11	Changes in natural heritage site	low
<b>Socio-Economic &amp; Cultural</b>		
SEC/1	Changes involving loss of private assets	low
SEC/2	Changes involving loss of cultural heritage	low
SEC/3	Changes involving displacement of people	low
SEC/4	Changes to local traffic patterns	low
SEC/5	Changes in local wage labour incomes/livelihood opportunities	medium
SEC/6	Changes in local trade/commercial incomes/opportunities	medium
SEC/7	Changes in visual amenity	medium
SEC/8	Changes to public infrastructure/community resources	medium

**Note: Impacts are negative unless indicated with shading in green color in the above impact matrix table.**

The mitigation measures for the above identified impacts are based on the environmental practice for improving safety, health and working environment in the informal footwear sector<sup>4</sup>.

Operational Phase Mitigation Measures:

- Periodically clear drainage at dumping / storage site;
- Practice good housekeeping: Keep workshop environmentally clean, prohibit dust;
- Implement Health and Safety Routines for the site:
- Protect workers' occupational health with good lighting, safe drinking water, clean air and sanitation facilities;
- Conduct public awareness raising on environment;
- Community safety monitoring to be carried out;
- Periodically checking of storage site and related structure;
- Check no interference with private / public assets;
- Ensure emergency response plan;
- Prioritized loading and unloading during daylight hours;
- Ensure vehicle and engine exhausts fully operational;
- Consider integrated waste management for footwear industry: prevention, minimization/reduction, reuse, recycling, energy recovery, and disposal;
- Ensure safe drinking water provision by testing the drinking water for its physical, chemical and also microbiological analysis at least twice a year;
- Ensure production workers' occupational health and safety by provision of mask and relevant personal protective equipment.

### **1.6 Summary of Key Informant Interview (KII)**

The following notes are responses from the key informant interviews at the project site during Sept-Oct 2021:

**Mountain Top Global Limited:** mostly produces Ladies footwear (boots, shoes and summer footwear) with CMP (Cutting-Making-Packing) procedure according to its ordered-footwear designs.

**Working Hours:** Working time starts from 7:30 AM to 4:30 PM with 1 hour lunch-break.

**Salary Rate:** start minimum 144,000 kyats to maximum 220,000 kyats. At present, we have 62 workers (labors) and 1 Chinese employee.

**The production process:** is just cut, glue, and stitch; and produce the output product according to ordered footwear design.

**Dormitory:** The foreign employee stays in the Factory but the local labors attend work from home.

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<sup>4</sup> ILO, "Improving safety, health and working environment in the informal footwear sector"

**Staff Welfare:** We have 62 staff, and those who live outside the factory come to work by their own initiatives. We don't have separate dining room for staff to eat our lunch during break-time at noon but we provide a place for lunch including dining tables and chairs. The staff brings their own meals from home. Currently we don't have ferry for 62 staffs but we will arrange it if there are more than 200 staffs.

**Solid Waste Management:** Since our CMP process for production of footwear is a dry process, we have mostly solid waste generated from the cutting stage. These are all collected by our local contractors and sent for recycling work. However, the domestic wastes are being collected by the local municipality regularly for its hygienic disposal to relevant landfill site.

**Health Clinic:** There is a health clinic inside the compound, with a certified nurse in-charge to take care of our staff's health.

**Fire Fighting System:** We have regular fire-fighting training administered to our staff.

**Electrical Supply:** We have 2000 KVA transformer to run the factory. The electrical power source is from the national grid (33 KV cable) as our factory is located in the Wartayar Industrial Zone area.

**Water Resources:** Water from our two wells is pumped and stored to 12 Nos. x 11' x7' x7' rectangular ground tanks. Then it is pumped to the overhead tanks (2000L x 4 nos. + 3000L steel tanks) and distributed to the entire factory by gravity flow.

**Drainage:** We have masonry drainage constructed around the compound, which drains out the effluent into the Wartayar Industrial Zone drainage system and ultimately into the nearby water body.

### 1.5 Summary of Environmental and Social Management Plan

The EMP organization or cell will be set up for the project proponent or the implementation of the EMP:

- **Environmental Auditor** to monitor the EMP Performance (can be internal or independent external);
- **Environmental Management Officer (EMO)**, who will manage the performance of the EMP, hired by the proponent (internal);<sup>5</sup>
- **Environmental Site Officer (ESO)**, who will assist EMO and carry out the environmental management on site<sup>6</sup>.

Environmental Management Plans for each identified impact<sup>7</sup>:

1. Water Quality Management and Ground Water Protection Plan;

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<sup>5</sup> Chapter 7.4.1 of this report: "EMO Roles and Responsibilities"

<sup>6</sup> Chapter 7.4.2 of this Report; "ESO Roles and Responsibilities"

<sup>7</sup> Chapter 8 of this Report: "Environmental Management, Monitoring and Budget Allocation"

2. Erosion, siltation and drainage Pattern Management Plan;
3. Air Quality Management Plan;
4. Waste Management Plan;
5. Traffic Management Plan;
6. Community Engagement and Development Plan;
7. Occupational Health and Safety Plan;
8. Emergency and Rescue Plan;
9. Corporate Social Responsibility (CSR) and Funding;
10. Restoration and Replantation Plan;
11. Environmental Monitoring Plan.

***The following contents of the above mentioned sub plans of the EMP are incorporated in Chapter 8 of this Report:***

- Objective of each sub plan;
- Relevant Legal Requirements;
- Implementation Schedule of the sub plan;
- Management Action of the sub plan;
- Monitoring Plan of the sub plan;
- Indicator Parameters for each sub plan;
- Location of Sampling for testing work / analysis;
- Frequency of Monitoring work;
- Estimated Budget Allocation of each sub plan;
- Responsible Person / Organization for the sub plan Environmental Management.

Overall Annual Budget Estimate for implementation of the EMP and monitoring is 22 Million Kyats. However, if the project is beyond the current estimated cost, the necessary funds are deemed to be duly expanded by the project proponent.

## EXECUTIVE SUMMARY IN MYANMAR LANGUAGE

### အကျဉ်းချုပ်အစီရင်ခံစာ

#### ၁.၁။ နိဒါန်း

အဆိုပြုစီမံကိန်းကိုဆောင်ရွက်နေသည့် မောင်တိန်တော့(ပ်)ဂလိုဘယ်လီမီတက်သည် ရန်ကုန်တိုင်းဒေသကြီး၊ ရွှေပြည်သာမြို့နယ်၊ ဝါးတရာစက်မှုဇုန်၊ မြေတိုင်းရပ်ကွက်အမှတ်(၄၉)၊ မြေကွက်အမှတ်(၁၇၆)တွင် အဓိက အားဖြင့် ဖိနပ်အမျိုးမျိုးကို ဝယ်ယူသူဖက်မှ အပ်နှံထားသောဒီဇိုင်းအတိုင်း ဖြတ်/ချုပ်/ထုတ်ပိုးသည့် စနစ် (CMP system) ဖြင့် ချုပ်လုပ်သော ဖိနပ်ချုပ်စက်ရုံဖြစ်ပါသည်။

စီမံကိန်းအတွက် စုစုပေါင်းမတည်ငွေပမာဏမှာ အမေရိကန်ဒေါ်လာ ၂.၉၂၂ သန်း (ရာခိုင်နှုန်းပြည့် နိုင်ငံခြားရင်းနှီးမြှုပ်နှံမှု)ဖြစ်ပါသည်။ စီမံကိန်းခြေနေရာနှင့် အဆောက်အအုံများကို ဒေါ်သီသီဟန်ထံမှ မြေဧက ၂.၇၅၂ (၁၁၁၃၆စတုရန်းမီတာ)ကို မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံရေးကော်မရှင်၏ခွင့်ပြုချက်နှင့်အညီ မြေပိုင်ရှင်နှင့် မြေဌာရမ်းသူတို့၏ နှစ်ဦးနှစ်ဖက် သဘောတူစာချုပ်လက်မှတ် ရေးထိုးသည့်ရက်မှစတင်၍ ပထမနှစ်(၃၀)စာ (၁၀နှစ်တစ်ကြိမ် မြေဌာစာချုပ်သက်တမ်းအား နှစ်ကြိမ်တိုးခြင်း) ဖြင့် ဌာရမ်းထားခြင်းဖြစ်ပါသည်။

CMP system ဖြင့် ဖိနပ်အမျိုးမျိုးချုပ်လုပ်ပြီး ပြည်ပသို့တင်ပို့ရန်အတွက် စက်ရုံကို ဆောက်လုပ်ထားပြီးဖြစ်ပြီး ယခုအချိန်တွင် အခြားအဆောက်အအုံများနှင့် စက်ပစ္စည်းတပ်ဆင်ခြင်းလုပ်ငန်းများပြီးစီးမှုမှာ ၁၀၀% ရှိပါသည်။ စီမံကိန်းတည်နေရာရှိ အဆောက်အအုံများမှာ အောက်ပါအတိုင်းဖြစ်ပါသည်။

- (အလျား ၉၄၅၀၀ မီလီမီတာ × အနံ ၃၅၀၀၀ မီလီမီတာ) နှစ်ထပ်အလုပ်ရုံ၊ အဆောက်အအုံ- အေ၊
- (အလျား ၉၄၅၀၀ မီလီမီတာ × အနံ ၄၁၀၀၀ မီလီမီတာ) နှစ်ထပ်အလုပ်ရုံ၊ အဆောက်အအုံ- ဘီ၊
- (အလျား ၈၀၀၀ မီလီမီတာ × အနံ ၃၅၀၀၀ မီလီမီတာ) သုံးထပ်အဆောင်နှင့် စားဖိုဆောင်

ဖိနပ်အမျိုးမျိုးထုတ်လုပ်ရန်အတွက် အသုံးပြုသောစက်ယန္တရားများ၊ ကုန်ကြမ်းပစ္စည်းများနှင့် အခြားလိုအပ်သောပစ္စည်းများကို နိုင်ငံခြားမှ တင်သွင်းမည်ဖြစ်ပါသည်။ တင်သွင်းလာသော ကုန်ကြမ်းပစ္စည်းများသည် သက်ဆိုင်ရာမှ အန္တရာယ်ကင်းရှင်းမှုရှိကုန်ပစ္စည်းများဖြစ်ကြောင်း ထောက်ခံချက်ရရှိထားပြီးဖြစ်ပါသည်။ ဖိနပ် ထို့ပြင်၊ ဖိနပ်ထုတ်လုပ်ရန်အတွက် စက်ယန္တရားပေါင်း (၆၇)ခုကို အသုံးပြုမည်ဖြစ်ပါသည်။

စက်ရုံဧရိယာအတွင်းရှိ အစိစိတွင်းမှ ရရှိသောရေများကို ရေသန့်စက်(RO treatment plant) ဖြင့်သန့်စင်ပြီး အထွေထွေသုံးရေအဖြစ် အသုံးပြုပါသည်။ လုပ်ငန်းသုံး အတွက် လိုအပ်သောလျှပ်စစ်ဓာတ်အားကို လျှပ်စစ်နှင့်စွမ်းအင်ဝန်ကြီးဌာနမှ ရရှိသည့်အပြင် အရေးပေါ်သုံးရန်အတွက် ဗို့အား (၂၀၀၀)KVA ရှိသည့် အရန်မီးစက်တစ်လုံး ရှိပါသည်။ ထို့နောက်၊ စက်ရုံရှိ အလုပ်သမားများ၏ကျန်းမာရေးအတွက် ဆေးပေးခန်းလည်း ထားရှိပေးပါသည်။

ယခုအချိန်တွင် အဆောက်အအုံများ၊ သိုလှောင်ရုံ၊ ရုံးခန်း၊ အဆောင်နှင့် စက်တပ်ဆင်မှုများ ဆောက်လုပ်မှုပြီးစီးပြီဖြစ်ပါသည်။ မီးဘေးအန္တရာယ်ကာကွယ်ရန်နှင့် အရေးပေါ်ကိစ္စများအတွက် ကြိုတင်ပြင်ဆင်မှုများလည်း စနစ်တကျ ဆောင်ရွက်ပေးလျက်ရှိပါသည်။

## ၁.၂ မူဝါဒ၊ ဥပဒေဆိုင်ရာနှင့် အဖွဲ့အစည်း မူဘောင် အကျဉ်းချုပ်

Mountain Topဖိနပ်လုပ်ငန်း ထုတ်လုပ်ခြင်း လုပ်ငန်းနှင့် ပတ်သက်၍ မူဝါဒ၊ ဥပဒေဆိုင်ရာနှင့် အဖွဲ့အစည်း ဆိုင်ရာ အချက်အလက်များကို မူဝါဒ၊ ဥပဒေဆိုင်ရာနှင့် အဖွဲ့အစည်းမူဘောင် အကျဉ်းချုပ်တွင် ရေးသားထားပါသည်။ အဆိုပါ မူဝါဒ၊ ဥပဒေဆိုင်ရာနှင့် အဖွဲ့အစည်း မူဘောင်များကို ဖော်ပြထားပါသည်။

၁။ ပတ်ဝန်းကျင် ထိန်းသိမ်းရေး ဥပဒေ (၂၀၁၂)

၂။ ပတ်ဝန်းကျင် ထိန်းသိမ်းရေး နည်းဥပဒေ (၂၀၁၄)

၃။ ပတ်ဝန်းကျင် ထိခိုက်မှု ဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်း (၂၀၁၅)

၄။ အမျိုးသား ပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များ (၂၀၁၅)

၅။ မြန်မာနိုင်ငံ ရင်းနှီးမြှုပ်နှံမှု ဥပဒေ (၂၀၁၆)

၆။ မြန်မာနိုင်ငံ ရင်းနှီးမြှုပ်နှံမှု နည်းဥပဒေ (၂၀၁၇)

၇။ သွင်းကုန်ထုတ်ကုန် ဥပဒေ (၂၀၁၂)

၈။ သစ်တောများ ဥပဒေ(၂၀၁၈)

၉။ ရေအရင်းအမြစ်နှင့် မြစ်ချောင်းများ ထိန်းသိမ်းရေး ဥပဒေ (၂၀၀၆)

၁၀။ ရှေးဟောင်းဝတ္ထုပစ္စည်း ကာကွယ်ထိန်းသိမ်းရေး ဥပဒေ (၂၀၁၅)

၁၁။ ရှေးဟောင်းအဆောက်အအုံ ကာကွယ်ထိန်းသိမ်းရေး ဥပဒေ (၂၀၁၅)

၁၂။ မြန်မာနိုင်ငံ မီးသတ်တပ်ဖွဲ့ ဥပဒေ (၂၀၁၅)

၁၃။ ဓါတုပစ္စည်းနှင့် ဆက်စပ်ပစ္စည်းများ အန္တရာယ်မှ တားဆီးကာကွယ်ခြင်း ဥပဒေ (၂၀၁၃)

၁၄။ မြန်မာ့ အာမခံ ဥပဒေ (၁၉၉၃)

၁၅။ စံချိန်စံညွှန်း သတ်မှတ်ခြင်းဆိုင်ရာ ဥပဒေ (၂၀၁၄)

၁၆။ မော်တော်ယာဉ် ဥပဒေ (၂၀၁၅)

၁၇။ ပြည့်သူ့ကျန်းမာရေး ဥပဒေ (၁၉၇၂)

၁၈။ ကူးစက်ရောဂါများ ကာကွယ် နှိမ်နင်းရေး ဥပဒေ (၁၉၉၅)



၁၉။ ဆေးလိပ်နှင့် ဆေးရွက်ကြီးထွက် ပစ္စည်း သောက်သုံးမှု ထိန်းချုပ်ရေး ဥပဒေ (၂၀၀၆)

၂၀။ အလုပ်အကိုင်နှင့် ကျွမ်းကျင်မှု ဖွံ့ဖြိုးတိုးတက်ရေး ဥပဒေ (၂၀၁၃)

၂၁။ အလုပ်သမား အငြင်းပွားမှု ဖြေရှင်းရေး ဥပဒေ (၂၀၁၂)

၂၂။ The workmen Compensation Act (1923) (Amend 2005)

၂၃။ အလုပ်သမား အဖွဲ့အစည်း ဥပဒေ (၂၀၁၁)

၂၄။ အနည်းဆုံး အခကြေးငွေ ဥပဒေ (၂၀၁၃)

၂၅။ အခကြေးငွေ ပေးချေရေး ဥပဒေ (၂၀၁၆)

၂၆။ လူမှု ဖူလုံရေး ဥပဒေ (၂၀၁၂)

၂၇။ တိုင်းရင်းသား လူမျိုးများ၏ အခွင့်အရေး ကာကွယ်စောင့်ရှောက်သည့် ဥပဒေ (၂၀၁၅)

၂၈။ ခွင့်ရက်နှင့် အလုပ်ပိတ်ရက်များ ဥပဒေ (၁၉၅၁)

၂၉။ လုပ်ငန်းခွင် ဘေးအန္တရာယ် ကင်းရှင်းရေးနှင့် ကျန်းမာရေးဆိုင်ရာ ဥပဒေ (၂၀၁၉)

၃၀။ IFC Environmental Health and Safety Guidelines



ကတိကဝတ်ပြုမှုဇယား

စဉ်	အကျဉ်းချုပ်	ရှင်းလင်းချက်	ကိုးကားအခန်း
၁။	<ul style="list-style-type: none"> <li>မှန်ကန်မှုနှင့် အသိအမှတ်ပြုမှု။</li> </ul>	<ul style="list-style-type: none"> <li>The Mountain Top Global Limited (Project Proponent) အနေဖြင့် ဖော်ပြထားသည့် ဖော်ပြချက်များအားလုံးသည် မှန်ကန်ကြောင်း အသိအမှတ်ပြုထားပါသည်။</li> <li>ဖော်ပြထားသည့် တာဝန်နှင့် ဝတ္တရားများကို ဆောင်ရွက်ရန် အဆိုပြု စီမံကိန်းတင်သွင်းသူမှ ကတိပြုထားပါသည်။</li> </ul>	အခန်း (၁) အကျဉ်းချုပ်အစီရင်ခံစာ
၂။	<ul style="list-style-type: none"> <li>မှန်ကန်မှုနှင့် အသိအမှတ်ပြုမှု။</li> </ul>	<ul style="list-style-type: none"> <li>The Mountain Top Global Limited (Project Proponent) သည် စီမံကိန်းအခြေအနေဖော်ပြထားသည့် ဖော်ပြချက်များ အားလုံးသည် မှန်ကန်ကြောင်း အသိအမှတ်ပြုထားပါသည်။</li> </ul>	အခန်း (၂) နိဒါန်း
၃။	<ul style="list-style-type: none"> <li>အသိအမှတ်ပြုမှုနှင့် တာဝန်ဝတ္တရားများ။</li> </ul>	<ul style="list-style-type: none"> <li>The Mountain Top Global Limited (Project Proponent) သည် ဤအစီရင်ခံစာတွင် စူးစမ်းလေ့လာထားသည့် မူဝါဒ အားလုံးကို အသိအမှတ်ပြုပြီး လိုက်နာဆောင်ရွက်ရန် ကတိပြုထား ပါသည်။</li> <li>ဤအစီရင်ခံစာတွင် စူးစမ်းလေ့လာခြင်းမလုပ်ရသော်လည်း ဆောင်ရွက်မည့်လုပ်ငန်းနှင့်သက်ဆိုင်သည့် လုပ်ဆောင်ချက်များကို ဆောင်ရွက်ရန် ကတိပြုထားပါသည်။</li> <li>The Mountain Top Global Limited (Project Proponent) သည် နိုင်ငံတော်လိုအပ်ချက်များအရ အစိုးရအာဏာပိုင်များမှ ပြင်ဆင်ပြီး ဆောင်ရွက်မည့် မူဝါဒများကို လိုက်နာရန် ကတိပြုထား ပါသည်။</li> <li>The Mountain Top Global Limited (Project Proponent) သည် ဤအစီရင်ခံစာတွင် ရှာဖွေလေ့လာလျက်ရှိသည့် အက်များ၊ စည်းမျဉ်းများ၊ လုပ်ထုံးလုပ်နည်းများ၊ ညွှန်ကြားချက်များ အားလုံးကို အသိအမှတ်ပြုပြီး လိုက်နာဆောင်ရွက်ရန် ကတိပြုထား ပါသည်။</li> <li>The Mountain Top Global Limited (Project Proponent) သည် နိုင်ငံတော်လိုအပ်ချက်များအရ အစိုးရအာဏာပိုင်များမှ ပြင်ဆင်ပြီး သတ်မှတ်မည့် စည်းမျဉ်းများ၊ လုပ်ထုံးလုပ်နည်းများ၊</li> </ul>	အခန်း (၃) မူဝါဒ၊ ဥပဒေနှင့် အဖွဲ့အစည်းဆိုင်ရာ မူဘောင်

		<p>ညွှန်ကြားချက်များအားလုံးကို လိုက်နာရန် ကတိပြုထားပါသည်။</p> <ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) သည် သဘာဝပတ်ဝန်းကျင် ထိန်းသိမ်းရေးဆိုင်ရာ လုပ်ဆောင်ချက်များ၊ စည်းမျဉ်းများ၊ လုပ်ထုံးလုပ်နည်းများ၊ ညွှန်ကြားချက်များအားလုံးကို အသိအမှတ်ပြုပြီး အဆိုပါ ညွှန်ကြားချက်များအတိုင်း စီမံကိန်းကို လိုက်နာအကောင်အထည် ဖော်ရန် ကတိပြုထားပါသည်။</li> <li>• The Mountain Top Global Limited (Project Proponent) သည် ဓာတ်ငွေ့ထုတ်လွှတ်မှု စံချိန်စံညွှန်းများကို အသိအမှတ်ပြုပြီး စီမံကိန်းနှင့်ပတ်သက်သည့် လုပ်ဆောင်မှုများ သည် လိုအပ်ချက်များအတိုင်း ပြည့်မီစေရန် အကောင်အထည်ဖော် ဆောင်ရွက်ရန် ကတိကဝတ်ပြုထားပါသည်။</li> <li>• The Mountain Top Global Limited (Project Proponent) သည် အဖွဲ့အစည်းဆိုင်ရာ စီစဉ်ဆောင်ရွက်မှုများကို အသိအမှတ်ပြုပြီး လိုက်နာရန် ကတိပြုထားပါသည်။</li> </ul>	
၄။	<ul style="list-style-type: none"> <li>• မှန်ကန်မှုနှင့် အသိအမှတ်ပြုမှု။</li> </ul>	<ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) သည် အစီရင်ခံစာပါ ဖော်ပြချက်များအားလုံးသည် မှန်ကန် ကြောင်း အသိအမှတ်ပြုထားပါသည်။</li> <li>• The Mountain Top Global Limited (Project Proponent) သည် ဖော်ပြထားသည့် တာဝန်နှင့် ဝတ္တရားများကို လိုက်နာဆောင်ရွက်ရန် ကတိပြုထားပါသည်။</li> </ul>	အခန်း (၄) စီမံကိန်းအကြောင်း ဖော်ပြချက်နှင့် အခြားနည်းလမ်းများ
၅။	<ul style="list-style-type: none"> <li>• မှန်ကန်မှုနှင့် အသိအမှတ်ပြုမှု။</li> <li>• ထိန်းချုပ်မှုနည်းလမ်းများအတွက် ကတိကဝတ်ပြုခြင်း။</li> </ul>	<ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) သည် အစီရင်ခံစာပါ ဖော်ပြချက်များအားလုံးသည် မှန်ကန် ကြောင်း အသိအမှတ်ပြုထားပါသည်။</li> <li>• The Mountain Top Global Limited (Project Proponent) သည် ဖော်ပြထားသည့် တာဝန်နှင့် ဝတ္တရားများကို လိုက်နာဆောင်ရွက်ရန် ကတိပြုထားပါသည်။</li> <li>• The Mountain Top Global Limited (Project Proponent)</li> </ul>	အခန်း (၅) ပတ်ဝန်းကျင်အခြေအနေ ဖော်ပြချက်

		သည် ညစ်ညမ်းမှုကို လျော့ချရန်အတွက် ထိန်းချုပ်မှု အစီအစဉ်များကို လိုက်နာဆောင်ရွက်ရန် ကတိပြုထားပါသည်။	
၆။	<ul style="list-style-type: none"> <li>• မှန်ကန်မှုနှင့် အသိအမှတ်ပြုမှု။</li> <li>• လူမှုရေးဆိုင်ရာ စွမ်းဆောင်ရည် လိုအပ်ချက်များအတွက် ကတိကဝတ်ပြုခြင်း။</li> </ul>	<ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) သည် အစီရင်ခံစာပါ ဖော်ပြချက်များအားလုံးသည် မှန်ကန် ကြောင်း အသိအမှတ်ပြုထားပါသည်။</li> <li>• The Mountain Top Global Limited (Project Proponent) သည် စီမံကိန်းနှင့်ပတ်သက်သည့် လှုပ်ရှားမှုများအားလုံး သည် လူမှုစွမ်းဆောင်ရည်လိုအပ်ချက်များနှင့် ကိုက်ညီမှုရှိကြောင်း ကတိပြုထားပါသည်။</li> </ul>	အခန်း (၆) လူမှုရေးနှင့် ပတ်ဝန်းကျင်အခြေအနေ ဖော်ပြချက်
၇။	<ul style="list-style-type: none"> <li>• မှန်ကန်မှုနှင့် အသိအမှတ်ပြုမှု။</li> <li>• ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်၊ လျော့ပါးသက်သာစေရေးအစီအမံများ၊ ကျန်းမာရေးနှင့် ပတ်ဝန်းကျင်ဘေးကင်းရေး၊ စီမံကိန်းသက်ဆိုင်သူများ တွေ့ဆုံဆွေးနွေးမှု၊ အရေးပေါ်တုံ့ပြန်မှုလုပ်ငန်းစဉ်အတွက် ကတိကဝတ်ပြုခြင်း။</li> </ul>	<ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) သည် အစီရင်ခံစာပါ ဖော်ပြချက်များအားလုံးသည် မှန်ကန် ကြောင်း အသိအမှတ်ပြုထားပါသည်။</li> <li>• The Mountain Top Global Limited (Project Proponent) သည် ဤအစီရင်ခံစာတွင် စူးစမ်းရှာဖွေထားသည့် အကျိုး သက်ရောက်မှုများ အားလုံးကို ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်အတိုင်း လျော့ချထားကြောင်း ကတိပြုထားပါသည်။</li> <li>• The Mountain Top Global Limited (Project Proponent) သည် စူးစမ်းလေ့လာထားသည့် လျော့ပါးသက်သာစေရေး အစီအမံများအားလုံးကို အသိအမှတ်ပြုပြီး လိုက်နာဆောင်ရွက် ရန် ကတိပြုထားပါသည်။</li> <li>• The Mountain Top Global Limited (Project Proponent) သည် စူးစမ်းလေ့လာထားသေးသော်လည်း လိုအပ်ချက်များ အရ ပေါ်ပေါက်လာမည့် လျော့ပါးသက်သာစေရေး အစီအမံများ အားလုံးကို လိုက်နာဆောင်ရွက်ရန် အသိအမှတ်ပြုထားပါသည်။</li> <li>• The Mountain Top Global Limited (Project Proponent) သည် စူးစမ်းလေ့လာထားသည့် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်ပြီးမြောက်ရန် လိုအပ်ချက်များအားလုံးကို အသိအမှတ်ပြုပြီး EMP ကို စီမံကိန်းလုပ်ငန်းများနှင့်အညီ ဆောင်ရွက်ရန် ကတိပြုထား</li> </ul>	အခန်း (၆) ဖြစ်လာနိုင်သည့် ပတ်ဝန်းကျင်နှင့် လူမှုရေးဆိုင်ရာ သက်ရောက်မှုများ

		<p>ပါသည်။</p> <ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) သည် ကျန်းမာရေး၊ ဘေးကင်းရေးနှင့် ပတ်ဝန်းကျင်ဆိုင်ရာ လိုအပ်ချက်များအားလုံးကို အသိအမှတ်ပြုပြီး အစီရင်ခံစာတွင် စူးစမ်းလေ့လာထားသည့်အတိုင်း လိုက်နာဆောင်ရွက်ရန်နှင့် အခြေအနေအရ လိုအပ်သည့်အတိုင်း လိုက်နာဆောင်ရွက်ရန် ကတိပြုထားပါသည်။</li> <li>• The Mountain Top Global Limited (Project Proponent) သည် လေ့လာတွေ့ရှိထားသည့် ပတ်ဝန်းကျင်ဆိုင်ရာ စောင့်ကြပ်ကြည့်ရှုခြင်းကို အကောင်အထည်ဖော်ရန် လိုအပ်ချက်များအားလုံးကို အသိအမှတ်ပြုပြီး လိုက်နာဆောင်ရွက်ရန် ကတိပြုထားပါသည်။</li> <li>• The Mountain Top Global Limited (Project Proponent) သည် လေ့လာတွေ့ရှိထားသည့် ကျင့်ထုံးများအားလုံးကို အသိအမှတ်ပြုပြီး လိုက်နာဆောင်ရွက်ရန် ကတိပြုထားပါသည်။</li> <li>• ကုမ္ပဏီသည် ယာဉ်ကြောပိတ်ဆို့မှု၊ မီးဘေး၊ ငလျင်ဘေး၊ မြေငလျင်ဘေးများအတွက် စီမံကွပ်ကဲမှုအစီအစဉ်များကို အသိအမှတ်ပြုပြီး ၎င်းအတိုင်း စီမံကိန်းကို ဆောင်ရွက်သွားရန် ကတိပြုထားပါသည်။</li> <li>• The Mountain Top Global Limited (Project Proponent) သည် မကျေနပ်ချက်ပြန်လည်ဖြေရှင်းရေးစနစ် (GRM) ကို စီမံကိန်းနှင့်သက်ဆိုင်သည့် သဘောတူညီမှုအတွက် လိုအပ်ချက် တစ်စိတ်တစ်ပိုင်းအနေဖြင့် ပြီးမြောက်အောင် ဆောင်ရွက်ရန် အသိအမှတ်ပြု၊ ကတိပြုထားပါသည်။</li> <li>• The Mountain Top Global Limited (Project Proponent) သည် CSR လုပ်ငန်းများကို အကောင်အထည်ဖော် ဆောင်ရွက်ရန် ရပ်ရွာဖွံ့ဖြိုးရေးစီမံကိန်းကို အသိအမှတ်ပြုပြီး လိုက်နာဆောင်ရွက်ရန်</li> </ul>	
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		<p>ကတိပြုပါသည်။</p> <ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) သည် လူမှုစီးပွားဖွံ့ဖြိုးတိုးတက်ရေးအစီအစဉ်ကို အသိအမှတ်ပြုပြီး လိုက်နာဆောင်ရွက်ရန် ကတိပြုထားပါသည်။</li> <li>• The Mountain Top Global Limited (Project Proponent) သည် လေ့လာတွေ့ရှိသည့် အရေးပေါ်ဖြစ်ရပ်တုံ့ပြန်မှုဆိုင်ရာ လုပ်ထုံးလုပ်နည်းများကို အသိအမှတ်ပြုပြီး ၎င်းအတိုင်း လိုက်နာဆောင်ရွက်ရန် ကတိပြုထားပါသည်။</li> </ul>	
၈။	<ul style="list-style-type: none"> <li>• လေ့လာစောင့်ကြည့်ခြင်းအစီရင်ခံစာအတွက် ကတိကဝတ်ပြုခြင်း။</li> <li>• ပတ်ဝန်းကျင်နှင့် လူမှုရေးဆိုင်ရာလေ့လာစောင့်ကြည့်ရန် ကတိကဝတ်ပြုခြင်း။</li> <li>• ပတ်ဝန်းကျင်စောင့်ကြည့်ရေး ကုန်ကျစရိတ်ခွဲဝေပေးရန် ကတိကဝတ်ပြုခြင်း။</li> </ul>	<ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) သည် ပတ်ဝန်းကျင်စွမ်းဆောင်ရည် စောင့်ကြည့်ခြင်း လုပ်ဆောင်ရန် အသိအမှတ်ပြုပြီး သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာ စီမံခန့်ခွဲမှုအစီအစဉ်ရှိ အချိန်ဇယားများအတိုင်း လေ့လာစောင့်ကြည့် ခြင်း အစီရင်ခံစာကို ဝန်ကြီးဌာနသို့ တင်ပြရန် ကတိပြုထားပါသည်။</li> <li>• The Mountain Top Global Limited (Project Proponent) သည် ပတ်ဝန်းကျင်နှင့် လူမှုရေးဆိုင်ရာ စောင့်ကြည့် လေ့လာရေးအစီအစဉ်ကို အသိအမှတ်ပြုပြီး လိုက်နာဆောင်ရွက်ရန် ကတိပြုထားပါသည်။</li> <li>• The Mountain Top Global Limited (Project Proponent) သည် ပတ်ဝန်းကျင်စောင့်ကြည့်လေ့လာရေး အကောင်အထည်ဖော်မှုအတွက် ကုန်ကျစရိတ်ခွဲဝေပေးရန် အသိအမှတ်ပြုပြီး ကတိပြုထားပါသည်။</li> </ul>	အခန်း (၇)နှင့် အခန်း (၈) ပတ်ဝန်းကျင်ဆိုင်ရာ လေ့လာစောင့်ကြည့်ခြင်း
၉။	<ul style="list-style-type: none"> <li>• လူမှုရေးနှင့် ပတ်ဝန်းကျင်ဆိုင်ရာတွေ့ရှိချက်များအား အသိအမှတ်ပြုခြင်းနှင့် ကတိကဝတ်ပြုခြင်း။</li> </ul>	<ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) သည် ပတ်ဝန်းကျင်နှင့် လူမှုရေးဆိုင်ရာတွေ့ရှိချက်များကို အသိအမှတ်ပြုပြီး အကြံပြုချက်အတိုင်း လိုက်နာဆောင်ရွက်ရန် ကတိပြုထားပါသည်။</li> </ul>	အခန်း (၉) အကြံပြုချက်နှင့် နိဂုံး

## ၁.၃။ စီမံကိန်းအနီးပတ်ဝန်းကျင်နှင့် လူနေမှုအခြေအနေအကျဉ်းချုပ်

မြေအရည်အသွေး။ ။ ၂၀၀၄ခုနှစ်၊ မတ်လတွင် လယ်ယာစိုက်ပျိုးရေးနှင့်ဆည်မြောင်းဝန်ကြီးဌာနမှ ထုတ်ပြန်ထားသော "မြန်မာနိုင်ငံတွင် တွေ့ရှိရသောမြေအမျိုးအစားများနှင့် မြေအမျိုးအစားများ၏ လက္ခဏာများ" အရ စက်ရုံတည်ရှိသောနေရာ၏ မြေအမျိုးအစားမှာ ဂဝ်မြေအမျိုးအစားဖြစ်ပြီး စက်ရုံ၏ (၁၀)ကီလိုမီတာ ပတ်ဝန်းကျင်ရှိ မြေအမျိုးအစားများမှာ လယ်မြေမြေအမျိုးအစားဖြစ်ပါသည်။ စီမံကိန်းတည်ရှိသည့် ဝါးတစ်ရာစက်မှုဇုန်၏ မြေအမျိုးအစားသည် အပူပိုင်းဒေသများတွင် တွေ့ရပြီး သံနှင့်အလူမီနီယံဓာတ်များပြီး၊ ဓာတုနည်းအရ အက်စစ်ဓာတ်များသော ဂဝ်မြေအမျိုးအစားဖြစ်ပါသည်။ လယ်မြေအမျိုးအစားမှာမူ လှိုင်မြစ်နှင့်နီးသောဒေသများတွင် တွေ့ရပြီး အဆိုပါမြေအမျိုးအစားသည် စိုက်ပျိုးရေးအတွက် ကောင်းမွန်ကြောင်း တွေ့ရပါသည်။

ရာသီဥတု။ ။ စီမံကိန်းတည်နေရာသည် ပူအိုက်စိုစွတ်သောရာသီဥတုရှိပြီး အမြင့်ဆုံးအပူချိန်မှာ ၄၁ ဒီဂရီ စင်တီဂရိတ် နှင့် အနိမ့်ဆုံးအပူချိန် ၃၀ ဒီဂရီစင်တီဂရိတ်ရှိပါသည်။ လွန်ခဲ့သော(၄)နှစ်အတွင်း နှစ်စဉ်ပျမ်းမျှ မိုးရေချိန် ၁၇၁.၉၀ မီလီမီတာ (၆၇. ၆၇လက်မ) ရှိပြီး နှစ်စဉ် မေလနှင့် အောက်တိုဘာလတို့တွင် မိုးအများဆုံး ရွာသွန်းလေ့ရှိပါသည်။ နှစ်စဉ်လေတိုက်နှုန်း အမြင့်ဆုံးနှင့်အနိမ့်ဆုံးမှာ တစ်နာရီ ၂.၉ ကီလိုမီတာ နှင့် တစ်နာရီ ၁.၈ ကီလိုမီတာ အသီးသီးရှိပြီး၊ နှစ်စဉ်ပျမ်းမျှစိုထိုင်းစ ၇၉ ရာခိုင်နှုန်းရှိပါသည်။

ရေအရည်အသွေး။ ။အဆိုပြုစီမံကိန်းသည် ဖိနပ်ချုပ်လုပ်သည့်လုပ်ငန်းဖြစ်သည့်အတွက် ရေအရည်အသွေးစမ်းသပ်ရန်အတွက်မူ စက်ရုံအတွင်းဖြန့်ဝေသော သောက်သုံးရေကို ၂၀၂၁ခုနှစ်၊ စက်တင်ဘာလ (၂၇) ရက်နေ့တွင် Pro Lab Analytical Laboratory တွင် ပြုလုပ်ခဲ့ပြီး တိုင်းတာမှုပြုလုပ်သောပါရာမီတာများသည် အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး(ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်နှင့် ကမ္ဘာ့ကျန်းမာရေးအဖွဲ့မှ ထုတ်ပြန်ထားသော သောက်သုံးရေစံနှုန်းများနှင့် ကိုက်ညီမှုရှိပါသည်။ ထို့ကြောင့် စက်ရုံပတ်ဝန်းကျင်မှ ရရှိသော တွင်းရေသည် သောက်သုံးရေအတွက် အသုံးပြုနိုင်ကြောင်းတွေ့ရှိရသည်။

လေထုအရည်အသွေး။ ။ ၂၀၂၁ခုနှစ်၊ စက်တင်ဘာလ(၂၇)ရက်နေ့တွင် စီမံကိန်းပတ်ဝန်းကျင်အတွင်းရှိ လေထုအရည်အသွေးနှင့် ဆူညံမှုတိုင်းတာရန်အတွက် Haxagonal Angle Consulting Team မှ OCEANUS™ AQM-09 နှင့် BENTECH GM 1356 စက်များဖြင့် စက်ရုံအတွင်း ရွေးချယ်ထားသော ကုန်ပစ္စည်းအတင်/အချ ပြုလုပ်သည့်နေရာတွင် တိုင်းတာမှုပြုလုပ်ခဲ့ပါသည်။ လေထုအတွင်းရှိ အမှုန်များနှင့် အဆိပ်သင့်နိုင်သော အငွေ့ များအား တိုင်းတာပြီး ကမာ/ကျန်းမာရေးအဖွဲ့နှင့် အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး(ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များနှင့် နှိုင်းယှဉ်ထားပါသည်။ အဆိုပါတိုင်းတာမှု ပြုလုပ်နေချိန်တွင် စက်ရုံပတ်ဝန်းကျင် အပူချိန် မှာ ၃၀.၂ ဒီဂရီစင်တီဂရိတ် နှင့် ပျမ်းမျှစိုထိုင်းစ ၇၆.၆ ရာခိုင်နှုန်း ရှိပါသည်။ ရရှိသောတိုင်းတာမှုရလဒ်များ သည် အထက်ဖော်ပြပါလေထုအရည်အသွေးညွှန်းကိန်း လမ်းညွှန် ချက်များနှင့် ကိုက်ညီမှုရှိပြီး စက်ရုံလုပ်ငန်းလုပ်ကိုင်ရန်အတွက် သင့်တော်သော ပတ်ဝန်းကျင် အနေအထားရှိကြောင်း တွေ့ရှိရသည်။

ဆူညံမှုတိုင်းတာခြင်း။ ။ BENTECH GM 1356 စက်၏ ဆူညံမှုတိုင်းတာရလဒ်အရ စက်ရုံအတွင်း နေအချိန် အသံဆူညံမှုနှုန်း အနည်းဆုံး နှင့် အများဆုံးမှာ ၄၄.၇ dBA နှင့် ၈၅.၁ dBA အသီးသီးရှိပြီး၊ ပျမ်းမျှ အားဖြင့် အသံဆူညံမှုနှုန်း ၆၄.၂၅ dBA ရှိပြီး အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး(ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်၏ သတ်မှတ်တန်ဖိုးဖြစ်သော ၇၀ dBA အောက်ရှိသောကြောင့် တိုင်းတာမှုရလဒ်ကောင်းမွန်ကြောင်း တွေ့ရှိရသည်။



ထိခိုက်ပျက်စီးလွယ်သည့် ဂေဟစနစ်။ ။ ထို့ပြင်၊ အနီးပတ်ဝန်းကျင်(၁၀)ကီလိုမီတာပတ်လည်တွင် စီမံကိန်း တည်နေရာ၏ အရှေ့ဖက်ခြမ်းတွင်ရှိသော ကွန်ပျူတာတက္ကသိုလ်နှင့် လှော်ကားအမျိုးသားဥယျာဉ်၊ အနောက်တောင်ဖက်ခြမ်းတွင်ရှိသော အနောက်ပိုင်းတက္ကသိုလ်နှင့် ရွှေလင်ဗန်းစက်မှုဇုန်များမှအပ အခြား ထိခိုက်ပျက်စီးလွယ်သည့်ဂေဟစနစ်များ မရှိကြောင်းတွေ့ရှိရသည်။

သဘာဝပေါက်ပင်နှင့်တိရစ္ဆာန်များ။ ။ အဆိုပြုစီမံကိန်းဖြစ်သည့်ဖိနပ်စက်ရုံသည် မြို့ပြနှင့်စက်မှုဇုန်အနီး တစ်ဝိုက်တွင် တည်ဆောက်ထားခြင်းဖြစ်သောကြောင့် စက်ရုံအနီးပတ်ဝန်းကျင်တွင် သိသာထင်ရှားသော အပင်နှင့်သားရဲတိရစ္ဆာန်များမရှိကြောင်း တွေ့ရှိရသည်။ လက်ရှိအချိန်တွင် စက်ရုံအနီးပတ်ဝန်းကျင်တွင် မြို့ပြ ဖွံ့ဖြိုးတိုးတက်မှုကြောင့် လမ်းမတစ်လျှောက် စိုက်ပျိုးထားသော သစ်ပင်များနှင့် အခြားအပင်ငယ်များသာ ရှိပါသည်။

လူမှုပတ်ဝန်းကျင်အခြေအနေ။ ။ အဆိုပြုစီမံကိန်းဖြစ်သည့် ဖိနပ်စက်ရုံသည် ရွှေပြည်သာမြို့နယ်အတွင်း တည်ရှိပြီး အရှေ့ဘက်တွင် မင်္ဂလာဒုံမြို့နယ်၊ အနောက်ဘက်တွင် ထန်းတပင်မြို့နယ်နှင့်လှိုင်မြစ်၊ တောင်ဘက်တွင် အင်းစိန်မြို့နယ်၊ မြောက်ဘက်တွင် မှော်ဘီမြို့နယ်တို့နှင့်ထိစပ်လျက်ရှိပါသည်။ အဆိုပြု စီမံကိန်းသည် ရွှေပြည်သာမြို့နယ်အနောက်ဖက်ခြမ်းနှင့် ဝါးတရာစက်မှုဇုန်နယ်မြေတွင် တည်ရှိသောကြောင့် အနီးပတ်ဝန်းကျင်သည် လူများအခြေချနေထိုင်ခြင်းနည်းပြီး စက်မှုကဏ္ဍဖွံ့ဖြိုးတိုးတက်သောနေရာ ဖြစ်ပါ သည်။

လူမှုစီးပွားရေးအခြေအနေ။ ။ ၂၀၁၉ ခုနှစ်၊ စက်တင်ဘာလဒေသဆိုင်ရာအချက်အလက်များအရ မြို့နယ် အတွင်းရှိ လူဦးရေမှာ (၂၈၄၉၂) ဦး နှင့် အိမ်ထောင်စုပေါင်း (၆၁၄၉၆) ရှိပါသည်။ မြို့နယ်အတွင်းရှိ ကျား/မ ဦးရေအချိုးမှာ (၁:၁.၁၄) ဖြစ်ပါသည်။ အများစုနေထိုင်သူမှာ ဗမာလူမျိုး (၉၄%) နှင့် နိုင်ငံခြားအပါအဝင် အခြား လူမျိုး (၆%) နေထိုင်ကြပါသည်။ စုစုပေါင်းနေထိုင်သူများအနက် အလုပ်လုပ် နိုင်သောလူဦးရေ (၁၃၅၀၂၈)ဦး ရှိ ပြီး အလုပ်လက်မဲ့ရာခိုင်နှုန်း (၁၃.၅၃)ရှိပါသည်။ ဒေသခံနေထိုင်သူများ၏ အဓိကအသက်မွေးဝမ်းကြောင်း လုပ်ငန်းများမှာ အစိုးရဝန်ထမ်း၊ စက်ရုံအလုပ်သမား၊ ကုန်သည်၊ မွေးမြူရေးလုပ်ငန်း၊ စိုက်ပျိုးရေးနှင့် ကျပ်စားအလုပ်သမားစသည်တို့ဖြစ်ပါသည်။

ရွှေပြည်သာမြို့နယ်သည် စီးပွားရေးကဏ္ဍများတွင် ဖွံ့ဖြိုးတိုးတက်လျက်ရှိသော မြို့နယ်ဖြစ်ပါသည်။ မြို့နယ် အနီးတစ်ဝိုက်တွင် စီးပွားဖွံ့ဖြိုးတိုးတက်မှု၏အရေးကြီးဆုံးကဏ္ဍမှာ စက်ရုံအလုပ်သမားနှင့် ကုန်သည် တို့ဖြစ်ပါသည်။ ရန်ကုန်မြို့နယ်မှ ကုန်ကြမ်းပစ္စည်းများကို တင်သွင်းပြီး အဓိကထုတ်ကုန်များဖြစ်သော လူသုံးကုန်ပစ္စည်းများကို အနီးဝန်းကျင်မြို့နယ်များသို့ အများဆုံးတင်ပို့ရောင်းချလျက်ရှိပါသည်။ အထွေထွေ အသုံးပြုသည့်ရေအဖြစ် မြစ်ရေကို အများဆုံးအသုံးပြုပါသည်။ မြို့နယ်အတွင်း အမှိုက်ယာဉ် (၁၃)စီးနှင့် သန့်ရှင်းရေးအလုပ်သမား (၁၁၈)ဦး ရှိပါသည်။ စီမံကိန်းတည်နေရာသည် လမ်းပမ်းဆက်သွယ်ရေး ကောင်းမွန်သောပြီး မော်တော်ယာဉ်၊ မီးရထား တို့ဖြင့် သွားလာနိုင်သည့်နေရာတွင် တည်ရှိပါသည်။ ကျန်းမာရေးကဏ္ဍအနေဖြင့် ဆေးရုံ၊ ဆေးပေးခန်းနှင့် ကျေးလက်ကျန်းမာရေးအဖွဲ့များလည်းရှိပါသည်။ စီမံကိန်းတည်နေရာအနီးတစ်ဝိုက်တွင် သမိုင်းဝင်ထင်ရှားသည့် အဆောက်အဦ၊ ရှေးဟောင်းအမွေအနှစ် အဆောက်အဦများ မရှိသော်လည်း (၁၀)ကီလိုမီတာပတ်လည် တွင် ထင်ရှားသည့်ဘုရား (၃)ဆူ ရှိပါသည်။

မြေအသုံးချမှု။ ။ ရွှေပြည်သာမြို့နယ်၏ စုစုပေါင်းမြေဧက (၁၆၄၈၄) တွင် မြို့ပြနှင့်တည်ဆောက်ရေးအတွက် ၇၂%ကျော်၊ စားကျက်မြေ ၀.၃၆%၊ စိုက်ပျိုးမြေ ၁၁.၂၇% ခန့်၊ စက်မှုဇုန်ဧရိယာ ၁၅.၈၈%၊ နှင့် သာသနာ့ပိုင် မြေဧရိယာ ၁.၁၈% ခန့်ရှိပြီး၊ သစ်တောဖုံးလွှမ်းဧရိယာနည်းပါးကြောင်း တွေ့ရှိရပါသည်။

**၁.၄။ လုပ်ငန်းလည်ပတ်သည့်ကာလအတွင်း အဓိကဖြစ်ပေါ်နိုင်သော ပတ်ဝန်းကျင်ထိခိုက်မှုများနှင့် ထိခိုက်မှုလျှော့ချရေးနည်းလမ်းများ**

ထိခိုက်မှုများကိုဆန်းစစ်လေ့လာရာတွင် တိုက်ရိုက်သက်ရောက်နိုင်သည့်ဧရိယာ၊ သွယ်ဝိုက်သက်ရောက်နိုင်သည့်ဧရိယာများအတွက် အဓိကအချက်များအနေဖြင့် ရုပ်ဇီဝနှင့် ဓာတုဗေဒဆိုင်ရာထိခိုက်မှုများနှင့် လူမှုစီးပွား ရေးနှင့် ယဉ်ကျေးမှုဆိုင်ရာထိခိုက်မှုများစသည့်ဖြင့် အမျိုးအစားလေးမျိုးခွဲ၍ အမှတ်ပေးစနစ်ဖြင့် ခွဲခြားသတ်မှတ်ပြီး အကဲဖြတ်တိုင်းတာရရှိပါသည်။ ပတ်ဝန်းကျင်အပေါ်ထိခိုက်သက်ရောက်မှုများအား အကဲဖြတ်ရရှိမှု များကို အောက်ပါဇယားတွင် ဖော်ပြထားပါသည်။

ရမှတ်	ထိခိုက်နိုင်သည့် အတိုင်းအတာ	အချိန်ကာလ	ပမာဏ	ဖြစ်နိုင်စွမ်း
၁	တိုက်ရိုက်ထိခိုက်မည့်ပုံ (လုပ်ငန်းခွင်အတွင်း သို့မဟုတ် လုပ်ငန်းခွင်အနီး ပတ်ဝန်းကျင်)	ကာလတို - ထိခိုက်မည့်အချိန်ကာလ (၀- ၁၂ လ ကြား)	နိမ့် - လူမှုစီးပွားရေးအပေါ် ပြောင်းလဲမှုမရှိခြင်း (သို့မဟုတ်) မသိသာသော ပြောင်းလဲမှုဖြစ်ပေါ်ခြင်း	နိမ့်
၂	ထိခိုက်မည့်အနီးဆုံးနေရာ (လုပ်ငန်းအနီးတစ်ဝိုက် သိသာသောနေရာနှင့် လုပ်ငန်းခွင် အနီး ပတ်ဝန်းကျင်)	ထိခိုက်မည့်အချိန်ကာလ (၁ -၂ နှစ် ကြား)	အလယ်အလတ် - သဘာဝဓာတ်စနစ်များ ပြောင်းလဲမှုဖြစ်ပြီး လူမှု စီးပွားရေးအပေါ် သက်ရောက်မှုရှိခြင်း	အလယ် အလတ်
၃	လုပ်ငန်းတည်နေရာမှစ၍ စကေးကျယ်ပြန့်စွာ ထိခိုက်မှု ရှိခြင်း	ကာလရှည် - ထိခိုက်မှုသည် လုပ်ငန်းတည်ဆောက်ပြီးကာလ နောက်ပိုင်း (သို့မဟုတ်) လုပ်ငန်းလည် ပတ်ဆဲကာလ ပြီးနောက် နှစ်တော်တော် များများ ဆက်လက်ထိခိုက် နေခြင်း	မြင့် - သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာ လုပ်ဆောင်ချက်ပြောင်းလဲမှုများကြောင့် လူမှုစီးပွားရေး အခြေအနေ ပြင်းထန်စွာ ထိခိုက်ခြင်း၊ စဉ်ဆက်မပြတ် ထိခိုက်ခြင်း	မြင့်

အဓိကဖြစ်ပေါ်နိုင်သောထိခိုက်မှုများ၏ ရလဒ်ပေါ်မူတည်၍ အဆင့်သတ်မှတ်ချက်ကို အောက်ပါ အတိုင်း ဖော်ပြနိုင်ပါသည်။

$$\text{အဆင့်သတ်မှတ်ချက်} = (\text{ထိခိုက်နိုင်သည့်အတိုင်းအတာ} + \text{အချိန်ကာလ} + \text{ဖြစ်နိုင်စွမ်း}) \times \text{ပမာဏ}$$

စီမံကိန်းလည်ပတ်သည့်ကာလအတွင်း အဓိကဖြစ်ပေါ်နိုင်သောထိခိုက်မှုများကို လေ့လာဆန်းစစ်ရာတွင် ရုပ်ဖီဝနှင့်ဓာတုဗေဒဆိုင်ရာထိခိုက်ခြင်း၊ ဂေဟစနစ်နှင့် လူမှုစီးပွားရေး၊ ယဉ်ကျေးမှုနှင့်ဆိုင် သောအချက်များ စသည်တို့အပေါ်တွင် သိသာထင်ရှားသည့် သက်ရောက်မှုများအကဲဖြတ်ခြင်းကို အောက်ပါဇယားတွင် အကျဉ်းချုပ်ဖော်ပြထားပါသည်။

စီမံကိန်းလည်ပတ်သည့်ကာလ		
စဉ်	စိစစ်သည့် အဓိကအချက်များ	အဆင့်သတ်မှတ်ချက်
ရုပ်ဖီဝနှင့် ဓာတုဗေဒဆိုင်ရာ ထိခိုက်မှု		
၁	မျက်နှာပြင်ရေအရည်အသွေး ပြောင်းလဲမှု	နိမ့်
၂	မြေအောက်ရေ အရည်အသွေး ပြောင်းလဲမှု	နိမ့်
၃	ဒေသအတွင်း ရေစီးရေလာ ပြောင်းလဲမှု	နိမ့်
၄	ရေတိုက်စားမှုနှင့် အနည်ကျမှု	နိမ့်
၅	လေအရည်အသွေး ပြောင်းလဲမှု	အလယ်အလတ်
၆	ပတ်ဝန်းကျင်အသံညစ်ညမ်းမှု	နိမ့်
၇	ရေနေသတ္တဝါ ပြောင်းလဲမှု	နိမ့်
၈	ကုန်းနေသတ္တဝါ ပြောင်းလဲမှု	နိမ့်
၉	ရောဂါကူးစက်နိုင်မှု အခြေအနေ	အလယ်အလတ်
၁၀	မြေမျက်နှာပြင် ပြောင်းလဲမှု	နိမ့်
၁၁	အမွေအနှစ်နေရာ ပြောင်းလဲမှု	နိမ့်
လူမှုစီးပွားရေးနှင့် လူမှုရေးဆိုင်ရာ ထိခိုက်မှုများ		
၁	ကိုယ်ပိုင်ပစ္စည်းများ ပျက်စီးဆုံးရှုံးခြင်းအရပြောင်းလဲမှု	နိမ့်
၂	ယဉ်ကျေးမှုအမွေအနှစ်များ ပြောင်းလဲမှု	နိမ့်
၃	လူအများ ပြောင်းရွှေ့နေထိုင်မှု	နိမ့်
၄	ယာဉ်သွားယာဉ်လာ/ ယာဉ်ကြော ပိတ်ဆို့မှု	နိမ့်

၅	ဒေသအတွင်း အသက်မွေးဝမ်း ကျောင်းအခွင့်အလမ်းများဝင်ငွေနှင့် လုပ်အားခများပြောင်းလဲခြင်း	အလယ်အလတ်
၆	ဒေသအတွင်း ကုန်သွယ်စီးပွား ဝင်ငွေ /အခွင့်အလမ်းများပြောင်းလဲခြင်း	အလယ်အလတ်
၇	မျက်စိပသာဒနရှိမှုများ ပြောင်းလဲခြင်း	အလယ်အလတ်
၈	လူနေအဆောက်အဦ/ ဆက်သွယ်ရေးအရင်းအမြစ်များ ပြောင်းလဲခြင်း	အလယ်အလတ်

မှတ်ချက် ။ ဇယားတွင်ဖော်ပြထားသောထိခိုက်မှုဇယားတွင် အစိမ်းရောင်အကွက်ခြယ်ထားသော သင့်လျော်ကောင်းမွန်သော သက်ရောက်ထိခိုက်မှုများမှအပ ကျန်ရှိသောထိခိုက်မှုများသည် စီမံကိန်းကြောင့် ဖြစ်ပေါ်လာနိုင်သော အဓိကထိခိုက်မှုများဖြစ်ပါသည်။

အထက်တွင်ဖော်ပြထားသော ထိခိုက်မှုများလျော့ချရေးနည်းလမ်းများသည် ဖိနပ်ထုတ်လုပ်ခြင်းလုပ်ငန်းအတွက် ကျန်းမာရေးနှင့်ညီညွတ်၍ လုံခြုံစိတ်ချရသော လုပ်ငန်းခွင်ဖြစ်စေရေးအတွက် ပတ်ဝန်းကျင်ဆိုင်ရာ လုပ်ထုံးလုပ်နည်းများကို အခြေခံထားပါသည်။

#### စီမံကိန်းလည်ပတ်သည့်ကာလအတွင်း ထိခိုက်မှုများလျော့ချရေးနည်းလမ်းများမှာ -

- စွန့်ပစ်သည့်နေရာ/သိုလှောင်သည့်နေရာအနီးရှိ ရေနုတ်မြောင်းများကို ပုံမှန်ရှင်းလင်းပေးရန်။
- စက်ရုံအတွင်း/အပြင် သန့်ရှင်းသပ်ရပ်မှုရှိစေရန်နှင့် ဗုန်/အမှိုက်များ မရှိစေရန်။
- စက်ရုံအတွင်း ကျန်းမာရေးနှင့် လုံခြုံရေးအတွက် လုပ်ရိုးလုပ်စဉ်များ ထားရှိပေးရန်။
- အလုပ်သမားများ၏ ကျန်းမာရေးအတွက် လေကောင်းလေသန့်နှင့် အလင်းရောင်ရရှိမှု ကောင်းမွန်သောအလုပ်ခွင်နေရာ၊ သန့်ရှင်းသောသောက်သုံးရေ၊ သန့်ရှင်းသပ်ရပ်သော ကျန်းမာရေးနှင့် ပတ်သက် သည့် အခြားဝန်ဆောင်မှုများထောက်ပံ့ပေးရန်။
- ပတ်ဝန်းကျင်နှင့်ပတ်သက်၍ ပြည်သူများအားအသိပေးနှိုးဆော်ခြင်းများ တိုးမြှင့်လုပ်ဆောင်ပေးရန်။
- အများပြည်သူဘေးကင်းလုံခြုံရေးအတွက် စောင့်ကြပ်ကြည့်ရှုမှုများဆောင်ရွက်ရန်။
- သိုလှောင်ရုံများနှင့်သက်ဆိုင်သော အဆောက်အဦများကို ပုံမှန်စစ်ဆေးခြင်းများ ပြုလုပ်ပေးရန်။
- စီမံကိန်းနေရာသည် အများပြည်သူ/ပုဂ္ဂိုလ်ကပိုင်ဆိုင်မှုများနှင့် သက်ဆိုင်မှုမရှိစေရန် စစ်ဆေး ဆောင်ရွက်ရန်။
- အရေးပေါ်ကယ်ဆယ်ရေးအစီအစဉ်များ ထားရှိရန်။
- ကုန်တင်/ကုန်ချလုပ်ငန်းများကို နေ့အချိန်တွင် ဦးစားပေးဆောင်ရွက်ရန်။
- မော်တော်ယာဉ်/စက်များ ကောင်းမွန်စွာလည်ပတ်မှုရှိစေရန်။
- ဖိနပ်စက်ရုံမှထုတ်လာသော စွန့်ပစ်ပစ္စည်းများအတွက် ပိုမိုကောင်းမွန်သောစီမံခန့်ခွဲမှုထားရှိရန် - ကာကွယ်ခြင်း၊ လျော့နည်းစေခြင်း/လျော့ချခြင်း၊ ပြန်လည်အသုံးပြုခြင်း၊ စွမ်းအင်ခြွေတာခြင်းနှင့် ကောင်းမွန်စွာ စွန့်ပစ်ခြင်း။
- စက်ရုံအလုပ်သမားများအတွက် သန့်ရှင်းသော သောက်သုံးရေရရှိနိုင်ရေးအတွက် တစ်နှစ်နှစ်ကြိမ်ရေ အရည်အသွေးစစ်ဆေးခြင်းများ ပြုလုပ်ရန်။

- အလုပ်သမားများ၏ ကျန်းမာရေးနှင့်လုံခြုံရေးအတွက် နှာခေါင်းစည်းများနှင့် အခြားလိုအပ်သည့် ကာကွယ်ရေးပစ္စည်းများ လုံလောက်အောင် ထောက်ပံ့ပေးရန်။

## ၁.၅။ စီမံကိန်းနှင့်ပတ်သက်သည့် ပုဂ္ဂိုလ်များနှင့်တွေ့ဆုံမေးမြန်းမှု အကျဉ်းချုပ်

အောက်ပါအချက်များသည် ၂၀၂၁ ခုနှစ် စက်တင်ဘာလမှ အောက်တိုဘာလအတွင်း အဆိုပြုစီမံကိန်း ဖြစ်သည့် စက်ရုံရှိ ပုဂ္ဂိုလ်များနှင့်တွေ့ဆုံမေးမြန်းမှုမှ တုံ့ပြန်မှုများဖြစ်ပါသည်။

- မောင်တိန်တော(ပ်)ဂလိုဘယ်လီမီတက်သည် အဓိကအားဖြင့် အမျိုးသမီးစီးဖိနပ်အမျိုးမျိုးကို CPM စနစ် ဖြင့် ဝယ်ယူသူဖက်မှာအပ်နှံသည့် ဒီဇိုင်းအတိုင်း ချုပ်လုပ်ပါသည်။
- စက်ရုံအလုပ်ချိန်သည် မနက်(၇း၃၀)နာရီမှစတင်၍ နေ့လည်တစ်နာရီ နားချိန်အပါအဝင် ညနေ (၄း၃၀)နာရီ အထိ လုပ်ငန်းလည်ပတ်လျက်ရှိပါသည်။
- လစာနှုန်းထားမှာ အနည်းဆုံး ၁၄၄၀၀၀ကျပ် မှ အများဆုံး ၂၂၀၀၀၀ ကျပ်ဖြစ်ပါသည်။ လက်ရှိတွင် အလုပ်သမား (၆၂)ယောက်နှင့် တရုတ် (၁)ဦး တို့ဖြင့် လုပ်ငန်းလည်ပတ်လျက်ရှိပါသည်။
- လက်ရှိစက်ရုံသည် အော်ဒါမှာသောဒီဇိုင်းအတိုင်း ပုံစံဖြတ်ခြင်း၊ ကော်ကပ်ခြင်း၊ စက်ချုပ်ခြင်းဖြင့် ဖိနပ် ထုတ်လုပ်ခြင်းဖြစ်ပါသည်။
- နိုင်ငံခြားဝန်ထမ်းသာ စက်ရုံအလုပ်သမားအဆောင်တွင် နေထိုင်လျက်ရှိပါသည်။
- လက်ရှိအချိန်တွင် အလုပ်သမား(၆၂)ယောက်အတွက် အလုပ်ခွင်သွားလာရေးကားများ စီစဉ်ထားခြင်း မရှိသော်လည်း အလုပ်သမားဦးရေ(၂၀၀)ကျော်လျှင် စီစဉ်ပေးရန် လျာထားပါသည်။ စက်ရုံအတွင်း စားဖိုဆောင်သတ်သတ် ထားရှိခြင်းမရှိသော်လည်း ထမင်းစားစာပွဲနှင့်ထိုင်ခုံများ ထားရှိပေးပါသည်။
- လုပ်ငန်းစွန့်ထုတ်အမှိုက်များကို ကွန်ထရိတ်တာများနှင့် ချိတ်ဆက်၍ စွန့်ပစ်ပစ္စည်းများပြန်လည်အသုံးပြု နိုင်သည့်နေရာများသို့ စွန့်ပစ်ထားပါသည်။ စက်ရုံအတွင်းရှိ စွန့်ထုတ်ပစ္စည်းများကိုမူ ရန်ကုန်မြို့တော် စည်ပင်သာယာရေးကော်မတီ နှင့်ချိတ်ဆက်လျက် စွန့်ပစ်ပါသည်။
- အဝီစိတွင်း (၂)တွင်းမှ တူးဖော်ရရှိသောတွင်းရေများကို (Reverse Osmosis System) ရေသန့်စက်ဖြင့် သန့်စင်စေပြီးမှ စက်ရုံတစ်ဝန်းတွင် လိုအပ်သလို အသုံးပြုနိုင်ရန် ဖြန့်ဝေပေးပါသည်။
- စက်ရုံဆေးပေးခန်းတွင် အလုပ်ချိန်တစ်လျှောက်ဝန်ထမ်းများနှင့်အလုပ်သမားများ၏ ကျန်းမာရေးစောင့်ရှောက်ရန် သူနာပြုဆရာမတစ်ဦးထားရှိပါသည်။
- မီးဘေးအန္တရာယ်ကာကွယ်ရန်အတွက် ဝန်ထမ်းများအား မီးငြိမ်းသတ်လေ့ကျင့်မှုများရှိပါသည်။
- လျှပ်စစ်ထောက်ပံ့ရေးအတွက် စက်ရုံလည်ပတ်ရန် ၂၀၀၀ kVA ထရန်ဖောမာ ရှိပါသည်။ စက်ရုံသည် ဝါးတရာစက်မှုဇုန်ဧရိယာအတွင်း တည်ရှိသောကြောင့် လျှပ်စစ်ဓာတ်အားအရင်းအမြစ်သည် အမျိုးသား လျှပ်စစ်ဓာတ်အားလိုင်း(၃၃kVA ကေဘယ်)မှ ဖြစ်ပါသည်။
- ရေတွင်း (၂)တွင်းမှ ရေကို (၁၁ x ၇ x ၇)ပေ ပတ်လည်ရှိ စတုရန်းမြေပြင်ကန်(၁၂)ကန်သို့ စုပ်ယူပြီး သိုလှောင် ထားပါသည်။ ထို့နောက် (လီတာ ၂၀၀၀ဆံ့ ၄ လုံး + လီတာ ၃၀၀၀ဆံ့ ၁ လုံး) overhead tanks သို့ စုပ်တင်ပြီး ၎င်းမှတစ်ဆင့် စက်ရုံတစ်ခုလုံးကို ဖြန့်ဝေပါသည်။

- ထွက်လာသော ရေဆိုးများကို ဝါးတရာစက်မှုဇုန် ရေနုတ်မြောင်းသို့ စွန့်ထုတ်ပြီး နောက်ဆုံးတွင် အနီးနားရှိ ရေတွင်းထဲသို့ စွန့်ထုတ်ပေးသည့် အုတ်ရေနုတ်မြောင်းများကို စက်ရုံးဝန်းအတွင်းတွင် ဖောက်လုပ်ထား ပါသည်။

#### ၁.၆။ သဘာဝပတ်ဝန်းကျင်နှင့် လူမှုဝန်းကျင်ဆိုင်ရာစီမံခန့်ခွဲမှုအစီအစဉ်

သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာစီမံခန့်ခွဲမှုအစီအစဉ် ပြီးမြောက်စေရန်အတွက် အဆိုပြုစီမံကိန်းတင် သွင်းသူနှင့် ဆောက်လုပ်ရေးပိုင်းဆိုင်ရာ တာဝန်ယူဆောင်ရွက်မည့်သူများမှ သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်ဖြစ်မြောက်ရေးအဖွဲ့အား ဖွဲ့စည်းရမည် ဖြစ်ပါသည်။

- သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာ စီမံခန့်ခွဲမှုအစီအစဉ်လုပ်ဆောင်ချက်များကို သဘာဝပတ်ဝန်းကျင် ဆိုင်ရာ အကဲဖြတ်သူမှ စောင့်ကြပ်ကြည့်ရှုရန်ဖြစ်ပါသည်။
- သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာ စီမံခန့်ခွဲမှုအစီအစဉ်ဆောင်ရွက်မှုများကို သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာ စီမံခန့်ခွဲသည့်အရာရှိ (EMO) ထားရှိ၍ ၎င်းမှ စီမံခန့်ခွဲပေးရန်ဖြစ်ပါသည်။
- သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာလုပ်ငန်းခွင်အရာရှိ (ESO) ထားရှိ၍ ၎င်းမှ သဘာဝပတ်ဝန်းကျင် ဆိုင်ရာစီမံခန့်ခွဲသည့်အရာရှိ (EMO) အား ကူညီဆောင်ရွက်ပေးမည် ဖြစ်ပါသည်။

လေ့လာတွေ့ရှိရသော ပတ်ဝန်းကျင်ထိခိုက်မှုများအတွက် သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာစီမံခန့်ခွဲမှုအစီအစဉ် များမှာ အောက်ပါအတိုင်း ဖြစ်ပါသည်။

- ၁။ ရေအရည်အသွေးစီမံခန့်ခွဲမှု၊ မြေအောက်ရေထိန်းသိမ်းမှုနှင့် သန့်ရှင်းသောသောက်သုံးရေ ရရှိရေး အစီအစဉ်
- ၂။ ရေနုတ်မြောင်းပုံစံ စီမံခန့်ခွဲမှုအစီအစဉ်
- ၃။ လေထုအရည်အသွေး စီမံခန့်ခွဲမှုအစီအစဉ်
- ၄။ စွန့်ပစ်အညစ်အကြေးများ စီမံခန့်ခွဲမှုအစီအစဉ်
- ၅။ ယာဉ်လမ်းကြော စီမံခန့်ခွဲမှုအစီအစဉ်
- ၆။ အများပြည်သူများနှင့်တွေ့ဆုံမှု နှင့် ဖွံ့ဖြိုးတိုးတက်စေရေးအစီအစဉ်
- ၇။ လုပ်ငန်းခွင် လုံခြုံရေးနှင့် ကျန်းမာရေးအစီအစဉ်
- ၈။ အရေးပေါ်ကယ်ဆယ်ရေးအစီအစဉ်
- ၉။ အသင်းအဖွဲ့၏လူမှုရေး တာဝန်ခံမှု
- ၁၀။ ပြန်လည်ပြုပြင်မွမ်းမံခြင်း အစီအစဉ်
- ၁၁။ ပတ်ဝန်းကျင်ဆိုင်ရာ စောင့်ကြပ်ကြည့်ရှုခြင်း အစီအစဉ်

အထက်တွင်ဖော်ပြထားသော သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာစီမံခန့်ခွဲမှုအစီအစဉ်ခွဲများကို အောက်တွင် ဖော်ပြ ထားသည့်ကဏ္ဍအလိုက် ဤအစီရင်ခံစာ၏ အခန်း (၈) တွင် ထည့်သွင်းဖော်ပြထား ပါသည်။

- EMP အစီအစဉ်ခွဲအသီးသီးတို့၏ ရည်ရွယ်ချက်
- သက်ဆိုင်ရာဥပဒေနှင့်ညီညွတ်သော လိုအပ်ချက်များ
- EMP အစီအစဉ်ခွဲများပြီးမြောက်ရေး လုပ်ငန်းစဉ်
- EMP အစီအစဉ်ခွဲများ စီမံခန့်ခွဲသည့် လုပ်ဆောင်ချက်
- EMP အစီအစဉ်ခွဲများအား စောင့်ကြပ်ကြည့်ရှုသည့် အစီအစဉ်
- EMP အစီအစဉ်ခွဲများအား ရည်ညွှန်းဖော်ပြသည့်အချက်များ

- EMP စမ်းသပ်မှုပြုလုပ်သည့် နေရာများ
- စောင့်ကြပ်ကြည့်ရှုမှုပြုလုပ်သည့် အကြိမ်အရေအတွက်
- EMP အစီအစဉ်ခွဲများအတွက် ခွဲဝေချမှတ်ပေးသည့် ခန့်မှန်းကုန်ကျငွေ
- သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာ စီမံခန့်ခွဲမှုအစီအစဉ်ခွဲများအတွက် တာဝန်ရှိသည့်ပုဂ္ဂိုလ်များ အဖွဲ့များ

စီမံကိန်း၏ သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာစီမံခန့်ခွဲမှုအစီအစဉ်ပြီးမြောက်နိုင်ရေးအတွက် နှစ်စဉ်ခန့်မှန်းကုန်ကျ စရိတ်မှာ မြန်မာငွေကျပ် (၂၂) သန်းဖြစ်ပါသည်။ သို့သော်၊ စီမံကိန်းကုန်ကျစရိတ်သည် လက်ရှိခန့်မှန်း ပမာဏထက်ကျော်လွန်ခဲ့ပါက အဆိုပြုတင်သွင်းသူဖက်မှ လိုအပ်သလို ကုန်ကျခံ မည်ဖြစ်ပါသည်။ အကယ်၍ တစ်ချို့ဆောင်ရွက်ရမည့် လျော့ချရေးနည်းလမ်းများသည် လုပ်ငန်းခွင်တွင် ရှိထားခဲ့ပြီးဖြစ်လျှင် ခန့်မှန်း ကုန်ကျစရိတ်အား သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာ စီမံခန့်ခွဲသည့်အရာရှိ (EMO) မှ သင့်လျော်သလို လျော့ချရ မည်ဖြစ်ပါသည်။

## 2. PROJECT DESCRIPTION

### INTRODUCTION

This document is the Environmental Management Plan (EMP) for the proposed shoes by CMP (Cut-Manufacture-Pack) system (the “Project”) implemented by Mountain Top Global Limited. The Project site is located in at Plot No. (176), Block No. (49), Watayar, Shwepyithar Township, Yangon Region.

#### 2.1 Objective of EMP

The principal objective of this EMP is to satisfy local regulatory requirements, in particular, the requirements related to exiting projects in the Environmental Impact Assessment Procedure, issued by Ministry of Natural Resources and Environmental Conservation on December of 2015. However, this EMP is not only to align with national permitting requirements to obtain the Environmental Compliance Certificate (ECC), but also to ensure that the any potential environmental and social impacts are mitigated and will not lead to significant adverse effects on the environment or people during the Project.

The overarching purpose of this EMP is to:

- Integrate management and mitigation measures into the exploration activities in order to reduce or mitigate any potential environmental and social impacts on natural and socio-economic environments;
- Consider and address the concerns and interests of stakeholders who will potentially be engaged or impacted during execution of the exploration activities;
- Establish systems and processes for delivery and implementation of environmental and social requirements in order to meet statutory and compliance standards.

#### 2.2 Project Proponent

Contact details for the proposed Project is provided below and all registration documents of Mountain Top Global Limited is described in Appendix A.

Managing Director of Mountain Top Global Limited	: Mr. Yang Chih-Chiang
General Manager of Mountain Top Global Limited	: Daw Win Win Shein
Address	: Plot No. (176), Block No.(49) Watayar Industrial Zone, Shwe Pyithar Township, Yangon Region
Mobile	: +95 9 782 880 750
Email	: <a href="mailto:hlahlaaye@stl-myanmar.com">hlahlaaye@stl-myanmar.com</a>



### 2.3 Environmental and Social Consultant Study Team

National Engineering and Planning Services Co., Ltd. (NEPS) of Myanmar has been selected by Mountain Top Global Limited to conduct the EMP.

NEPS is a company incorporated in Myanmar in 1998 specializing in Planning, Design, Construction and Engineering Consultancy Services related to civil engineering works. It has the resources and experience essential for the successful completion of the tasks.

NEPS has more than 40 engineers and specialists of various disciplines including geology, geo- technology, agronomy, hydraulics, hydrology, geometrics engineering, social economics and remote sensing subjects. Among the above specialists, 15 key personnel of NEPS have work- experience of more than 30 years and had proven expertise having post graduate trainings in overseas institutes.

For flora, terrestrial fauna and aquatic fauna study, some specialists (Retired Professors and Lecturers from the Universities) are affiliated with NEPS to cope with the diversified nature of EIA works. Among other works, NEPS had involved in the following Environmental and Social Impact Assessment (ESIA), Initial Environmental Examination (IEE) and Environmental Management Plans (EMP) related works.

The MONREC Consultant Registration Certificate of National Engineering and Planning Services Co., Ltd is 0000035<sup>8</sup>.

The information of the contact Person of NEPS is as follow.

Name: Daw Hay Mar Hnin  
Position: Environmental Engineer  
Phone No.: +95(0)9250619018  
Email: [haymarhnin1500@gmail.com](mailto:haymarhnin1500@gmail.com)

#### **EMP Report Preparers**

Members of EMP preparation				
Team Leader of the team				
Name (Sur name, Given name)	Registration / License No. by ECD	Organization	Contact Detail	Area of expertise
<b>U Aye Myint</b>	<b>0000035</b>	<b>National Engineering and Planning Services Co.,Ltd.</b>	<b>No. 880, Yadanar Road, Thingankyun TS. Yangon Region, Information.neps@gmail.com, ph-013562407</b>	Senior Water Resources Engineer <b>1. Facilitation of Meeting</b> <b>2. Groundwater and Hydrology</b> <b>3. Land Use</b> <b>4. Socio-Economy</b>

<sup>8</sup> MONREC Consultant Registration Certificate of National Engineering and Planning Services Co., presented in Appendix A2.

Members of EMP preparation				
Member of the team (except the team leader)				
Name (Sur name, Given name)	Registration / License No. by ECD (if registered)	Organization	Contact Detail	Area of expertise
U Aye Ko	0000035	National Engineering and Planning Services Co.,Ltd.	No. 880, Yadanar Road, Thingankyun TS. Yangon Region, Information.neps@gmail.com, ph-013562407	Geology Engineer, 1. Geology and Soil 2. Groundwater and Hydrology
Daw Khin Khin Cho	0000035	National Engineering and Planning Services Co.,Ltd.	No. 880, Yadanar Road, Thingankyun TS. Yangon Region, Information.neps@gmail.com, ph-013562407	Senior Hydrologist, 1. Hydrology 2. Meteorology, Modeling for Air Quality, 3. Air Pollution Control;
Daw Phyu Phyu Aye	0000035	National Engineering and Planning Services Co.,Ltd.	No. 880, Yadanar Road, Thingankyun TS. Yangon Region, Information.neps@gmail.com, ph-013562407	Environmental Specialist, 1. Facilitation of Meeting 2. Hazard Management 3. Water Pollution Control 4. Waste Management
U Nyo	0000035	National Engineering and Planning Services Co.,Ltd.	No. 880, Yadanar Road, Thingankyun TS. Yangon Region, Information.neps@gmail.com, ph-013562407	Soil and Water Quality Expert, 1. Soil 2. Land Use 3. Modeling for Water Quality 4. Solid and Liquid Waste Management
Daw Haymar Hnin	0000035	National Engineering and Planning Services Co.,Ltd.	No. 880, Yadanar Road, Thingankyun TS. Yangon Region, Information.neps@gmail.com, ph-013562407	Environmental/ Civil Engineer, 1. Facilitation of Meeting 2. Socio-Economy 3. Preparation of Resettlement Action framework
Daw Aye Thet Wai	0000035	National Engineering and Planning Services Co.,Ltd.	No. 880, Yadanar Road, Thingankyun TS. Yangon Region, Information.neps@gmail.com, ph-013562407	GIS Analyst, 1. Land Use Map 2. Facilitation of Meeting 3. Designing digital maps with geographic data
Dr. Win Myint	0000035	National Engineering and Planning Services Co.,Ltd.	No. 880, Yadanar Road, Thingankyun TS. Yangon Region, Information.neps@gmail.com, ph-013562407	Biodiversity Consultant 1. Ecology and Biodiversity 2. Facilitation of Meeting 3. Land Use 4. Waste Management
U Kyaw Zin Htun	0000035	National Engineering and Planning Services Co.,Ltd.	No. 880, Yadanar Road, Thingankyun TS. Yangon Region, Information.neps@gmail.com, ph-013562407	Surveyor, 1. Facilitation of Meeting 2. Socio-Economy 3. Other Data Collection (Water, Air, Soil, Noise and Vibration)

Members of EMP preparation				
Daw Esther Ro Hiang	0000035	National Engineering and Planning Services Co.,Ltd.	No. 880, Yadanar Road, Thingankyun TS. Yangon Region, Information.neps@gmail.com, ph-013562407	Civil Engineer, 1. Facilitation of Meeting 2. Socio-Economy 3. Other Data Collection (Water, Air, Soil, Noise and Vibration)

## 2.4 Project Background

The Project Proponent “Mountain Top Global Limited” has leased the land and its three buildings at Plot No. 176, Block No. 49, Wartayar, Shwepyithar Township, Yangon Region to produce footwear, mostly Lady Boots, Lady Shoes and Summer Shoes by CMP (Cutting-Making-Packing) system with manufacturing by client-ordered design.

Infrastructures already constructed at project site (100% completed):

- Warehouse Factory A (94,500mm x 35,000mm) two storey building;
- Warehouse Factory B (94,500mm x 41,000mm) two storey building;
- Dormitory Building (8,000mm x 35,000mm) three storey building.

The Factory infrastructure has already been constructed for manufacturing of varieties of shoes to be exported on (CMP) System. The area of the project area is 2.752 acres (11,136 sq. meters).

The following Raw Materials per norm of product would be used to manufacture the footwear:

Norm of Product.	Raw Material List
<b>Ladies Boots</b>	Synthetic Leather 0.4 m2, Buckle 0.2kg, Bag (PE, non-woven) 1pr, Cutting Board 0.1u, Foam 0.5 m, Heel & Top 1pr, Hang Tag & Loop 0.5 pr, Insole 1 pr, Iron Core 0.07 kg, Label 2 pr, Leather tier 0.03 kg, Lace 1 pr, non-woven 0.2 m, Out sole 1 pr, Paper 0.2 u, PVC Sheet 0.5 pr, PU Leather 0.2m, Rubber Sheet 0.07 kg, Silica Gel 0.09 kg, Sponge 0.1 kg, Tape(OPP, Magic) 0.1m, Textile 0.8m, thread 0.08 u, Welt 0.08 kg.
<b>Ladies Shoes</b>	Synthetic Leather 0.4 m2, Bronzing Paper 0.02 kg, Band Elastic & Rubber 0.4 kg, Bag (PE, non-woven) 1 pr, Canvas Welt 0.2 pr, Foam 0.5 pr, Heel & Top 1 pr, Hang Tag & Loop 0.5 pr, Inner Box 1 pr, Insole 1 pr, Label 2 pt, Leather Tier 0.03 kg, Lace 1 u, Leather Wax 0.01 pr, Non-woven 0.2 pr, Outsole 1 pr, PE Leather 0.2 pr, Stick 0.02 kg, Sole Sheet 0.06 pr, Sample Shoe 0;01 kg, Textile 0.8 m.
<b>Ladies Summer Shoes</b>	Synthetic Leather 0.4 m2, Bronzing paper 0.02 kg, Band Elastic & Rubber 0.4 kg, Bag (PE, non-woven) 1 pr, Canvas Welt 0.2 pr, Foam 0.5 pr, Hang Tag & Loop 0.5 pr, Inner Box 1u, Insole 1 u, Label 2 u, Leather Tier 0.03m,

	Leather Wax 0.01 u, Non-woven 0.2 u, Outsole 1pr, PU Leather 0.2 pr, Stick 0.02 pr, Sole Sheet 0.08 pr, Sample (Shoes) 0.01 kg, Textile 0.8 pr, Thread 0.08 kg, Wax 0.003 u.
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**The following Machinery will be imported for production of footwear in this factory:**

<b>Sr. No.</b>	<b>Machine and Accessories for Footwear Production</b>	<b>Unit</b>	<b>Quantity</b>
1.	Single Needle Drive Roller Sewing Machine	u	84
2.	Double Needle Drive Roller Sewing Machine	u	6
3.	Single Needle Post Bed Direct Drive Sewing Machine	u	24
4.	Double Needle Post-Bed Direct Drive Sewing Machine	u	12
5.	TTY-801 Skiving Machine	u	24
6.	Lock-Stich Zigzag	u	12
7.	Lining Trimming Machine	u	12
8.	TTY-310 Flattening & Hammering	u	12
9.	TTY-513A Single Needle Feed Lock Stich	u	12
10.	TTY-25 Seam Opening & Tape	u	2
11.	TTY-25 RF Computer Control	u	4
12.	TTY-787 Intelligentized Automatic Edge Folder Machine	u	2
13.	TTY-839 Middle Bottom Sewing	u	2
14.	Hand Table	u	186
15.	Manual Roughing Machine with Dust Shield collector	u	1
16.	Cleaner Frequency Conversion	u	6
17.	Last Machine	u	24
18.	Lacquer Table	u	4
19.	Hydraulic Sewing arm cutting	u	14
20.	Hydraulic Plane Cutting Machine	u	14
21.	Edge Grinding Machine	u	16
22.	Hydraulic Automatic Upper Moulding Machine	u	4
23.	Air Pressure Automatic Upper Moulding Machine	u	2
24.	Upper Attaching Machine	u	4
25.	Needle Conveyor (22m)	u	2
26.	Needle Conveyor (18m)	u	6
27.	Buckle Machine	u	2
28.	Dehumidification Machine	u	6
29.	White Glue Machine	u	1
30.	Yellow Glue Machine	u	6
31.	Bronzing Machine	u	4
32.	Drying Machine	u	20

33	Floating Bottom Scribing	u	2
34	Bottom Grooving Machine	u	1
35	Double Ended Tail Drawing	u	2
36	20T Embossing Machine	u	1
37	Shoe Heel Machine	u	2
38	High Speed Edge Trimmer	u	2
39	MC-703 Rubber Belt	u	2
40	MC-939 Advanced	u	2
41	Rotary Upper Attaching Machine	u	2
42	MC-821	u	2
43	MC-703 Rubber Belt	u	2
44	MC-969 Two Layer	u	2
45	MC-823 Overhead	u	2
46	MC-703 Rubber Belt	u	2
47	MC-825K Aerial	u	2
48	9-Pincers Toe Lasting Machine	u	4
49	Hydraulic Heel Lasting	u	2
50	Two Hot and Two Cold Toe Moulding Machine	u	2
51	Two Hot and Two Cold Counter Moulding Machine	u	2
52	Automatic Toe Flattening Machine	u	2
53	Automatic Heel Seat Flattening	u	2
54	Edge Grinding Machine with dust shield collector	u	4
55	Manual Roughing Machine Dust	u	3
56	Universal Oil Hydraulic Attaching Machine	u	2
57	Hydraulic Lasting Hot Pressing	u	2
58	Automatic Hydraulic Heel Nailing Machine	u	1
59	Steam Conditioning Machine	u	4
60	Steel nest Conveyor with Holder	u	4
61	Infrared Oven 2m	u	8
62	Drilling rig	u	4
63	Bubbling Cotton Machine	u	2
64	Vertical Milling Machine	u	2
65	Pointed Machine	u	2
66	Side Lasting Machine	u	8
67	Toe Lasting Machine	u	8

The machinery, spare parts, raw materials and others necessary are imported from foreign country. These raw materials are certified to ensure safe transportation to the project site as non-hazardous materials.

## 2.4.1 Project Details

### *Project Detail*

<b>Project Site:</b>	Plot No. 176, Block No. 49, Wartayar Industrial Zone, Shwepyithar Township, Yangon Region.
<b>Project Proponent:</b>	Mountain Top Global Limited.
<b>Description of Project:</b>	Footwear Production Factory Project
<b>Project Site Area:</b>	2.752 acres
<b>Project Investment:</b>	2.922 Million USD (100% Foreign Investment Company Mountain Top Global Limited.)
<b>Land Acquisition:</b>	Lease land and building from Daw Thi Thi Han (Lessor, Wartayar Industrial Zone) for 2.752 acres (11,136 m <sup>2</sup> ) at initial thirty (30) years + 10 years (extendable two times) for USD 33,408 USD per annum, calculated at the rate of 3 USD per square meter per year <sup>9</sup>
<b>Project Completion:</b>	Completion of Construction Phase is 100% {Warehouse Factory A (94,500mm x 35,000mm) two storey, Warehouse Factory B (94,500mm x 41,000mm) two storey, Dormitory (8,000mm x 35,000mm) three storey buildings.
<b>Project Water Supply:</b>	Tube well water, treated by RO treatment Plant and aerated for domestic water consumption <sup>10</sup>
<b>Electrical Power Supply:</b>	National Grid (Transformer) (2000 KVA + Gen-sets)
<b>Solid Waste Disposal:</b>	Solid Waste generated by production process (from cutting) is collected by relevant contractors for recycling work. Domestic waste accumulated collected systematically by local municipality.
<b>Health care:</b>	Provide clinic at the factory for workers and for those who are sick, they will be sent to Social Welfare Hospital for care.

## 2.5 Project Implementation Program

The project has completed the construction phase of all infrastructures including warehouse, dormitory, factory and offices. Now it is in its operational phase. Emergency Response Procedures and Fire Protection Equipment are being supplied and carried out systematically.

### 2.5.1 Schedule of Project

Land and Buildings are hired from landlord on (3-10-2018). 100% of renovation/ construction was done and factory has been run on 2019. The operation time schedule for regular time during COVID-19 is presented in following tables. The operation day per year is about 313 days.

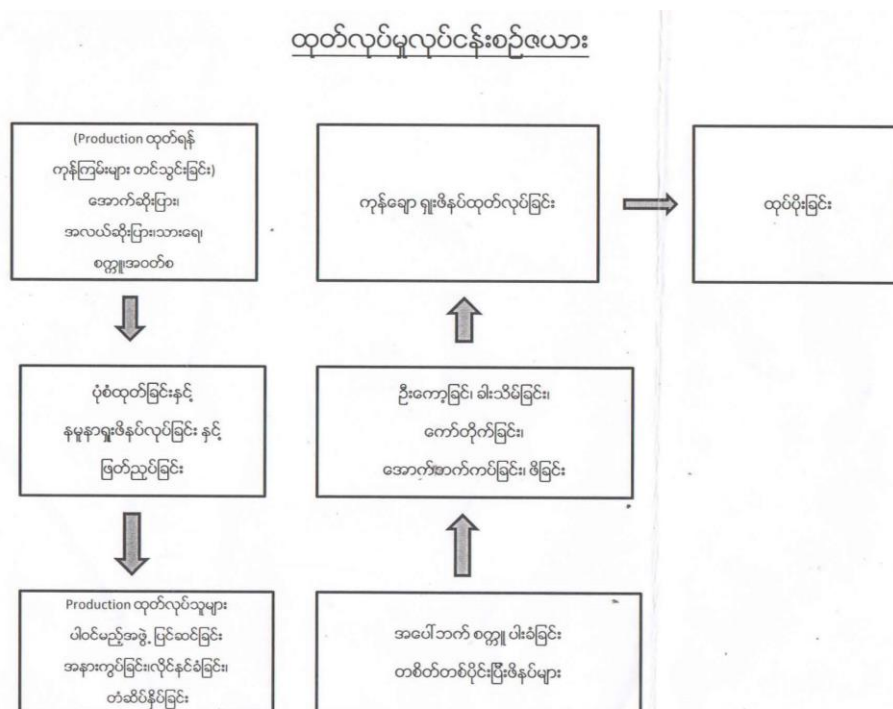
<sup>9</sup> YRIC-1/E-148/2019 Yangon Region Investment Committee Letter dated 7 Feb 2019:

<sup>10</sup> Appendix E of this Report: Water Quality Test Result

### Operational Working Schedule

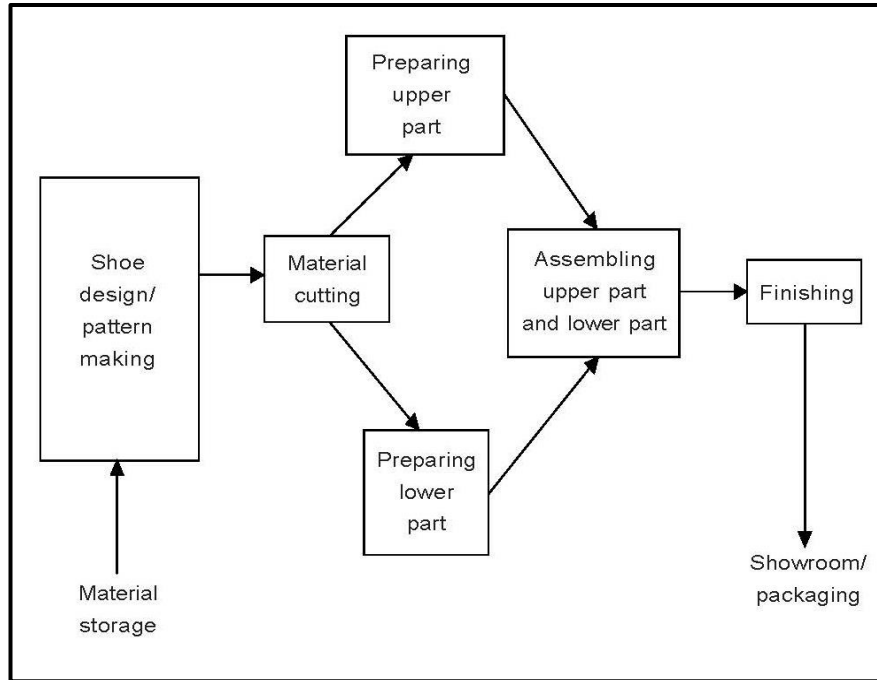
Activities	Period
<i>Regular</i>	
<b>Working Time</b>	<b>7:00 to 4:00</b>
<b>Lunch Time</b>	<b>12:00 to 1:00</b>
<b>Over Time</b>	<b>16:00 to 18:00</b>
<b>Working Days</b>	<b>Monday to Friday (7:00 to 16:00)</b> <b>Saturday (7:00 to 11:00)</b>
<i>During COVID-19</i>	
<b>Working Time</b>	<b>7:30 to 16:30</b>
Lunch Time <i>(15 mins rest in the dining room &amp; the rest of the time is allowed to rest at their place of work)</i>	- 11:00 to 12:00 - 11:15 to 12:15 - 11:30 to 12:30
<b>Over Time</b>	<b>17:00 to 19:00</b>
<b>Working Days</b>	<b>Monday to Friday (7:30 to 16:30)</b> <b>Saturday (7:30 to 11:30)</b>

### 2.5.2 Production Flow Chart



### **Footwear Production<sup>11</sup>**

Generally, footwear is designed according to the needs of customers. An informal sector footwear manufacturer may have various models designed to market the products and finding potential new customers. Shoemaking can comprise numerous process steps. A simplified production flowchart is illustrated in the below Figure.



**Footwear Production Flowchart**

A pattern determines the shape and size of the footwear upper-part; this can be produced by the shoemaker or ordered outside. The upper-part style is drawn on the material (e.g. leather, polyurethane, PVC, etc.) according to the pattern, which is then cut with scissors.

After cutting, the outer area of the material is often thinned with a skiving machine. The uppers and linings are sewn together; eye-letting, button-holing, and decorating may be carried out. The uppers and lowers are assembled together primarily by gluing, but also by stitching, nailing, or screwing. Before assembling, the sole parts may be smoothened with a grinder. Those soles that are not ground are often treated with primer: a glue-bonding. Once glue has been spread on the sole part, it is heat-treated in an oven to further increase the bond strength. Then, glue assembled footwear is often compressed tightly with a pressing machine. Finishing may include such tasks as cleaning, polishing, waxing, coloring, and paint spraying. Finally, the footwear is packed into boxes or plastic bags and transported to the customer.

### **2.5.3 Installations, Technology, Infrastructure**

The installation of factory machineries and the construction of infrastructures at the project site are conducted by the proponent with local construction company.

<sup>11</sup> ILO, "Improving Safety, Health and Working Environment in the informal footwear Sector"



- 6 -

ကော်ပူ/လ.ဂျပလပ်တို့သောလွှတ်ရန်အတွက်သာ  
ပြည်အားလုံးသမ္မတမြန်မာနိုင်ငံတော်

ရန်ကုန်မြို့၊ အောက်ဧည့်ပင်သာယာစုနေကော်မတီ

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<p>အသားရခွပ် အခြေအနေ အကျဉ်းချုပ်အကျဉ်းချုပ် ပုံနှိပ်သုံး ပြေပုံမှ အမှန်အတိုင်းသော မှန်ကန်ကြောင်း သက်သေသော ပြေပုံအရရှိပြေပုံ</p>	
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ပြေပုံအရရှိရန်အတွက်	သတ်
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<p>အသားရခွပ် အခြေအနေ အကျဉ်းချုပ်အကျဉ်းချုပ် ပုံနှိပ်သုံး ပြေပုံမှ အမှန်အတိုင်းသော မှန်ကန်ကြောင်း သက်သေသော ပြေပုံအရရှိပြေပုံ</p>	
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ပြေပုံအရရှိရန်အတွက်	သတ်
ပြေပုံအရရှိရန်အတွက်	ခွပ်ပေးသော

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Figure 1: Project Site Location and Land Acquisition

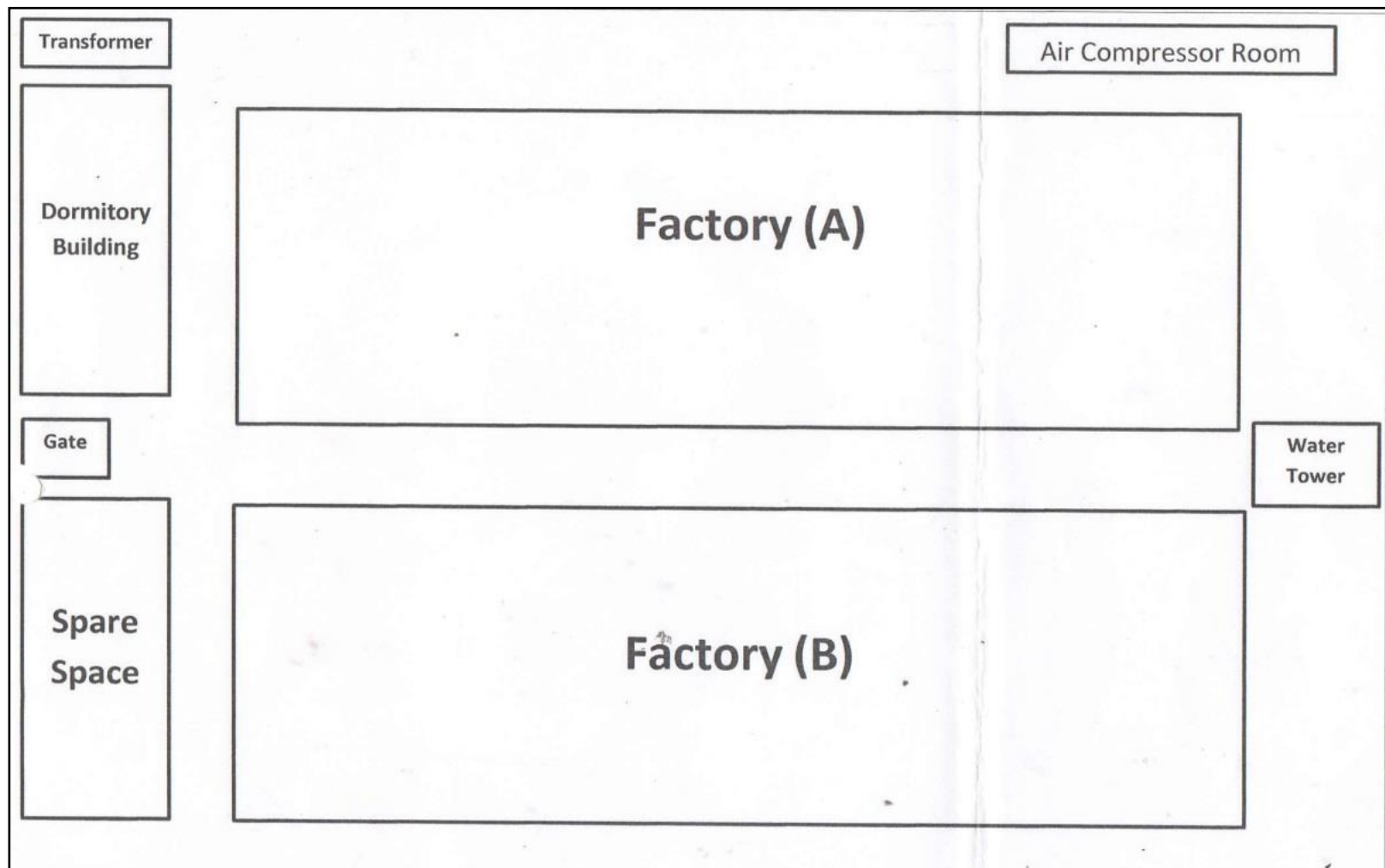


*Figure 2: Satellite Image of Project Site and its surroundings*

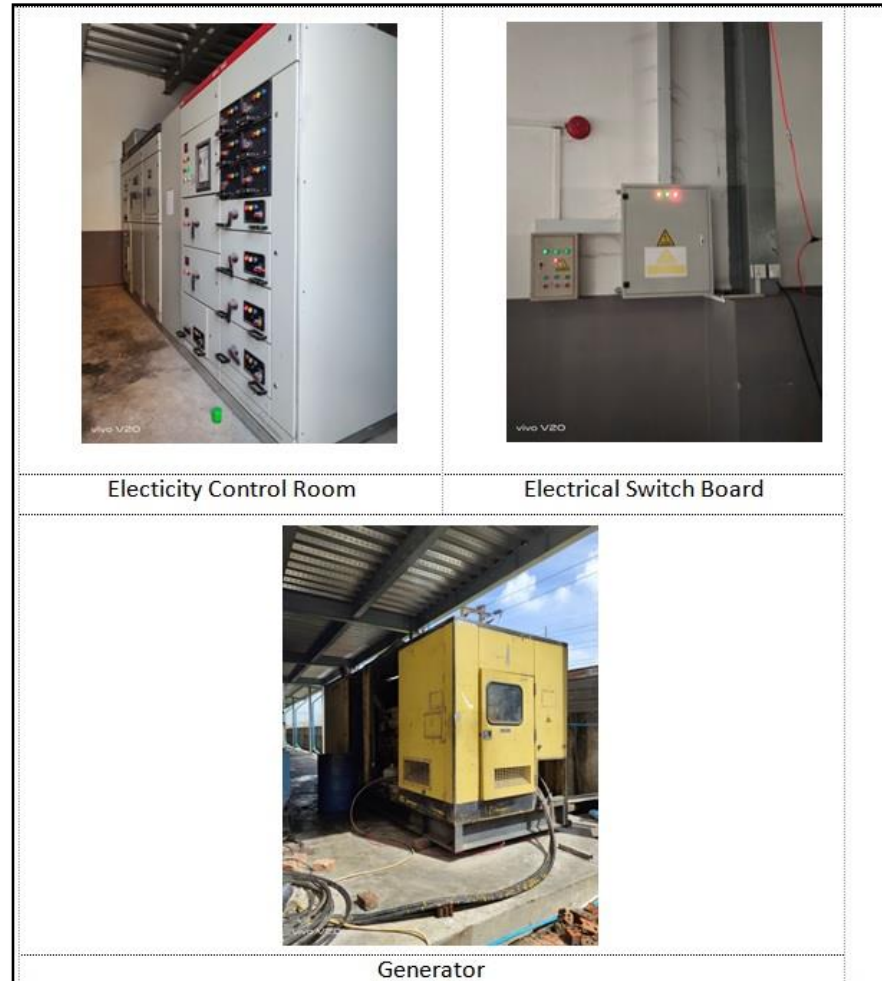


***Figure 3: Project Building Site Overview***





*Figure 4: Project Layout Plan*



***Figure 5: Electricity Control Room and Emergency Power Generation Gen-set***



***Figure 6: Fire Protection Equipment***



Water Tank



Reverse Osmosis water treatment plant



Deep Well

***Figure 7: Water Supply with Reverse Osmosis Water Treatment System***



***Figure 8: Masonry Drainage at Project Site***





*Figure 9: Project Store for Raw Materials*



*Figure 10: Store Shelves*



***Figure 11: Raw Material Store Fabric and Pu Leather***



***Figure 12: Staff Working***



*Figure 13: Project Staff in Production Process Line*





***Figure 14: Cutting of Pu Leather and Fabric by Machines***



*Figure 15: Pressing by Machine after Glueing in Manufacturing Process*



**Figure 16: Finished Product Sample Ladies Footwear**





***Figure 17: Hygienic and Sanitation Facilities for Project Staff***

## 2.5.4 Waste Disposal

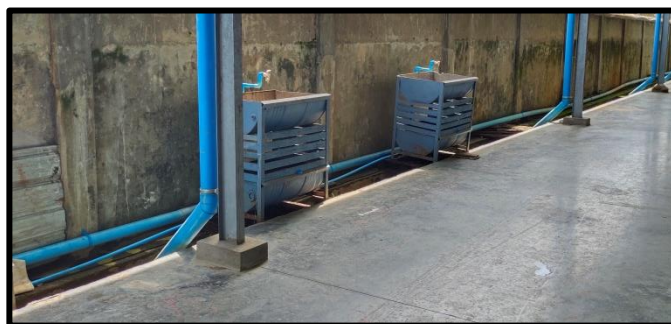
### Solid Waste:

Solid Waste generated by production process is collected by YCDC daily and transported to landfill site and paid twice a month. Footwear Factory is producing the most significant quantity of leather wastes such as leather trimmings, shavings and leather dust which are temporarily collected as reuse, reduce and recycle behind of the canteen. The Temporary Waste Storage Area is described in Figure.



### Wastewater:

Domestic wastewater is discharge into the drain directly without treatment. Drainage is checked daily and drain and down pipe's condition is well managed.



### 3. HEALTH POLICIES AND COMMITMENTS, LEGAL AND INSTITUTIONAL ARRANGEMENTS

#### 3.1 Environmental, health and Social Policy of Project Proponent

The environment and social status shall not be endangered due to implementation of the project. To fulfill the environmental objectives of the project, the proponent aims:

- To reduce carbon emission and hazardous materials through an initiative role of coping with climate change;
- To protect the occupational health of the project staff;
- To develop a green business for securing new growth engines;
- To reinforce an eco-friendly supply chain management (SCM) and green partnership;
- To manage social responsibility and reinforce the stakeholders' network by opening job opportunities to local youths.

The following mentioned protection and prevention measures are declaration of project proponent in regard with ensuring of mitigating environmental and social adverse impacts and enhancing beneficial impacts:

##### A. Protection of Environment

We, Mountain Top (Hong Kong) Co., Ltd shall be responsible for the protection as well as preservation of environment in and around the area of the project site. We shall be able to protect pollution of air, water and land and not to cause environmental degradation. Our company takes necessary measures in order to fulfill environment protection to keep the project site to be environmentally friendly. The project ground will have suitable shady side walks, flowering plants and trees and ever green arbors.

##### B. Fire Hazard Prevention

With regard to the matter – Mountain Top (Hong Kong) Co., Ltd will be undertaking the project works under the normal basic guide lines and for the purpose we have applied for approval of Myanmar Investment Commission.

Regarding Fire Hazard Prevention, Mountain Top (Hong Kong) Co., Ltd follows the National standard and we have fire-fighting equipment and prevention initiatives in place at project site.

##### C. CSR Fund

We, the Mountain Top (Hong Kong) Co., Ltd shall use 2% of annual net profit to be appointed as CSR fund from the commencing year of our business. It should be funded at around 10 lakh kyats. The amount should be contributed in factors tentatively as an example like; 350,000kyats per year in education, 300,000 kyats per year in health care and 350,000 kyats per year in protection of environment.

*The project is being implemented with authorization from the relevant Government Departments<sup>12</sup>.*

Myanmar has developed a Goals and Policies to uplift the country's economy in all aspects. The relevant policies are described below and the Project Proponent commits to support and meet these goals.

1. The National Environment Policy, 2019
2. Myanmar Climate Change Policy, 2019
3. The Constitution of the Republic of the Union of Myanmar, 2008

### **3.2 National Laws and Regulations**

The Project is being conducted in line with HSE Management Policy, the requirements of the Myanmar regulatory requirements, and international conventions, standards, and guidelines. EIA Procedure (2015), National Environmental Quality Emissions Guidelines (2015) are the main governing body. Myanmar National Drinking Water Quality Standard (2014, Ministry of Health) will be taken as guideline. The Laws, regulations relevance to the EMP of the Project are summarized below:

1. The Environmental Conservation Law, 2012
2. The Environmental Conservation Rules, 2014
3. EIA Procedure (2015)
4. National Environmental Quality (Emissions) Guidelines (2015)
5. Myanmar Investment Law, 2016
6. Myanmar Investment Rules, 2017
7. The Import and Export Law, 2012
8. The Forest Law (2018)
9. Conservation of Water Resources and Rivers Law (2006)
10. The Protection and Preservation of Antique Objects Law (2015)
11. The Protection and Preservation of Ancient Monument Law (2015)
12. Myanmar Fire Force Law, 2015
13. Prevention from Danger of Hazardous Chemical and Associated Material Law (2013)
14. Myanmar Insurance Law (1993)
15. The Law on Standardization (2014)
16. Motor Vehicle Law (2015)
17. Public Health Law (1972)
18. The Protection and Prevention of Communicable Disease Law, 1995
19. The Control of Smoking and Consumption of Tobacco Product Law, 2006
20. Employment and skill development law (2013)
21. The Settlement of Labour Dispute Law (2012)
22. The Workmen Compensation Act, 1923 (amend 2005)

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<sup>12</sup> Appendix A of this Report

23. Labour Organization Law (2011)
24. Minimum Wages Law (2013)
25. Payment of Wages Law (2016)
26. Social Security Law (2012)
27. Law Protecting Ethnic Right (2015)
28. Monogamy Law (2015)
29. Buddhist Women special Marriage Law (2015)
30. Religious Conservation Law (2015)
31. Population Control Healthcare Law (2015)
32. Leaves and Holiday Act (1951)
33. Occupational Safety and Health, 2019

### 3.3 International Guidelines and International Agreements

It is also customary to adhere to International Guidelines from IFC (International Finance Corporation) such as the Environmental, Health and Safety Guidelines for General EHS Guidelines: Introduction, or other similar organizations such as International Programme on the Elimination of Child Labour (IPEC) from ILO (International Labour Office).

#### 3.3.1 International Agreements and Treaty:

Relevant international conventions to which Myanmar is a signatory include those related to waste management, biodiversity conservation and labour conventions. The key international conventions of relevance to the Project and commitment to adhere with Project Compliance are described below:

**Table 1: International Convention of Relevance to the Project**

Legislation	Relevance	Ratification Status (in Myanmar)	Project Compliance
Environmental			
Vienna Convention for the Protection of the Ozone Layer 1988 and Montreal Protocol on Substances that Deplete the Ozone Layer 1989	Not relevant to the Project as the Project will not use any ozone depleting substances.	Accession 16 <sup>th</sup> Sep 1998 (Vienna) & Accession 24 <sup>th</sup> Nov 1993 (Montreal)	The Project commits not to utilize ozone depleting substances.
Convention on Biological Diversity 1992	The Project will be undertaken in habitats for biodiversity.	Ratified 25 <sup>th</sup> Nov 1994	The Project commits to comply as per Myanmar's
Basel Convention on the Control of Trans-	The Project may generate	Entered into force 6 <sup>th</sup>	The Project commits to



Legislation	Relevance	Ratification Status (in Myanmar)	Project Compliance
boundary Movements of Hazardous Wastes and Their Disposal	hazardous wastes.	April 2015	comply as per Myanmar's
United Nations Framework Convention on Climate Change 1992 (UNFCCC) and Kyoto Protocol 1997	The Project will form part of Myanmar's total emissions output.	Entered in force 23 <sup>rd</sup> Feb 1995 (UNFCCC) and 16 <sup>th</sup> Feb 2005 (Kyoto Protocol)	The Project commits to comply as per Myanmar's
Asia Least Cost Greenhouse Gas (GHG) Abatement Strategy (ALGAS) 1998	The Project will produce air emissions from the vessels.	1998	The Project commits to comply as per Myanmar's

### 3.4 Proponent's contractual and other commitments

The Project Proponent will comply with the Myanmar Environmental Conservation Law, Environmental Conservation Rules, Environmental Quality (Emission) Standards and all necessary international standards.

The Project commits to comply, undertake the following:

- The Project Proponent will comply with commitments, mitigation measures and management plans stated in this EIA report.
- The Project Proponent is responsible for its actions and omissions and those of its contractors, Sub-contractors, officers, employees, agents, representatives, and consultants employed, hired, or authorized by the company acting for or on behalf of the Project.
- Support programs for livelihood restoration and resettlement in consultation with the PAPs, related government agencies, and organizations and other concerned persons for all Adverse Impacts.
- Fully implement the EMP, all Project commitments, and conditions, and is liable to ensure that all contractors and subcontractors of the Project comply fully with all applicable Laws, the Rules, this Procedure, the EMP, Project commitments and conditions when providing services to the Project.
- Be responsible for, and shall fully and effectively implement, all requirements set forth in the ECC, applicable Laws, the Rules, this Procedure and standards.
- Timely notify and identify in writing to the Ministry, providing detailed information as to the proposed Project's potential Adverse Impacts.

- Respect and comply with the customs, traditions and traditional culture of the ethnic groups in the Union;
- Abide by the terms and conditions, stipulations of special licenses, permits, and business operation certificates issued to them, including the rules, notifications, orders, and directives and procedures issued by the MIC and the applicable laws, terms and conditions of contract and tax obligations;
- Carry out in accordance with the stipulations of the relevant department if it is, by the nature of business or by other need, required to obtain any license or permit from the relevant Union Ministries government departments and governmental organizations, or to carry out registration;
- Immediately inform the Commission if it is found that natural mineral resources or antique objects and treasure trove not related to the investment permitted above and under the land on which the investor is entitled to lease or use and not included in the original contracts.
- To inform the village administrative office and the Department of Historical Research if any historical thing is found during the project operations;
- Abide by the applicable laws, rules, procedures and best standards practiced internationally for this investment so as not to cause damage, pollution, and loss to the natural and social environment and not to cause damage to cultural heritage;
- Close and discontinue the investment only after payment of compensation to employees in accordance with applicable laws for any breach of employment contracts, closure of investment, sale and transfer of investment, discontinuation of investment, or reduction of workforce;
- Pay wages and salaries to employees in accordance with applicable laws, rules, procedures, directives and so forth during the period of suspension of investment for a credible reason;
- Pay compensation and indemnification in accordance with applicable laws to the relevant employee or his successor for injury, disability, disease and death due to the work;
- Supervise foreign experts, supervisors and their families, who employ in its investment, to abide by the applicable laws, rules, orders and directives, and the culture and traditions of Myanmar;
- Respect and comply with the labor laws;
- Have the right to sue and to be sued in accordance with the laws;

- Pay effective compensation for loss incurred to the victim, if there is damage to the natural environment and socioeconomic losses caused by logging or extraction of natural resources which are not related to the scope of the permissible investment, except from carrying out the activities required to conduct investment in a Permit or an Endorsement.
- Ensure equal rights for local workers and avoid salary bias, i.e. ensure that local and foreign workers have the same salary at the same level.
- Ensure that all foreign employees apply for the proper work permit and visa through the Myanmar Investment Commission (MIC).
- Provide rights and benefits including but not limited to, leave, holidays, overtime pay, compensation and social security. Most of the relevant particulars are in the Myanmar Companies Act.
- Settle disputes, within the law, between workers, employers, consulting experts or any other personnel involved in the business operation.

### **3.5 Proponent's Environmental and Social Standards**

MONREC has established environmental quality standards, the National Environmental Quality Emission Guidelines (2015) (NEQEG). The NEQEG provide the basis for regulation and control of noise and air emissions and effluent discharges from projects in order to prevent pollution and protect the environment and public health.

The Project Proponent will implement the project by complying as per NEQEG for all phases (construction, operation, disclosure and post-disclosure) where applicable.

In NEQEG guideline, there prescribe the limit for Tanning and Leather Finishing (2.3.2.2) in Garments, Textile and Leather Products (2.3.2). This guideline applies to textile manufacturing using natural fibers (made entirely from chemicals), and regenerated fibers (made from natural materials by processing these materials to form a fiber structure). It does not include polymer synthesis and natural raw material production.



Table of Commitments

No.	Brief commitments	Descriptions of Commitment	Reference Chapter
10.	<ul style="list-style-type: none"> <li>Correctness and acknowledgement</li> </ul>	<ul style="list-style-type: none"> <li>The Mountain Top Global Limited (Project Proponent) acknowledged all the correctness of all the description being described.</li> <li>The Project Proponent committed to take any obligation and responsibility being described.</li> </ul>	Chapter.1 Executive Summary
11.	<ul style="list-style-type: none"> <li>Correctness and acknowledgement</li> </ul>	<ul style="list-style-type: none"> <li>The Mountain Top Global Limited (Project Proponent) acknowledged all the correctness of all the description being described for the context of the project.</li> </ul>	Chapter.2 Introduction
12.	<ul style="list-style-type: none"> <li>Acknowledgement and obligations</li> </ul>	<ul style="list-style-type: none"> <li>The Mountain Top Global Limited (Project Proponent) acknowledged all the policies being explored in this report and committed to comply to undertake.</li> <li>The Mountain Top Global Limited (Project Proponent) committed to comply which are applicable and relevant to the activities which will be undertaken although not explored in this report.</li> <li>The Mountain Top Global Limited (Project Proponent) committed to comply policies which will be prepared and undertaken by the government authorities for the state requirements.</li> <li>The Mountain Top Global Limited (Project Proponent) acknowledged all the acts, rules, regulations, procedures, directives being explored in this report and committed to comply to undertake.</li> <li>The Mountain Top Global Limited (Project Proponent) committed to comply which are applicable and relevant to the activities which will be undertaken although not explored in this report.</li> <li>The Mountain Top Global Limited (Project Proponent) committed to comply rules,</li> </ul>	Chapter.3 Policy, Legal and institutional framework

		<p>regulations, procedures, directives which will be prepared and prescribed by the government authorities for the state requirements.</p> <ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged all the acts, rules, regulations, procedures concerning environmental conservation and committed to comply and implement the project as per those prescriptions.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged emission standards and committed to comply to undertake the project activities to meet the requirements.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged the institutional arrangement and committed to comply.</li> </ul>	
13.	<ul style="list-style-type: none"> <li>• Correctness and acknowledgement</li> </ul>	<ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged all the correctness of all the description being described.</li> <li>• The Project Proponent committed to take any obligation and responsibility being described.</li> </ul>	Chapter.4 Project description and alternative
14.	<ul style="list-style-type: none"> <li>• Correctness and acknowledgement</li> <li>• Commitment for control measure</li> </ul>	<ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged all the correctness of all the description being described.</li> <li>• The Project Proponent committed to take any obligation and responsibility being described.</li> <li>• The Mountain Top Global Limited (Project Proponent) committed to comply the control measures being explored for reducing pollution.</li> </ul>	Chapter.5 Description of Physical and Social Environmental Condition
15.	<ul style="list-style-type: none"> <li>• Correctness, acknowledgement</li> <li>• Commitment for social</li> </ul>	<ul style="list-style-type: none"> <li>• The Resources Group Logistics Company Limited (Project Proponent)</li> </ul>	

	performances requirements	<p>acknowledged all the correctness of all the description being described.</p> <ul style="list-style-type: none"> <li>The Project Proponent committed that all project activities undertaken to meet social performances requirements</li> </ul>	
16.	<ul style="list-style-type: none"> <li>Correctness and acknowledgement</li> <li>Commitment for EMP, mitigation measures, HSE, Monitoring, stakeholder engagement, Emergency/Response Procedure</li> </ul>	<ul style="list-style-type: none"> <li>The Mountain Top Global Limited (Project Proponent) acknowledged all the correctness of all the description being described.</li> <li>The Project Proponent committed that all the impacts being explored in this report are being reduced as per EMP.</li> <li>The Mountain Top Global Limited (Project Proponent) acknowledged all the mitigation measures being described and committed to comply.</li> <li>The Mountain Top Global Limited (Project Proponent) acknowledged to comply and undertake the mitigation measures which are not being explored but will be arisen upon the requirements.</li> <li>The Mountain Top Global Limited (Project Proponent) acknowledged all the requirements to implement the EMP being explored and committed to undertake the EMP in line with project activities.</li> <li>The Mountain Top Global Limited (Project Proponent) acknowledged all the requirements concerning health, safety and environment and committed to comply as per those being explored in this reported and those which may arise to be complied upon the situations.</li> <li>The Mountain Top Global Limited (Project Proponent) acknowledged all the requirements to implement the Environmental Monitoring</li> </ul>	Chapter.6 Potential environmental and social impacts

		<p>being explored and committed to undertake.</p> <ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged all the codes of practices being explored and committed to undertake.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged and committed to undertake the project as per management plans being explored for caring traffic, fire, disaster, earthquakes.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged and committed to implement the Grievance Redress Mechanism-GRM as a part of requirements for stakeholder engagement.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged and committed to undertake Community Development Plan for implementing CSR activities.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged and committed to undertake Socio-economic development Program.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged and committed to undertake as per Emergency/Incident Response Procedures being explored.</li> </ul>	
17.	<ul style="list-style-type: none"> <li>• Commitment for Monitoring Report</li> <li>• Commitment for Environmental and Social Monitoring Program</li> <li>• Commitment to allocate Environmental Monitoring cost</li> </ul>	<ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged to undertake environmental performance monitoring and committed to submit the monitoring report to the Ministry as per schedules being explored in Environmental Management Plan.</li> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged and committed to comply to undertake the Environmental and social</li> </ul>	Chapter.7 and 8 Environmental Management & Monitoring, Mitigation Measures

		<p>Monitoring Program.</p> <ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged and committed to allocate the cost for the implementing of Environmental Monitoring.</li> </ul>	
18.	<ul style="list-style-type: none"> <li>• Acknowledgement and commitment for social and environmental finding</li> </ul>	<ul style="list-style-type: none"> <li>• The Mountain Top Global Limited (Project Proponent) acknowledged the finding concerning environmental and social and committed to comply the recommendation being explored.</li> </ul>	Chapter.9 Recommendation and Conclusion

## 4. DESCRIPTION OF THE ENVIRONMENT

### 4.1 Physical Environment

#### 4.1.1 Climate and Hydrology

The project area is located at Shwe Pyi Thar Township of Yangon Region; having subtropical climate with recorded maximum temperature of 41°C and Recorded minimum temperature of 30°C.

Shwe Pyi Thar climate and hydrological data were collected from Department of Hydrology and Meteorology for the environmental management plan assessment of footwear production project. The data was analyzed based on the available rainfall, temperature, relative humidity, and wind speed in the study area.

#### 4.1.2 Rainfall and Temperature

**Table 2: Mean Yearly Rainfall and Temperature**

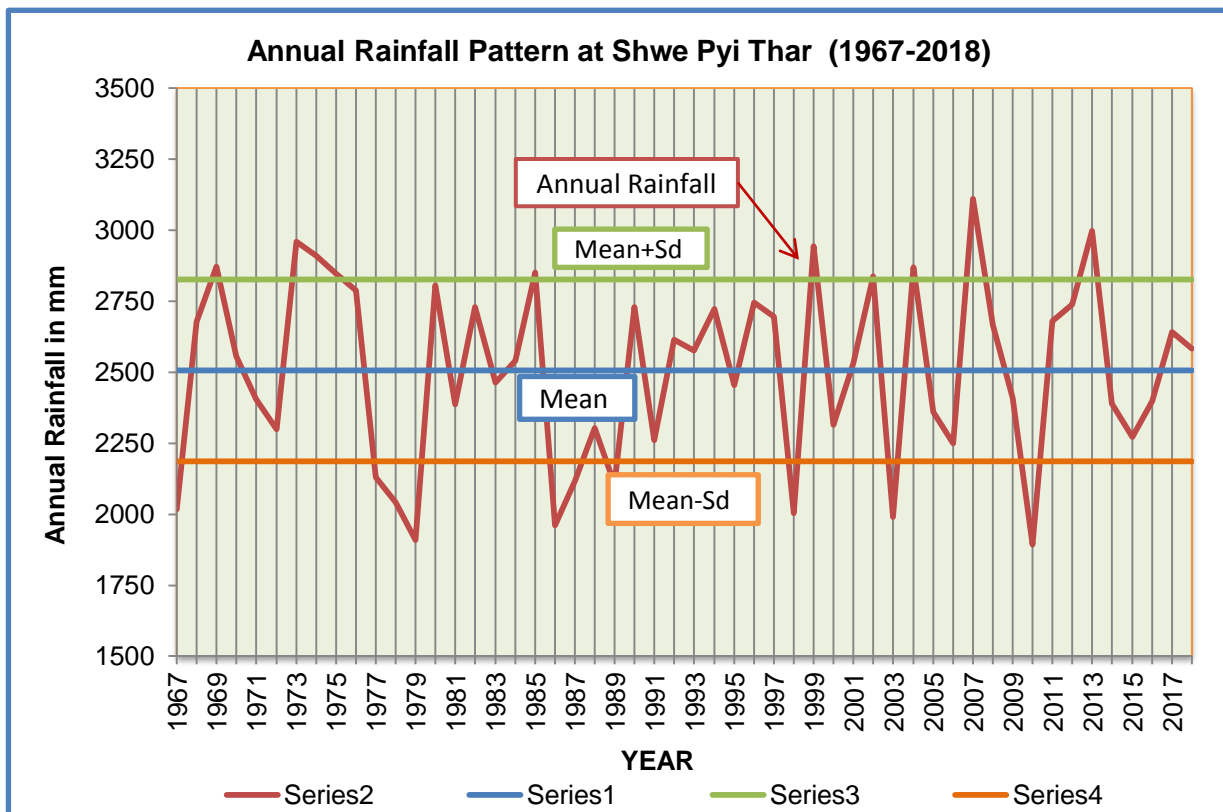
Sr.No	Year	Rainfall		Temperature	
		Rainy Days	Total Rainfall (inches)	Summer	Winter
				Highest (°C)	Lowest (°C)
1	2015 - 2016	105	84.91	34	30
2	2016 - 2017	116	85.89	34	30
3	2017 - 2018	97	86.70	38	30
4	2018 - 2019	69	1320	41	30

**Table 3: Mean Monthly Rainfall in mm at Shwe Pyi Thar (1967-2018 Average)**

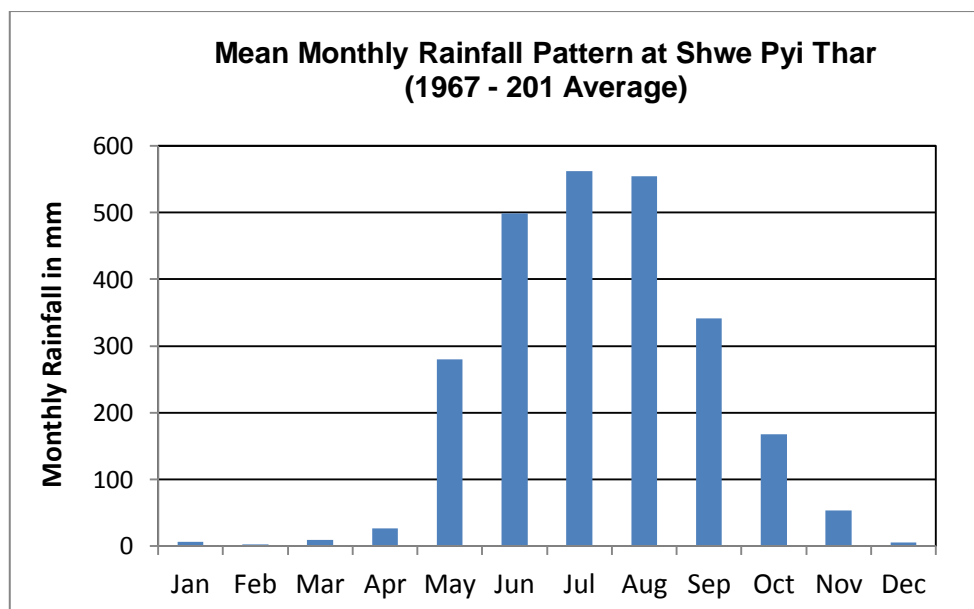
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean	6	2	9	26	280	498	562	555	342	168	54	5	2507

**Table 4: Monthly Rainfall in millimeter at Shwe Pyi Thar (Mean Year, Wet Year, Dry Year)**

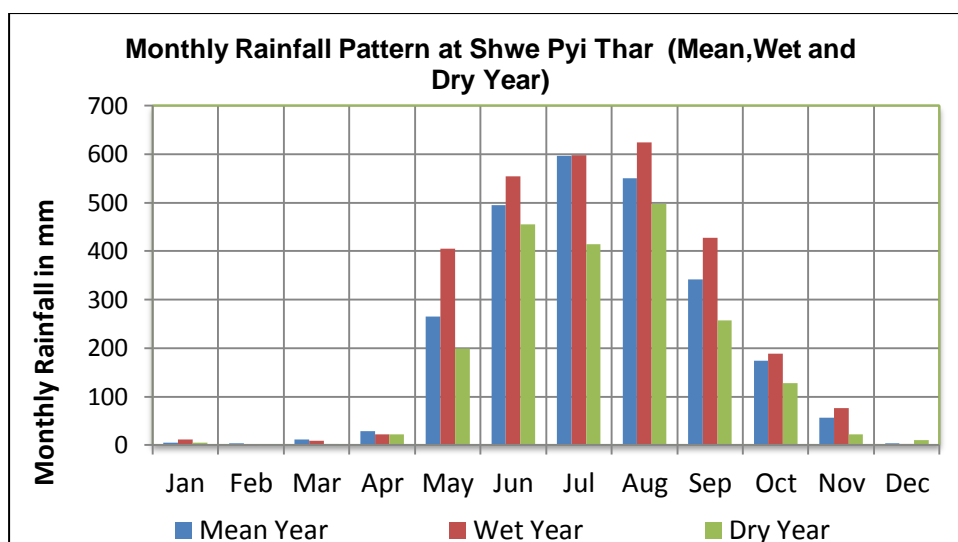
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean Year	5	3	12	28	266	494	597	551	341	174	56	4	2531
Wet Year	12	1	9	22	405	554	598	625	427	188	77	2	2920
Dry Year	6	1	2	22	199	456	415	498	258	128	22	11	2017



**Figure 18: Annual Rainfall Pattern at Shwe Pyi Thar (1967-2018)**



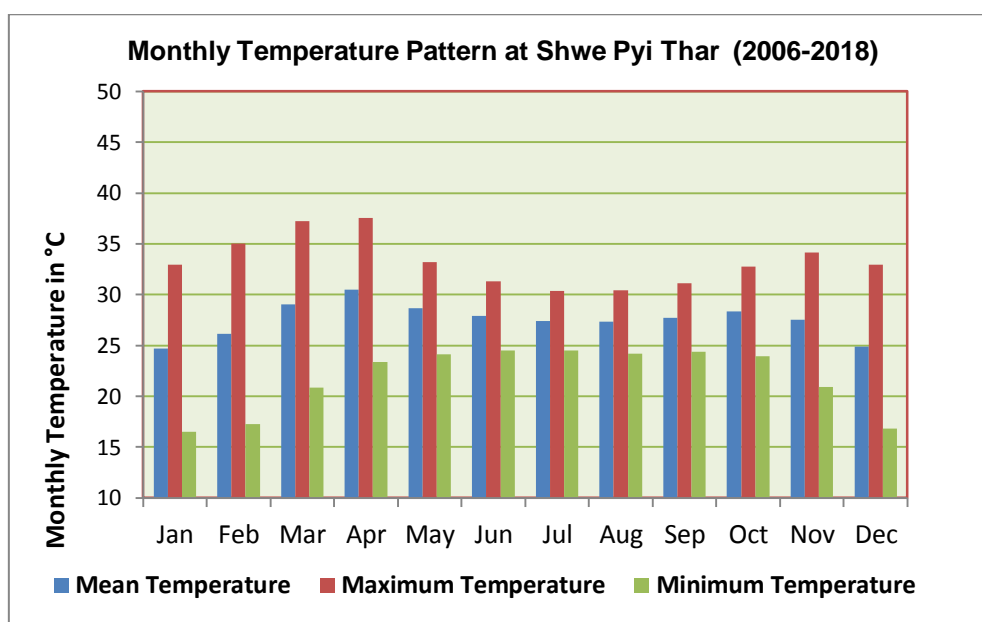
**Figure 19: Mean Monthly Rainfall Pattern at Shwe Pyi Thar (1967-2018)**



**Figure 20: Monthly Rainfall Pattern at Shwe Pyi Thar (Mean, Wet and Dry Year)**

**Table 5: Monthly Mean, Maximum and Minimum Temperature at Shwe Pyi Thar in °C**

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean	24.7	26.1	29.1	30.5	28.7	27.9	27.4	27.3	27.8	28.4	27.6	24.9	27.5
Maximum	32.9	35.0	37.3	37.6	33.2	31.3	30.4	30.5	31.1	32.8	34.2	33.0	33.3
Minimum	16.5	17.2	20.9	23.4	24.2	24.5	24.5	24.2	24.4	23.9	20.9	16.8	21.8

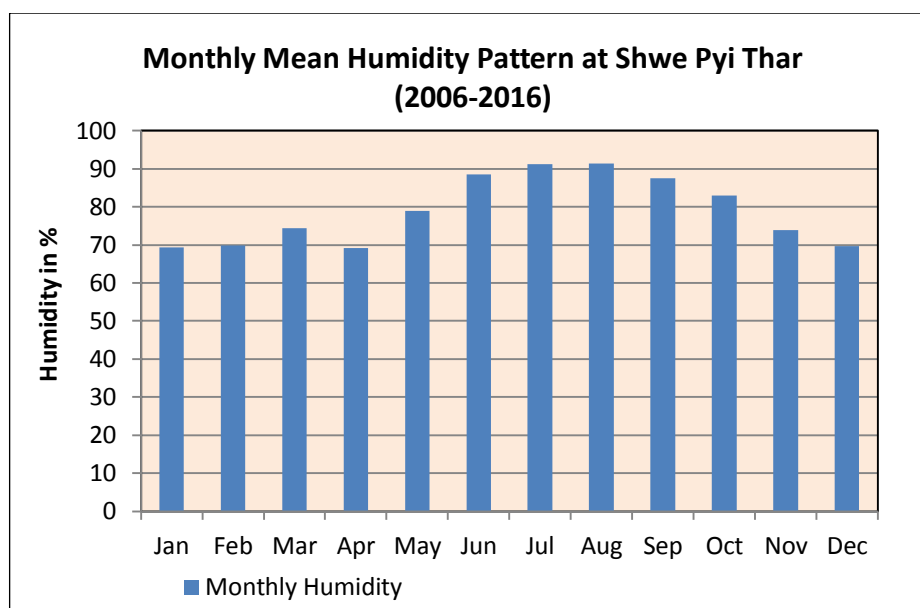


**Figure 21: Monthly Mean, Maximum and Minimum Temperature Pattern**

**Table 6: Monthly Mean Relative Humidity at Shwe Pyi Thar in % (2006-2016)**

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean	69	70	74	69	79	88	91	91	88	83	74	70	79

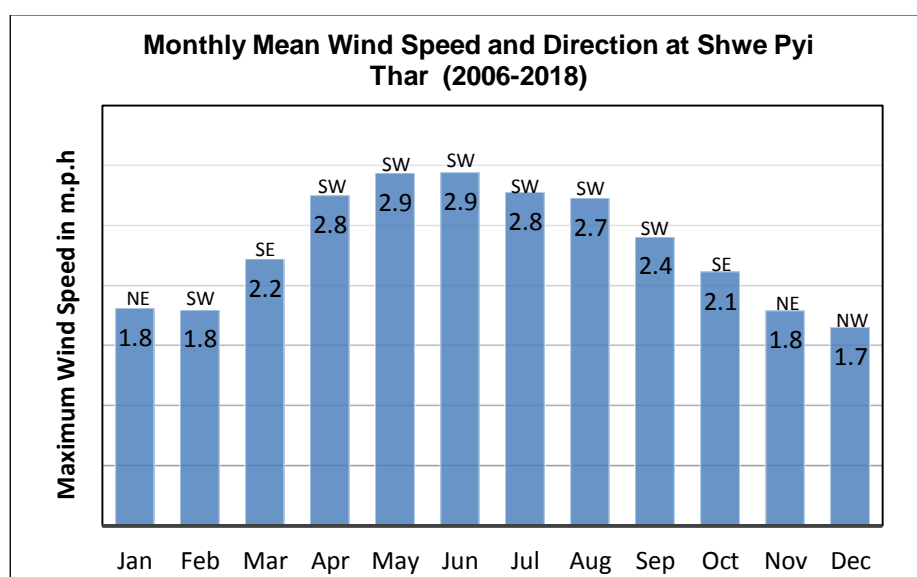




**Figure 22: Monthly Humidity Pattern at Shwe Pyi Thar (2006-2016)**

**Table 7: Monthly Mean Wind Speed (m.p.h) and Direction at Shwe Pyi Thar (2006-2018)**

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean	1.8	1.8	2.2	2.8	2.9	2.9	2.8	2.7	2.4	2.1	1.8	1.7
Direction	NE	SW	SE	SW	SW	SW	SW	SW	SW	SE	NE	NW



**Figure 23: Monthly Mean Wind Speed and Direction Pattern at Shwe Pyi Thar (2006-2018)**

Source: Meteorological and Hydrological Department

## 5. Baseline Data: Physical, Ecological and Social Status of the Environment

### 5.1 Baseline Data: Physical, Ecological and Social Status of the Environment

The baseline environmental data generation has been done during September 2021. The study area within a 10 km radius around the proposed terminal site has been considered as general impact zone and 2 Km radius as specific impact zone for the impact study. Primary and secondary data has been collected for both the zone. However, focus of primary data generation has been more for 2 Km radius.

The Salient Environmental Features of Footwear Factory Project within 500m, 2 Km and 10 Km radius is summarized at Table 8 below.

**Table 8: Salient Environmental Features of Footwear Factory Project Site**

Sr. No.	Environmental Features	Within 500 m area around Proposed project site	Within 2 km area around Proposed project site	Within 10 km area around Proposed project site
1.	<b>Physical Environment</b>			
A	Road connectivity	The site is well connected by roads.	Bo Taik Chun Street is connected from east to west.	Pathein road and No (4) road are connected along its western part and eastern part of the site respectively.
B	Rail connectivity	None	Railway line is running along the	Yangon - Pyay Railway line is running along the
C	Defense Installation	None	None	None
D	Densely Populated Area/ Industrial Area	None	None	Mingalardong Township, Htantabin Township, Hmawbi Township, Insein Township
E	Topography	Mainly flat with ground elevation ranging around 100 feet above mean sea level	Mainly flat with ground elevation ranging around 100 feet above mean sea level	Mainly flat with ground elevation ranging around 100 feet above mean sea level
F	Seismicity	Low magnitude	Low magnitude	Low magnitude
G	Surface Water Resources (Rivers)	None	About 2 km from the project site, Hlaing River is flowing from north to south direction.	None

H	Groundwater	The groundwater resources found below the natural ground surface.		
I	Soil and Land Used <sup>13</sup>	Lateritic Soils Land use in 500 m of site is under road, industrial use and settlements.	Lateritic Soil, Meadow & Meadow alluvial soil Land use in 2 km area of site is under road, industrial use, and settlements.	Meadow & Meadow alluvial soil Land use in 10 km of site is under agriculture, settlement, water bodies and rest of the land is under other uses.
<b>2. Ecological/ Biological Environment</b>				
J	Presence of Wildlife Sanctuary / National Park /	None	None	Hlawga National Park
K	Reserved /Protected Forests	None	None	None
L	Wetland of state and national interest	None	None	None
M	Migratory route for wild animals	None	None	None
N	Migratory routes for birds	None	None	None
O	Presence of Terrestrial Fauna	None	None	None
P	Presence of Aquatic Fauna	None	None	None
Q	Tree cover	Yes: General road side plantation	Yes: General road side plantation	Yes: General sparse vegetation and road side plantation.
<b>3. Social Environment</b>				
R	Physical Setting	Industrial /Urban	Industrial / Urban	Urban / Rural / Industrial Settings
S	Physical Sensitive Receptors	None	Yes (Temples, Schools, College, Hospital)	Yes (Temples, Schools, College, Hospital)
T	Archaeological Monuments	None	None	None

<sup>13</sup> Soil Types and Soil Characteristics of Myanmar, Ministry of Agriculture and Irrigation, March 2004

## 5.1.1 Physical Environment

### 5.1.1.1 Land

**(a) Soil Quality:** The soil types and the soil characteristics of representative soils in the project area are available in details respectively. According to soil types and soil characteristics of Myanmar, Ministry of Agriculture and Irrigation, March 2004, the soils of the project area are Lateritic soils which are prominent and Meadow and Meadow alluvial soils at 10 km range of the project site. The area demarcated as Watayar Industrial Zone has lateritic soil which is a zone soil, formed in warm, temperature and tropical regions and rich in iron and aluminum, low in silica and chemically acidic. Meadow soil which occur near the river plains with occasional tidal flood are non-carbonate and contain more plant nutrient than that of upper Myanmar.

### 5.1.1.2 Water

**(a) Meteorology:** Climate of the project area is subtropical climate with maximum temperature of 41°C and minimum temperature of 30°C. During the rainy season, the rainy days last consecutively for 69-116 days. Annual rainfall over the area averages 67.67 inches (171.90 mm) during the past four year. Most rainfall in Yangon results from tropical systems during the period of May and October. Annual wind speed at Shwe Pyi Thar generally ranges from maximum wind speed of 2.9 kmph and minimum wind speed of 1.8 kmph with mean annual relative humidity of 79% according to 2019. Dominant wind direction of the study area is SW during post-monsoon and NE & NW during pre-monsoon period.

**(b) Water Quality:** Since the production process does not have wastewater, the water sample was collected from drinking water pipe for workers at the project site and it was tested in Pro Lab Analytical Laboratory in 27<sup>th</sup> September, 2021. Water quality assessment parameters are pH, acidity, alkalinity, electric conductivity, total dissolved solid, total suspended solids, calcium hardness, chloride, carbonate, magnesium hardness, manganese, phosphate, iron, salinity, sodium chloride, sulphate and turbidity. The analyzed parameters are compared with WHO Drinking Water Guidelines. According to the test result, all of the chemical and physical parameters are within the limit range of WHO Standards, 2018. Therefore, the water quality assessment indicated that the water is suitable for drinking purposes or industrial uses.

### 5.1.1.3 Air and Noise

**(a) Air Quality<sup>14</sup>:** Environmental quality monitoring, i.e., ambient air pollution and noise level tests at the project area was conducted by the Hexagonal Angle Consulting Team on 25<sup>th</sup> September of 2021. The OCEANUS<sup>TM</sup> AQM-09 was used for air measuring survey and the measurement station is located at the project area and monitoring point is located in the loading/ uploading place between two production factories. During the assessment, the average temperature was 30.2°C and relative humidity was 76.6%. The measured

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<sup>14</sup> Environmental Quality Monitoring Report, Appendix E of this Report

parameters are dust particles such as TSP, PM<sub>10</sub>, PM<sub>2.5</sub>, and the gaseous pollutants such as NO<sub>2</sub>, SO<sub>2</sub>, CO and O<sub>3</sub>, relative humidity, air pressure and temperature etc., for outdoor air quality. Measurements were recorded in the operation with duration of 24 hours between consecutive measurements and the results are compared with National Environmental Quality (Emission) Guideline and World Health Organization Guideline. According to the result, the observed level of the ambient air quality parameters meet permissible limits of both Guidelines, making environment safe for the workers.

**(b) Noise Quality:** Baseline noise quality was measured at loading and unloading place in the shoe factory using BENTECH GM 1356 Digital Sound Level Meter. At present minimum sound level results is 44.7 dBA and maximum is 85.1 dBA with average noise level of 64.25 dBA during day time. For industrial and commercial area, the maximum permissible sound level hourly by day and night is 70 dBA respectively. Noise levels at the site and in nearby areas are also found to be within the permissible limits as National Environmental Quality (Emission) Guideline for Industrial Area.

### **5.1.2 Ecological/ Biological Environment**

#### **5.1.2.1 Sensitive Ecosystem**

Except from Hlawgar National Park which is situated at about 5 km from the project site, there is no sensitive ecosystem including wildlife sanctuaries, migratory routes of wildlife, biosphere reserve, tiger reserve, elephant reserve, and wetlands are present in this township. University of Computer Studies and Hlawga National Park at its eastern part and West Yangon University and Shwe Lin Ban Industry Zone at its southwest which are within 10 km range of the project site.

#### **5.1.2.2 Flora and Fauna**

*Since the project area is situated closed to urban area, there is no significant flora and fauna around the vicinity area. The native plants of Shwe Pyi Thar township are ma-gyi, ta-ma, kokku, mayzali, pine and other green trees. However, the specific study area has already been urbanized with human activities and land used over the past years. Nowadays, the site within the industrial area has no significant vegetation or habitat for wildlife and its vegetation mainly comprises of the road side vegetation and prominent vegetation pattern is bushy and continuous on both sides of the road.*

### **5.1.3 Socioeconomic Data**

#### **5.1.3.2 Social Environment**

The proposed site is located in Shwe Pyi Thar Township, Yangon Region, Myanmar and the site is bordered by four townships namely: Mingalardon Township to its east, Hthatanin Township and Hlaing River to its west, Insein Township to its south and Hmawbi Township to its north. Since the project site falls administratively on the west part of Shwe Pyi Thar Township, most of the surrounding areas are occupied by factories and there is human

settlement inside and around the environment.

#### **5.1.3.2 Socio-Economic Status**

According to 2019 social study, the total population of the study area is 284922 with total household of 61496. Male female ratio of the study area is 1:1.14 as of 2019. The ethnicity of almost 94% is Bamah and others make less than 6% including foreigners. Out of the total population, the number of people who can work is 135028 and the unemployment rate is 13.53%. Main livelihoods are government services, industrial worker, merchant, livestock breeding, agriculture, casual labor and others.

This township is a developing township in economic status. The important sectors for the economic development of the vicinity area are industrial worker and merchant. Commodities are the major productions of this township which are mainly exported to the vicinity townships and most of the materials are imported from Yangon. There are many water resources in this township and most of water supply for the township is mainly from surface water. The township has 13 waste trucks with 118 municipal workers. Major crop productions are paddy (monsoon/ summer) and beans. The project area has good transportation and can be accessed through railway and roads. There are one hospital, 120 clinics and 9 rural healthcare centers, and 4 INGO and NGO in this township. Three well-known pagodas and one monastery are in this township; however, there are no main historical and archeological structures with 10 km range of the project site.

#### **5.1.3.3 Land Use**

Land use refers to the type of human activity that occurs on the land. On the other hand, land use changes are mostly from human developments such as agricultural operations, forestry, urbanization, industrialization and so on. The total land use area in Shwe Pyi Thar Township is 16484 acres. Almost 72% of its total area covers urban and built-up area, 0.36% of grassland, 11.27% of agriculture land, 15.88% of industrial area and 1.18% of religious land area. Forest area percentage in this township is deemed negligible.

## 6. POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS ASSESSMENT

### 6.1 Summary of Potential Impacts

#### 6.1.1 Impact Identification<sup>15</sup>

The impacts have been assessed according to four parameters. The four parameters are assigned a score from 1 to 3 based on a grading, which is illustrated in the table below; this then allows an assessment of overall significance to emerge.

**Table 9: Impact Assessment Table Key**

SCORE	Extent	Duration	Magnitude	Probability
1	Direct impact zone: Within the works/site area or immediate surroundings	Short: The impact is short term (0- 12 months) or intermittent	Low: No or negligible alterations to no or minimal change to socio-economic condition	Low
2	Locally: Effects measurable/noticeable outside the works area and immediate surroundings	Medium: Medium term (1-2 years)	Medium: Natural ecosystems are modified Changes are experienced to socio-economic	Medium
3	Wide Area: The activity has impact on a larger scale	Long: the impact persists beyond the construction phase for years or the operational life of the project area may be continuous	High: Environmental functions altered Socio-economic conditions highly modified. Effects may be permanent or irreversible	High

*Based on the scores related to extent, duration, magnitude and probability of a specific impact, the significance of the impact is expressed as an indicator given by:*

$$\text{Significance indicator} = (\text{Extent} + \text{Duration} + \text{Probability}) \times \text{Magnitude}$$

Impacts are negative unless indicated with shading in the impact matrix.

**Table 10: Summary of Impact Assessment Matrix**

Operational Phase			
Ref.	Impact/Issue		Significance
Bio-Physical & Chemical			
BPC/1	Changes in surface water quality		low
BPC/2	Changes in groundwater quality		low
BPC/3	Changes to drainage patterns		low
BPC/4	Risk of Soil erosion and siltation		low
BPC/5	Changes to air quality		medium
BPC/6	Changes to ambient noise levels		low
BPC/7	Changes to aquatic biota		low

<sup>15</sup> Adapted from RIAM (Rapid Impact Assessment Matrix) developed by DHI in Denmark

BPC/8	Changes to terrestrial biota	low
BPC/9	Changes to disease vector populations	medium
BPC/10	Changes to land cover	low
BPC/11	Changes in natural heritage site	low
<b>Socio-Economic &amp; Cultural</b>		
SEC/1	Changes involving loss of private assets	low
SEC/2	Changes involving loss of cultural heritage	low
SEC/3	Changes involving displacement of people	low
SEC/4	Changes to local traffic patterns	low
SEC/5	Changes in local wage labour incomes/livelihood opportunities	medium
SEC/6	Changes in local trade/commercial incomes/opportunities	medium
SEC/7	Changes in visual amenity	medium
SEC/8	Changes to public infrastructure/community resources	medium

Note: Impacts are negative unless indicated with shading in green color in the above impact matrix table.



**Table 11: Operational Phase Impact Assessment of Proposed Project**

OPERATIONAL PHASE IMPACTS for Environmental and Social Impact Assessment of Bolly Footwear Production Project, Hmawbi Township							
		Green for positive impact	score 1, 2 or 3	score 1, 2 or 3	score 1, 2 or 3	score 1, 2 or 3	
Ref.	Impact/Issue	Comment/Description of Impact	Extent	Duration	Magnitude/Intensity	Probability	Significance
<b>Bio-Physical &amp; Chemical</b>							
BPC/1	Changes in surface water quality	Risk of changes in water quality to nearby water body	1	3	1	2	low
BPC/2	Changes in groundwater quality	No significant potential pollution to ground water sources	1	3	1	2	low
BPC/3	Changes to drainage patterns	Changes to drainage pattern due to operation of factory	1	3	1	2	low
BPC/4	Changes in rates of erosion and siltation	Risk of soil erosion and siltation	0	0	0	0	low
BPC/5	Changes to air quality	Potential gas emission from CMP process for footwear production	2	3	2	2	medium
BPC/6	Changes to ambient noise levels	Significant changes in noise level due to operation of machines and equipment	2	3	1	2	low
BPC/7	Changes to aquatic biota	Soil erosion, sedimentation and siltation to nearby Creek	0	0	0	0	low
BPC/8	Changes to terrestrial biota	No significant changes in terrestrial biota	0	0	0	0	low
BPC/9	Changes to disease vector populations	Significant occupational health risk to factory staff (noise/ air)	1	3	2	2	medium
BPC/10	Changes to land cover	No further land cover change during operational phase of manufacturing of electrical equipment	0	0	0	0	low
BPC/11	Changes to areas of natural habitat	No further significant impacts on natural habitat in project area	0	0	0	0	low
<b>Socio-Economic &amp; Cultural</b>							
SEC/1	Changes involving loss of private assets	No potential impact	0	0	0	0	low
SEC/2	Changes involving loss of cultural heritage	No impact in operational phase.	0	0	0	0	low
SEC/3	Changes involving displacement of people	No potential social impact	0	0	0	0	low
SEC/4	Changes to local traffic patterns	Potential changes in traffic patterns due to transport vehicles	2	3	1	2	low
SEC/5	Changes in local wage labour incomes/livelihood opportunities	Possibility of Increased income and livelihood opportunities due to the project.	2	3	2	2	medium
SEC/6	Changes in local trade/commercial incomes/opportunities	Possibility of Increased income and livelihood opportunities due to the project.	2	3	2	2	medium
SEC/7	Changes in visual amenity	Enhanced infrastructure appears with natural landscape.	2	3	2	2	medium
SEC/8	Changes to public infrastructure/community resources	Expected infrastructure development	2	3	2	2	medium

## 6.2 Operational Phase Impacts

### **Bio-Physical Impacts**

BPC/1 Changes in surface water quality

Risk of changes in water quality to nearby water body

Ref.	Extent	Duration	Magnitude/ Intensity	Probability	Significance
BPC/1	1	3	1	2	Low

BPC/2 Changes in groundwater quality

Significant potential pollution to ground water sources

Ref.	Extent	Duration	Magnitude/ Intensity	Probability	Significance
BPC/2	1	3	1	2	Low

BPC/3 Changes to drainage patterns

Significant changes in drainage pattern during operation period.

Ref.	Extent	Duration	Magnitude/ Intensity	Probability	Significance
BPC/3	1	3	1	2	Low

BPC/4 Changes in rate of erosion and siltation

Risk of soil erosion and siltation

Ref.	Extent	Duration	Magnitude/ Intensity	Probability	Significance
BPC/4	0	0	0	0	Low

BPC/5 Changes to air quality

Potential gas emission from CMP process for footwear production

Ref.	Extent	Duration	Magnitude/ Intensity	Probability	Significance
BPC/5	2	3	2	2	Medium

BPC/6 Changes to ambient noise levels

Noise level due to operation of machines and equipment

Ref.	Extent	Duration	Magnitude/ Intensity	Probability	Significance
BPC/6	2	3	1	2	Low

BPC/7 Changes to aquatic biota

Soil erosion, sedimentation and siltation to nearby Creek

Ref.	Extent	Duration	Magnitude/ Intensity	Probability	Significance
BPC/7	0	0	0	0	Low

BPC/8 Changes to terrestrial biota

Effect on terrestrial biota

Ref.	Extent	Duration	Magnitude/ Intensity	Probability	Significance
BPC/8	0	0	0	0	Low

BPC/9 Changes to disease vector populations

Occupational health risk to workers

Ref.	Extent	Duration	Magnitude/ Intensity	Probability	Significance
BPC/9	1	3	2	2	Medium

BPC/10 Changes to land cover

No further land cover change during operational phase

Ref.	Extent	Duration	Magnitude/ Intensity	Probability	Significance
BPC/10	0	0	0	0	Low

BPC/11 Changes to areas of natural habitat

No other significant impact in proposed project area

Ref.	Extent	Duration	Magnitude/ Intensity	Probability	Significance
BPC/11	0	0	0	0	Low

## Socio-Economic Impacts

SEC/1 Changes involving loss of private assets

No potential impact

Ref.	Extent	Duration	Magnitude/ Intensity	Probability	Significance
SEC/1	0	0	0	0	Low

SEC/2 Changes involving loss of cultural heritage

No impact in operational phase.

Ref.	Extent	Duration	Magnitude/ Intensity	Probability	Significance
SEC/2	0	0	0	0	Low

SEC/3 Changes involving displacement of people

No potential social impact

Ref.	Extent	Duration	Magnitude/ Intensity	Probability	Significance
SEC/3	0	0	0	0	Low

SEC/4 Changes to local traffic patterns

Potential change in traffic patterns

Ref.	Extent	Duration	Magnitude/ Intensity	Probability	Significance
SEC/4	2	3	1	2	Low

SEC/5 Changes in local wage labor incomes/livelihood opportunities

Possibility of Increased income and livelihood opportunities due to the project

Ref.	Extent	Duration	Magnitude/ Intensity	Probability	Significance
SEC/5	2	3	2	2	Medium

SEC/6 Changes in local trade/commercial incomes/opportunities

Possibility of Increased income and livelihood opportunities due to the project

Ref.	Extent	Duration	Magnitude/ Intensity	Probability	Significance
SEC/6	2	3	2	2	Medium

SEC/7 Changes in visual amenity

Amenity changes to vision operation period.

Ref.	Extent	Duration	Magnitude/ Intensity	Probability	Significance
SEC/7	2	3	2	2	Medium

SEC/8 Changes to public infrastructure/community resources

Expected infrastructure development

Ref.	Extent	Duration	Magnitude/ Intensity	Probability	Significance
SEC/8	2	3	2	2	Medium

The EMP sets out what should be done (and what should not be done) and how those actions should be performed to avert environmental impacts and harm or to keep it to an acceptable minimum.

The main responsibility for producing the EMP falls on the project proponents. This responsibility is fulfilled:

- By ensuring that social and environmental aspects are integrated with project planning and design
- By observing approved measures throughout the operational period to period mitigate impacts

The EMP enables environmental mitigation measures to be effectively integrated into project implementation. As compliance with provisions of the EMP it is ultimately the responsibility of the proponent of the project company must extend this to bind contractors and sub-contractors.

## **7. COMPONENTS OF ENVIRONMENTAL MANAGEMENT AND MITIGATION MEASURES**

### **7.1 Health, Safety and Environment**

#### **7.1.1 Awareness**

Environmental and Social awareness play an important role in achieving compliance for environmental management. In this regard the following steps shall be taken to ensure all contractor and sub-contractor staff are informed and trained appropriately:

- Environmental and Social Awareness Orientation shall be given to all employees, sub-contractors and consultants as part of their general orientation. The proponent has to verify the HSE procedure for Training and Induction of the contractor.
- Basic environmental and social auditing and compliance training should be provided to the Safety Officers on site and persons responsible for the day to day monitoring of the environmental and social performance.
- The Environmental manager should have the necessary training to conduct compliance audits throughout the duration of the project.
- The Environmental manager will promote onsite environmental and social awareness through talks / meetings and promotions throughout the extent of the project.
- All environmental and social incidents that occur on site, or adjacent areas, will be reported and addressed through the HSE reporting procedure of the contractor
- A register will be maintained that will log all environmental and social complaints raised by stakeholders or the general public in connection with project activities. This register will be available to project proponent for periodic review.
- The register shall be regularly updated and shall maintain records including the name of the complainant, his or her domicile and contact details, the nature of the complaint and any action that was taken to rectify the problem.
- The Environment manager in conjunction with the HSE manager will be responsible for drafting the environmental and social complaints report, handling complaints and maintaining the register.

#### **7.1.2 Health and Safety of Local Populations**

Lack of care or lack of information can cause accidents (e.g. traffic incidences, electrocution where they may suffer injury, and risk of fire hazard). Thus, people or workers under direct influence of project should be informed by project proponent or their appointed representative regarding appropriate security precautions for example: Using appropriate PPE (Personal Protective Equipment) during operation; Participation of training programs regarding adhering to emergency response procedures and activities; Abiding to good and standard practice and procedures for relevant machineries and equipment; and Monitoring of alarm system for emergency conditions.

## 7.2 Occupational Health and Safety for footwear sector and mitigation measures

### 7.2.1 Risk Assessment

#### A. Physical Environment

**Dust:** Footwear grinding machines produce a lot of leather, rubber, and textile dust. Other dust generating tasks include skiving and cutting operations. Any dust exposure is hazardous as dust can irritate or damage worker's lungs and upper airways (e.g. leather dust exposure has been associated with nasal cancer). Dust negatively affects machinery functions, thus, requiring more maintenance. It may also negatively affect the quality of raw materials and finished products.

**Mitigation measure:** remove dust, clean properly (don't spread dust):

- Introduce / improve local exhaust ventilation at the dust-generating work station, in particular the footwear grinding work;
- Enclose or isolate footwear grinding or any other dust generating tasks;
- Consider utilizing a grinder equipped with dust bag, guard to protect eyes, and seat with appropriate positioning for maximum protection, comfort and workability;
- Clean regularly and implement rigorous daily housekeeping practice. Use water when cleaning. Do not spread dust;
- If the local exhaust ventilation is not possible, make use of wind direction and blowers to reduce exposure to fine dust.

**Chemicals:** In shoemaking, the serious chemical hazard exposure is mostly caused by organic solvents used in glues, primers, degreasers, cleaners, and paints. Vapors spread throughout the workshop – the solvent exposure is not only to gluing, cleaning, and polishing work. Footwear chemicals have serious long-term health effects that may manifest years afterwards: damages in the nervous system (e.g. intellectual capacity, memory problems, weakening of senses, etc.), skin, liver, kidneys, lungs, immune system, etc.

Incorrect disposal of chemicals harms the environment outside the workplace. Footwear chemicals are also flammable and represent a serious fire hazard. Keep them away from any ignition sources: burning cigarettes, open flames, sparks, etc.

All chemical containers should be adequately labelled indicating clearly ingredients used, manufacturer information, as well as safety and health precautions.

**Mitigation measure:** Protect workers from chemical hazards:

- Check that all chemical containers are properly labelled and material safety data sheets are provided for all chemical products. If not, inform the inspectorate and manufacturer about this;
- Seek possibilities to use safer, water-based chemicals instead of solvent-based ones. Introduce and improve local exhaust ventilation. Keep containers covered;

- Change the work method in order to reduce direct handling of hazardous materials. Rotate work tasks;
- Provide workers with and use suitable protective clothing and gloves to avoid direct contact with hazardous materials;
- If local exhaust ventilation is not possible, use fans and wind direction to reduce exposure.

**Noise:** The high noise levels created by machines can damage the hearing. It can also affect the health of workers in other ways, for example creating high blood-pressure, headaches, nervousness, and stress. Noise can interfere with warning shouts, signals, and communication. This can cause accidents and affect production quality. If workers standing at arm's length from each other cannot talk in a normal voice tone, the noise level is too high. In the footwear workshops, some sole pressing machines, hammering, and grinding can create high noise levels. In larger footwear factories, noise level is usually high due to the use of various machines.

**Mitigation measure:** Ensure that noise does not harm workers:

- Reduce noise at the source by using properly designed, maintained, and adjusted tools or machines;
- Screen or isolate the noise source as much as possible;
- Reduce noise reflection by raising the ceiling or using sound-absorbing materials;
- As a last resort, use ear muffs or ear plugs when necessary.

**Heat:** Heat influences working capacity and decreases productivity. It increases fatigue, this, human errors and accidents. Heat-related health hazards include dehydration, heat exhaustion, cramps, and rash. Especially in a tropical climate, it is important to provide available means of protection against excessive exposure to heat. In the shoe workshops, try by all means possible to keep indoor temperature lower than 30°C, which is already a very uncomfortable working environment.

**Mitigation measure:** Protect the workers from excessive heat:

- Increase natural ventilation by having more openings, windows, or open doorways;
- Insulate or screen heat-producing objects, machinery or equipment;
- Use ventilators or fans to have good air flow;
- Remember that trees, bushes, and flowers can help in reducing that harmful sun radiation, hot winds, and create a more pleasant environment at the same time.

**Lighting:** Sufficient lighting improves workers' comfort and performance, making the workplace a pleasant place to work. It also reduces work errors, thus, improves quality. Additionally, poorly lit or dark places cause accidents, especially when materials are being moved.

**Mitigation measure:** Increase lighting to improve quality and prevent accidents.



- Maximize the use of daylight with: (i) properly located machines and work stations, (ii) higher roof and bigger windows, and (iii) installation of skylights (e.g. with translucent plastic sheets);
- Clean regularly windows and maintain lamps and other light sources regularly;
- Eliminate glare or reflections which strain the workers' eyes;
- Improve general artificial lighting or provide spot lighting.

**Housekeeping:** When a workplace is free from clutter, work proceeds safely and comfortably. Valuable space will be free of obstacles and workers can easily find the right tool for the job. When the workplace is in good order there is less fire and accident hazards. An orderly workplace leaves a good impression on your clients.

**Mitigation measure:** Remove all unnecessary items and provide a proper place for everything.

- Remove all unnecessary items from your workplace;
- Assign daily or more frequent responsibility for clean-up to specific workers for specific areas;
- Provide convenient places and storage racks for tools, raw materials, parts and products;
- Keep paths and aisles clear and wide enough to allow proper transport.

**Waste Disposal:** Waste, scrap, and liquid spills on the floor not only represent a material loss and work obstacle, but are also a significant accident cause. Conveniently placed, easy-to-empty waste containers help in housekeeping and create free space.

**Mitigation measure:** Establish a good waste disposal system:

- Provide enough waste containers of adequate size;
- Establish regular system for removing waste out from the workplace;
- Specify clear responsibilities for waste disposal.
- Avoid waste-mountain outside of a shoe-workshop. Proper waste management practices enhance community well-being as well.

**B. Premises: Roof:** For workers health, well-being, the correct temperature and humidity inside the work premises is important. A proper roof can protect from direct and indirect heat-up effect of sunlight. When it rains and if the roof is not in the good condition, there is a risk of damage materials and products.

**Mitigation measure:** Protect your workers and products from outside heat and rain:

- Improve roof to give protection from the sunlight and rain;
- Heat and cold penetration can be considerably reduced by insulating walls and roof panels and providing air gaps between wall and backing. This is a better alternative;
- Construction of a ceiling is another effective way of reducing heat and cold penetration from above;

- Raise the roof to increase natural indirect lighting and ventilation in work premises.

**Premises: Floor and Drainage:** Inappropriate floor surfaces or poorly maintained floors can be a major source of accidents, work interruptions, and product damage.

**Mitigation measure:** Improve your workshop floor for productive and safe work:

- Improve your floor for better strength and resistance to wear and abrasion;
- Keep floors clear from obstacles;
- Keep floors in good condition to avoid accidents and damages for works, materials, and products.

**Drainage:** A good drainage system is important to keep work premises dry, achieve good hygiene, reduce the incidence of infectious diseases, and avoid accidents.

**Mitigation measure:** Improve drainage system to keep your workplace dry and clean:

- Provide for proper waste water drainage outside work premises and remember that it should only be used as a passage for water disposal;
- Provide a rain water drainage system;
- Keep the drainage clean and clear on a regular basis.

**Premises: Fire Prevention:** Fire prevention is the best insurance against fire accidents. When fire occurs, it often causes deaths, significant material damage, thus, major financial loss.

**Mitigation measure:** Protect your business from fire accidents:

- Keep premises in good order by housekeeping;
- Acquire basic fire-fighting equipment, for example fire extinguisher, water bucket, and blankets or install a systematic fire-fighting system;
- Train workers in fire prevention and fighting;
- Check that all electrical appliances are properly insulated;
- Provide proper storage for flammable chemicals and other materials; such as: all solvent-based footwear chemicals, fuels, and gases. Keep them away from ignition sources;
- Avoid use of extension cords over-loaded with various electrical appliances as these can be sources of sparks and cause fire;
- Avoid serious fire hazards from rampant cigarette smoking in the workshop / factory.

**C. Ergonomics: Lifting, Carrying and Moving:** Heavy lifting and wrong lifting methods cause fatigue and back injuries. This can cost you a great deal, as you may lose working ability for a long period.

**Mitigation measure:** Prevent workers from breaking their backs:

- Train workers to use their legs rather than their backs when lifting;

- Raise and lower materials slowly in front of the body without twisting or deep bending;
- Instead of lifting or carrying heavy weight, divide them into smaller packages, containers, or baskets which allow a use of power grip, instead of pinch grip when handled manually;
- Use carts, hand trucks and other wheeled devices or rollers when moving heavy materials;
- Combine lifting with physically lighter tasks to avoid injury, fatigue, and to increase efficiency. Rotate work tasks.
- Right lifting method<sup>16</sup>: i) Keep feet far enough apart to give a balanced distribution of weight; ii) The knees and hips should be bent, the back kept as straight as possible; iii) The arms should be held as near to the body as possible. This helps sustain the load by allowing friction between the load and clothing; iv) Lift should be made smoothly, no jerks or snatches should occur.

**Ergonomic – Hazardous Postures and Seats:** When work is done in a natural posture, with weight on both feet and without bending or twisting, this produces less fatigue and higher productivity. Arrange for good hand positions to allow a natural posture.

**Mitigation measure:** Avoid bad postures as this decrease efficiency and comfort:

- Avoid strenuous work or prolonged unnatural working postures;
- Avoid work requiring high hand positions for standing workers by providing foot stands or platforms;
- Put materials within easy reach of workers, using racks if necessary;
- Assign work tasks to create opportunities to alternate between standing and sitting postures.

**Seats:** Seated work seems comfortable compared with other forms of work. However, sitting for long hours is also tiring. Good seats with a proper and sturdy backrest reduce fatigue and increase job satisfaction.

**Mitigation measure:** Provide good seats for everybody:

- Provide chairs or benches of the correct height or make seats height individually adjustable;
- Choose the seat surface and / or provide a cushion for comfort and support;
- Provide chairs with backrest of proper size which provides low back support.

**Ergonomic – Working Surface:** Work consists of a variety of tasks. A stable work surface that allows the work to be carried out on an elbow height is needed. Too narrow or unsteady surface results in some loss and more effort, thus reducing work productivity and increasing fatigue.

**Mitigation measure:** Provide a stable work surface at each workstation:

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<sup>16</sup> ILO-WISE Manual

- At each workstation, provide a stable work surface of an appropriate size;
- Avoid a narrow or unsteady surface;
- Avoid bending postures for standing workers by raising the height of equipment, controls, or work surfaces;
- Provide work tables of suitable height for seated workers so that too high or low hand positions and bending postures are avoided.

**Work Tools:** Tools adapted to the particular operation and well-maintained are safe to use. When cutting tools are kept sharp, less force is required to use them. Children should not be working with sharp tools. Large and softer handles in footwear tools such as knives, scissors, and tongs are more comfortable to work with. An uncomfortable tool with small and hard handles (e.g. wooden or metal) is un-ergonomic and less productive. Vices and clamps reduce accidents, as they prevent slippage of material, reduce the need for maintaining a bad posture and provide better control over the work item and tools.

**Mitigation measure:** Utilize safe and ergonomic tool for maximum production:

- Use safe power tools and make sure that safety guards are used (e.g. Skiving machine (for material thinning): the moving parts, like the belt in this skiver, should be properly guarded or enclosed);
- Choose tools of appropriate size and shape for easy and safe use;
- Improve tools or use locking devices to reduce gripping or handling force;
- Provide a “home” for each tool;
- Make sure that tools are maintained and repaired and that no worn-out tools are used.

**D. Welfare Facilities – Toilets:** Well- maintained toilets meet some of workers’ most essential needs. Conveniently located toilet facilities also save working time. Sufficient, clean and well-maintained toilets is a must in all decent workplaces.

**Mitigation measure:** Ensure toilet facilities serve their purpose:

- Provide sufficient toilet facilities close to the working area;
- Provide sufficient separate hand washing facilities with soap or hand cleaners;
- Ensure that toilet and hand washing facilities are regularly cleaned and in good sanitary conditions;
- Provide separate toilet for men and women. Ensure privacy when using the toilet.

**Welfare Facilities – Washing:** Washing facilities that are conveniently located and regularly used help to prevent chemicals from being absorbed through the skin or being ingested during snacks and meals. Well-maintained washing facilities have also positive effects for work satisfaction.

**Mitigation measure:** Ensure washing facilities are functional for essential hygiene and health:

- Check that sufficient, clean, and well-maintained washing facilities are near the worksite;
- When you rearrange or build again your workshop, provide good washing facilities to ensure hygiene and tidiness;
- Maintain and clean up washing facilities or showers properly.

**Welfare Facilities – Drinking Water:** Good drinking facilities can do much to prevent fatigue and maintain workers' health. Especially in a hot environment, work results in considerable loss of water. This can affect both the workers' health and productivity if clean drinking water is not available.

**Mitigation measure:** Ensure potable drinking water for workers:

- Provide proper facilities for drinking water near the work area;
- Ensure that there is always safe drinking water available and that the water cannot be contaminated by dust, chemicals, or dirt or example spread by insects.

**Welfare Facilities – Food Hygiene:** Shoe manufacturers spend a substantial part of their everyday life at the workplace. They need to drink, eat, and take a rest. Clean and hygienic cooking facilities and eating areas are essential. Eating, drinking, and smoking in the work process is dangerous and can result in ingestion of hazardous chemicals and dust.

**Mitigation measure:** Ensure food hygiene at workplace as good hygiene is important for work and health:

- Ensure that the food is always prepared in a clean and hygienic place;
- Provide a separate area for meals near the work area, but away from the workstations;
- Keep washing facilities clean to ensure food hygiene.

**E. Personal Protective Equipment (PPE):** For hazards which cannot be eliminated or reduced by engineering controls or by administrative controls, appropriate PPE must be selected and used. Each type of PPE is designed to protect certain parts of the body (e.g. hands, feet, eyes) and only against certain hazards.

**Mitigation measure:** Provide PPE that gives adequate protection:

- Provide adequate number and appropriate types of protective goggles, face shields, masks, earplugs, finger cups (when using a needle), safe footwear, and gloves;
- Ensure regular use of PPE through adequate instruction and training;
- Ensure that all PPE is easily available, well-maintained, and its use is regularly monitored;
- Clearly mark areas requiring the use of PPE;
- Remember that PPE is always a last resort control measure. Replace PPE with local exhaust ventilation, built-in guards, isolating hazards, or other engineering hazard control measures whenever possible.

**F. Work Organization – Work / Rest Cycles:** Prolonged work leads to fatigue and raises the accident risks. Short rest pauses can improve concentration and increase work quality and productivity. Taking short breaks at relatively short intervals (say five minutes in every hour) is better than taking a long break after the worker reaches a stage of excessive fatigue.

**Mitigation measure:** Have the workers take frequent short pauses to avoid fatigue and to work with renewed energy:

- Avoid daily or weekly working hours which are too long (about eight hours in a day is recommended);
- Consider taking short breaks in addition to a long break for meals;
- Take short, spontaneous pauses during the working period.

**Work Organization – Skills Development and Training:** By training workers in new skills, it is easier to organize new work systems, which are productive and safer. By acquiring new skills, worker can do multiple jobs. In this way, job rotation can be more easily organized and absent workers more easily replaced, without looking for additional workers. Task enlargement and job enrichment lead to a greater worker motivation and well-being.

**Mitigation measure:** Provide opportunities for workers to learn new skills and work tasks:

- Improve job content by training workers to do maintenance, adjustment, and task planning in addition to their routine manual work;
- Train workers to do multiple job tasks;
- Ensure that workers are trained about safety and health hazards as well as protective measures.

**Work Organization: Interaction and Communication:** Well-planned work provides opportunities for workers to communicate with other workers without leaving their work station. This stimulates the workers without interrupting work. Interaction in work has positive effects on job satisfaction and problem solving.

**Mitigation measure:** Ensure good communication at workplace as it has many positive effects:

- Provide opportunities for workers to talk with each other while they are working;
- Avoid layouts or job assignments which require work in isolation;
- Provide workers with frequent feedback on the quality and quantity of their work.

**G. Health Promotion – Safety and Health Committee:** An Occupational safety and health (OSH) committee can be an effective medium in exchanging ideas on how to make the working environment safer and healthier. The committee can be established both at the workplace and the community level.

**Mitigation measure:** Consider forming an occupational safety and health (OSH) Committee<sup>17</sup>:

- Members of an OSH committee are nominated by the workers or community members;
- An OSH committee member should represent different parts of the workplace. A community-based committee should represent members from different villages;
- A committee should meet regularly (for example twice a month and be responsible for organizing safety and health activities;
- A committee is an important contact point for the Government officers who are responsible for safety, health, and environmental issues.

**Health Promotion – First Aid:** Even if safety and health measures are well organized in a workplace, there is still always a possibility for an accident. If an accident happens, loss can be minimized by quick corrective action. First-aid is the first skilled assistance given to an injured or sick person before taking the victim to the hospital for medical treatment.

**Mitigation measure:** Provide first aid as essential provision at workplace / shoe workshop:

- Ensure that there is at least one trained first aider in every workplace;
- Provide an adequately furnished first-aid box;
- Ensure that workers have an easy access to medical care, if necessary.

**Health Promotion – Health Service:** Protecting the workers against any health hazards which may arise in or out of the workplace can be done only by professional occupational health personnel.

Mitigation measure: Provide well-organized health services / clinic as it is important for workers' well-being:

- Establish a regulate system for identifying and controlling work hazards and to protect workers' health;
- Establish a record keeping of accidents and diseases in the workplace or in the community for example, through the OSH Committee;
- The OSH Committee should seek professional advice from health services on occupational health issues. Cooperation between the OSH Committee and health professionals is essential.

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<sup>17</sup> An OSH Committee can be a medium to improve the work environment and advocate safety and health measures

## Fire

May be full-time professional fire fighters; part-time volunteer departments; company employees trained and equipped to fight fires.

Police: municipal or First National police forces

SAR – Search and Rescue: teams of trained and equipped volunteers prepared to search for missing persons or respond to other types of emergencies

Medical: provincial or local ambulance service; hospital; local doctor; air ambulance; company employees trained and equipped to provide first aid

Municipal government, public works department: may provide assistance with situations involving water, sewer, or other services – may already have plans in place for large scale emergencies

Electrical utility: Local municipal or regional electricity utility may provide assistance with situations involving overhead or underground power lines

Telephone utility may be required to provide assistance with situations involving telephone or related service or telephone equipment

Fuel supplier may be required to provide assistance with situations involving fuel, fuel storage or fuel transfer.

Ministry of Labor may be consulted

Ministry of the Environment: advice and assistance with situations involving release of materials into the air, water or ground.

Review codes and regulations: Some emergency situations may be caused or complicated by failing to follow the dictates of one or more codes of practice. Legislation is in place to direct companies on procedures to follow and notification to be given in case of an emergency. Codes and regulations include but may not be limited to:

- National Fire Code: details fire prevention characteristics to be included in residential and commercial buildings as well as installation, testing and use of fire emergency systems ,
- National Fire Protection Agency (NFPA 58) standard.

Develop training programs: Everyone who works for the company requires some type of training. Even contractors and visitors may require some emergency response training and orientation.

Training may include safety meetings, reviews of procedures, use of fire extinguishers, evacuation drills or full-scale disaster exercises. Some or all employees may be trained in fire preventive and emergency first aid training is already mandatory.

Typically, a company will assign someone to be responsible for managing the emergency response training program. The training plan should speak to the following considerations:

Who is to be trained

Who will do the training; employees, contractors, community responders

What training is required for all employees

What training is required for specialist employees

What training is required for contractors and their employees

What orientation training is required for visitors



How can members of the community first response teams be involved with the training programs

How to evaluate training and re-training intervals

Implement the plan: There are several aspects to plan implementation:

Management can indicate its “buy-in” to the plan by adding a launch covering letter signed and dated by the most senior manager for the site or operation

The employee introduction to the emergency plan may take place through safety meetings, orientation meetings or specific training programs

Emergency preparedness information from the plan may be distributed or promoted through posters, bulletin board showings and employee newsletters

Supervisors should make a habit of asking employees what they would do if a fire (explosion, cyclone, etc.) occurred.

Plan implementation should include a launch with police, fire, medical and other support services

**Emergency Training:** One day of the week-long pre-production startup program will be devoted to refresher training in emergency procedures, fire-fighting and related programs. An emergency evacuation drill will be held at least once during production season.

**Fire Protection and Fire Fighting Plan:** All employees will follow the procedure:

In the event of a fire in equipment which has a built-in fire suppression system, (loaders, gen set) activate the system.

If you discover a fire in its early stage, notify the office by radio then make the decision whether to fight it with a fire extinguisher – all employees should be familiar with extinguisher locations and how to use them – when in doubt evacuate.

For any fire which cannot be fought with hand-held extinguishers, the local municipal fire department will be called – if required, an employee will be designated to lead the fire department to the scene of the fire using a company truck. The company has offered its property for fire fighter training purposes.

## **Explosions**

Signs of an explosion may be a very loud noise or series of noises and vibrations, fire, heat or smoke, falling glass or debris, or building damage.

The first requirement is a means for alerting all personnel on the site to the emergency. A loud, open-air horn or siren may be effective for most people but operators inside cabs of mobile vehicles may not hear the warning especially if they have air conditioning running at the time. A general alert delivered on all working radio frequencies is effective. The system should be tested on a regularly-scheduled basis. Each employee participate in a fire drill at least once per year. Employees should know where to go when the alarm is sounded.

## Immediate Action

- ✓ Get out of the building as quickly and calmly as possible.
- ✓ As soon as possible, and from a safe location, press 911 on a telephone to report the incident.
- ✓ If items are falling off of bookshelves or from the ceiling, get under a sturdy table or desk.
- ✓ If there is a fire, stay low to the floor and exit the building as quickly as possible.

Develop training programs: Everyone who works for the company requires some type of training. Even contractors and visitors may require some emergency response training and orientation.

Training may include safety meetings, reviews of procedures, use of fire extinguishers, evacuation drills or full-scale disaster exercises. Some or all employees may be trained in fire preventive and emergency first aid training is already mandatory.

Typically, a company will assign someone to be responsible for managing the emergency response training program. The training plan should speak to the following considerations:

Who is to be trained

Who will do the training; employees, contractors, community responders

What training is required for all employees

What training is required for specialist employees

What training is required for contractors and their employees

What orientation training is required for visitors

Develop a communication strategy: Effective communication is essential to report emergencies to first response support teams, employees, neighboring businesses and residences, the community, news media and other interested parties such as employees' families and company customers. Even a temporary communication disruption can have a serious effect on the response process. An Emergency Response Organization Chart can play a major role in maintaining effective communication especially during a crisis.

Dealing with the news media at the time of an emergency situation can present a special challenge. Experts recommend only one trained person be allowed to brief the media on behalf of the company. Media representatives should not be given free access to the job site. They must be provided with PPE and escorted at all times for their own safety. Where possible, information for media distribution should be printed and distributed as a press release.

Write the plan: Every component of every emergency response plan requires the approval of some level of management. Plan development will proceed more smoothly and with fewer revisions if the approvals process and deadlines are established and understood beforehand.

Implement the plan: There are several aspects to plan implementation:

Management can indicate its "buy-in" to the plan by adding a launch covering letter signed and dated by the most senior manager for the site or operation

The employee introduction to the emergency plan may take place through safety meetings, orientation meetings or specific training programs

Emergency preparedness information from the plan may be distributed or promoted through posters, bulletin board showings and employee newsletters

Supervisors should make a habit of asking employees what they would do if a fire (explosion, cyclone, etc.) occurred.

Plan implementation should include a launch with police, fire, medical and other support services

Emergency Training: One day of the week-long pre-production startup program will be devoted to refresher training in emergency procedures, fire-fighting and related programs.

An emergency evacuation drill will be held at least once during production season.

All employees will follow the procedure:

In the event of a fire in equipment which has a built-in fire suppression system, (loaders, gen set) activate the system.

If you discover a fire in its early stage, notify the office by radio then make the decision whether to fight it with a fire extinguisher – all employees should be familiar with extinguisher locations and how to use them – when in doubt evacuate.

### **Chemical spills, Leakages and other unintended release of chemicals or radioactive materials**

Proper disposition of a discarded or discharged material in accordance with local environmental guidelines or laws. Avoid exposure of hazardous waste to natural resources such as soil, air and water; due to hazardous chemical waste produced from project site. Ensure proper waste management practices to enhance community well-being.

Management and Monitoring Action:

- Provide sufficient waste containers of adequate size. Establish a regular system for removing waste from the workplace;
- Specify clear responsibilities for waste disposal. The disposal of waste, dumping for solid waste produced from shoe making should be disposed periodically for recycling or municipal waste treatment plant and avoid waste-mountain outside the footwear workshop.
- Diversion and management of surface and waste water to minimize water pollution problems. Simple treatment to reduce the discharge of suspended solids may also be necessary.
- Collected and provided to a waste recycling facility when there is a sufficient quantity to warrant collection.

- Inspect solid and liquid waste disposal system on site (ensure segregation of waste: glue bins and waste-fabric separation, sewerage facilities functional) for safe environment.

Chemical Waste generated at the Project is monitored on a daily basis through waste disposal receipts.

### 7.3 Environmental Mitigation Plan

**Table 12: Mitigation Measures for Impacts during Operational Phase**

Mitigation Measures		Physical Environment			Socio-Economic Environment			
		Air Quality		Water Quality				
		Noise and vibration generation	Dust, odor and exhaust emissions	Impacts on water quality	Temporary Flooding	Impacts on factory performance	Impact on utilities	Public and Worker Health and Safety
1	Periodically clear drainage at dumping / storage site			▲	▲			
2	Conduct public awareness raising on environment							▲
3	Ensure nearby water body protection			▲				
4	Community safety monitoring						▲	▲
5	Periodical checking of storage site and related structure	▲					▲	▲
6	Check no interference with private / public assets							▲
7	Ensure emergency response plan							▲
8	Prioritize working hour during daylight	▲	▲				▲	▲
9	Ensure vehicle and engine exhausts fully operational	▲	▲					▲
10	Implements Health & Safety routines for the site						▲	▲
11	Landfill or dispose of solid waste as appropriate			▲				▲
12	Collect and treat any contaminated liquid run-off			▲				▲
13	Provide favorable working place and amenities for profitable and safe work							▲
14	Supply sanitary and hygienic services			▲				▲
15	Provide well planned schedule and skills development training					▲		

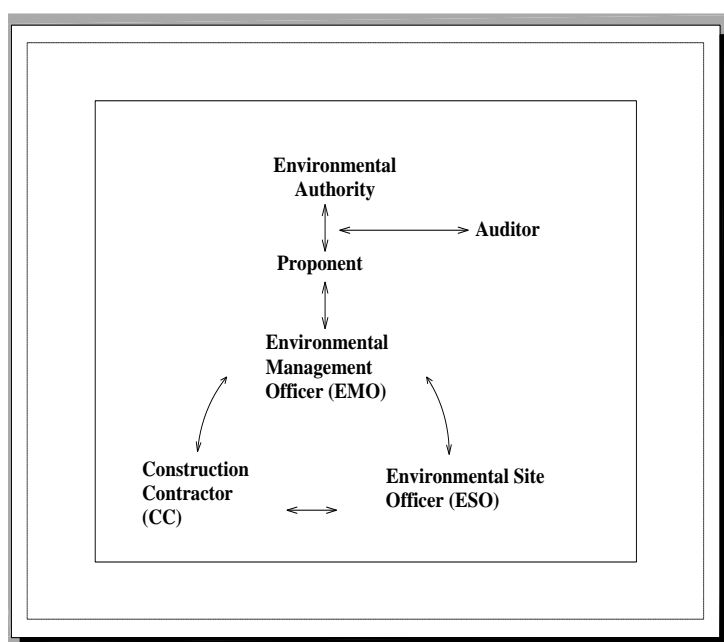
## 7.4 EMP Organization

This section defines the organization set up by the EMP if necessary and as required, for the proponent and the Construction Contractors for the implementation of the EMP and the roles and responsibilities devoted to each position involved in the process.

Three levels of organization, fully complementary, are set-up by the EMP.

- The Environmental Auditor (may be internal or independent external)
- The Environmental Management Officer (EMO),
- The Environmental Site Officer (ESO)

General organization is presented in the following figure:



**Figure 24: EMP Organization**

The Environmental Management organization described above includes an Environmental Management Officer (EMO) and an Environmental Site Officer (ESO). The EMO function is for the duration of the construction period plus post-construction audit and operational period.

The EMO role is executed by:

- An environmental management officer attached to the Project who may be an external specialist or a suitably qualified or oriented staff member from the Proponents organization;
- Support from the site construction supervision staff.

The EMO coordinates (directly or through the site construction supervision staff) with the various CCs and with the ESO(S) appointed by the Construction Contractors. The overall

role of the EMO is to oversee and monitor adherence to, and implementation of, the EMP by the CCs (which includes compliance with the relevant obligations contained in the EMP).

The EMO is assisted by the site supervision staff and the ESO on the CC's side, responsible for monitoring construction-related activities and implementing environmental measures on site as part of the EMP conditions.

The ESO is the CC's focal point for all environmental matters, and coordinates directly with the EMO and CE. The ESO is routinely on-site for the duration of the construction works.

ESOs are appropriated technical officers (often the CC site engineer), who has the knowledge of environment issues on the project site. The ESO carries out regular inspections of the CC activities in relation to environmental issues, and provides day-to-day advice to Contractor personnel about environmental issues. Verification is provided by the EMO.

#### **7.4.1 EMO Roles & Responsibilities**

The EMO should be responsible for monitoring, reviewing and verifying compliance with the EMP by the Construction Contractor. The ESO should also ensure compliance (as per the construction contractor). The EMO's duties in this regard, and working with the CE, who will have day-to-day interaction through supervisory staff, should include the following:

- Ordering the removal of person(s) and / or equipment not complying with the specifications;
- Verifying Environmental Compliance
- The issuing of penalties for contraventions of the EMP;
- Taking decisions in case of severe non-compliances to the EMP are detected;
- Providing input for on-going internal review of the EMP
- Stopping works in case of emergency or if significant environment impacts are apparent or imminent.

The EMO ensures the CC has all plans, procedures, approvals, and documentation in place to ensure EMP compliance prior to commencement of any work. The EMO's duties here include the following:

- Supervising updating and maintenance of the EMP;
- Monitoring and verifying that the EMP is adhered to at all times and taking action if the specifications are not followed;
- Monitoring and verifying that environmental impacts are kept to a minimum
- Sampling sites and surrounding areas regularly with regard to compliance with the EMP;
- Recommending to stop work in emergencies or if significant environmental impacts are apparent or imminent;

- Preparing the background information for the Reports
- Participating, upon request in meetings with the environmental authorities as requested.

#### **7.4.2 ESO Roles & Responsibilities**

The ESO(s) has the principal responsibility for observing construction activities and ensuring that those activities are in compliance with the EMP requirements. To accomplish this, each ESO should be familiar with the EMP and contract specifications.

The specific responsibilities of the ESO are to:

1. Monitor implementation of environmental measures by CC construction staff against contractual obligations by:
2. Performing regular monitoring activities;
3. Detecting non-conformance and approving corrective action (with advice from EMO if necessary)
4. Evaluating CC environmental efforts and effectiveness; and
5. Identifying circumstance requiring management decisions to evaluate variance or compliance issues.
6. Compile documentation of monitoring observations by:

Collecting any specific data that the ESO is assigned to monitor;

- Interface with EO to assist in field interpretation of environmental requirements, provide advice regarding corrective actions and resolving non-compliance situations, and issue specific formal instructions to the CC workforce;
- Interface with CC manager to help communicate requirements, obtain a hands-on view of special problems so that implementation difficulties can be communicated to the EMO to aid in problem resolution especially in situations where adjustment of compliance requirements may be necessary;
- Communicate to EMO by:  
Interaction with EMO as needed to define corrective action recommendation for any identified non-compliance situation.
- Implementation for environmental controls and measures specified in the EMP, Sub-Plans.
- Ensuring measures to protect project staff health are implemented.



## 8. ENVIRONMENTAL MANAGEMENT, MONITORING AND BUDGET ALLOCATION

### 8.1 Water Quality Management Plan

*Surface Water Quality Management, Ground Water Protection Plan and Ensure safe drinking water*

Objective	<p>To reduce discharge of wastes that impact water quality and to determine if additional implementation of management practices are necessary to improve and/or protect water quality.</p> <p>Ensure safe drinking water, which is essential for good health.</p>
Legal Requirements	National Environmental Quality (Emission) Guidelines, 2015
Implementation Schedule	During Operation and Decommissioning Phases
Management Action	<ul style="list-style-type: none"> <li>▪ Put a set of procedure for the stockpiling and removal of waste material (particularly liquid, solid and human waste) from project site; and establishing sewerage facilities on site;</li> <li>▪ Regularly inspect the accumulated solid waste for periodic removal from site for proper waste treatment or disposal for recycling;</li> <li>▪ Installation of proper waste water drainage outside work premises.</li> <li>▪ Provide a rain water drainage system. Keep the drainage clean and clear on a regular basis;</li> <li>▪ Chemically contaminated run-off should be intercepted and discharged where it will not leak to contaminate ground water.</li> <li>▪ Provide proper facilities for drinking water near the work area;</li> <li>▪ Ensure that there is always safe drinking water available and that the water cannot be contaminated by dust, chemicals, or dirt for example spread by insects.</li> </ul>
Monitoring Plan	<p>Monitor the waste water from the project area before discharging into the nearby water body. Monitor the solid waste from footwear production process and ensure that they are systematically disposed for recycling and environmental protection measures.</p> <p>Ensure safe drinking water adhering to National Environmental Quality Guidelines, 2015 for safe drinking water and waste water effluent.</p>

Parameters for waste water and drinking water	<ul style="list-style-type: none"> <li>▪ Turbidity, EC, Total hardness, Total dissolved Solids, Chloride, Sulfate, Calcium, Magnesium, BOD, COD, pH, Temperature, Ammonia for waste water;</li> <li>▪ Physico-Chemical parameters (e.g. Turbidity, EC, Total hardness, Total dissolved Solids, pH, Temperature, Iron (as Fe), SO<sub>4</sub>, Nitrates (as NO<sub>3</sub>), Fluoride (F), etc. and Microbiological parameters (E-coli and total coliforms) for drinking water.</li> </ul>
Location	One sample at outlet of Project Area (surface water), and one sample for drinking water
Frequency	Twice per year
Budget Allocation	100,000 Kyats / test (100,000 x 2 x 2 Kyats per Year) = 400,000 Ks
Responsibilities	Monitoring by EMP Organization or Third Party

## 8.2 Drainage Management Plan

Objective	To flow clean water outside the project area
Legal Requirements	National Environmental Quality (Emission) Guidelines, 2015
Implementation Schedule	During Operation Period
Management Action	<p>Avoid removing and altering the natural features of the land as much as possible;</p> <p>Provide proper waste drainage outside work premises, provide a rain water drainage system, keep the drainage clean and clear on a regular basis;</p> <p>Periodically clear drainage, maintain channels to prevent seepage and reduce inefficiencies resulting from siltation and weeds, all access to channels for maintenance in design, application of effective litter prevention and control, implementation of secondary containment procedure that avoid accidental or intentional releases of contaminated containment fluids.</p>
Monitoring Plan	Site supervision during operational period; once a week
Parameters	Good housekeeping and professional landscape and drainage design
Location	Site Project Area
Frequency	Weekly

Budget Allocation	500,000 Kyats/ year
Responsibilities	Monitoring by EMP Organization or Third Party

### 8.3 Air Quality Management Plan

Objective	<p>To reduce the potential impacts of noise and dust; to reduce exposure to fine dust; to ensure clean physical environment;</p> <p>To monitor emissions from Project activities and establish measures to mitigate emissions from Project activities to meet air quality legislative requirements and to reduce the Project effects to reasonable levels.</p>
Legal Requirements	National Environmental Quality (Emission) Guidelines, 2015
Implementation Schedule	During Operation and Decommissioning Phases
Management Action	<p>The following are some mitigation measures :</p> <ul style="list-style-type: none"> <li>▪ Implement rigorous daily housekeeping practice. Use water when cleaning. Take care not to spread dust;</li> <li>▪ Clean properly at each workplace; avoid spreading of dust, especially from footwear grinding machines, skiving and cutting operations;</li> <li>▪ Improve local exhaust ventilation at dust generating work station, in particular the footwear grinding work; Enclose or isolate footwear grinding or any other dust generating tasks;</li> <li>▪ Reduce noise at the source by using properly designed, maintained, and adjusted tools or machines;</li> <li>▪ Screen or isolate the noise source as much as possible; reduce noise reflection by raising the ceiling or using sound-absorbing materials, use relevant PPE (ear muffs / ear plugs) when necessary;</li> <li>▪ Avoid burning of materials, vegetation or waste on site</li> </ul> <p>Odor management:</p> <ul style="list-style-type: none"> <li>▪ Operators to use relevant PPE (Personal protective equipment) during operation and decommissioning phases;</li> <li>▪ Keep glue / chemical containers covered. Avoid letting hazardous</li> </ul>

	<p>vapors escape around the workshop.</p> <p>Footwear Chemical management:</p> <ul style="list-style-type: none"> <li>▪ Check all chemical containers are properly labelled and material safety data sheets are provided for all chemical products;</li> <li>▪ Seek to use water-based chemicals instead of solvent-based ones. Introduce local exhaust ventilation. Keep containers covered;</li> <li>▪ Change the work method in order to reduce direct handling of hazardous materials. Rotate work tasks;</li> <li>▪ Provide workers with and use suitable protective clothing and gloves to avoid direct contact with hazardous materials.</li> </ul> <p>Dust Management</p> <p>Material handling has to be limited to as little as possible to prevent the generation of dust. Avoid spreading of dust.</p>
Monitoring Plan	<p>Monitoring of air quality at project site, and in general ventilation air, Air quality monitoring, including the occurrence of dust and possible air pollutants, will be carried out to establish the emissions associated with the site activities during Operation.</p> <p>Monitoring will occur on a yearly basis and results of the monitoring program will be recorded and reported annually. If adverse conditions are found in a particular area or process, adaptive management policies will be implemented.</p>
Parameters	<p>Nitrogen dioxide (NO<sub>2</sub>), Ozone (O<sub>3</sub>), Particulate Matter (PM<sub>10</sub>), Particulate Matter (PM<sub>2.5</sub>), Sulfur dioxide (SO<sub>2</sub>), Total Suspended Particulate (TSP), CO, Temp, Relative Humidity.</p>

	NEQEG Noise Level Parameters		
	Receptor	One hour LAeq (dBA) <sup>a</sup>	
		Daytime 07:00 – 22:00 (10:00 - 22:00 for Public holidays)	Night Time 22:00 – 07:00 (22:00 - 10:00 for Public holidays)
	Residential, institutional, educational	55	45
	Industrial, commercial	70	70
	<sup>a</sup> Equivalent continuous sound level in decibels		
Location	One sample is measured to cover the whole Project Area		
Frequency	Once per year		
Budget Allocation	1,500,000 Kyats x 1 / year = 1,500,000 Kyats / year		
Responsibilities	Monitoring by EMP Organization or Third Party		

#### 8.4 Waste Management

Objective	Avoid exposure of waste to natural resources such as soil, air and water; due to waste produced from project site. Ensure proper waste management practices to enhance community well-being.
Legal Requirements	National Environmental Quality (Emission) Guidelines, 2015
Implementation Schedule	During Operation and Decommissioning Phases
Management Action	<ul style="list-style-type: none"> <li>▪ Provide sufficient waste containers of adequate size. Establish a regular system for removing waste from the workplace;</li> <li>▪ Specify clear responsibilities for waste disposal. The disposal of waste, dumping for solid waste produced from shoe making should be disposed periodically for recycling or municipal waste treatment plant and avoid waste-mountain outside the footwear workshop.</li> <li>▪ Diversion and management of surface and waste water to minimize water pollution problems. Simple treatment to reduce the discharge of suspended solids may also be necessary.</li> </ul>

Monitoring Plan	Collected and provided to a waste recycling facility when there is a sufficient quantity to warrant collection. Inspect solid and liquid waste disposal system on site (ensure segregation of waste: glue bins and waste-fabric separation, sewerage facilities functional) for safe environment.
Parameter	Waste generated at the Project is monitored on a weekly basis through waste disposal receipts.
Location	the whole Project Area
Frequency	Weekly
Budget Allocation	300,000 Kyats/ month {(3,600,000) Kyats/ Year}
Responsibilities	Monitoring by EMP Organization or Third Party

### 8.5 Hazardous Chemical Management

Objective	Proper disposition of a discarded or discharged material in accordance with local environmental guidelines or laws. Avoid exposure of hazardous waste to natural resources such as soil, air and water; due to hazardous chemical waste produced from project site. Ensure proper waste management practices to enhance community well-being.
Legal Requirements	<ul style="list-style-type: none"> <li>✓ National Environmental Quality (Emission) Guidelines, 2015</li> <li>✓ Prevention from Danger of Hazardous Chemical and Associated Material Law (Pyidaungsu Hluttaw Law No. 28/2013)</li> <li>✓ Occupational Safety and Health 2019 (Pyidaungsu Hluttaw Law No.8.2019)</li> <li>✓ IFC Environmental, Health and Safety Guidelines</li> </ul>
Implementation Schedule	During Operation and Decommissioning Phases
Management Action	<ul style="list-style-type: none"> <li>▪ Provide sufficient waste containers of adequate size. Establish a regular system for removing waste from the workplace;</li> <li>▪ Specify clear responsibilities for waste disposal. The disposal of waste, dumping for solid waste produced from shoe making should be disposed periodically for recycling or municipal waste treatment plant and avoid waste-mountain outside the footwear workshop.</li> <li>▪ Diversion and management of surface and waste water to minimize water pollution problems. Simple treatment to reduce the dis-</li> </ul>

	charge of suspended solids may also be necessary.
Monitoring Plan	Collected and provided to a waste recycling facility when there is a sufficient quantity to warrant collection. Inspect solid and liquid waste disposal system on site (ensure segregation of waste: glue bins and waste-fabric separation, sewerage facilities functional) for safe environment.
Parameter	Chemical Waste generated at the Project is monitored on a daily basis through waste disposal receipts.
Location	the whole Project Area
Frequency	Daily
Budget Allocation	300,000 Kyats/ month {(3,600,000) Kyats/ Year}
Responsibilities	Monitoring by EMP Organization or Third Party

## 8.6 Traffic Management Plan

Objective	To ensure the safety of the traffic To prevent air pollution on transportation routes To have better services of traffic To Reduce disturbance and mortality related to roads and traffic
Legal Requirements	Social Security Law (2012)
Implementation Schedule	During Operation Phases
Management Action	To avoid traffic congestion in the project area, the speed of vehicles and the volume of loads will be limited by regulation. And regular checking on the capacity of trucks and drivers whether they will follow the rules and regulations or not. In addition, puddles and pits are frequently reclaimed and expand the truck routes.
Monitoring Plan	Designate specific roadways or provide alternate routes for light duty vehicles in high activity or congested areas. Adhere to all traffic rules, signals, speed limits and warnings. Design traffic patterns to reduce exposure to blindside hazards. Always ensure equipment is stopped in a safe area Always make eye contact or use hand signals before boarding equipment and again, wait for positive response.
Location	the whole Project Area

Frequency	Daily
Budget Allocation	500,000 Kyats (Lump sum per year)
Responsibilities	Monitoring by EMP Organization or Third Party

## 8.7 Community Engagement and Development Plan

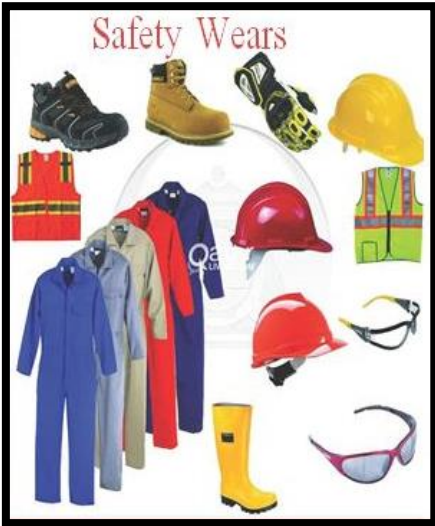
<b>Objective</b>	<p>To inform communities about footwear production activities, work schedules, potential health and safety issues and how to engage with the project for any grievances</p> <p>Community engagement plan, the following information will be conducted such as raising awareness campaign to local community to understand how they will get benefits developing the project in this areas and the best way to cooperate projects activities</p>
<b>Legal Requirements</b>	Social Security Law (2012)
<b>Implementation Schedule</b>	During Operation Phases
<b>Management Action</b>	<p>Community Engagement</p> <p>Community engagement can foster an open and meaningful dialogue that can not only help to build trust, respect and legitimacy for project operation, but also support effective decision making. This is because engagement can address community concerns, manage expectations, tap local knowledge and help negotiate a mutually beneficial future. In addition, show that where conflicts exist between the company and the local community, delays are common and there are often striking differences in perceptions between the company representatives and communities. Breakdowns in perception, communication and understanding are common.</p> <p>Community Development</p> <p>Employment:</p> <p>Communicate available opportunities at the Project in advance, so as to manage employment expectations;</p> <p>Employment of locals and an increase in salary earners;</p> <p>Maximize &amp; monitor local recruitment</p> <p>Prevent nepotism/ corruption in local recruitment structures</p> <p>Promote the employment of women and youth</p>



	<p>The Company provided they meet the education and skills/experience criteria. The company will implement a multi-skill and entrepreneurship training program to all employees during working life to prepare them for work outside.</p> <p>Education:</p> <p>The company will seek to support schools in the neighborhood by addressing needy areas such as infrastructure development, offering a limited number of scholarships for exceptionally performing students/pupils as an incentive for hard work, sponsoring orphans and pupils from vulnerable families etc.</p> <p>Economic Development:</p> <p>Determine party responsible for relocation. For non-vulnerable households and individuals, negotiate a favorable outcome on a case-by-case basis.</p> <p><b>Health and Welfare</b></p> <p>Extensive HIV/ AIDS and other current health awareness campaign</p> <p>Cease construction activities before nightfall</p> <p>Clear identification of workers; prevention of loitering - Liaison with police</p> <p>Do not recruit laborers on-site.</p>
<b>Monitoring Plan</b>	<p>One of the most important aspects of stakeholder engagement is reporting and monitoring to measure progress and allow follow up. This can be done using meeting logs to report on formal meetings, informal meetings, telephone calls, visits of community members to the site or information office, emails or any other form of contact with the community. The meeting logs should also record the type of meeting, attendees/participants, date, issues and be supplemented by a commitment register, a meeting attendance register and an activity register, that lists the action points agreed to.</p>
<b>Location</b>	Nearby Village or local community
<b>Frequency</b>	Regularly Monitoring and Annual Reporting
<b>Budget Allocation</b>	700,000 Kyats (Lump sum/year)
<b>Responsibilities</b>	Monitoring by EMP Organization or Third Party

## 8.8 Occupational Health and Safety

Objective	To reduce operation work-related deaths, injuries, and ill health
Legal Requirements	Social Security Law (2012) Employment and Skills Development Law (2013) The Occupational Explosive Material Law (June 2018)
Implementation Schedule	During Operation and Decommissioning Phases
Management Action	<p><b>Health and Safety of Population</b></p> <p>Lack of care or lack of information can cause accidents (e.g. traffic incidences, electrocution where they may suffer injury, and risk of fire hazard). Thus, people or workers under direct influence of project should be informed by project proponent or their appointed representative regarding appropriate security precautions for example: Using appropriate PPE (Personal Protective Equipment) during operation; Participation of training programs regarding adhering to emergency response procedures and activities; Abiding to good and standard practice and procedures for relevant machineries and equipment; and Monitoring of alarm system for emergency conditions.</p> <p><b>Occupational Health</b></p> <p>The manager must take effective steps to ensure the safety and health of the workplace. Workers should first be given training prior to the use of machinery / equipment for safety reasons and should report to relevant departments for accidental cases.</p> <p>Pre-employment and regular medical examinations shall be carried out on all plant employees. The Company will provide well-equipped sanitary facilities for its employees.</p> <p><b>Occupational Safety</b></p> <p>Minimum age of employment is 18 year of age (Children should not be working with footwear chemicals);</p> <ul style="list-style-type: none"> <li>- One day of rest per week</li> <li>- Limited working hours</li> <li>- Provision of clean water and medical facilities</li> </ul>

	<ul style="list-style-type: none"> <li>- Right of inspectors to survey safety and health</li> </ul> <p><b>Occupational Health and Safety Training</b></p> <p>The level of training that site personnel receive in emergency preparedness needs to be significantly increased. In particular emphasis should be placed on testing the whole emergency response system, especially under worst case scenarios such as night or weekend. Training shall consist of basic hazard awareness, site specific hazards, safe work practices, and emergency procedures for fire, evacuation, and natural disaster, as appropriate. Any site specific hazard or color coding in use shall be thoroughly reviewed as part of orientation training.</p> <p>Occupational Safety Wear</p>  <p><b>Area Signage</b></p> <p>Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors and the general public as appropriate.</p>
Monitoring Plan	<ul style="list-style-type: none"> <li>- Define the scope of the Management Plan including roles, responsibilities and time frame;</li> <li>- Prepare a list of potential community health, safety and security risks associated with the proposed Project</li> <li>- Discuss Project commitments, programs, operational procedures and guidance that respond to and mitigate the identified risks</li> <li>- Suggest monitoring and reporting procedures and identify Key Performance Indicators to measure the achievements of the proposed Project Commitments and Programs</li> <li>- Anticipate training requirements</li> </ul>

Location	Direct Affected Area
Frequency	Regularly Monitoring and Quarterly Reporting
Budget Allocation	2,400,000 Kyats (Lump sum/year)
Responsibilities	Monitoring by EMP Organization or Third Party

## 8.9 Emergency and Rescue Plan

Objective	Ensure processes for requesting outside emergency support, notification of officials and incident documentation is clearly defined, communication tools are understood and the appropriate action is taken.  Ensure training is thorough and often with written instructions available in all areas to support immediate and effective response.															
Legal Requirements	Natural Disaster Management Law (2013), National Fire Protection Agency (NFPA 58) standard															
Implementation Schedule	During Operation Phase															
Management Action	<div><b>Emergency Contacts</b></div> <table><tr><td>EMO</td><td>Head</td></tr><tr><td>External Emergency Response Team (EERT)</td><td>Member</td></tr><tr><td>ESO (1 No.)</td><td>Member</td></tr></table> <table><thead><tr><th>Entity</th><th>Responsibilities</th></tr></thead><tbody><tr><td>EMP Team (ERT)</td><td>Communicates / alerts the EERT. Prepares the emergency site to facilitate the response action of the EERT, e.g., vacating, clearing, restricting site. When necessary &amp; requested by the EERT, lends support / provides assistance during EERT's response operations</td></tr><tr><td>External Emergency Response Team (EERT)</td><td>Solves the emergency / incident</td></tr><tr><td>Resources</td><td>Provide and sustain the people, equipment, tools &amp; funds necessary to ensure Project's quick response to emergency situations.</td></tr></tbody></table>		EMO	Head	External Emergency Response Team (EERT)	Member	ESO (1 No.)	Member	Entity	Responsibilities	EMP Team (ERT)	Communicates / alerts the EERT. Prepares the emergency site to facilitate the response action of the EERT, e.g., vacating, clearing, restricting site. When necessary & requested by the EERT, lends support / provides assistance during EERT's response operations	External Emergency Response Team (EERT)	Solves the emergency / incident	Resources	Provide and sustain the people, equipment, tools & funds necessary to ensure Project's quick response to emergency situations.
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		Maintain good communication lines with the EERT to ensure prompt help response & adequate protection, by keeping them informed of Project progress.
	<p><b>Content</b></p> <p>The most crucial aspect of the emergency system is the identification and communication of the emergency to the appropriate persons. Consequently, the names of the appropriate contact person together with their contact numbers would be prominently displayed around the facility. The contact details will be updated on a regular basis.</p> <p>Each person's responsibility would be cleared with him/her beforehand and a copy of the emergency contingency plan would be distributed to each person, including the responsible and/or affected persons not associated with the Operator:</p> <ul style="list-style-type: none"> <li>Disaster management and firefighting agencies;</li> <li>Downstream water supply authorities</li> <li>Downstream users that could be affected in the case of an emergency such as local communities</li> <li>Relevant government authorities; and</li> <li>Approved professional person (engineer).</li> </ul> <p>It must be ensured that operating and supervisory staff are familiar with the emergency plan, and that the content thereof is understood and familiar to them.</p> <p>The emergency response plan will be updated as circumstances change or operating procedures are amended, and as a minimum in the event of:</p> <ul style="list-style-type: none"> <li>Any additional recommendations made by a professional engineer (annual safety inspections) or environmental auditors;</li> <li>Any change in operational procedures and/or management of the project activity;</li> <li>The identification of any issues of concern or additional risks as a result of regular inspections and/or monitoring results; and</li> <li>Any unplanned or unforeseen emergency situation.</li> </ul> <p>Establish a planning team: Demonstrate management's commitment to the project by appointing a competent team leader and authorizing the leader and the team he assembles to take the necessary steps to develop an emergency response plan. Management should provide the leader with expectations for deliverables and a deadline and budget, if required.</p> <p>The team may elect to meet with municipal and provincial government agencies, first response organizations and others to obtain information. Meetings will also be held with other company personnel such as</p>	

	<p>members, worker safety and health representatives, engineers, maintenance, human resources, purchasing and others.</p> <p>With management's directives and deadlines in mind, the team should also establish schedules and budget for their work and have these approved, if necessary.</p> <p>Training and competency: The level of training that project site personnel receive in emergency preparedness needs to be significantly increased. In particular emphasis should be placed on testing the whole emergency response system, especially under worst case scenarios such as night or weekend. There is an opportunity for providers of training in emergency management to develop courses for site personnel in emergency management for personnel other than for the major roles. This would generate a wider understanding of what happens in an emergency and what needs to happen in what order. Any whole of training in emergency management plans (EMP) should include the post incident analysis and investigation that may be required by the regulator.</p> <p>Documents to review:</p> <ul style="list-style-type: none"> <li>Health and safety policy</li> <li>Evacuation plan</li> <li>Fire protection and fire-fighting plans</li> <li>Security procedures</li> <li>Mutual aid agreements with other companies</li> <li>Risk management plan</li> <li>Records from previous incidents and drills</li> <li>Environmental policies</li> <li>Accident investigation records</li> <li>Records of past meetings with first responders (fire, police, medical, etc.)</li> </ul> <p>Identify hazards, estimate probability and assess potential impact on people, property and business.</p> <p>A good starting point is to create an inventory of emergencies which have or could have occurred in:</p> <ul style="list-style-type: none"> <li>Your facility</li> <li>The area adjacent to your facility</li> <li>The community</li> <li>The region</li> </ul> <p>Include the following if appropriate:</p> <ul style="list-style-type: none"> <li>Fire</li> <li>Chemical spills and leaks</li> <li>Hazardous materials</li> <li>Extreme weather</li> <li>Explosion</li> </ul>
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	<p>Electrical emergency</p> <p>Water hazards and floods</p> <p>Mobile equipment</p> <p>Conveyor emergencies</p> <p>Confined space</p> <p>Widespread illness or pandemic</p> <p>Other(s)</p> <p>Take into account such factors as:</p> <p>Patterns of extreme weather such as freezing rain, drought, cyclones, excessive rain</p> <p>Proximity to flood plains, seismic faults, dams, water tables</p> <p>Proximity to companies which produce, use, store or transport dangerous goods</p> <p>The state of the roads leading to and from your facility – are they ever impassable due to heavy mist or reduced visibility – what is the local accident frequency?</p> <p>For isolated operations, the availability of emergency transportation such as ambulance or helicopter</p> <p>Typical employee drive time to and from work</p> <p>Identify emergency resources: More than listing telephone numbers in the emergency procedure, many companies maintain an active relationship with some or all emergency services, providing them with site plans, plant tours and notification when there are major changes to plant, process or materials. Many fire departments, for example, would welcome an opportunity to conduct a training session regarding footwear production work.</p> <p>Resources include but may not be limited to:</p> <p>Fire: may be full-time professional fire fighters; part-time volunteer departments; company employees trained and equipped to fight fires.</p> <p>Police: municipal or First National police forces</p> <p>SAR – Search and Rescue: teams of trained and equipped volunteers prepared to search for missing persons or respond to other types of emergencies</p> <p>Medical: provincial or local ambulance service; hospital; local doctor; air ambulance; company employees trained and equipped to provide first aid</p> <p>Municipal government, public works department: may provide assistance with situations involving water, sewer, or other services – may already have plans in place for large scale emergencies</p> <p>Electrical utility: Local municipal or regional electricity utility may provide assistance with situations involving overhead or underground power lines</p> <p>Telephone utility may be required to provide assistance with situations involving telephone or related service or telephone equipment</p> <p>Fuel supplier may be required to provide assistance with situations</p>
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	<p>involving fuel, fuel storage or fuel transfer.</p> <p>Ministry of Labor may be consulted</p> <p>Ministry of the Environment: advice and assistance with situations involving release of materials into the air, water or ground.</p> <p>Review codes and regulations: Some emergency situations may be caused or complicated by failing to follow the dictates of one or more codes of practice. Legislation is in place to direct companies on procedures to follow and notification to be given in case of an emergency. Codes and regulations include but may not be limited to:</p> <ul style="list-style-type: none"> <li>▪ National Fire Code: details fire prevention characteristics to be included in residential and commercial buildings as well as installation, testing and use of fire emergency systems ,</li> <li>▪ National Fire Protection Agency (NFPA 58) standard.</li> </ul> <p>Develop training programs: Everyone who works for the company requires some type of training. Even contractors and visitors may require some emergency response training and orientation.</p> <p>Training may include safety meetings, reviews of procedures, use of fire extinguishers, evacuation drills or full-scale disaster exercises. Some or all employees may be trained in fire preventive and emergency first aid training is already mandatory.</p> <p>Typically, a company will assign someone to be responsible for managing the emergency response training program. The training plan should speak to the following considerations:</p> <ul style="list-style-type: none"> <li>Who is to be trained</li> <li>Who will do the training; employees, contractors, community responders</li> <li>What training is required for all employees</li> <li>What training is required for specialist employees</li> <li>What training is required for contractors and their employees</li> <li>What orientation training is required for visitors</li> <li>How can members of the community first response teams be involved with the training programs</li> <li>How to evaluate training and re-training intervals</li> <li>The method of storing and the location of the training records</li> </ul> <p>Develop a communication strategy: Effective communication is essential to report emergencies to first response support teams, employees, neighboring businesses and residences, the community, news media and other interested parties such as employees' families and company customers. Even a temporary communication disruption can have a serious effect on the response process. An Emergency Response Organization Chart can play a major role in maintaining effective communication especially during a crisis.</p>
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	<p>The first requirement is a means for alerting all personnel on the site to the emergency. A loud, open-air horn or siren may be effective for most people but operators inside cabs of mobile vehicles may not hear the warning especially if they have air conditioning running at the time. A general alert delivered on all working radio frequencies is effective. The system should be tested on a regularly-scheduled basis. Each employee participate in a fire drill at least once per year. Employees should know where to go when the alarm is sounded.</p> <p>Some notifications are required by law. A list of “Legislated Requirements for Incident Reporting” is included with this guideline as an addendum. Note that, in some cases, “immediate notification” is required. Someone on the emergency team should have responsibility for making reports as required by legislation.</p> <p>Dealing with the news media at the time of an emergency situation can present a special challenge. Experts recommend only one trained person be allowed to brief the media on behalf of the company. Media representatives should not be given free access to the job site. They must be provided with PPE and escorted at all times for their own safety. Where possible, information for media distribution should be printed and distributed as a press release.</p> <p>Write the plan: Every component of every emergency response plan requires the approval of some level of management. Plan development will proceed more smoothly and with fewer revisions if the approvals process and deadlines are established and understood beforehand.</p> <p>Not everyone is capable of writing clear, concise copy. Encourage everyone participating in the actual plan development to record information in point form. The project leader should assign the writing tasks to those who are most knowledgeable about sections of the content.</p> <p>Working from your lists of probable emergencies and resources available, develop an approach to deal with the situations. Include a step-by-step procedure, and state who is responsible for taking which actions.</p> <p>Implement the plan: There are several aspects to plan implementation:</p> <ul style="list-style-type: none"> <li>Management can indicate its “buy-in” to the plan by adding a launch covering letter signed and dated by the most senior manager for the site or operation</li> <li>The employee introduction to the emergency plan may take place through safety meetings, orientation meetings or specific training programs</li> <li>Emergency preparedness information from the plan may be distributed or promoted through posters, bulletin board showings and employee newsletters</li> </ul>
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	<p>Supervisors should make a habit of asking employees what they would do if a fire (explosion, cyclone, etc.) occurred.</p> <p>Plan implementation should include a launch with police, fire, medical and other support services</p> <p>Emergency Training: One day of the week-long pre-production startup program will be devoted to refresher training in emergency procedures, fire-fighting and related programs. An emergency evacuation drill will be held at least once during production season.</p> <p>Fire Protection and Fire Fighting Plan: All employees will follow the procedure:</p> <p style="padding-left: 40px;">In the event of a fire in equipment which has a built-in fire suppression system, (loaders, gen set) activate the system.</p> <p style="padding-left: 40px;">If you discover a fire in its early stage, notify the office by radio then make the decision whether to fight it with a fire extinguisher – all employees should be familiar with extinguisher locations and how to use them – when in doubt evacuate.</p> <p style="padding-left: 40px;">For any fire which cannot be fought with hand-held extinguishers, the local municipal fire department will be called – if required, an employee will be designated to lead the fire department to the scene of the fire using a company truck. The company has offered its property for fire fighter training purposes.</p> <p>Incident and Injury Plan: First aid kits are located at the site plant, gen set trailer and in each company vehicle.</p> <p style="padding-left: 40px;">For minor injuries (scrapes, shallow cuts, etc.) all employees are authorized to use materials in any first aid kit but must make a note of the injury and materials used in the kit's log book.</p> <p style="padding-left: 40px;">For any injury more serious than the above, call the office for assistance. Current-trained first-aiders will determine whether an injury can be treated on site, treated in hospital or requires an ambulance.</p> <p>Security Procedures: Only the main gate will be opened for vehicle access. All other gates at entries to the property will be closed and locked at all times. Report any damage to gates or perimeter fences</p> <p style="padding-left: 40px;">Incoming customer trucks for pickup must stop at the office. Drivers are not allowed to leave the cabs of their vehicles at any time while on Company property. All other visitors are required to park near the office for check-in and check-out when leaving. All visiting vehicles must be accompanied by a Company vehicle when traveling on company property. Hard hats and safety glasses are available for visitors in the office.</p> <p style="padding-left: 40px;">No explosives are stored on the company property.</p> <p>Interruption of Electrical Supply: Electrical systems in the office are</p>
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	<p>designed to switch over to power supplied by our generators in the event of a failure of utility-supplied power.</p> <p>Emergency response and preparedness: If Accidents, injuries or health effects and natural disasters occur during the operation, must be prepared to act in a timely manner. In case of emergencies, the first-aid nurses in the workplace and the clinic staff will take charge; and patients will be treated and must be taken to the nearest hospital for a serious condition.</p>
Monitoring Plan	<p>There are several aspects to Monitoring plan:</p> <p>Management can indicate its “buy-in” to the plan by adding a launch covering letter signed and dated by the most senior manager for the site or operation</p> <p>The employee introduction to the emergency plan may take place through safety meetings, orientation meetings or specific training programs</p> <p>Emergency preparedness information from the plan may be distributed or promoted through posters, bulletin board showings and employee newsletters</p> <p>Supervisors should make a habit of asking employees what they would do if a fire (explosion, cyclone, etc.) occurred.</p> <p>Plan implementation should include a launch with police, fire, medical and other support services</p>
Location	Direct Affected Area
Frequency	Regularly Monitoring and Quarterly Reporting
Budget Allocation	2,400,000 Kyats (Lump sum/year)
Responsibilities	Monitoring by EMP Organization or Third Party

### 8.10 Corporate Social Responsibility (CSR) and Funding

In the implementation of the CSR, the contribution made by society through the business activities and investment of the company has improved many years ago throughout the world. CSR is a social, environmental and an effect of various economic pressures.

Development Companies should also share some of the benefits of the business with the social, economic, education, health and environmental benefits of the local people and employees. By contributing these activities, it will facilitate better relations between the locals and the company. Therefore, the company should interview the people and the authorities from the local village and take care of their needs.

The project proponent shall use maximum 2% of annual net profit to be allocated as CSR fund starting from the project operation. It is basically suggested to be funded at around 10 lakh kyats. The amount should be contributed in factors tentatively as an example like; 350,000 kyats per year in education, 300,000 kyats per year in health care and 350,000 kyats per year in protection of environment.

### 8.11 Restoration and Replantation plan

- (1) In the field, nursery garden shall be established seedlings for planting substitutes
- (2) Measuring the area for planting suitable trees in the region with the guidance of the relevant township department of forestry.
- (3) Planting seedlings in designated areas.
- (4) Maintaining the water that comes from the production through the sewer pond for watering.
- (5) Employment of a local day laborer to monitor the growth of the plant.
- (6) As a daily laborer should be monitored and replaced of crop failure and other condition.
- (7) The company will provide support to local daily laborers who will look after the trees.

**Table 13: Annual Replantation Programme**

No.	Year	Planned Green Area (m <sup>2</sup> )	Project Area	Arable Area (m <sup>2</sup> )	Total Seedlings
1	First	200	Native Perennial Trees / Floriculture	200	10
2	Second	200	Native Perennial Trees / Floriculture	200	10
3	Third	200	Native Perennial Trees / Floriculture	200	15
4	Fourth	200	Native Perennial Trees / Floriculture	200	15
Project's Total Planned Green Area = 10% of Project Area		800		800	

## **8.12 Environmental Monitoring Plan**

For the Footwear production operation requires an adequate level of monitoring to ensure a safe and healthy environment.

It is important that the environmental works should be supervised and monitored at all times, in order to ensure that the greatest possible benefits are gained from the Environmental Management process. General guidelines are provided below, as to how the EMP can be managed and monitored.

The Consultant recommends that a person responsible for Environmental management at all works sites, should be seconded to the work program.

This person should have adequate experience in environmental management, and in dealing with relevant project works. This person would also have knowledge in monitoring social / occupational health issues, both on site and with adjacent areas, associated with footwear production work and protection of the environment.

### **8.12.1 Site Inspection and Audits**

The contractor must develop appropriate protocols for regular site inspections and monitor compliance with environmental and social legislation and best practice, which includes World Bank safeguards standards. The project proponent personnel should participate in this process in the context of capacity building for environmental management.

**Table 14: Environmental Monitoring Plan**

Indicator	Location and Data Collection	Frequency	Parameters	Institution
<b>Operation Phase</b>				
Monitoring EMP Implementation				
1. Mitigation Measures 2. Enhancement Measures	Project Area (Direct Affected Area)	Daily monitoring and documenting, and Bi-Annual reporting		EMP Organization or Third Party
3. Surface Water, Drinking water	Two samples (wastewater and drinking water) are measured to cover the whole Project Area	Twice per year	<ul style="list-style-type: none"> <li>▪ Turbidity, EC, Total hardness, Total dissolved Solids, Chloride, Sulfate, Calcium, Magnesium, BOD, COD, pH, Temperature, Ammonia for waste water;</li> <li>▪ Physico-Chemical parameters (e.g. Turbidity, EC, Total hardness, Total dissolved Solids, pH, Temperature, Iron (as Fe), SO<sub>4</sub>, Nitrates (as NO<sub>3</sub>), Fluoride (F), etc. and Microbiological parameters (E-coli and total coliforms) for drinking water.</li> </ul>	EMP Organization or Third Party
4. Drainage Management	Project Area (Direct Affected Area)	Daily	<ul style="list-style-type: none"> <li>▪ Good housekeeping and professional landscape and drainage design</li> </ul>	EMP Organization or Third Party
5. Air	One sample is measured to cover the whole Project Area	Yearly	<ul style="list-style-type: none"> <li>▪ Nitrogen dioxide (NO<sub>2</sub>), Ozone (O<sub>3</sub>), Particulate Matter (PM<sub>10</sub>), Particulate Matter (PM<sub>2.5</sub>), Sulfur dioxide (SO<sub>2</sub>), Total Suspend Particulate (TSP), CO, Temp, Relative Humidity.</li> </ul>	EMP Organization or Third Party
6. Noise and Vibration	One sample is measured to cover the whole Project Area	Yearly	NEQEG Noise Level Parameters	EMP Organization or Third Party

			Receptor	One hour LAeq (dBA) <sup>a</sup>			
				Daytime 07:00 – 22:00 (10:00 - 22:00 for Public holidays)	Night Time 22:00 – 07:00 (22:00 - 10:00 for Public holidays)		
				Residential, institutional, educational	55		45
				Industrial, commercial	70		70
			an Equivalent continuous sound level in decibels				
7. Waste Management	the whole Project Area	Weekly	Waste generated at the Project is monitored on a monthly basis through waste disposal receipts		EMP Organization or Third Party		
8. Traffic Management	Transportation Route	Daily			EMP Organization or Third Party		
9. Community Engagement	Direct Effected Area and In- directed Affected Area	Regularly Monitoring and Quarterly Reporting			EMP Organization or Third Party		
10. Occupational Health and Safety	Direct Effected Area	Regularly Monitoring and Quarterly Reporting			EMP Organization or Third Party		
11. Emergency and Rescue Plan	Direct Effected Area	Regularly Monitoring and Quarterly Reporting			EMP Organization or Third Party		

## 8.12 EMP and Monitoring Cost

*The estimated costs of developing a monitoring program are as follows:*

**Table 15: Estimated Environmental Management Plan and Monitoring Cost**

**(Operational Phase)**

<b>Estimated Environmental Management and Monitoring Cost (Operational Phase)</b>					
<b>Section</b>	<b>Description of Monitoring Cost</b>	<b>Unit Cost (Ks)</b>	<b>Unit</b>	<b>Amount (Ks)</b>	<b>Note</b>
8.1	Water Quality Management Plan	100,000	2x2	400,000	Yearly
8.2	Drainage Management Plan	500,000	1	500,000	Yearly
8.3	Air Quality (including Noise) Management Plan	1,500,000	1	1,500,000	Yearly
8.4	Waste Management Plan	300,000	12	3,600,000	Yearly
8.5	Traffic Management Plan	500,000	1	500,000	Yearly
8.6	Community Engagement and Health Care Plan	700,000	1	700,000	Yearly
8.7	Occupational Health and Safety Plan	2,400,000	1	2,400,000	Yearly
8.8	Emergency Response Plan	2,400,000	1	2,400,000	Yearly
8.9	Corporate Social Responsibility Plan	1,000,000	1	1,000,000	Yearly
6.5	Salary for EMO and ESO (EMP Organization)	700,000	12	8,400,000	Yearly
810	Restoration and Replantation Programme	500,000	1	500,000	Yearly
Total Estimated Annual Budget for EMP and Monitoring (Kyats)				21,900,000	Kyats

**Say 22,000,000 Kyats**

**Estimated Annual Budget Allocation for EMP and Monitoring is 22,000,000 Kyats (Twenty-Two Million Kyats only)**

**Note:** If the project is beyond the current estimated cost, the necessary funds will be expanded. The Environmental Auditor is assumed to be from project proponent's office. However, if some of the works have already been in place, the EMP Budget may be duly budgeted accordingly by the EMO.



### 8.13 Summary KII (Key Informant Interview) Notes

Due to the COVID-19 spread out in that time, other stakeholders could not be participated. So, KIIs (Key Informant Interviews) were carried out by the Consultant Team during the Social Survey work at Mountain Top Footwear Factory in Sep-Oct 2021.

The summary notes from these interviews with different key stakeholders are as follows:

**Table 16: Summary Notes from KII (Key Informant Interviews), Sept-Oct 2021**

Item	Name of Key Informant / Stakeholder	Designation / Organization	Summary Notes
1	U Kyaw Zeya	Manager, Human Resources	<p>Mountain Top Global Limited mostly produces Ladies footwear with CMP (Cutting-Making-Packaging) procedure according to its ordered-footwear designs.</p> <ul style="list-style-type: none"><li>▪ Working Hours: Working time starts from 7:30 AM to 4:30 PM with 1 hour lunch-break.</li><li>▪ Salary Rate: start minimum 144,000 kyats to maximum 220,000 kyats.</li><li>▪ At present, we have 62 worker (labors) and 1 Chinese employee.</li><li>▪ The production process: is just cut, glue, and stitch; and produce the output product according to ordered footwear design.</li><li>▪ Dormitory: The foreign employee stay in the Factory and the local labors attend work from home.</li><li>▪ Water Supply: There are two deep well in our factory compound. Raw water from these wells are pumped into ground tanks and then stored in overhead tanks and then the water passes through the Reverse Osmosis water treatment plant and is distributed to the entire factory buildings and compound.</li><li>▪ The treated water is being tested for its physical-chemical and microbiological parameters for its drinkability.</li><li>▪ Staff Welfare: We have 62 staff, and those who live outside the factory come to work by their own initiatives.</li><li>▪ We don't have separate dining room for staff to eat our lunch during break-time at noon but we provide a place for lunch including dining tables and chairs.</li><li>▪ The staff brings their own meals from home.</li></ul>

			<ul style="list-style-type: none"> <li>▪ Currently we don't have ferry for 62 staffs but we will arrange it if there have more than 200 staffs.</li> </ul>
2	Daw Thandar	Manager, Production Line	<p>The quality of each step of the CMP process is controlled in each stage of the process.</p> <p>Process of CMP for footwear production:</p> <ul style="list-style-type: none"> <li>▪ Raw Material Store: The fabric, cloth, leather are stored in the ground floor warehouse store of this factory building with temperature-control and fungus prevention;</li> <li>▪ Cutting Section: a) The material for footwear production are cut / folded / thinned according to design measurements with different tools / machines;</li> <li>▪ Sewing Section: Then the components are stitched and sewed to form a rough footwear nature. Then it is glued to its sole and heel.</li> <li>▪ Shaping Section: The artificial foot (mould) is inserted into the rough shoe and heated, dried, pressed in successive conveyor-machines. Then the mould is dis-engaged from the shoe. Tissue / paper is inserted inside the shoe and then the finished shoe is stamped, fungus-prevent treated and boxed to be sent to the Packing Section.</li> <li>▪ Glue Warehouse: The glue containers are stored in the Glue warehouse inside the compound. Safety instructions are posted for safe-handling and occupational health in the warehouse.</li> <li>▪ The raw materials such as leather, fabric, cloth, glue (white/yellow/green) and relevant machinery/ equipment are imported from abroad.</li> <li>▪ Solid Waste Management: Since our CMP process for production of footwear is a dry process, we have mostly solid waste generated from the cutting stage. These are all collected by our local contractors and sent for recycling work. However, the domestic waste are being collected by the local municipality for hygienic disposal.</li> </ul>

3	U Kyaw Ko Ko Chit	Head, Labor Staff	<ul style="list-style-type: none"> <li>▪ Project Staff: We have 62 staff and those who live outside the factory premises come to work from their homes.</li> <li>▪ Health Clinic: There is a health clinic inside the compound, with a certified nurse in-charge to take care of our staff's health.</li> <li>▪ Fire Fighting System: We have regular fire-fighting training administered to our staff.</li> <li>▪ Electrical Supply: We have 2000 KVA transformer to run the factory. The electrical power source is from the national grid (33 KV cable) as our factory is located in the Watayar Industrial Zone area.</li> <li>▪ Water Resources: Water from our well is pumped and stored in 12 Nos. x 11' x7' x7' rectangular ground tanks, after which is then treated by Reverse Osmosis treatment system. Then it is pumped to the overhead tanks (2000 lts x 4 nos. + 3000 lts steel tanks), and is being distributed to the entire factory by gravity flow.</li> <li>▪ Drainage: We have masonry drainage constructed around the compound, which drains out its effluent into the Watayar Industrial Zone drainage system.</li> </ul>
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## 9. CONCLUSION AND RECOMMENDATION

**Social Status:** The proposed project land has no inhabitants living in the area and no resettlement issue identified since the project area lies in the Watayar Industrial Zone of Shwe Pyi Thar Township and has already settled all issues of land acquisition for implementation of the footwear production work by CMP process. The social survey was carried out in the environs of the project site during Sept-Oct 2021. It is observed that the people have no objection to the proposed project and they expect better operations of project to reduce the environmental and social impacts and having job opportunities for local people.

It is recommended that the project has to be operated according to Standing Law, Rules and Regulations of Country Government and relevant Government Departments and international standardized methods and procedures to prevent from potential impacts and risk caused by the proposed project. There will be job opportunities and capacity building for local people as the project proponent plans to train local youths to operate operation works.

**Environmental Status:** The proposed project site is already urbanized with human activities over the past many years. Therefore, only a few trees are observed during the baseline study during Aug-Sept 2020. And therefore, there is no sensitive or conservation worthy habitats in surrounding environ of the project area.

The project proponent is desirous to conserve the environment. The affirmation of project proponent regarding environment impact is that; we, the Mountain Top Global Limited shall be responsible for the protection as well as preservation of environment in and around the area of the project site. We shall be able to protect pollution of air, water and land and not to cause environment degradation. Our company takes necessary measures in order to fulfill environmental protection to keep the project site environment friendly by inclusion of replanting of trees program as describe in Chapter 8 of this EMP report. The project site grounds as well as the approach roads will have suitable shady side walks, flowering plants and trees and ever green arbors.

Waste generated from the CMP process is mainly from the cutting section and is being collected by the local contractors for recycling of waste products. For the domestic waste, the local municipality collects for safe disposal. However, the waste dumping site within the project premises should be monitored to preserve aesthetic beauty of the natural environment and enhance proper landscape of the locality.

All environmental impacts identified are capable of mitigation through a combination of adherence to relevant international design codes and an effective health safety and environment (HSE) policy by the operators.

Therefore, the Proposed Project need to start taking action complying with the basis of JICA or the World Bank Safe Guard Policies: Environmental Health and Safety Guidelines (EHS Guidelines) at website: [www.ifc.org/ifcext/sustainability.nsf/Content/EnvironmentalGuidelines](http://www.ifc.org/ifcext/sustainability.nsf/Content/EnvironmentalGuidelines) or other International Environmental Standards for Environmental and Social Considerations with conformity to The Environmental Conservation Law, July 2012 of the Republic of the Union of Myanmar and Rules Notification No. 50/2014 of MOECF (Ministry of Environmental Conservation and Forestry) in order to fulfill the environmental objectives of the project proponent:

- To reduce carbon emission and hazardous materials through an initiative role of coping with climate change,
- To develop a green business for securing new growth engines,
- To reinforce an eco-friendly supply chain management (SCM) and green partnership, and
- To manage social responsibility and reinforce the stakeholders' network.

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## ***APPENDICES***

<i>Appendix A</i>	<i>: Permit Order and Certificates</i>
<i>Appendix A-1</i>	<i>: Land release of Project area</i>
<i>Appendix A-2</i>	<i>: Consultant Registration Certificates (TCR)</i>
<i>Appendix B</i>	<i>: Photo Records of Project Site</i>
<i>Appendix C</i>	<i>: Impact Assessment Matrix of Footwear Production Factory Project</i>
<i>Appendix D</i>	<i>: Project Documents of Footwear Production Factory Project: Material and Machine Lists and Project Layout Plan</i>
<i>Appendix E</i>	<i>: Environmental Quality Monitoring Report: Ambient Air, Noise Level and Water Quality Analysis Result</i>
<i>Appendix F</i>	<i>: Overview of Policy, Legal and Institutional Framework for Footwear Project</i>
<i>Appendix G</i>	<i>: Commitment Letter of Project Proponent</i>

## Appendix A : Permit Order and Certificates






ကုမ္ပဏီမှတ်ပုံတင်လက်မှတ်  
Certificate of Incorporation

မောင်တိန် တော့ (ပဲ) ဂလိုဘယ် လီမိတက်  
**MOUNTAIN TOP GLOBAL LIMITED**  
Company Registration No. 108145234

မြန်မာနိုင်ငံကုမ္ပဏီများဥပဒေ၂၀၁၇ အရ  
မောင်တိန် တော့ (ပဲ) ဂလိုဘယ် လီမိတက်  
အား ၂၀၁၈ ခုနှစ် အောက်တိုဘာလ ၂၉ ရက်နေ့တွင်  
အစုရှယ်ယာအားဖြင့် တာဝန်ကန့်သတ်ထား သည့် အများနှင့်မသက်ဆိုင်သောကုမ္ပဏီ  
အဖြစ် ဖွဲ့စည်းမှတ်ပုံတင်ခွင့်ပြုလိုက်သည်။

This is to certify that  
**MOUNTAIN TOP GLOBAL LIMITED**  
was incorporated under the Myanmar Companies Law 2017 on 29  
October 2018 as a Private Company Limited by Shares.

  
ကုမ္ပဏီမှတ်ပုံတင်အရာရှိ

Registrar of Companies

ရင်းနှီးမြှုပ်နှံမှုနှင့်ကုမ္ပဏီများညွှန်ကြားမှုဦးစီးဌာန

Directorate of Investment and Company Administration







The Government of The Republic of the Union of Myanmar  
Ministry of Commerce  
Department of Trade

042379

CERTIFICATE OF EXPORTER/IMPORTER REGISTRATION

1. Enterprise Name (မြန်မာ/အင်္ဂလိပ်) MOUNTAIN TOP GLOBAL LIMITED. 2. Registration No: 108145234 (15-02-19)

3. Registration Term: FIVE YEAR

4. Start Date : 15-02-2019

5. End Date : 14-02-2024

6. Address : (မြန်မာ/အင်္ဂလိပ်) Plot No.176,Block No.49, Wartayar, Shwe Pyi Thar Township,  
Yangon Region,Myanmar

7. Business Registration No : 108145234

8. Type of Business : (မြန်မာ/အင်္ဂလိပ်) ☐ Sole Proprietorship(တစ်ဦးတည်းခိုင်) ☒ Partnership(အစုအစပ်)  
☒ Limited Company(လီမိတက်ကုမ္ပဏီ)(Myanmar/Foreign)  
☐ Co-operative Society(သမဝါယမအသင်း)  
☐ Others(Please specify)အခြား(ဖော်ပြရန်)သင်းဖွဲ့မှတ်တမ်းပါလုပ်ငန်း( )မျိုး ဆောင်ရွက်ခွင့်ရှိသည်။

9. Type of Service : ☒ New ☐ Extension ☒ Amendment

10. Contact No : 09-892962700, 09-765380539

thithihan86@gmail.com

Telephone No.

Fax No.

e-mail

11. Remarks : YRIC Endorsement No.YGN-148/2019 Date (7-2-2019)

12. Terms and Conditions : ငါ့ကမ်းကုန်များ

I hereby register the above mentioned enterprise as Exporter/Importer subject to the following terms and conditions: (အောက်ဖော်ပြပါစည်းကမ်းချက်များဖြင့် ပို့ကုန်သွင်းကုန် လုပ်ငန်းရှင်အဖြစ် မှတ်တမ်းတင်ခွင့်ရှိသည်)

(a) Line of goods permitted - all items except prohibited and restricted items.

ခွင့်ပြုသည့်ကုန်ပစ္စည်းအမျိုးအမည် - တားမြစ်ကုန်သတ်ထားသော ကုန်ပစ္စည်းအမည်များမှလွဲ၍ ကျန်ကုန်ပစ္စည်းများအားလုံး

(b) The enterprise must abide by the Export/Import rules and Regulations prescribed for the registered Exporters/Importers.(လုပ်ငန်းရှင်သည် မှတ်ပုံတင် ပို့ကုန်သွင်းကုန်လုပ်ငန်းလုပ်ကိုင်သူများ လိုက်နာရမည့်စည်းကမ်းချက်များကို လိုက်နာရမည်)



For Director General

(စိုးနိုင်၊ ဦးစီးအရာရှိ)

5.7.20

EIREG02198EIREGEN12130012

လုပ်ငန်းရည်ရွယ်ချက်များမှာ

စီအမ်ပီစနစ်ဖြင့် ဖိနပ်အမျိုးမျိုးထုတ်လုပ်ခြင်း လုပ်ငန်း





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



Endorsement No. YGN -148/2019

Date 7 February 2019

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

- (1) Name of Investor MR. YANG CHIH-CHIANG
- (2) Citizenship TAIWAN
- (3) Residence Address NO. 52, THIN SHAN SQUARE ROAD, HOUIE TOWN, DONGGUAN, GUANGDONG, TAIWAN, REPUBLIC OF CHINA.
- (4) Name and Address of Principle Organization MOUNTAIN TOP GLOBAL LIMITED, LE SANALELE COMPLEX, GROUND FLOOR, VAEA STREET, SALEUFI APIA, SAMOA AND TOP CHINA ENTERPRISE CORP, VISTRA CORPORATE SERVICES CENTRE, GROUND FLOOR NPF BUILDING, BEACH ROAD, APIA, SAMOA.
- (5) Place of Incorporation SAMOA
- (6) Type of business MANUFACTURING OF ALL KINDS OF FOOTWEAR PRODUCTS ON CMP BASIS
- (7) Place(s) of investment Project PLOT NO. (176), BLOCK NO. (49) WARTAYAR, SHWE PYI THAR TOWNSHIP, YANGON REGION
- (8) Amount of Foreign Capital US\$ 2.922 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\$ 2.922 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 MOUNTAIN TOP GLOBAL LIMITED

YRIC1482019



(Phyo Min Thein)

Chairman



ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်  
ရန်ကုန်တိုင်းဒေသကြီးရင်းနှီးမြှုပ်နှံမှုကော်မတီ  
အတည်ပြုမိန့်

အတည်ပြုမိန့်အမှတ် ရကတ-၁၄၈/၂၀၁၉ ၂၀၁၉ ခုနှစ် ဖေဖော်ဝါရီလ ၇ ရက်

ရန်ကုန်တိုင်းဒေသကြီး ရင်းနှီးမြှုပ်နှံမှု ကော်မတီသည် မြန်မာနိုင်ငံ ရင်းနှီးမြှုပ်နှံမှု ဥပဒေ  
ပုဒ်မ-၂၅ ပုဒ်မခွဲ (ဃ) အရ ဤအတည်ပြုမိန့်ကိုထုတ်ပေးလိုက်သည် -

- (၁) ရင်းနှီးမြှုပ်နှံသူအမည် MR. YANG CHIH-CHIANG
- (၂) နိုင်ငံသား TAIWAN
- (၃) နေရပ်လိပ်စာ NO.52, THIN SHAN SQUARE ROAD, HOUJIE TOWN, DONGGUAN, GUANGDONG, TAIWAN, REPUBLIC OF CHINA.
- (၄) ပင်မအဖွဲ့အစည်းအမည်နှင့်လိပ်စာ MOUNTAIN TOP GLOBAL LIMITED, LE SANALELE COMLEX, GROUND FLOOR, VAEA STREET, SALEUFI APIA, SAMOA AND TOP CHINA ENTERPRISE CORP, VISTRA CORPORATE SERVICES CENTRE, GROUND FLOOR NPF BUILDING, BEACH ROAD, APIA, SAMOA.
- (၅) ဖွဲ့စည်းရာအရပ် SAMOA
- (၆) ရင်းနှီးမြှုပ်နှံသည့်လုပ်ငန်းအမျိုးအစား CMP စနစ်ဖြင့် ဖိနပ် အမျိုးမျိုး ထုတ်လုပ်ခြင်း လုပ်ငန်း
- (၇) ရင်းနှီးမြှုပ်နှံသည့်အရပ်ဒေသ(များ) မြေကွက်အမှတ် (၁၇၆)၊ မြေတိုင်းရပ်ကွက် အမှတ် (၄၉) ဝါးတရာ၊ ရွှေပြည်သာမြို့နယ်၊ ရန်ကုန်တိုင်းဒေသကြီး
- (၈) နိုင်ငံခြားမတည်ငွေရင်း ပမာဏ အမေရိကန်ဒေါ်လာ ၂.၉၂၂ သန်း
- (၉) နိုင်ငံခြားမတည်ငွေရင်းယူဆောင်လာရမည့်ကာလ အတည်ပြုမိန့် ရရှိသည့် နေ့မှ ၁ နှစ်အတွင်း
- (၁၀) စုစုပေါင်း မတည်ငွေရင်းပမာဏ(ကျပ်) အမေရိကန်ဒေါ်လာ ၂.၉၂၂ သန်း နှင့် ညီမျှသော မြန်မာကျပ်ငွေ
- (၁၁) တည်ဆောက်မှု/ ပြင်ဆင်မှုကာလ ၁ နှစ်
- (၁၂) အတည်ပြုမိန့်သက်တမ်း ၃၀ နှစ်
- (၁၃) ရင်းနှီးမြှုပ်နှံမှုပုံစံ ရာခိုင်နှုန်းပြည့် နိုင်ငံခြားရင်းနှီးမြှုပ်နှံမှု
- (၁၄) မြန်မာနိုင်ငံတွင် ဖွဲ့စည်းမည့် ကုမ္ပဏီအမည် MOUNTAIN TOP GLOBAL LIMITED



YRCIC1482019

ဖိုးမင်းသိန်း

၃၈၆၆





## Myanmar Companies Online Registry - Company Extract

### Company Name (English)

MOUNTAIN TOP GLOBAL LIMITED

### Company Name (Myanmar)

မောင်တိန် တော့ (ပဲ) ဂလိုဘယ် လီမိတက်

#### Company Information

<b>Registration Number</b>	<b>Registration Date</b>	<b>Status</b>
108145234	29/10/2018	Registered
<b>Company Type</b>	<b>Foreign Company</b>	<b>Small Company</b>
Private Company Limited by Shares	Yes	-
<b>Principal Activity</b>	<b>Date of Last Annual Return</b>	<b>Previous Registration Number</b>
-	-	-

#### Addresses

Registered Office In Union	Wartayar, Plot No.176,Block No.49 Shwe Pyi Thar Township Yangon, Myanmar
----------------------------	--

#### Officers

Name:	CHANG,MEI-HUI	Type:	Director
Date of Appointment:	29/10/2018	Date of Birth:	16/07/1970
Nationality:	Taiwan	N.R.C./Passport:	305825335
Gender:	Female	Business Occupation:	Managing Director
Name:	YANG,CHIH-CHIANG	Type:	Director
Date of Appointment:	29/10/2018	Date of Birth:	02/10/1975
Nationality:	Taiwan	N.R.C./Passport:	306372991
Gender:	Male	Business Occupation:	Director
Name:	YANG, LONG-WU	Type:	Director
Date of Appointment:	29/10/2018	Date of Birth:	21/04/1961
Nationality:	Taiwan	N.R.C./Passport:	305825336
Gender:	Male	Business Occupation:	Director

#### Ultimate Holding Company

<b>Name of Ultimate Holding Company</b>	<b>Jurisdiction of Incorporation</b>	<b>Registration Number</b>
-	-	-

#### Share Capital Structure

<b>Total Shares Issued by Company</b>	<b>Currency of Share Capital</b>
20,000	USD

## Myanmar Companies Online Registry - Company Extract

### Company Name (English)

MOUNTAIN TOP GLOBAL LIMITED

### Company Name (Myanmar)

မောင်တိန် တော့ (ပဲ) ဂလိုဘယ် လီမိတက်

Class	Description	Total Number	Total Amount Paid	Total Amount Unpaid
ORD	Ordinary	20,000	2,000,000.00	0.00

### Members

Name of Company: MOUNTAIN TOP GLOBAL LIMITED  
Registration Number: 78657 Jurisdiction of Incorporation: Samoa

Class	Description	Total Number	Total Amount Paid	Total Amount Unpaid
ORD	Ordinary	8,000	800,000.00	0.00

Name of Company: TOP CHINA ENTERPRISE CORP  
Registration Number: 35678 Jurisdiction of Incorporation: Samoa

Class	Description	Total Number	Total Amount Paid	Total Amount Unpaid
ORD	Ordinary	4,000	400,000.00	0.00

Name: YANG , LONG - WU  
Gender: Male Date of Birth: 21/04/1961  
Nationality: Taiwan N.R.C./Passport: 305825336

Class	Description	Total Number	Total Amount Paid	Total Amount Unpaid
ORD	Ordinary	8,000	800,000.00	0.00

### Mortgages and Charges

Form / Filing Type Effective Date

No records available

Details about all mortgages and charges can be accessed from the Company Profile Filing History at no charge.

### Filing History

Form / Filing Type Effective Date

C-3 | Change to share capital or register of members

15/08/2019

A-1 | Application for incorporation as a private company limited by shares

29/10/2018





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## COMPANY PROFILE

NEW FILING

ORDER DOCUMENTS

PRINT CERTIFICATE

Company Name (English)

MOUNTAIN TOP GLOBAL LIMITED

Company Name (Myanmar)

မောင်တိန်တော့(ပိ)ဂလိုဘယ် လီမိတက်

Registration Number

108145234

Registration Date

29/10/2018

Company Type

Private Company Limited by Shares

Status

Registered

Foreign Company

Yes

Small Company

-

FILING HISTORY

ADDRESSES

OFFICERS

SHAREHOLDINGS

COMPANY AUTHORITY

MEMBERS

DOCUMENTS

Name

Type

Nationality

N.R.C. (For Myanmar Citizens)

Effective Date

YANG LONG WU

Director

Taiwan

305825336

29/10/2018

YANG CHIH CHIANG

Director

Taiwan

306372991

29/10/2018

CHANG MEI HUI

Director

Taiwan

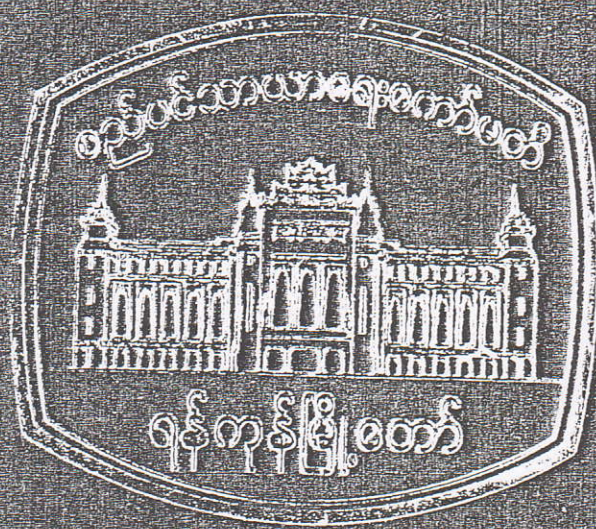
305825335

29/10/2018



## Appendix A-1 : Land release of Project area

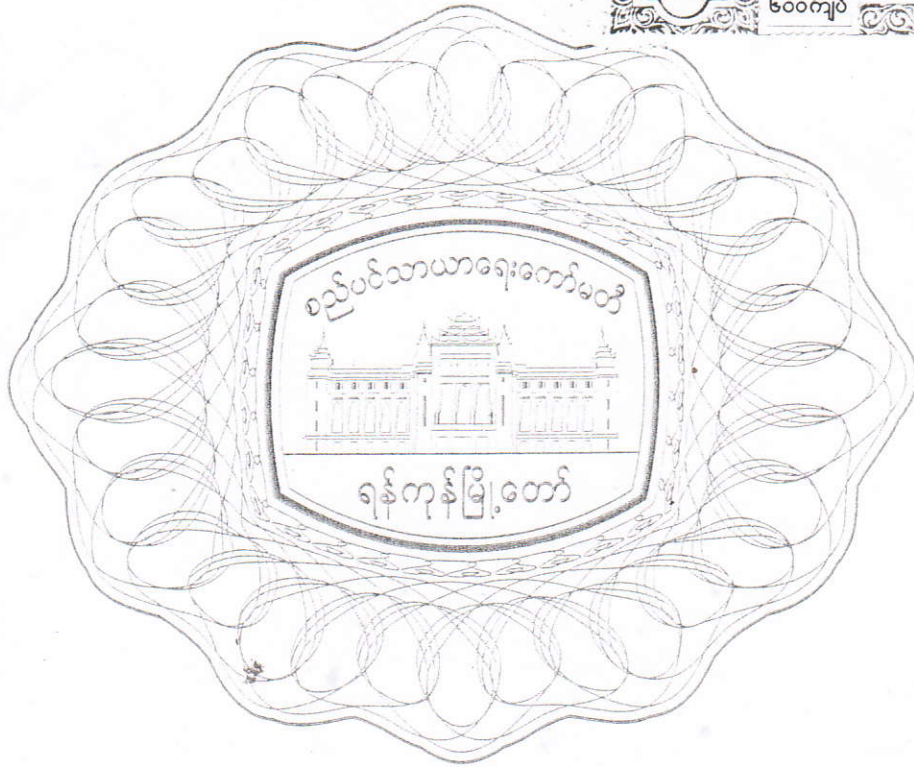
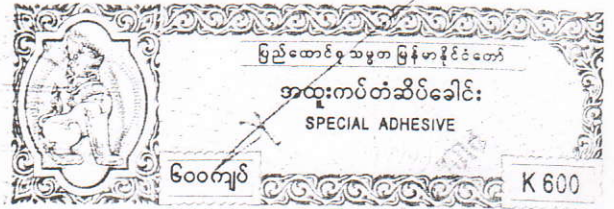




ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်  
ရန်ကုန်မြို့တော်စည်ပင်သာယာရေးကော်မတီ

ပြေားစာချုပ်





အမည်

ဒေါ်အိအိဟန်

မြို့နယ်

ရွှေပြည်သာ

နိုင်ငံသား/အမျိုးသား  
မှတ်ပုံတင်အမှတ်

၁၃/ကနဒ(ဇူ) ၀၀၀၁၁၆

မြေတိုင်းရပ်ကွက်

၄၉ / ဝါးတုာ

မြေငှားစာချုပ်အမှတ်

ရပသ/ဂရု. ၃၁၁ / ၁၈

လူနေရပ်ကွက်အမှတ်

၁၇၆

အမှုတွဲအမှတ်/နေ့စွဲ

ရပသ/ဂရု. ၂၀၁၇၀၇၂၇/၁၇  
(၂၅. ၁၀. ၁၇)

မြေကွက်အမှတ်

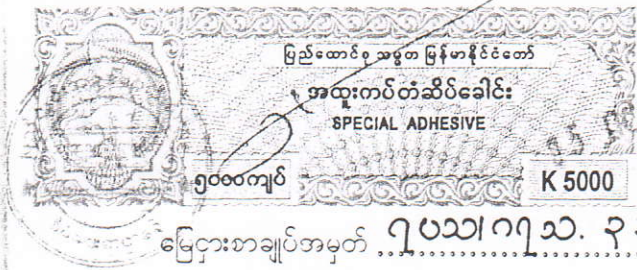
အမှတ် (၁၇၆)၊ သံဇင်းလမ်း

မြေကွက်လိပ်စာ

၂၃၁ ရပ်ကွက်

ဝက်မှု/လက်မှုလုပ်ငန်းဆောင်ရွက်ရန်ဆောင်ရွက်သူ  
မြေငှားစာချုပ်

34  
A 0035959 A



နေ့စွဲ၊ ၂၀၁၈ခုနှစ်၊ ကဆုန်လ၊ ၃ ရက်

မြေငှားစာချုပ်အမှတ် ၇၂၁၁/၇၁၁၊ ၃၁၁/၁၈ အမှုတွဲအမှတ် ၇၂၁၁/၇၁၁၊ ၂၀၁၇၀၁.၇၇၄၀/၁၇

ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်၊ ရန်ကုန်မြို့တော် စည်ပင်သာယာရေးကော်မတီ မြို့ပြစီမံကိန်းနှင့် မြေစီမံခန့်ခွဲမှုဌာန (နောင်တွင် “အငှားချထားသူ” ဟု ရည်ညွှန်းသည်။ အငှားချထားသူဆိုသည့် စကားရပ်တွင် ရန်ကုန်မြို့တော်စည်ပင်သာယာရေးကော်မတီ၊ မြို့ပြစီမံကိန်းနှင့် မြေစီမံခန့်ခွဲမှုဌာနကို ဆက်ခံသူများ၊ အဆိုပါဌာနက လွှဲအပ်သူများလည်း ပါဝင်သည်။)

နှင့်

၇၂၇၃၆ မြို့နေ၊ ဦး မောင် ဆိန် ၏ သား/သမီးဖြစ်သော ဦး/ဒေါ် ဒီဒီပန်း နိုင်ငံသား/အမျိုးသားမှတ်ပုံတင်အမှတ် ၁၃၂၈၁၃ (၉၂) ၀၀၀၁၁၆ (နောင်တွင် “အငှားစာချုပ်ရသူ” ဟုရည်ညွှန်းသည်။) တို့ ၁၃ ခုနှစ်၊ လဆန်း/လပြည့်ကျော် ရက်နေ့၊ ၂၀ ၁၈ ခုနှစ်၊ ကဆုန်လ ၃ ရက်နေ့တွင် အောက်ပါအတိုင်း မြေငှားစာချုပ် ချုပ်ဆိုကြသည်။

အငှားစာချုပ်ရသူက နောက်တွင် သတ်မှတ်ထားသည့် မြေငှားခကို ပေးဆောင်ရန် သဘောတူသောကြောင့်လည်းကောင်း၊ နောက်တွင်ပါရှိသော ပဋိညာဉ်ခံစားချက်ကို ပြုသောကြောင့်လည်းကောင်း၊ အောက်ပါဇယား၌ ဖော်ပြထားသော မြေကွက်အားလုံးကို ထိုမြေကွက်နှင့် သက်ဆိုင်သော ပိုင်ဆိုင်ခွင့်များ၊ ဝင်-ထွက်သွားလာနိုင်ခွင့် စသော သက်သာခွင့်များနှင့် အခြားအခွင့်အရေးများနှင့်တကွ အငှားချထားသူက အငှားစာချုပ်ရသူအား ဤစာချုပ်ဖြင့် အငှားချထားသည်။ အဆိုပါမြေကွက်အတွင်း မြေပေါ် မြေအောက်ရှိ သတ္တုတွင်းများ၊ ဓါတ်သတ္တုပစ္စည်းများ၊ ကျောက်မျက်ရတနာများ၊ မြေမြှုပ်ဘုရားများ၊ ကျောက်မီးသွေး၊ ရေနံနှင့် ကျောက်မိုင်း စသည်တို့သည် ဤစာချုပ်ဖြင့် အငှားချထားခြင်း၌မပါဝင်ချေ။ ထိုသို့ ရှာဖွေတူးဖော်သယ်ဆောင်ရာ၌ အဆိုပါမြေကွက်၏ မျက်နှာပြင်ကို နှောင့်ယှက် ပျက်စီးစေခဲ့လျှင် အငှားစာချုပ်ရသူအား သင့်လျော်သောလျော်ကြေးကို အငှားချထားသူက ပေးရမည်။ ထိုလျော်ကြေးနှင့် စပ်လျဉ်း၍ အငြင်းဖြစ်ပွားခဲ့သော် လျော်ကြေးကို တည်ဆဲမြေသိမ်းအက်ဥပဒေ သို့တည်းမဟုတ် စည်းမျဉ်းဥပဒေများ၏ ပြဌာန်းချက်နှင့်အညီ ရန်ကုန်မြို့တော်စည်ပင်သာယာရေးကော်မတီ၊ မြို့ပြစီမံကိန်းနှင့် မြေစီမံခန့်ခွဲမှုဌာန၊ ဌာနမှူးကဆုံးဖြတ်ရမည်။

ထို့ကြောင့် ဤစာချုပ် ချုပ်ဆိုသည့် ၂၀၁၈.၁၁.၂၀ ရက်နေ့မှစ၍ နှစ်ပေါင်း ၆၀ ကာလအပိုင်းအခြားအတွက် လက်ရှိထားနိုင်ရန် အငှားစာချုပ်ရသူအား အဆိုပါ မြေကွက်ကိုအငှားချထားသည်။

နှစ်ပေါင်း ( ၆၀ ) မြေငှားစာချုပ်ကာလအပိုင်းအခြားတွင် ၂၀၁၇.၃.၂၀ ရက်နေ့စွဲ၊ ကဆုန်လ ၃ ရက်

နေ့ကျန်ဆုံးသည့် ပထမ ( ၁၅ ) နှစ်အတွင်းတွင် သုံးလပတ်အတွက် မြေငှားရမ်းခငွေ ကျပ် ၅၀၀၀/- ငါးထောင် ဝက်နှစ်ရာတစ်ဆယ် ကြောက် (ကျပ်..... တိတိ) ကို ဇန်နဝါရီလ၊ ဧပြီလ၊ ဇူလိုင်လ နှင့် အောက်တိုဘာလများ၏လဆန်း (၁) ရက်နေ့များတွင် ကြိုတင်ပေးဆောင်ရမည်။ အဆိုပါ နှစ်ပေါင်း ( ၆၀ ) ကာလအပိုင်းအခြား၏ ဒုတိယ၊ တတိယ နှင့် စတုတ္ထ (၁၅) နှစ်စီအတွက် အပို (၃) တွင် ပြဌာန်းထားသည့် နည်းလမ်းအတိုင်း အငှားချထားသူအား သတ်မှတ်သည့် မြေငှားခများကို အငှားစာချုပ်ရသူက ပေးဆောင်ရမည်။



ဝက်ပူ/လက်မူလုပ်ငန်းဆောင်ရွက်ရန်အတွက်သာ

၁။

အငှားစာချုပ်ရသူသည် အငှားချထားသူအား အောက်ပါအတိုင်း ပဋိညာဉ်ခံချက် ပြုလုပ်သည် ~

- (က) အထက်၌ မြေငှားခကိုပေးဆောင်ရန် သတ်မှတ်သည့်နေ့ရက်တွင် သတ်မှတ်သည့်နည်းလမ်းအတိုင်း မြေငှားခနှင့် အဆိုပါမြေကွက်ပေါ်၌လည်းကောင်း၊ ထိုမြေကွက်ပေါ်တွင် ဆောက်လုပ်ထားသော အဆောက်အအုံပေါ်၌ လည်းကောင်း၊ အငှားစာချုပ်ရသူအပေါ်၌လည်းကောင်း၊ အဆိုပါ နှစ်ပေါင်း ( ၆၀ ) ကာလအပိုင်းအခြားအတွင်း စည်းကြပ်ဆဲ၊ စည်းကြပ်လတ္တံ့ဖြစ်သော အခွန်အတုပ်အားလုံးကို ပေးဆောင်ရမည်။
- (ခ) ဤစာချုပ်ချုပ်ဆိုသည့်နေ့မှ ( ၆ ) လအတွင်း စတင်ဆောက်လုပ်၍ အဆိုပါမြေကွက်ပေါ်တွင် ကောင်းမွန်ခိုင်ခံ့သော လူနေအိမ်ကို ရန်ကုန်မြို့တော်စည်ပင်သာယာရေးကော်မတီ၊ အင်ဂျင်နီယာဌာန (အဆောက်အအုံ) မှ သတ်မှတ်ခွင့်ပြုသည့် ပုံစံအတိုင်း ရန်ကုန်မြို့တော်စည်ပင်သာယာရေးဥပဒေနှင့်အညီ ပြီးစီးအောင် ဆောက်လုပ်ရန်နှင့် ထိုလူနေအိမ် စသည်တို့ကို အဆိုပါနှစ်ပေါင်း ( ၆၀ ) ကာလအပိုင်းအခြားအတွင်းပြုပြင်မွမ်းမံထားရှိရန်။
- (ဂ) အဆိုပါမြေကွက် တည်ရှိသောရပ်ကွက်၌ သက်ဆိုင်ရာ ဒေသန္တရအာဏာပိုင်များက မိလ္လာပိုက်များနှင့် ရေပိုက်များချထားလျှင် ဒေသန္တရအာဏာပိုင်နှင့် သက်ဆိုင်သည့် တရားဥပဒေနှင့်အညီ အဆိုပါမြေကွက်ပေါ် ဆောက်လုပ်ထားသော အဆောက်အအုံများကို ထိုမိလ္လာပိုက်၊ ရေပိုက်များနှင့် ဆက်သွယ်ရန်။
- (ဃ) အဆိုပါမြေကွက်ပေါ်၌ အဆောက်အအုံများ တည်ဆောက်ရာတွင် ဒေသန္တရအာဏာပိုင် (သို့မဟုတ်) ရန်ကုန်မြို့တော်စည်ပင်သာယာရေးကော်မတီ၊ အင်ဂျင်နီယာဌာန (အဆောက်အအုံ) ၏ ကြိုတင်ခွင့်ပြုချက် ရယူရန်။
- (င) အငှားချထားသူ၏ စာပြင့်သဘောတူညီချက်ကို ကြိုတင်မရရှိဘဲ နှစ်ပေါင်း ( ၆၀ ) ကာလ အပိုင်းအခြားအတွင်း အဆိုပါမြေကွက်ကို လူနေအိမ်ဆောက်လုပ်ရန်အတွက်မှတစ်ပါး အခြားကိစ္စအတွက် အသုံးမပြုရန်နှင့် အဆိုပါမြေကွက်ပေါ်တွင် ဆောက်လုပ်သည့်လူနေအိမ်ကို၊ လူနေအိမ်အဖြစ်မှတစ်ပါး အခြားနည်းအသုံးမပြုရန်။
- (စ) အငှားချထားသူ၏ စာပြင့် ကြိုတင်သဘောတူညီချက်မရရှိဘဲ စာချုပ်ပါမြေကို ခွဲခြမ်းခြင်းမပြုရသည့်အပြင် ၎င်းမြေ၏ တစ်စိတ်တစ်ဒေသကိုလည်း လွှဲပြောင်းခြင်း၊ တဆင့်ငှားရမ်းခြင်း၊ လက်လွှတ်ခြင်းများ မပြုလုပ်ရ။
- (ဆ) ဤစာချုပ်နှင့် စပ်လျဉ်း၍ မည်သည့်ကိစ္စအတွက်မဆို အဆိုပါမြေကွက်သို့ဖြစ်စေ၊ အဆိုပါ မြေကွက်ပေါ်တွင် ဆောက်လုပ်ထားသော အဆောက်အအုံသို့ဖြစ်စေ၊ နှစ်ပေါင်း ( ၆၀ ) ကာလအပိုင်းအခြားတွင် ပြည်ထောင်စု သမ္မတမြန်မာနိုင်ငံတော်၊ ရန်ကုန်မြို့တော်စည်ပင်သာယာရေးကော်မတီ၊ မြို့ပြစီမံကိန်းနှင့် မြေစီမံခန့်ခွဲမှုဌာန၊ ဌာနမှူး၏ အမိန့်အရ ဆောင်ရွက်သူများအား နေ့ပိုင်းသင့်လျော်သည့် အချိန်များတွင် ဝင်ရောက်ခွင့်ပြုရန်။
- (ဇ) ဤစာချုပ်အရ အငှားချထားသည့် နှစ်ပေါင်း ( ၆၀ ) အပိုင်းအခြား ကုန်ဆုံးသောအခါ အဆိုပါ မြေကွက် တည်ရှိသည့် အဆောက်အအုံနှင့် ယင်းအဆောက်အအုံတွင် ပါဝင်တည်ဆောက်ထားသော ပစ္စည်းများ မပါဝင်စေဘဲ အဆိုပါမြေကွက်ကို အငှားချထားသူအား အေးဆေးစွာပြန်လည်ပေးအပ်ရန်၊ သို့ရာတွင် အငှားချထားသူက အပိုင်း ( ၂ ) အရ အဆိုပါမြေကွက်ကို ပြန်လည်သိမ်းယူပြီး စာချုပ်ကိုရပ်စဲလျှင် အဆိုပါမြေကွက်နှင့် ထိုမြေကွက်ပေါ်တွင်တည်ရှိသည့် အဆောက်အအုံနှင့် ယင်း၏အဆောက်အအုံတွင် ပါဝင်တည်ဆောက်ထားသော ပစ္စည်းများကို အငှားစာချုပ်ရသူက အငှားချထားသူအား အေးဆေးစွာပေးအပ်ရန်။



- ၃ -  
**စက်မှု/လက်မှုလုပ်ငန်းဆောင်ရွက်ရန်အတွက်သာ  
အပိုပဋိညာဉ်ခံချက်များ**

ဖော်ပြပါ မြေငှားခနှုန်းသည် ယာယီမျှသာဖြစ်၍ ၂၀ ..၃၇...ခုနှစ် အတွင်းတွင်ဖြစ်စေ၊ ထို့နောက် အချိန်ကာလတွင်ဖြစ်စေ၊ ပြန်လည်ပြင်ဆင်သင့်က ပြင်ဆင်စည်းကြပ်ရန် ဖြစ်သည်။

၂။ အဆိုပါမြေငှားခကို တောင်းဆိုသည်ဖြစ်စေ၊ မတောင်းဆိုသည်ဖြစ်စေ၊ ကြိုတင်ပေးဆောင်ရမည့် သုံးလပတ်အတွက် မြေငှားခကို (သို့တည်းမဟုတ်) ၎င်းအစိတ်အပိုင်းကို ထိုသုံးလပတ်၏ ဒုတိယ လဦးပိုင်းတွင် မပေးဆောင်သဖြင့် မြေငှားခမပြေကျန်ရှိနေလျှင်၊ သို့တည်းမဟုတ် အငှားစာချုပ်ရသူသည် အထက်တွင်ဖော်ပြပါရှိသည့် ပဋိညာဉ်ခံချက်များအတိုင်း လိုက်နာဆောင်ရွက်ရန် ပျက်ကွက်လျှင်၊ ရန်ကုန်မြို့တော်စည်ပင်သာယာရေးကော်မတီ မြို့ပြစီမံကိန်းနှင့် မြေစီမံခန့်ခွဲမှုဌာန ဌာနမှူးသည် အဆိုပါမြေငှားခကိုရယူရန် ချက်ချင်းအမှုဖွင့်နိုင်သည်။ ထို့ပြင် သို့တည်းမဟုတ် ယခင်က ပဋိညာဉ်ခံချက် ပျက်ကွက်ခြင်းအတွက် အရေးယူပိုင်ခွင့်ကိုဖြစ်စေ၊ အဆိုပါ မြေကွက် ပြန်လည်သိမ်းယူနိုင်ခွင့်ကိုဖြစ်စေ၊ စွန့်လွှတ်ခဲ့စေကာမူ ဤစာချုပ်ကို ပယ်ဖျက်၍ အဆိုပါမြေကွက်နှင့် ထိုမြေကွက်ပေါ်တွင် တည်ရှိသော အဆောက်အအုံများ၊ အဆောက်အအုံများနှင့် အမြဲတွယ်ကပ်ထားသော ပစ္စည်းများကို သိမ်းယူနိုင်သည်။

၃။ အငှားချထားသူသည် အငှားစာချုပ်ရသူအား အောက်ပါအတိုင်း ပဋိညာဉ်ခံချက်ပြုလုပ်သည် -

(က) အပိုဒ် (၂) အရ ဤစာချုပ်ကို ပယ်ဖျက်ကြောင်း နို့တစ်စာကို အငှားချထားသူက မိမိသင့်လျော်သည်ဟု ထင်မြင်သည့် နည်းလမ်းအတိုင်း အငှားစာချုပ်ရသူ၏ နောက်ဆုံးသိရှိရသော လိပ်စာတပ်ပြီး မှတ်ပုံတင်ပြုလုပ်၍ စာပို့တိုက်မှ ပေးပို့နိုင်သည်။ သို့တည်းမဟုတ် ဆွဲခဲ့သည့်အတိုင်း လိပ်စာတပ်၍ နို့တစ်စာကို အဆိုပါမြေကွက်၊ အဆောက်အအုံ စသည့် ပစ္စည်းများ၏ ထင်ရှား၍ လူအများမြင်သာသော နေရာတွင် ကပ်ထားနိုင်သည်။ အဆိုပါနို့တစ်စာကို ပြဆိုသည့် နည်းလမ်းအတိုင်း ပေးပို့ခြင်း၊ ကပ်ထားခြင်း၊ ပြုလုပ်ပြီးနောက် ရက်ပေါင်း ( ၆၀ ) အတွင်း အငှားစာချုပ်ရသူက အဆိုပါဌာနမှူးအား မပြေကျန်ရှိနေသေးသော မြေငှားခကို ဤစာချုပ်ပယ်ဖျက်ခြင်း၊ သို့တည်းမဟုတ် အဆိုပါမြေကွက် ပြန်လည်သိမ်းယူခြင်း၊ သို့တည်းမဟုတ် အဆိုပါမြေကွက်ကို ပြန်လည်အငှားချထားခြင်းနှင့် စပ်လျဉ်း၍ အငှားချထားသူက ကုန်ကျသော စရိတ်အားလုံးနှင့်တကွ အဆိုပါဌာနမှူးသို့ ပေးဆောင်လျှင်သော်လည်းကောင်း၊ အခြားပဋိညာဉ်ခံချက် တစ်ခုခုနှင့် စပ်လျဉ်း၍ ပျက်ကွက်သည့်အတွက် နစ်နာမှုကိုပပျောက်စေရန် အဆိုပါဌာနမှူး ကျေနပ်လောက်အောင် ဆောင်ရွက်လျှင်သော်လည်းကောင်း၊ အငှားချထားသူက ဤစာချုပ်ပါ ပဋိညာဉ်ခံချက်များအတိုင်း နှစ်ပေါင်း ( ၆၀ ) ကာလအပိုင်းအခြား၏ ကျန်ရှိသေးသောကာလအဖို့ အဆိုပါမြေကွက်နှင့် ပြန်လည်သိမ်းယူသည့် အချိန်တွင် ထိုမြေကွက်ပေါ်၌ တည်ရှိနေသော အဆောက်အအုံ၊ ထိုအဆောက်အအုံနှင့် အမြဲတွယ်ကပ်ထားသော ပစ္စည်းများကို လက်ရှိထားနိုင်စေခြင်းငှာ အငှားစာချုပ်ရသူအား ပြန်လည်ပေးအပ်ရန်၊ သို့ရာတွင် မီးကြောင့်သော်လည်းကောင်း၊ အခြားအကြောင်း တစ်ခုခုကြောင့်သော်လည်းကောင်း၊ ပျက်စီးရသည့် အဆောက်အအုံ သို့တည်းမဟုတ် ထိုအဆောက်အအုံနှင့် အမြဲတွယ်ကပ်ထားသော ပစ္စည်းများကို ပြန်လည်ပေးအပ်ရန် အငှားချထားသူ၌ တာဝန်မရှိသည့်အပြင် ယင်းသို့ ပြန်လည်သိမ်းယူသည့်အခါ ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်၊ ရန်ကုန်မြို့တော် စည်ပင်သာယာရေးကော်မတီ၊ မြို့ပြစီမံကိန်းနှင့် မြေစီမံခန့်ခွဲမှုဌာန၏ အမှုထမ်းများ သို့တည်းမဟုတ် ကိုယ်စားလှယ်များ၏ ပျက်လိုဖျက်စီး ပြုလုပ်မှုကြောင့် ဆုံးရှုံးပျက်စီးခြင်းအတွက်မှတစ်ပါး အဆိုပါမြေကွက်ပေါ်တွင်ဖြစ်စေ၊ အထဲတွင်ဖြစ်စေ၊ တည်ရှိနေသော အဆောက်အအုံနှင့် အခြားပစ္စည်းများ၏တန်ဖိုး ယုတ်လျော့ခြင်း၊ ပြုပြင်မှုကင်းမဲ့ခြင်း၊ သို့တည်းမဟုတ် ပျက်စီးယိုယွင်းခြင်းအတွက် ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်၊ ရန်ကုန်မြို့တော် စည်ပင်သာယာရေးကော်မတီ၊ မြို့ပြစီမံကိန်းနှင့် မြေစီမံခန့်ခွဲမှုဌာန၌ တာဝန်မရှိစေရန်။



ဝက်မှု/လက်မှုလုပ်ငန်းဆောင်ရွက်ရန်အတွက်သာ

(ခ) အပိုင်း ( ၂ ) အရ ဤစာချုပ်ကို ပယ်ဖျက်ပြီး မဟုတ်လျှင်သော်လည်းကောင်း၊ အငှားစာချုပ်ရသူက နှစ်ပေါင်း ( ၆၀ ) ကာလအပိုင်းအခြား ကုန်ဆုံးသည်အထိ အဆိုပါမြေငှားခကို ပြေလည်အောင် ပေးဆောင်၍ ဤစာချုပ်ပါ မိမိပြုလုပ်သည့် ပဋိညာဉ်ခံချက်များအတိုင်း လိုက်နာဆောင်ရွက်လျှင်သော်လည်းကောင်း၊ အငှားစာချုပ်ရသူသည် အဆိုပါမြေကွက်ပေါ်တွင် တည်ဆောက်ကွယ်ကပ်ထားသော အဆောက်အအုံများ၊ အဆောက်အအုံများ နှင့် အမြဲ ကွယ်ကပ်ထားသော ပစ္စည်းများကို အဆိုပါကာလအပိုင်းအခြား မကုန်မီ ( ၆ ) လအတွင်း ဖျက်သိမ်း သယ်ယူ ခန့်ခွဲနိုင်သည်။ သို့ရာတွင် ထိုသို့သယ်ယူခြင်းကြောင့် အဆိုပါမြေကွက် ပျက်စီးယိုယွင်းခဲ့လျှင် ထိုမြေကွက်ကို မူလ အခြေအနေအတိုင်းရှိအောင် ပြုပြင်ပေးရန်။

(ဂ) .....၂၀၁၇ခုနှစ်၊ ဧပြီလ၊ .....ရက်နေ့မှစ၍ ပထမ ( ၁၅ ) နှစ် ကုန်ဆုံး သောအခါ ဒုတိယ ( ၁၅ ) နှစ်အတွက် ရန်ကုန်မြို့တော်စည်ပင်သာယာရေး မြေနည်းဥပဒေ ၂၄ အရ စည်းကြပ် သော သုံးလပတ် မြေငှားခကိုလည်းကောင်း၊ ဒုတိယ ( ၁၅ ) နှစ်ကုန်ဆုံးသောအခါ တတိယ ( ၁၅ ) နှစ် အတွက် အဆိုပါ မြေနည်းဥပဒေ ၂၄ အရ စည်းကြပ်သော သုံးလပတ်မြေငှားခကိုလည်းကောင်း၊ တတိယ ( ၁၅ ) နှစ် ကုန်ဆုံးသောအခါ စတုတ္ထ ( ၁၅ ) နှစ်အတွက် အဆိုပါ မြေနည်းဥပဒေ ၂၄ အရ စည်းကြပ်သော သုံးလပတ် မြေငှားခကိုလည်းကောင်း၊ အငှားစာချုပ်ရသူက အငှားချထားသူအား ပေးဆောင်ရန်၊ အကယ်၍ အထက်ပါ နည်းဥပဒေအတိုင်း မြေငှားခကို ပြန်လည်စည်းကြပ်ခြင်းမပြုလျှင် အငှားစာချုပ်ရသူသည် ဤအပိုင်းတွင် ပြဋ္ဌာန်း ထားသည့် နည်းဥပဒေအတိုင်း မြေငှားခကို ပြောင်းလဲခြင်းမပြုမီ သတ်မှတ်ထားသည့် စည်းကြပ်ဆဲ သုံးလပတ် မြေငှားခကို ဆက်လက်ပေးဆောင်ရန်။

(ဃ) ဤစာချုပ်ပါ အခြားပြဋ္ဌာန်းချက်များတွင် ဆန့်ကျင်လျက်မည်သို့ပင် ပါရှိစေကာမူ ဤစာချုပ်ချုပ်ဆိုသည့် နေ့မှစ၍ ပထမနှစ်ပေါင်း ( ၃၀ ) အတွင်း သတ်မှတ်ထားသော သို့တည်းမဟုတ် ပြန်လည်စည်းကြပ်သော မြေငှားခကို ပြေလည်အောင် ပေးဆောင်ခဲ့သောကြောင့်လည်းကောင်း၊ ပြုလုပ်ထားသော ပဋိညာဉ်ခံချက်များကို မပျက်မကွက် လိုက်နာဆောင်ရွက်ခဲ့သောကြောင့်လည်းကောင်း၊ သတ်မှတ်ထားသော သို့တည်းမဟုတ် ပြန်လည်စည်းကြပ်သော သုံးလပတ် မြေငှားခပြန် နောက်ထပ် နှစ်ပေါင်း ( ၃၀ ) အတွက် ဆက်လက်၍ အဆိုပါမြေကွက်ကို ငှားရမ်းခြင်း၊ စာချုပ်အသစ် ချုပ်ဆိုရန်သဘောတူကြောင်းကို အဆိုပါ ပထမနှစ်ပေါင်း ( ၃၀ ) မပြည့်မီ အနည်းဆုံး ( ၆ ) လ ကြိုတင်၍ အငှားရသူက အငှားချထားသူအား စာဖြင့်အကြောင်းကြားရမည်။ အကြောင်းကြားစာနှင့်အတူ ပထမ မြေငှားစာချုပ်ကို ပေးအပ်လျှင် ထိုအကြောင်းကြားစာ ရရှိသည့်နေ့မှ ( ၆ ) လအတွင်း နောက်နှစ်ပေါင်း ( ၃၀ ) အတွက် ပထမမြေငှားစာချုပ်ပါ ပဋိညာဉ်ခံချက်များနှင့် ဖြစ်နိုင်သမျှတူညီသည့် ပဋိညာဉ်ခံချက်များပါရှိသည့် မြေငှားစာချုပ်အသစ်ကို အငှားစာချုပ်ရသူ၏ စရိတ်ဖြင့် အငှားချထားသူက ထုတ်ပေးရန်၊ အကယ်၍ မြေငှားခကို သတ်မှတ်ခြင်းမရှိသေးလျှင် ပထမမြေငှားစာချုပ်အရ နောက်ဆုံးပေးဆောင်ခဲ့ရသော သုံးလပတ်မြေငှားခကို အငှားစာချုပ်ရသူက ပေးဆောင်ရန်။

ဤစာချုပ်ပါ စကားရပ်များကို သိရှိနားလည်ကြပြီးဖြစ်သဖြင့် ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်၊ ရန်ကုန်မြို့တော် စည်ပင်သာယာရေးကော်မတီ၊ မြို့ပြစီမံကိန်းနှင့် မြေစီမံခန့်ခွဲမှုဌာန၊ ဌာနမှူး နှင့် ဒုတိယဌာနမှူး တို့ရှေ့တွင် ဤကော်မတီ တံဆိပ် ကို ခပ်နှိပ်၍ အဆိုပါ ဌာနမှူး နှင့် အဆိုပါ .....ဒေါ်သီသီဟန်..... သည် ဤစာချုပ်ကို အထက်၌ ဖော်ပြခဲ့သည့် နေ့ရက်တွင် လက်မှတ်ရေးထိုးကြပါသည်။

ဝက်မ/လူနာလုပ်ငန်းဆောင်ရွက်ရန်အတွက်သာ  
ရန်ကုန်မြို့တော်ဧည့်ပင်မိသားစုရေးကော်မတီ

မြို့ပြစီမံကိန်းနှင့် မြေစီမံခန့်ခွဲမှုဌာန



တံဆိပ်

တံဆိပ်ကို မြို့ပြစီမံကိန်းနှင့် မြေစီမံခန့်ခွဲမှုဌာန  
ဌာနမှူး နှင့် ဒုတိယဌာနမှူးတို့ ရှေ့မှောက်၌  
ပေါ်နှိပ်၍ အဆိုပါ ဌာနမှူး နှင့်  
ဒုတိယဌာနမှူးတို့ လက်မှတ်ရေးထိုးသည်။

အသိသက်သေ

.....  
လက်ထောက်ဌာနမှူး

(မြို့ပြစီမံကိန်းနှင့် မြေစီမံခန့်ခွဲမှုဌာန)

ထုတ်

၁/၁၀/၁၈

ဌာနမှူး

.....  
28-9-18

ဒုတိယဌာနမှူး

အငှားစာချုပ်ရသူ ဒေါ်သီသီဟန်..... က လက်မှတ်ရေးထိုးသည်။

အသိသက်သေ

၁။   
.....  
၁၁/လ၁၁ယလိုင်ယလ၁၁၁၁၁၁

.....  
အငှားစာချုပ်ရသူ

၂။   
.....

ဌာနမှူး  
မြို့ပြစီမံကိန်းနှင့် မြေစီမံခန့်ခွဲမှုဌာန

အထက်တွင် ရည်ညွှန်းထားသည့်ဇယား

ခွင့်ပြုပြီး မြေပုံပြစ်ခံသာ လူနေရပ်ကွက်အမှတ် .....

မြေတိုင်းရပ်ကွက်အမှတ် ...၄၉.၄၀၁(၈၈၈).....

ရန်ကုန်မြို့...ရွှေမြည်သာ..... မြို့နယ် အတွင်းရှိ ..... တန်းစား၊ မြေကွက်အမှတ်  
.....၁၇၆..... ပြစ်သည့် ပူးတွဲပါမြေပုံ၌ မှင်နီဖြင့်ပြထားသော အလျား ..၃၈၁'./၃၁၂'./၆"..... ပေါ်

အနံ .၄၆၄'./၄၆၄'./၃၁၂'./၁၀၀'..... ပေါ် ခန့်ရှိသော အလားအလာ ~

အရှေ့လားသော် .....လမ်း.....

အနောက်လားသော် ..မြေကွက်အမှတ်...၁၇၆.....

တောင်လားသော် ..မြေကွက်အမှတ်... ၁၇၇

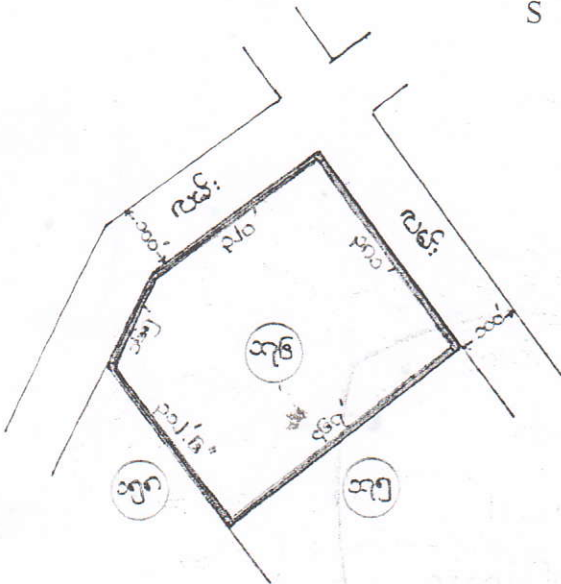
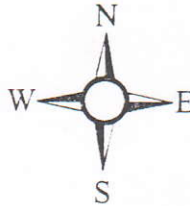
မြောက်လားသော် .....လမ်း.....

အတွင်းရှိ မြေအားလုံးအရိယာ ...၄.၀၀၅..... ဒင်္ဂါ ( စတုရန်းပေ .....၁၇၄၄၇၄..... )



ဧက/လက်မှတ်လုပ်ငန်းဆောင်ရွက်ရန်အတွက်သာ  
ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်

ရန်ကုန်မြို့တော်စည်ပင်သာယာရေးကော်မတီ



၂၀၁၈ ခုနှစ် ဧပြီလမှ စက်တင်ဘာလထိ ခုနှစ်သုံး မြေပုံမှ ရေးကူးပေးသည့် မှန်ကန်ကြောင်း သက်သေခံသည့် မြေပုံရေးကော်မတီ	
အမည်ပေါက်	ဧကသိသိဟန်
မြေတိုင်းရပ်ကွက်အမှတ်	၄၉ (ဝါးတော)
လူနေရပ်ကွက်အမှတ်	
မြေကွက်အမှတ်	၁၇၆
မြေအမျိုးအစား	ဒွန်ငါးဝါးကုန်း
အလျား	၁၀၀' x ၁၀၀' (၁၀၀' x ၁၀၀')
ဧရိယာ	၁.၀၀၅ ဧက
မြို့နယ်	ရွှေပြည်သာ
စကေး	၁" = ၃၀၀' .၀"
ရှိသော/ဂရုသ ထုတ်ပေးသည့်အမှုတွဲအမှတ် ၂၀၁၈/၁၇၆/၁၇ (၂၅.၁၀.၁၇)	
(Signature) ၁၇.၆.၂၀၁၈ မြေတိုင်း(၂) မြို့ပြစီမံကိန်းနှင့်မြေစီမံခန့်ခွဲမှုဌာန	
(Signature) မြေတိုင်း(၁) ၄၉၆ မြို့ပြစီမံကိန်းနှင့်မြေစီမံခန့်ခွဲမှုဌာန	
(Stamp) A 0035959A (Signature) ၁၇/၆/၁၈ မြို့ပြစီမံကိန်းနှင့်မြေစီမံခန့်ခွဲမှုဌာန	

၂၀၁၈ ခုနှစ် ဧပြီလမှ စက်တင်ဘာလထိ  
 ၂၀ ခုနှစ်သုံး မြေပုံ/မြို့ မြေစာရင်းမှ ရေးကူးသော  
 ကောက်နုတ်ချက်မိတ္တူမြေပုံ/မြေရာဇဝင်ဖြစ်၍ တိကျမှန်ကန်ကြောင်း  
 ထောက်ခံပါသည်။ (မြို့ပြစီမံကိန်းနှင့် မြေစီမံခန့်ခွဲမှုဌာန)



ကိစ္စ/လက်မှုလုပ်ငန်းဆောင်ရွက်ရန်အတွက်သာ

အမှုတွဲအမှတ် နံပါတ်နှင့် ခွင့်ပြုရက်စွဲ	ဂရုန်အမည်ပေါက် နှင့် နိုင်ငံသားအမှတ်	လွှဲပြောင်းသည့် စာချုပ်အမှတ်နှင့်ရက်စွဲ (သို့)တရားရုံးဒီကရီနှင့်ရက်စွဲ	လွှဲပြောင်းခံရသူ (သို့) တရားရုံးဒီကရီရှိသူ၏ အမည်နှင့် နိုင်ငံသားအမှတ်
၁	၂	၃	၄



ဝန်ဆောင်ခပေးသွင်းရန်ပုံစံ

အကြောင်းအရာ ။ ငွေပေးသွင်းခွင့်ပြုပါရန်ကိစ္စ

အောက်ဖော်ပြပါ မြေကွက်အတွက် ဝန်ဆောင်ခငွေကို လက်ခံပေးပါရန် အကြောင်းကြားအပ်ပါသည်-

အမည် ----- ဦးအောင်စိုး  
အမှုတွဲအမှတ် ----- ၇၈၁၁ / ၁၂ - ၂၂၀၄၃ / ၁၈ (၇၀-၁၁-၁၈)  
အကြောင်းအရာ ----- မြေပွဲလွှဲ (မြေလွှဲခွင့်)  
မြို့နယ် ----- ရွှေဇော်သာ  
မြေတိုင်း ----- ၄၉၂၈၂-၁၈၇  
မြေကွက်အမှတ် ----- ၁၇၆  
ကျသင့်ငွေ ----- ဝန်ဆောင်ခ ----- ၁၂၅၆၇၂ / ၁၈  
ခွင့်ပြု ----- ၁၈၁၈-၂၀၁၉  
ငွေစာရင်း -----  
ကြီးကြပ်ရေးမှူး / ဌာနမှူး / ဌာနခွဲမှူး -----  
၃၀.၁၁.၁၈

အမှုတွဲဖွင့်လှစ်သူများသိသာရန်

၁။ မြေစီမံမှုလုပ်ငန်းများဖြစ်သော မြေပုံ မြေရာဇဝင်ကူးယူခွင့် လျှောက်ထားခြင်း၊ အမည်ပြောင်း လျှောက်ထားခြင်း၊ မြေငှားစာချုပ် (ဂရန်သစ်၊ ဂရန်သက်တမ်းတိုး၊ ဂရန်မိတ္တူ၊ ဂရန်ခွဲ) လျှောက်ထားခြင်း၊ မြေတိုင်းလျှောက်ထားခြင်း၊ မြေကွက်ခွဲစိတ်အတည်ပြု (တိုင်းခွဲ / အတည်ပြု) လျှောက်ထားခြင်းများအတွက် အမှုတွဲဖွင့်လှစ်သည့်အခါ အောက်ပါ အချက်များကို အသိပေးအပ်ပါသည်-

- (က) စုံစမ်းရန်သတ်မှတ်ထားသည့်နေ့ရက်တွင် လျှောက်ထားသူမှ လာရောက်စုံစမ်း၍ ပြီးစီးပါကထုတ်ယူရန်နှင့် မပြီးစီးသောအမှုတွဲများအား သက်ဆိုင်ရာအရာရှိမှ တွေ့ဆုံရှင်းလင်းပေးမည်ဖြစ်ပါသည်။
- (ခ) ဂရန်သစ်၊ ဂရန်သက်တမ်းတိုး၊ ဂရန်မိတ္တူနှင့် အမည်ပြောင်းလျှောက်ထားခြင်း စသည့်ကိစ္စများတွင် အမှုတွဲဖွင့်သည့်နေ့၌ ကန့်ကွက်ရန် ရှိ/မရှိ (Objection) စာရွက် (၃) စောင်ကို အမှုတွဲဖွင့်သည့် ဌာနစုတွင် ထုတ်ယူပြီး ရပ်ကွက်အုပ်ချုပ်ရေးမှူးရုံးတွင် (၁) စောင်၊ မြို့နယ်အထွေထွေအုပ်ချုပ်ရေးဦးစီးဌာန၊ အုပ်ချုပ်ရေးမှူးရုံးတွင် (၁) စောင်၊ ကြော်ငြာကပ်ငြှမည်ဖြစ်ပြီး ကျန်လက်ခံ (၁) စောင်တွင် သက်ဆိုင်ရာရုံးမှ လက်ခံရရှိကြောင်း လက်မှတ်ရေးထိုးစေ၍ မြို့တော်ခန်းမရှိ ရုံးအဖွဲ့သို့ ပြန်လည်အပ်နှံရမည်ဖြစ်ပါသည်။

ဝန်ဆောင်ခပေးသွင်းရန်ပုံစံ

အကြောင်းအရာ ။ ငွေပေးသွင်းခွင့်ပြုပါရန်ကိစ္စ

အောက်ဖော်ပြပါ မြေကွက်အတွက် ဝန်ဆောင်ခငွေကို လက်ခံပေးပါရန် အကြောင်းကြားအပ်ပါသည်-

အမည် ----- စီးယီးပီဟန်

အမှုတွဲအမှတ် ----- ၇၈၁၀/တိုင်း - ၂၈၀၄၃/၁၈ (၃၀-၁၁-၁၈၇)

အကြောင်းအရာ ----- ဖြေတိုင်း

မြို့နယ် ----- ဧရာဝတီ

မြေတိုင်း ----- ၄၉ / ၁၆ တာရု

မြေကွက်အမှတ် ----- ၁၇၆

ကျသင့်ငွေ ----- ၁ နှစ်သား - ၁၁၇၄ (၁၁၄၇၀၇၂၅၁) / ၁

၃၀-၁၁-၇၈

ကြီးကြပ်ရေးမှူး / ဌာနမှူး / ဌာနခွဲမှူး

ငွေစာရင်း

၂၀၇၈

အမှုတွဲဖွင့်လှစ်သူများသိသာရန်

၁။ မြေစီမံမှုလုပ်ငန်းများဖြစ်သော မြေပုံ မြေရာဝေငွေကူးယူခွင့် လျှောက်ထားခြင်း၊ အမည်ပြောင်း လျှောက်ထားခြင်း၊ မြေငှားစာချုပ် (ဂရန်သစ်၊ ဂရန်သက်တမ်းတိုး၊ ဂရန်မိတ္တူ၊ ဂရန်ခွဲ) လျှောက်ထားခြင်း၊ မြေတိုင်းလျှောက်ထားခြင်း၊ မြေကွက်ခွဲစိတ်အတည်ပြု (တိုင်းခွဲ / အတည်ပြု) လျှောက်ထားခြင်းများအတွက် အမှုတွဲဖွင့်လှစ်သည့်အခါ အောက်ပါ အချက်များကို အသိပေးအပ်ပါသည်-

- (က) စုံစမ်းရန်သတ်မှတ်ထားသည့်နေ့ရက်တွင် လျှောက်ထားသူမှ လာရောက်စုံစမ်း၍ ပြီးစီးပါကထုတ်ယူရန်နှင့် မပြီးစီးသောအမှုတွဲများအား သက်ဆိုင်ရာအရာရှိမှ တွေ့ဆုံရှင်းလင်းပေးမည်ဖြစ်ပါသည်။
- (ခ) ဂရန်သစ်၊ ဂရန်သက်တမ်းတိုး၊ ဂရန်မိတ္တူနှင့် အမည်ပြောင်းလျှောက်ထားခြင်း စသည့်ကိစ္စများတွင် အမှုတွဲဖွင့်သည့်နေ့၌ ကန့်ကွက်ရန် ရှိ/မရှိ (Objection) စာရွက် (၃) စောင်ကို အမှုတွဲဖွင့်သည့် ဌာနစုတွင် ထုတ်ယူပြီး ရပ်ကွက်အုပ်ချုပ်ရေးမှူးရုံးတွင် (၁) စောင်၊ မြို့နယ်အထွေထွေအုပ်ချုပ်ရေးဦးစီးဌာန၊ အုပ်ချုပ်ရေးမှူးရုံးတွင် (၁) စောင်၊ ကြော်ငြာကပ်ရုံမည်ဖြစ်ပြီး ကျန်လက်ခံ (၁) စောင်တွင် သက်ဆိုင်ရာရုံးမှ လက်ခံရရှိကြောင်း လက်မှတ်ရေးထိုးစေ၍ မြို့တော်ခန်းမရှိ ရုံးအဖွဲ့သို့ ပြန်လည်အပ်နှံရမည်ဖြစ်ပါသည်။



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**MOUNTAIN TOP GLOBAL LIMITED**

**Company Type**  
Private Company Limited by Shares

**Annual Return Due Date**  
29/11/2019

**Status**  
Registered

108145234 29/10/2018

Foreign Company Yes

Small Company

- FILING HISTORY
- ADDRESSES
- OFFICERS
- SHAREHOLDINGS**
- COMPANY AUTHORITY
- MEMBERS
- DOCUMENTS

Total Shares Issued by Company  
20000

Currency of Share Capital  
USD

**ULTIMATE HOLDING COMPANY**

Company Name

Registration Number

Jurisdiction of Incorporation

**SHARE CAPITAL STRUCTURE**

Share Class	Class Title	Total No. Shares	Total Amount Paid	Total Amount Unpaid
ORD	Ordinary	20,000	20,000,000	0

**DICA ADDRESS:**  
No. 1, Tithar Road  
Yankin Township, Yangon



## PROCESSING CONTRACT

Party A : Top China Enterprise Corp

Address No.52, Thin Shan Square, Houjie Town ,Dong guan , Guangdong,  
Taiwan.

Party B : Mountain Top Global Limited

Address Plot No. 176 , Block No . 49/Wartayar ,Shwe Pyi Thar Township ,Yangon.

The two parties have mutually agreed as per terms and conditions as follows:

### Article 1. Objective of the Contract

The purpose of the agreement is for Manufacturing of all kind of footwear products on CMP basis.

Party A supplies all materials and accessories if any together with technical documents and necessary conditions basing on which Party B organizes production to meet Party B' requirements in quantity, quality and shipment time.

Party B secures necessary capacity in the factory involved (identified and agreed between the parties) to carry out production in accordance with materials and technical conditions provided by Party A to ensure complete quantity, quality and delivery time. Party B has to be responsible for handling all brand names of labels supplied for processing to ensure these are utilized solely for agreed purpose under this Agreement.

Factory involved for the process shall be agreed between the parties after joint investigation for compliances for conditions under this Agreement.

## Article 2. Production -Quantity-Unit Price

Party B has accepted to process as follows:

Sr. No	Name	A/U	Year 1		
			Unit Prices US\$	Qty Pcs	Total US\$ / Pcs
1	Lady Boot	Pair	6.00	600,000	3,600,000
2	Lady Shoes	Pair	4.00	400,000	1,600,000
3	Summer Shoes	Pair	1.50	150,000	225,000
	<b>TOTAL</b>			<b>1,150,000</b>	<b>5,425,000</b>

## Article 3. Technical stipulation and quality

Party A shall deliver to factory involved of Party B with materials, technical documents and specific conditions such as master samples for each batch of production at least 7 days before scheduled production starts. Production plan, schedule and delivery shall be based on mutually discussed and agreed plan.

Both parties acknowledge that quality of Footwear Products will be based on raw material supplied by Party A and consumption rate according to norms of approved samples confirmed by both parties before production.

## Article 4. Delivery Upon an Loading of Good

### A. Material and Accessories:

Party A will supply good quality raw materials to Party B free of charge on CIF Yangon basis in complete and sufficient quantity in timely manner to ensure

production progress can be carried out without interruption and at commercially effective volumes. Quantity and description of goods must be correctly and clearly indicated in Bill of Loading and other shipping documents to enable Party B to process for required import licenses and undertake customs clearance

Party A will advise Party B by telex or fax details of raw materials shipment within three days after shipment date.

Upon unloading of goods, representative from Party A and Party B will check the quantity of cartons or package against B/L within 7 days after arrival of raw materials in the involved factory, representative from Party B will check the content of each package, have to made and sign a control report and delivery to Party A.

Party B will be responsible for raw materials which are Party A's properties from the date of receipt until the date of shipment and shall compensate Party A full invoice value for any losses and damages incurred in that period.

**B. Finished goods:**

- Packing method and shipping mark will be instructed in technical document.
- Shipping document of finished Plastic Products will send to Party A by courier service.
- Original Bills of Loading
- Commercial invoice duly signed in triplicate
- Packing list in triplicate
- Certificate of origin



## Article 5. Payment

Party A will settle the due by telegraphic transfer (payment in US\$) at least from 10 days after shipment of garment products or shall settle in advance in adequate amount and in time manner if the rules and procedures in Myanmar requires advance receipt of processing charge for export license.

## Article 6. Inspection

Representative from Party A can inspect and check the production process without requiring prior approval from Party B. Party B shall provide cooperation to fullest extent for sub purpose and when Party A representative visits the production process

Authorized representative from Party A will come to inspect the goods during production and before shipment. Party B has responsibility to solve any problem arising in discharging the obligations under contract avoiding interference with production progress and shipping schedule.

## Article 7. Claim and Arbitration

Party B will inspect materials and accessories. Upon receipt, should there be any shortage in quantity and defect in quality, Party B shall advise Party A by telex or by fax within 7 days and have a survey report made and sent to Party A within 15 days after service of inspection report for arbitration, if not amicably solved in mutual discussion.

Article 8. General Provision

Both parties confirm their willingness to fulfill contract obligations.

It is fully understood that this contract must be carried out in strict accordance with the stipulation and instruction outlined here and under the term and conditions listed in this contract.

Any enclosures, supplements, amendments, or modification to this contract, shall be valid only after both parties have duly signed a written agreement.

In case violation by either party of this contract's term and conditions causes financial loss to the other party, the violating party shall bear full responsibility to compensate the effected party with reasonable amount agreed upon by the parties.

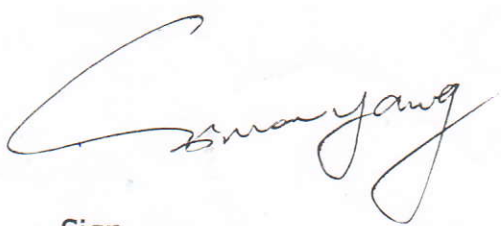
This contract is made in English in 4 (four) copies each party keeps two copies of equal value with effect from the signing date.

For and by Party A  
On Behalf of

For and by Party B  
On Behalf of

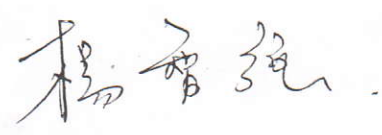
Top China Enterprise Corp

Mountain Top Global Limited



Sign

Name : Simon yang



Sign

Name : 楊智強  
YANG CHICH CHIANG

**Presentation of Corporate Social Responsibility Program (CSR) Plan**

For the project of " Manufacturing of all kind of footwear products on CMP basis"by forming 100% foreign own Company namely "Mountain Top Global Limited" we would like to present our CSR Plan as follows:

We have allocated 2% on net profit after tax for spending in CSR activities and areas to be spent are targeted as follows:

- (1) 1% of CSR fund will be used for labor training in the factory.
- (2) 0.5 % of CRS fund will be used for health care for employee.
- (3) 0.5% of CSR fund will be used for donation for the education of children.

With Best Regards



Mr. Yang ,Chih - Chiang  
The Promoter  
Mountain Top Global Limited



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## **Employees' Welfare Plan of Mountain Top Global Limited**

**Mountain Top Global Limited** is a foreign 100% company established under the Myanmar Companies Act . In order that the staff may enjoy proper welfare commensurate with that of a prestigious co. set up a plan for its employees as its .....

1. Staff Transportation
2. Health Care

### **(1) Staff Transportation**

For all employees who live far away from the factory, commuter buses will be rented by the company and the staff will be transported free of charge.

### **(2) Health Care**

An infirmary will be set up within the factory compound and stocked with appropriate medicines. In addition, a water purifier will be installed for staff drinking water. Appropriate sanitation facilities will be installed in the factory and regular disinfection work carried out.

Your Faithfully,



Mr. Yang, Chih-Chiang  
Promoter  
Mountain Top Global Limited

### Environmental Protection Plan

We, **Mountain Top Global Limited**, shall be responsible for the protection as well as perseveration of environment in and around the area of the project site **Mountain Top Global Limited** shall be able to control pollution of air, water and land, and not to cause environment degradation.

The Factory grounds as well as the approach roads will have suitable shady side walks, flowering plants and trees and ever green labors. Arrangement will be made for plantation of tree, gardens and grass field in the campus, ventilation, good drainage, disposing waste in accordance with rules at places determined by industrial zone management committee.

Your Faithfully



Mr. Yang, Chih-Chiang  
Promoter  
Mountain Top Global Limited

## Fire Protection of Mountain Top Global Limited

Our company will be undertaking the manufacturing works under the C.M.P Basic for that purpose we have applied for the approval of Yangon Region Investment Committee's Endorsement Permit in accordance with the Myanmar Investment Law.

For the prevention of fire Hazards, as we will be manufacturing of all kinds of footwear products on CMP basis we are very much aware of the fire and have a large series of modern fire extinguishers, sand bags and sand pits with the essential shovels, pick axes, hooks and flats ready at hand in every sub-section of the factory.

We will have Fire Drill Instructions posted at every section of the factory and the workers will have regular fire Drills and they will be divided into specific groups to carry out precise evacuation plan, if fire breaks out. We have cautions against dangers of electrical shock and misuse of electrical instruments also.

As for fire protection, sufficient fire extinguishers will be placed. In addition, awareness talk for protection will be held and workers will be sent to trainings administered by Fire Bridge. Moreover, smoking places will be provided for smoking workers. We undertake to follow rules and directives in force for fire protection.

Best Regards,



Mr. Yang, Chih-Chiang  
The Promoter  
Mountain Top Global Limited





မြေအသုံးပြုခွင့်လျှောက်ထားလွှာ

သို့

ဥက္ကဋ္ဌ

-----တိုင်းဒေသကြီး/ပြည်နယ် ရင်းနှီးမြှုပ်နှံမှုကော်မတီ

စာအမှတ်၊

ရက်စွဲ၊ ၂၀

ခုနှစ်၊

လ

ရက်

အကြောင်းအရာ။ ရင်းနှီးမြှုပ်နှံမှုလုပ်ငန်းဆောင်ရွက်ရန် မြေငှားရမ်းခွင့် သို့မဟုတ် မြေ  
အသုံးပြုခွင့် လျှောက်ထားခြင်း။

ကျွန်တော်/ကျွန်မသည် ရင်းနှီးမြှုပ်နှံမှုလုပ်ငန်း ဆောင်ရွက်ရန်အတွက် မြေငှားရမ်းခွင့်  
သို့မဟုတ် မြေအသုံးပြုခွင့်ကို မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှု နည်းဥပဒေ ၁၁၆ နှင့်အညီ အောက်ပါ  
အချက်အလက်များကို ဖော်ပြ၍ လျှောက်ထားအပ်ပါသည်-

၁။ မြေ/ အဆောက်အအုံ၏ ပိုင်ရှင်နှင့်စပ်လျဉ်းသောအချက်အလက်များ

- (က) ပိုင်ရှင်အမည်/အဖွဲ့အစည်း: -----
- (ခ) ဧရိယာအကျယ်အဝန်း: -----
- (ဂ) တည်နေရာ -----
- (ဃ) မူလမြေအသုံးပြုခွင့်ရရှိထားသောကာလ(မြေငှားဂရမ်သက်တမ်း) -----
- (င) နှစ်ရှည်ငှားရမ်းခများကိုမတည်ရင်းနှီးငွေအဖြစ်ဖော်ပြခဲ့ခြင်းရှိ-မရှိ -----
- (စ) ကနဦးငှားရမ်းသူကသဘောတူ/မတူ -----
- (ဆ) မြေအမျိုးအစား: -----

၂။ အငှားချထားသူ

- (က) အမည်/ကုမ္ပဏီအမည်/ဌာန/အဖွဲ့အစည်း: -----
- (ခ) နိုင်ငံသားစိစစ်ရေးကတ်အမှတ် -----
- (ဂ) နေရပ်လိပ်စာ -----

## Appendix A-2 : Consultant Registration Certificates (TCR) of NEPS



# REPUBLIC OF THE UNION OF MYANMAR

## Ministry of Natural Resources and Environmental Conservation

### CERTIFICATE FOR TRANSITIONAL CONSULTANT REGISTRATION

(ကြားကာလအကြံပေးလုပ်ကိုင်သူမှတ်ပုံတင်ခြင်းအထောက်အထားလက်မှတ်)



No.

0000035

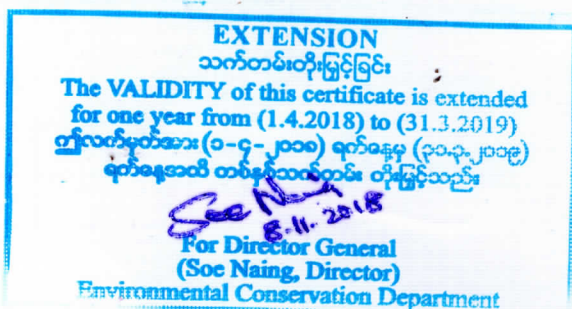
Date

15 JUL 2017

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 အဖွဲ့အစည်းအား ထုတ်ပေးလိုက်သည်။)

- |  |  |
|--|--|
| (a) Name of Organization<br>(အဖွဲ့အစည်းအမည်)   | National Engineering & Planning Services Co., Ltd.   |
| (b) Name of the representative in the organization<br>(အဖွဲ့အစည်းကိုယ်စားလှယ်၏ အမည်)   | U Cho Cho  |
| (c) Citizenship of the representative in the organization<br>(အဖွဲ့အစည်းကိုယ်စားလှယ်၏ နိုင်ငံသား)  | Myanmar  |
| (d) Identity Card /Passport Number of the representative person in the organization<br>(အဖွဲ့အစည်းကိုယ်စားလှယ်၏ မှတ်ပုံတင်/ နိုင်ငံကူးလက်မှတ် အမှတ်) | 12/ La Ma Na (Naing) 122819  |
| (e) Address of organization<br>(ဆက်သွယ်ရန်လိပ်စာ)  | 880, Yadanar Road, Thingangyun Township, Yangon, Myanmar.<br><a href="mailto:neps@myanmar.com.mm">neps@myanmar.com.mm</a> ,<br><a href="mailto:information.neps@gmail.com">information.neps@gmail.com</a> , 09 8635150 |
| (f) Type of Consultancy<br>(အကြံပေးလုပ်ကိုင်မှုအမျိုးအစား)   | Organization   |
| (g) Duration of validity<br>(သက်တမ်းကုန်ဆုံးရက်)   | 31 March 2018  |



31.3.2018

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



**Areas of Expertise Permitted**  
(ခွင့်ပြုသည့် ကျွမ်းကျင်မှုနယ်ပယ်များ)

1. Ecology and Biodiversity
2. Facilitation of Meeting
3. Geology and Soil
4. Ground Water and Hydrology
5. Socio-Economy
6. Ecology and Biodiversity (Flora)
7. Ecology and Biodiversity (Fauna)

**EXTENSION**  
သက်တမ်းတိုးမြှင့်ခြင်း  
The VALIDITY of this certificate is extended  
for one year from (1.1.2020) to (31.12.2020)  
ဤလက်မှတ်အား (၁-၁-၂၀၂၀) ရက်နေ့မှ (၃၁-၁၂-၂၀၂၀)  
ရက်နေ့အထိ တစ်နှစ်သက်တမ်းတိုးမြှင့်သည်။  
*Soe Naing* 21.1.2020  
For Director General  
(Soe Naing, Director)  
Environmental Conservation Department

**EXTENSION**  
သက်တမ်းတိုးမြှင့်ခြင်း  
The VALIDITY of this certificate is extended  
for nine months from (1.4.2019) to (31.12.2019)  
ဤလက်မှတ်အား (၁-၄-၂၀၁၉) ရက်နေ့မှ (၃၁.၁၂.၂၀၁၉)  
ရက်နေ့အထိ (၉)လသက်တမ်း တိုးမြှင့်သည်။  
*Soe Naing* 6.6.2019  
For Director General  
(Soe Naing, Director)  
Environmental Conservation Department

**EXTENSION**  
သက်တမ်းတိုးမြှင့်ခြင်း  
The VALIDITY of this certificate is extended  
for six month from (1.1.2021) to (30.6.2021)  
ဤလက်မှတ်အား (၁-၁-၂၀၂၁) ရက်နေ့မှ (၃၀-၆-၂၀၂၁)  
ရက်နေ့အထိ (၆)လသက်တမ်းတိုးမြှင့်သည်။  
*Soe Naing*  
For Director General  
(Soe Naing, Director)  
Environmental Conservation Department

**EXTENSION**  
သက်တမ်းတိုးမြှင့်ခြင်း  
The VALIDITY of this certificate is extended  
for six months from (1.7.2021) to (31.12.2021)  
ဤလက်မှတ်အား (၁-၇-၂၀၂၁) ရက်နေ့မှ (၃၁-၁၂-၂၀၂၁)  
ရက်နေ့အထိ (၆)လသက်တမ်းတိုးမြှင့်သည်။  
*Soe Naing*  
For Director General  
(Soe Naing, Director)  
Environmental Conservation Department

**EXTENSION** (သက်တမ်းတိုးမြှင့်ခြင်း)  
The VALIDITY of this certificate is extended  
for one year from (1.1.2022) to (31.12.2022)  
ဤလက်မှတ်အား (၁-၁-၂၀၂၂) ရက်နေ့မှ (၃၁-၁၂-၂၀၂၂)  
ရက်နေ့အထိ တစ်နှစ်သက်တမ်းတိုးမြှင့်သည်။  
*Soe Naing*  
For Director General  
(Soe Naing, Director)  
Environmental Conservation Department

## Appendix B : Photo Records of Project Site

## Photo Records of Footwear Manufacturing Factory Project, Watayar Industrial Zone, Shwe Pyi Thar Township, Yangon Region

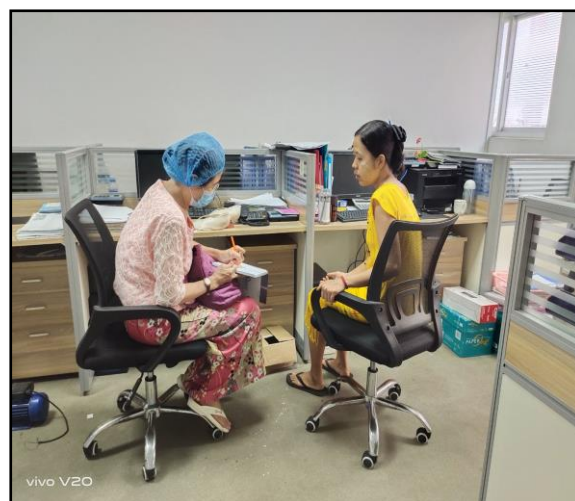


Figure 1: Factory Interior



**Photo Records of Footwear Manufacturing Factory Project, Watayar Industrial Zone, Shwe Pyi Thar Township, Yangon Region**

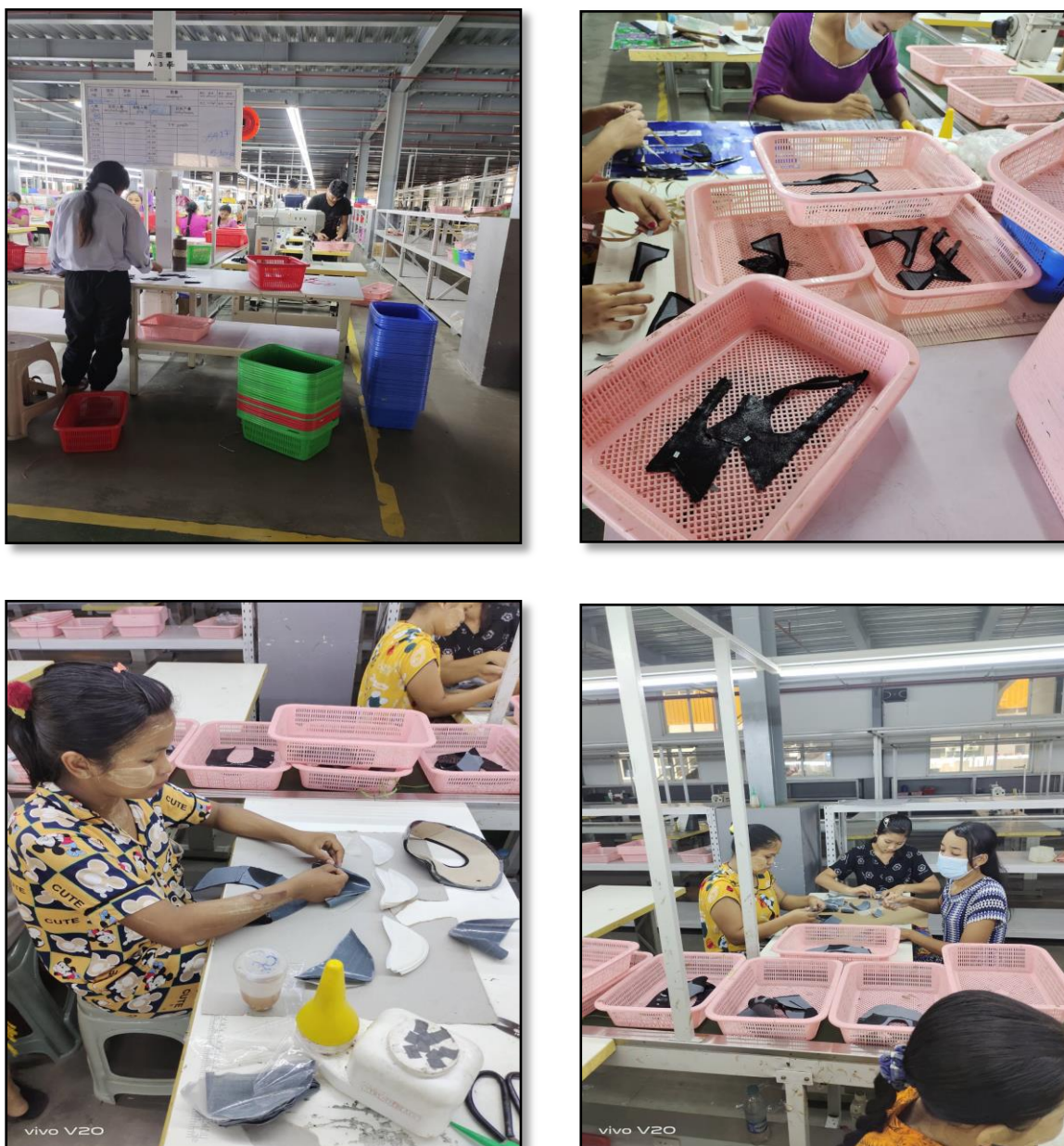


Figure 2 : Footwears Production

**Photo Records of Footwear Manufacturing Factory Project, Watayar  
Industrial Zone, Shwe Pyi Thar Township, Yangon Region**



Figure 3: Fire Safety Equipments



**Photo Records of Footwear Manufacturing Factory Project, Watayar  
Industrial Zone, Shwe Pyi Thar Township, Yangon Region**



Figure 4: Machine Control



**Photo Records of Footwear Manufacturing Factory Project, Watayar  
Industrial Zone, Shwe Pyi Thar Township, Yangon Region**



Figure 5: Storage Control

**Photo Records of Footwear Manufacturing Factory Project, Watayar  
Industrial Zone, Shwe Pyi Thar Township, Yangon Region**



Figure 6: Personal Hygiene (Toilet, Hand wash Basin, Canteen)



**Photo Records of Footwear Manufacturing Factory Project, Watayar  
Industrial Zone, Shwe Pyi Thar Township, Yangon Region**

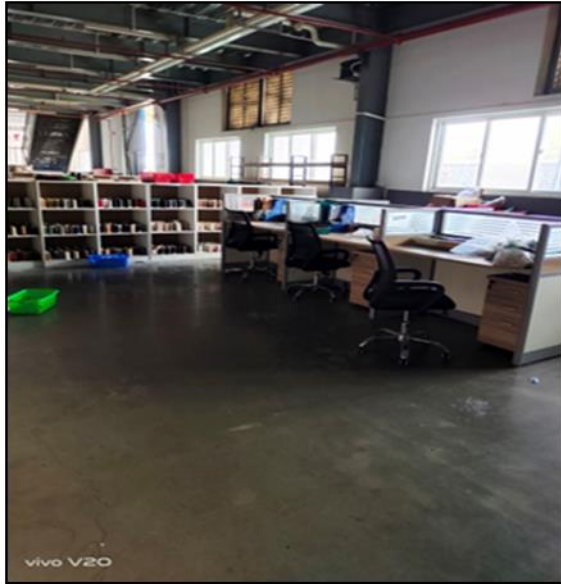


Figure 7: Private Locker for Staffs

**Photo Records of Footwear Manufacturing Factory Project, Watayar  
Industrial Zone, Shwe Pyi Thar Township, Yangon Region**



Figure 8:Water Supply (Deep Well) with R.O Water Treatment System

**Photo Records of Footwear Manufacturing Factory Project, Watayar  
Industrial Zone, Shwe Pyi Thar Township, Yangon Region**



Figure 9: Electric Supply



**Photo Records of Footwear Manufacturing Factory Project, Watayar  
Industrial Zone, Shwe Pyi Thar Township, Yangon Region**



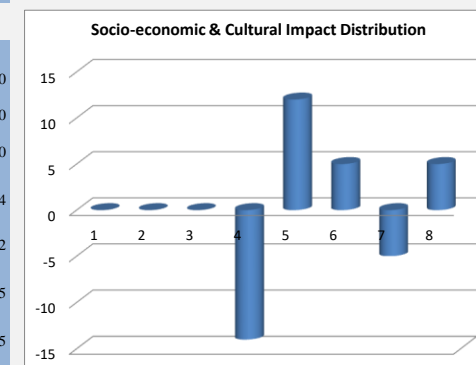
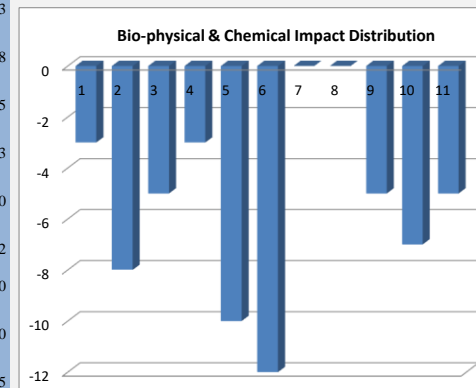
Figure 10: Factory Waste and Wastewater

Appendix C :  
Impact Assessment Matrix of Footwear  
Production Factory Project

## Impact Assessment Matrix for Footwear Production Factory Project CMP

### INSTALLATION PHASE IMPACTS for Environmental and Social Impact Assessment of Mountain Top Footwear Production Project, Shwe Pyi Thar Township

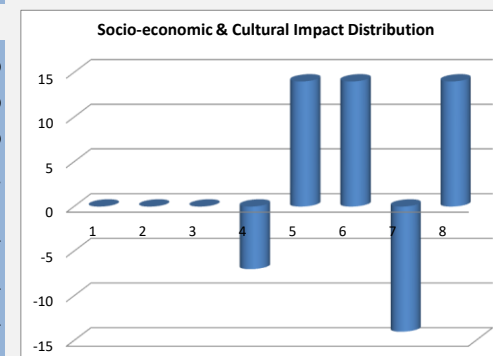
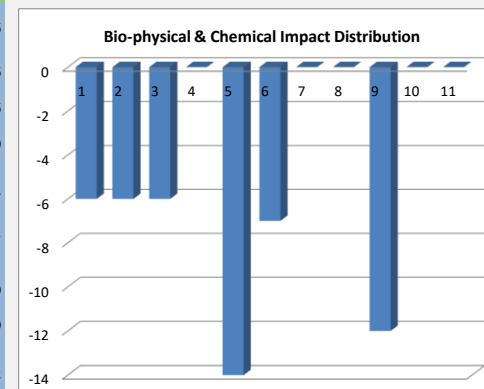
Green for positive impact								Cumulative Score (default negative)
Ref.	Impact/Issue	Comment/Description of Impact	Extent	Duration	Magnitude/Intensity	Probability	Significance	
<b>Bio-Physical &amp; Chemical</b>								
BPC/1	Changes in surface water quality	Installation of machines and electrical equipment for footwear production affects the surface water quality	1	1	1	1	low	-3
BPC/2	Changes in groundwater quality	Risk of disturbance to underground water resources due to installation of machines	1	1	2	2	low	-8
BPC/3	Changes to drainage patterns	Alteration of the natural drainage system due to installation of machines	1	2	1	2	low	-5
BPC/4	Changes in rates of erosion and siltation	Significant erosion and siltation due to installation of machinery (nearby channels)	1	1	1	1	low	-3
BPC/5	Changes to air quality	Air quality will be changed because of dust, particulate matter during installation works	1	2	2	2	medium	-10
BPC/6	Changes to ambient noise levels	Noise levels will be significant during installation disturbing the biota in the environment	2	2	2	2	medium	-12
BPC/7	Changes to aquatic biota	No Change in aquatic biota due to installation works	0	0	0	0	low	0
BPC/8	Changes to terrestrial biota	No Significant changes expected in terrestrial biota and habitation due to installation of machines for project	0	0	0	0	low	0
BPC/9	Changes to disease vector populations	Health risk to labours during installation period (dust / noise)	1	2	1	2	low	-5
BPC/10	Changes to land cover	No significant changes in land cover due to installation works	2	3	1	2	low	-7
BPC/11	Changes to areas of natural habitat	Due to the changes in vegetation in land and water, natural habitat may change to a certain extent	1	2	1	2	low	-5
<b>Socio-Economic &amp; Cultural</b>								
SEC/1	Changes involving loss of private assets	No significant private asset disturbed due to installation works	0	0	0	0	low	0
SEC/2	Changes involving loss of cultural heritage	No significant cultural heritage at proposed project area	0	0	0	0	low	0
SEC/3	Changes involving displacement of people	No displacement of inhabitants.	0	0	0	0	low	0
SEC/4	Changes to local traffic patterns	Installation of machines for manufacturing of electrical equipment may change traffic pattern to a certain extent.	2	3	2	2	medium	-14
SEC/5	Changes in local wage labour incomes/livelihood opportunities	Labours are employed.	2	2	2	2	medium	12
SEC/6	Changes in local trade/commercial incomes/opportunities	No significant local trade / commercial incomes during construction phase.	1	2	1	2	low	5
SEC/7	Changes in visual amenity	No significant amenity to vision during installation period; garbage appears instead of natural beauty of landscape.	1	2	1	2	low	-5
SEC/8	Changes to public infrastructure/community resources	Change in infrastructure due to installation works	1	2	1	2	low	5



## Impact Assessment Matrix for Footwear Production Factory Project CMP

### OPERATIONAL PHASE IMPACTS for Environmental and Social Impact Assessment of Mountain Top Footwear Production Project, Shwe Pyi Thar Township

		Green for positive impact	score 1, 2 or 3	score 1, 2 or 3	score 1, 2 or 3	score 1, 2 or 3		
Ref.	Impact/Issue	Comment/Description of Impact	Extent	Duration	Magnitude/Intensity	Probability	Significance	Cumulative Score (default negative)
<b>Bio-Physical &amp; Chemical</b>								
BPC/1	Changes in surface water quality	Risk of changes in water quality to nearby water body	1	3	1	2	low	-6
BPC/2	Changes in groundwater quality	No significant potential pollution to ground water sources	1	3	1	2	low	-6
BPC/3	Changes to drainage patterns	Changes to drainage pattern due to operation of factory	1	3	1	2	low	-6
BPC/4	Changes in rates of erosion and siltation	Risk of soil erosion and siltation (nearby channels)	0	0	0	0	low	0
BPC/5	Changes to air quality	Potential gas emission from CMP process for footwear production	2	3	2	2	medium	-14
BPC/6	Changes to ambient noise levels	Significant changes in noise level due to operation of machines and equipment	2	3	1	2	low	-7
BPC/7	Changes to aquatic biota	Soil erosion, sedimentation and siltation to nearby Creek	0	0	0	0	low	-10
BPC/8	Changes to terrestrial biota	No significant changes in terrestrial biota	0	0	0	0	low	0
BPC/9	Changes to disease vector populations	Significant occupational health risk to factory staff (noise/air)	1	3	2	2	medium	-12
BPC/10	Changes to land cover	No further land cover change during operational phase of manufacturing of electrical equipment	0	0	0	0	low	0
BPC/11	Changes to areas of natural habitat	No further significant impacts on natural habitat in project area	0	0	0	0	low	0
<b>Socio-Economic &amp; Cultural</b>								
SEC/1	Changes involving loss of private assets	No potential impact	0	0	0	0	low	0
SEC/2	Changes involving loss of cultural heritage	No impact in operational phase.	0	0	0	0	low	0
SEC/3	Changes involving displacement of people	No potential social impact	0	0	0	0	low	0
SEC/4	Changes to local traffic patterns	Potential changes in traffic patterns due to transport vehicles	2	3	1	2	low	-7
SEC/5	Changes in local wage labour incomes/livelihood opportunities	Possibility of Increased income and livelihood opportunities due to the project.	2	3	2	2	medium	14
SEC/6	Changes in local trade/commercial incomes/opportunities	Possibility of Increased income and livelihood opportunities due to the project.	2	3	2	2	medium	14
SEC/7	Changes in visual amenity	Enhanced infrastructure appears with natural landscape.	2	3	2	2	medium	-14
SEC/8	Changes to public infrastructure/community resources	Expected infrastructure development	2	3	2	2	medium	14



## Impact Assessment Matrix for Footwear Production Factory Project CMP

Guidance for Use				
Score	Extent	Duration	Magnitude	Probability
1	On site: Within the works/site area or immediate surroundings	Short: The impact is	Low: No environmental functions and processes are altered	Low
		short term (0- 12 months) or intermittent	No or minimal change to socio-economic condition	
2	Locally: Effects measurable/noticeable outside the works area and immediate surroundings	Medium: Medium term (1-2 years - construction phase)	Medium: Natural ecosystems are modified	Medium
			Changes are experienced to socio-economic condition	
3	Beyond: The activity has impact outside the project area	Long: the impact persists beyond the construction phase for years or the operational life of the project	High: Environmental functions altered	High
			Socio-economic conditions highly modified	
			Effects may be permanent or irreversible.	



Appendix D :  
Project Documents of Footwear Production Factory Project:  
Material and Machine Lists and Project Layout Plan

**MOUTAIN TOP GLOBAL LIMITED**  
**MACHINE LIST**

Sr. No	DESCRIPTION OF GOOD	Quantity	
1	BRAND NEW SEWING MACHINES FOR FOOTWEAR SINGLE NEEDLE DRIVE ROLLER	84	U
2	BRAND NEW SEWING MACHINES FOR FOOTWEAR DOUBLE NEEDLE DRIVE ROLLER	6	U
3	BRAND NEW SEWING MACHINES FOR FOOTWEAR SINGLE NEEDLE POST-BED DIRECT DRIVE	24	U
4	BRAND NEW SEWING MACHINES FOR FOOTWEAR DOUBLE NEEDLE POST-BED DIRECT	12	U
5	BRAND NEW SEWING MACHINES FOR FOOTWEAR TTY-801 SKIVING MACHINE	24	U
6	BRAND NEW SEWING MACHINE FOR FOOTWEAR LOCKSTITCH ZIGZAG	12	U
7	BRAND NEW SEWING MACHINES FOR FOOTWEAR LINING TRIMMING MACHINE	12	
8	BRAND NEW SEWING MACHINES FOR FOOTWEAR TTY-310 FLATTENING & HAMMERING	12	U
9	BRAND NEW SEWING MACHINES FOR FOOTWEAR TTY-513A SINGLE NEEDLE FEED LOCK-STITCH	12	U
10	BRAND NEW SEWING MACHINES FOR FOOTWEAR TTY-25 SEAM OPENING &TAPE	2	
11	BRAND NEW SEWING MACHINES FOR FOOTWEAR TTY-25 RF COMPUTER CONTROL	4	U
12	BRAND NEW SEWING MACHINES FOR FOOTWEAR TTY -787 INTELLIGENTIZED AUTOMATIC EDGE FOLDER MACHINE	2	U
13	BRAND NEW SEWING MACHINES FOR FOOTWEAR TTY-839 MIDDLE BOTTOM SEWING	2	U
14	BRAND NEW SEWING MACHINES FOR FOOTWEAR HAND TABLE	186	U
15	BRAND NEW SEWING MACHINES FOR FOOTWEAR MAUAL ROUGHING MACHINE DUST	1	U
16	BRAND NEW SEWING MACHINES FOR FOOTWEAR CLEANER FRFQUENCY CONVERSION	6	U
17	BRAND NEW SEWING MACHINES FOR FOOTWEAR LAST MACHINE	2	U
18	BRAND NEW SEWING MACHINES FOR FOOTWEAR LACQUER TABLE	4	U
19	BRAND NEW SEWING MACHINES FOR FOOTWEAR HYDRAULIC SEWING ARM CUTTING	14	U
20	BRAND NEW SEWING MACHINES FOR FOOTWEAR HYDRAULIC PLANE CUTTING MACHINE	14	U
21	BRAND NEW SEWING MACHINES FOR FOOTWEAR ENDGE GRINDING MACHINE	16	U
22	BRAND NEW SEWING MACHINES FOR FOOTWEAR HYDRAULIC AUTOMATIC UPPER MOULDING MACHINE	4	U

23	BRAND NEW SEWING MACHINES FOR FOOTWEAR AIE PRESSURE AUTOMATIC UPPER MOULSINF MACHINE	2	U
24	BRAND NEW SEWING MACHINES FOR FOOTWEAR UPPER ATTACHING MACHINE	4	U
25	BRAND NEW SEWING MACHINES FOR FOOTWEAR NEEDLE CONVEYOR (22M)	2	U
26	BRAND NEW MACHINES FOR FOOTWEAR NEEDLE CONVEYOR(18 M)	6	U
27	BRAND NEW SEWING MACHINES FOR FOOTWEAR BUCKLE MACHNE	2	U
28	BRAND NEW SEWING MACHINES FOR FOOTWEAR DEHUMIDIFICATION MACHINE	6	U
29	BRAND NEW SEWING MACHINES FOR FOOTWEAR WHITE GLUE MACHINE	1	U
30	BRAND NEW SEWING MACHINES FOR FOOTWEAR YELOW GLUE MACHINE	6	U
31	BRAND NEW SEWING MACHINES FOR FOOTWEAR BRONZING MACHINE	4	U
32	BRAND NEW SEWING MACHINES FOR FOOTWEAR DRYING MACHINE	20	U
33	BRAND NEW SEWING MACHINE FOR FOOTWEAR FLOATING BOTTOM SCRIBING	2	U
34	BRAND NEW SEWING MACHINES FOR FOOTWEAR BOTTOM GROOVING MACHINE	1	U
35	BRAND NEW SEWING MACHINES FOR FOOTWEAR DOUBLE ENDED TAIL DRAWING	2	U
36	BRAND NEW SEWING MACHINES FOR FOOTWEAR 20T EMBOSSING MACHINE	1	U
37	BRAND NEW SEWING MACHINES FOR FOOTWEAR SHOE HEEL MACHNE	2	U
38	BRAND NEW SEWING MACHINES FOR FOOTWEAR HIGH SPEED EDGE TRIMMER	2	U
39	BRAND NEW SEWING MACHINES FOR FOOTWEAR MC-703 RUBBER BELT	2	U
40	BRAND NEW SEWING MACHINES FOR FOOTWEAR MC-939 ADVNCED	2	U
41	BRAND NEW SEWING MACHINES FOR FOOTWEAR MC-939 ADVANCED	4	U
42	BRAND NEW SEWING MACHINES FOR FOOTWEAR MC-821	2	U
43	BRAND NEW SEWING MACHINES FOR FOOTWEAR MC-703 RUBBER BELT	2	U
44	BRAND NEW SEWING MACHINES FOR FOOTWEAR MC-969 TWO-LAYER	2	U
45	BRAND NEW SEWING MACHINES FOR FOOTWEAR MC -823 OVERHEAD	2	
46	BRAND NEW SEWING MACHINES FOR FOOTWEAR MC-703 RUBBER BELT	2	U
47	BRAND NEW SEWING MACHINES FOR FOOTWEAR MC-825K AERIAL	2	U

48	BRAND NEW SEWING MACHINES FOFR FOOTWEAR 9-PINCERS TOE LASTING MACHINE	4	U
49	BRAND NEW SEWING MACHINES FOR FOOTWEAR HYDRAULIC HEEL LASTING	2	U
50	BRAND NEW SEWING MACHINES FOR FOOTWEAR TWO HOT AND TWO COLD TOE MOULDING MACHINE	2	U
51	BRAND NEW SEWING MACHINES FOR FOOTWEAR TWO HOT AND TWO COLD COUNTER MOULDING MACHINE	2	U
52	BRAND NEW SEWING MACHINES FOR FOOTWEAR AUTOMATIC TOE FLATTENING MACHINE	2	U
53	BRAND NEW SEWING MACHINES FOFR FOOTWEAR AUTOMATIC HEEL-SEAT FLATTENING	2	U
54	BRAND NEW SEWING MACHINES FOR FOOTWEAR MAUAL ROUGHING MACHINE DUST	3	U
55	BRAND NEW SEWING MACHINES FOR FOOTWEAR UNIVERSAL OIL HYDRAULIC ATTACHINE MACHINE	2	U
56	BRAND NEW SEWING MACHINES FOR FOOTWEAR HYDRAULIC LASTING HOT PRESSING	2	U
57	BRAND NEW SEWING MACHINES FOR FOOTWEAR AUTOMATIC HYDRAULIC HEEL-NAILING MACHINE	1	U
58	BRAND NEW SEWING MACHINES FOR FOOTWEAR STEAM CONDITIONING MACHINE	4	U
59	BRAND NEW SEWING MACHINES FOR FOOTWEAR STEEL NEST CONVEUYOR(WITH AND HOLDER)	4	U
60	BRAND NEW SEWING MACHINES FOR FOOTWEAR INFRARED OVEN-2M	8	U
61	BRAND NEW SEWING MACHINES FOR FOOTWEAR ENDGE GRINDING MACHINE	4	U
62	BRAND NEW SEWING MACHINES FOR FOOTWEAR PEELING MACHINE	4	U
63	BRAND NEW SEWING MACHINES FOR FOOTWEAR EDGE GRINDING MACHINE WITH DUST	4	U
64	BRAND NEW SEWING MACHINES FOR FOOTWEAR ROTARY UPPER ATTACHING MACHINE	2	U
65	BRAND NEW SEWING MACHINE FOR FOOTWEAR NEEDLE CONVEYOR(22M)	4	U
66	BRAND NEW SEWING MACHINES FOR FOOTWEAR AIR COMPRESSOR	2	U
67	BRAND NEW SEWING MACHINE FOR FOOTWEAR WHITE GLUE MACHINE	3	U
68	BRAND NEW SEWING MACHINES FOR FOOTWEAR PUNCHING MACHINE	6	U
69	BRAND NEW SEWING MACHINES FOR FOOTWEAR MIDSOLE FIXING MACHINE	2	U
70	BRAND NEW SEWING MACHINES FOR FOOTWEAR INNER BOX MACHINE	1	U
71	BRAND NEW SEWING MACHINES FOR FOOTWEAR DRILLING RIG	4	U
72	BRAND NEW SEWING MACHINES FOR FOOTWEAR BUBBLING COTTON MACHINE	2	U

73	BRAND NEW SEWING MACHINES FOR FOOTWEAR VERTICAL MILLING MACHINE	2	U
74	BRAND NEW SEWING MACHINES FOR FOOTWEAR POINTED MACHINE	4	U
75	BRAND NEW SEWING MACHINES FOR FOOTWEAR SIDE LASTING MACHINE	8	U
76	BRAND NEW SEWING MACHINES FOR FOOTWEAR TOE LASTING MACHINE		



1  
提撥 投資  
Proposal Of The Promoter To Make Investment In The  
Republic Of The Union Of Myanmar

To Carry Out The Business Of:

開展業務

"Manufacturing of all kinds of footwear products on CMP

在cmp基礎上生產各種鞋類 basis"產品

By

"Mountain Top Global Limited"

Mountain Top Global Limited

## Norm of Products


Photo	Product	No.	Raw Material Name	Unit	Norm Q'ty
	Lady Boot	1	SYNTHETIC LEATHER	M2	0.4
		2	BUCKLE	KG	0.2
		3	BAG (PE , NON WOVEN)	PR	1.00
		4	CUTTING BOARD	U	0.10
		5	FOAM	M	0.50
		6	HEEL & TOP	PR	1.00
		7	HANG TAG & LOOP	PR	0.50
		8	INNER BOX	PR	1.00
		9	INSOLE	PR	1.00
		10	IRON CORE	KG	0.07
		11	LABEL	PR	2.00
		12	LEATHER TIER	KG	0.03
		13	LACE	PR	1.000
		14	NON WOVEN	M	0.20
		15	OUT SOLE	PR	1.00
		16	PAPER	U	0.20
		17	PVC SHEET	PR	0.50
		18	PU LEATHER	M	0.20
		19	RUBBER SHEET	KG	0.07
		20	SILICA GEL	KG	0.090
		21	SPONGE	KG	0.10
		22	TAPE (OPP , MAGIC )	M	0.10
		23	TEXTILE	M	0.80
		24	THREAD	U	0.08
		25	WELT	KG	0.08
		26	ZIPPER	KG	0.08



Photo	Product	No.	Raw Material Name	Unit	Norm Q'ty
 <p>03350 LKA005 RA1029P A</p>	Lady Shoes	1	SYNTHETIC LEATHER	M2	0.4
		2	BRONZING PAPER	Kg	0.020
		3	BAND ELASTIC & RUBBER)	Kg	0.40
		4	BAG (PE, NON WOVEN)	M	1.00
		5	CANVAS WELT	Pr	0.20
		6	FOAM	Pr	0.50
		7	HEEL & TOP	Pr	1.00
		8	HANG TAG & LOOP	U	0.50
		9	INNER BOX	U	1.00
		10	INSOLE	U	1.00
		11	LABEL	M	2.00
		12	LEATHER TIER	U	0.03
		13	LACE	U	1.000
		14	LEATHER WAX	Pr	0.01
		15	NON WOVEN	Pr	0.20
		16	OUT SOLE	Pr	1.00
		17	PU LEATHER	Pr	0.20
		18	STICK	Kg	0.02
		19	SOLE SHEET	Pr	0.08
		20	SAMPLE (SHOES)	Kg	0.01
		21	TEXTILE	U	0.80
		22	THREAD	Kg	0.08
		23	WAX	Pr	0.002

Photo	Product	No.	Raw Material Name	Unit	Norm Q'ty
	Summer Shoes	1	SYNTHETIC LEATHER	M2	0.4
		2	BRONZING PAPER	Kg	0.020
		3	BAND(ELASTIC & RUBBER)	Kg	0.40
		4	BAG (PE, NON WOVEN)	M	1.00
		5	CANVAS WELT	Pr	0.20
		6	FOAM	Pr	0.50
		7	HANG TAG & LOOP	Pr	0.50
		8	INNER BOX	U	1.00
		9	INSOLE	U	1.00
		10	LABEL	U	2.00
		11	LEATHER TIER	M	0.03
		12	LEATHER WAX	U	0.01
		13	NON WOVEN	U	0.20
		14	OUT SOLE	Pr	1.00
		15	PU LEATHER	Pr	0.20
		16	STICK	Pr	0.02
		17	SOLE SHEET	Pr	0.08
		18	SAMPLE (SHOES)	Kg	0.01
		19	TEXTILE	Pr	0.80
		20	THREAD	Kg	0.08
		21	WAX	U	0.003

# MOUNTAIN TOP GLOBAL LIMITED

PLOT NO.176,BLOCK NO.49, WARTAYAR, SHWE PYI THAR TOWNSHIP, YANGON REGION, MYANMAR

095011906, [chiang02tw@yahoo.com.tw](mailto:chiang02tw@yahoo.com.tw)

နောက်ဆက်တွဲ (ခ)

ယခုလျှော့ချမည့်ထုတ်ကုန် အရည်အတွက် နှင့် တန်ဖိုး

NO	PARTICULAR	UNIT	YEAR-1			YEAR-2			YEAR-3		
			Unit Price	QTY	VALUE	Unit Price	QTY	VALUE	Unit Price	QTY	VALUE
1	Lady Boot	Pair	6.00	300000.00	1800000.00	6.00	330000.00	1980000.00	6.00	363000.00	2178000.00
2	Lady Shoes	Pair	4.00	200000.00	800000.00	4.00	220000.00	880000.00	4.00	242000.00	968000.00
3	Summer Shoes	Pair	1.50	75000.00	112500.00	1.50	82500.00	123750.00	1.50	90750.00	136125.00
TOTAL				575000.00	2712500.00		632500.00	2983750.00		695750.00	3282125.00



MR.YANG, LONG-WU

DIRECTOR

MOUNTAIN TOP GLOBAL LTD



# MOUNTAIN TOP GLOBAL LIMITED

PLOT NO.176,BLOCK NO.49, WARTAYAR, SHWE PYI THAR TOWNSHIP, YANGON REGION, MYANMAR

095011906, chiang02tw@yahoo.com.tw

နောက်ဆက်တွဲ (ခ)

နောက်ဆက်တွဲ (ခ)

ယခုလျှော့ချမည့်ထုတ်ကုန် အရည်အတွင်း ယခုလျှော့ချမည့်ထုတ်ကုန် အရည်အတွက် နှင့် တန်ဖိုး

NO	PARTICULAR	UNIT	YEAR-4			YEAR-5 to 10		
			Unit Price	QTY	VALUE	Unit Price	QTY	VALUE
1	Lady Boot	Pair	6.60	381150.00	2515590.00	7.26	400207.50	2905506.45
2	Lady Shoes	Pair	4.40	254100.00	1118040.00	4.84	266805.00	1291336.20
3	Summer Shoes	Pair	1.65	95287.50	157224.38	1.82	100052.00	182094.64
TOTAL				730537.50	3790854.38		767064.50	4378937.29



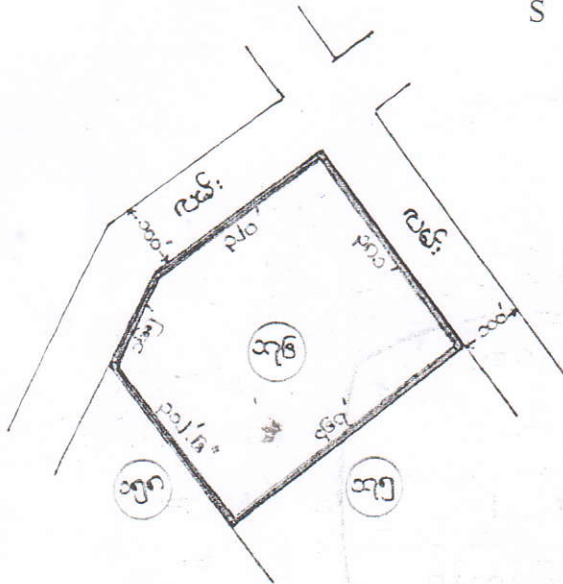
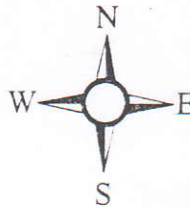
MR.YANG, LONG-WU

DIRECTOR

MOUNTAIN TOP GLOBAL LTD

ဝက်ပူ/လက်မလုပ်ငန်းဆောင်ရွက်ရန်အတွက်သာ  
ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်

ရန်ကုန်မြို့တော်စည်ပင်သာယာရေးကော်မတီ



၂၀၁၈ ခုနှစ် ဧပြီလမှ စက်တင်ဘာလထိ  
ခုနှစ်သုံး မြေပုံမှ ရေးကူးပေးသည့်  
မှန်ကန်ကြောင်း သက်သေခံသည့် မြေငှားဂရန်မြေပုံ

အမည်ပေါက် ငေါ်သီသီဟန်

မြေတိုင်းရပ်ကွက်အမှတ် ၄၉ (ငါးလျှာ)

လူနေရပ်ကွက်အမှတ်

မြေကွက်အမှတ် ၁၇၆

မြေအမျိုးအစား ခွင်ငမ္ဘဝါဂရန်

အလျား ၃၈၀' ၂၁၁' ၆".....x အနံ ၄၆၇' ၁၅၆' ၁၀" ၁)

ဧရိယာ ၄.၀၀၅ ဧက

မြို့နယ် ရွှေပြည်သာ

စကေး ၁" = ၃၀၀' ၀"

ထုတ်ပေးသည့်အမှုတွဲအမှတ် ၇၂၁၁/၈၇၄၀/၁၇  
(၂၅.၁၀.၁၇)

၁၇.၉.၂၀၁၈  
မြေတိုင်း(၂)  
မြို့ပြစီမံကိန်းနှင့်မြေစီမံခန့်ခွဲမှုဌာန

မြေတိုင်း(၁) ၄၉၇၆  
မြို့ပြစီမံကိန်းနှင့်မြေစီမံခန့်ခွဲမှုဌာန

၂၀၁၈ ခုနှစ် ဧပြီလမှ စက်တင်ဘာလထိ  
ခုနှစ်သုံး မြေပုံ/မြို့ မြေစာရင်းမှ ရေးကူးသော  
ကောက်နှုတ်ချက်မိတ္တူမြေပုံ/မြေရာဇဝင်ဖြစ်၍ တိကျမှန်ကန်ကြောင်း  
ထောက်ခံပါသည်။ (မြို့ပြစီမံကိန်းနှင့် မြေစီမံခန့်ခွဲမှုဌာန)



၁၇/၉/၁၈  
မြို့ပြစီမံကိန်းနှင့်မြေစီမံခန့်ခွဲမှုဌာန

# Layout Plan

Transformer

Dormitory  
Building

Gate

Spare  
Space

Air Compressor Room

Factory (A)

Water  
Tower

Factory (B)

## Building Measurement

(1) Factory A = (94500 mm x 35000 mm) (2 Storey Building )

(2) Factory B = (94500 mm x 41000 mm) (2 Storey Building )

(3) Dormitory Building = (8000 mm x 35000 mm) (Three Storey Building)



Transformer

Three  
Story  
Building

Gate

spare  
space

Warehouse (A)

Warehouse (B)

Air Compressor Room

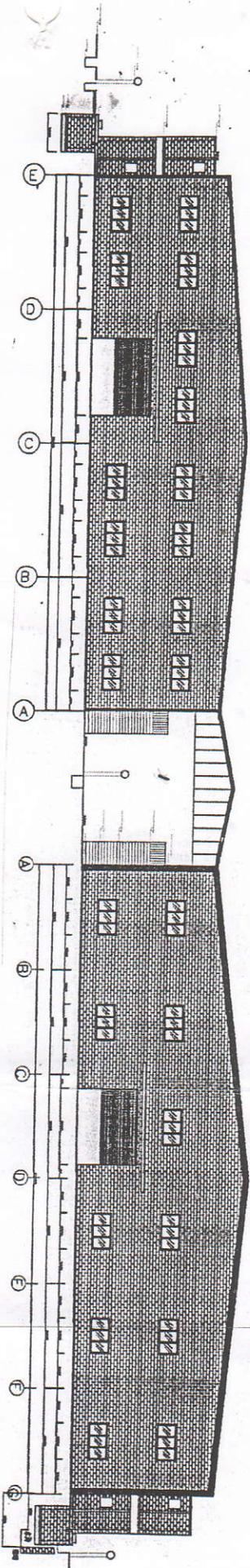
Water  
Tower

96000

《厂区规划图》

116000

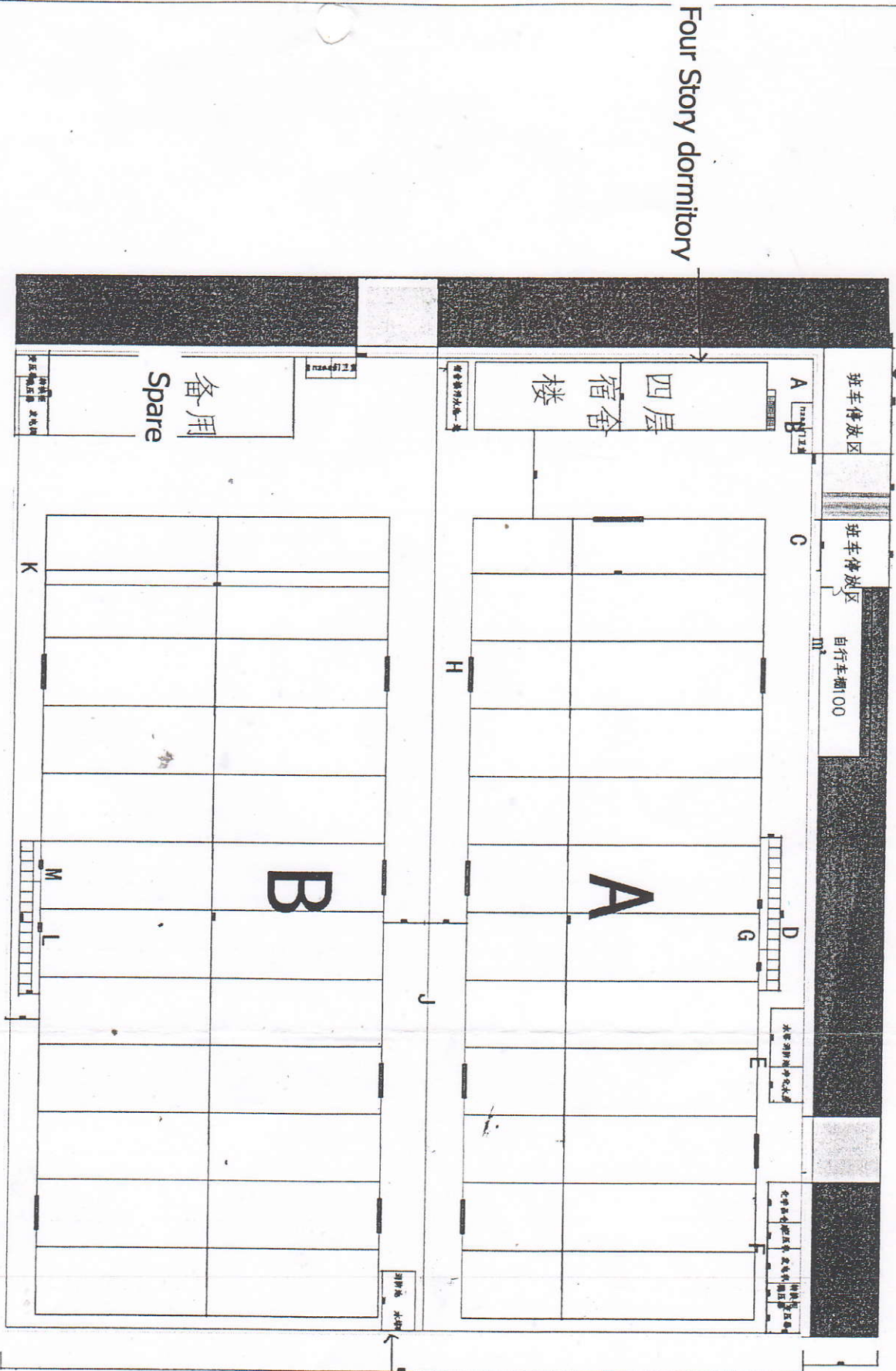




Overall Side View

投资公司		设计公司		中兴钢结构建筑工程有限公司		工程名称		乔柳实业（缅甸）有限公司瓦池亚工厂		图纸说明		整体立面布置图		设计		图号		乔柳002	
乔柳实业（缅甸）有限公司						项目名称		整体立面图						审核		比例			
																日期			

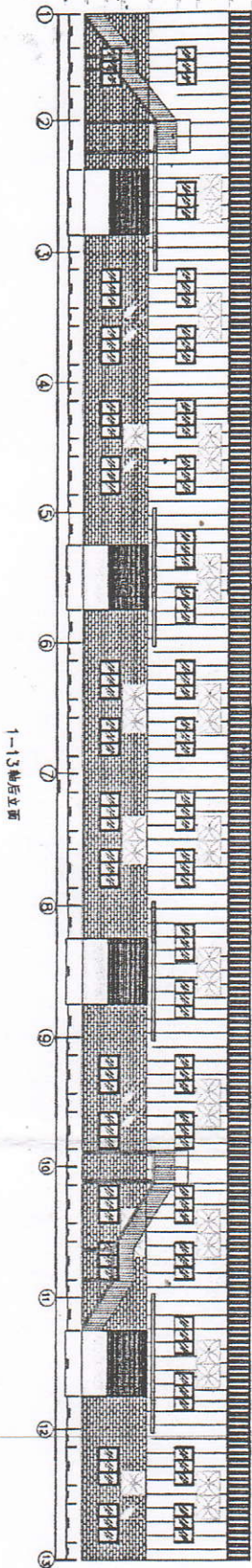
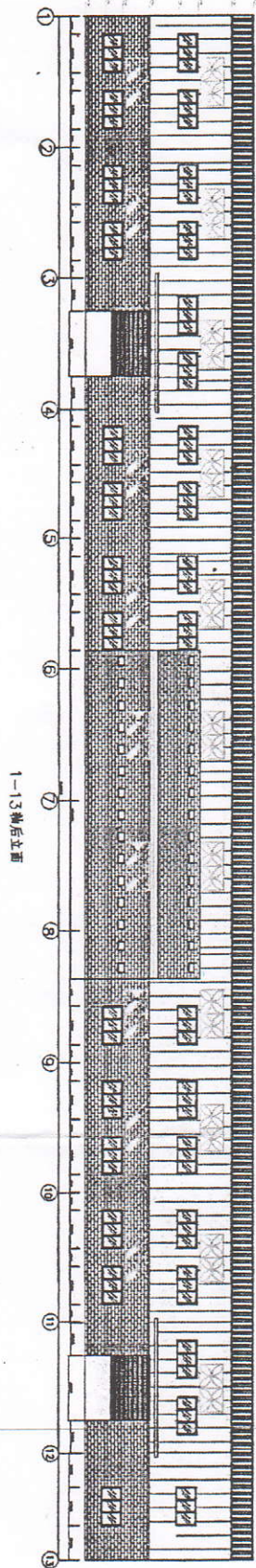
Shuttle Parking Area



Overall Plan

资 公 司		设计 公 司		图 纸 说 明		设计 图 号	
乔娜实业 (缅甸) 有限公司		中兴钢结构建筑工程有限公司		整体平面布置图		乔娜001	
工程名称		项目名称		审核		日期	
乔娜实业 (缅甸) 有限公司瓦拉瓦工厂		整体平面图					





## Front and rear Facade analysis renderings

### 一、说明:

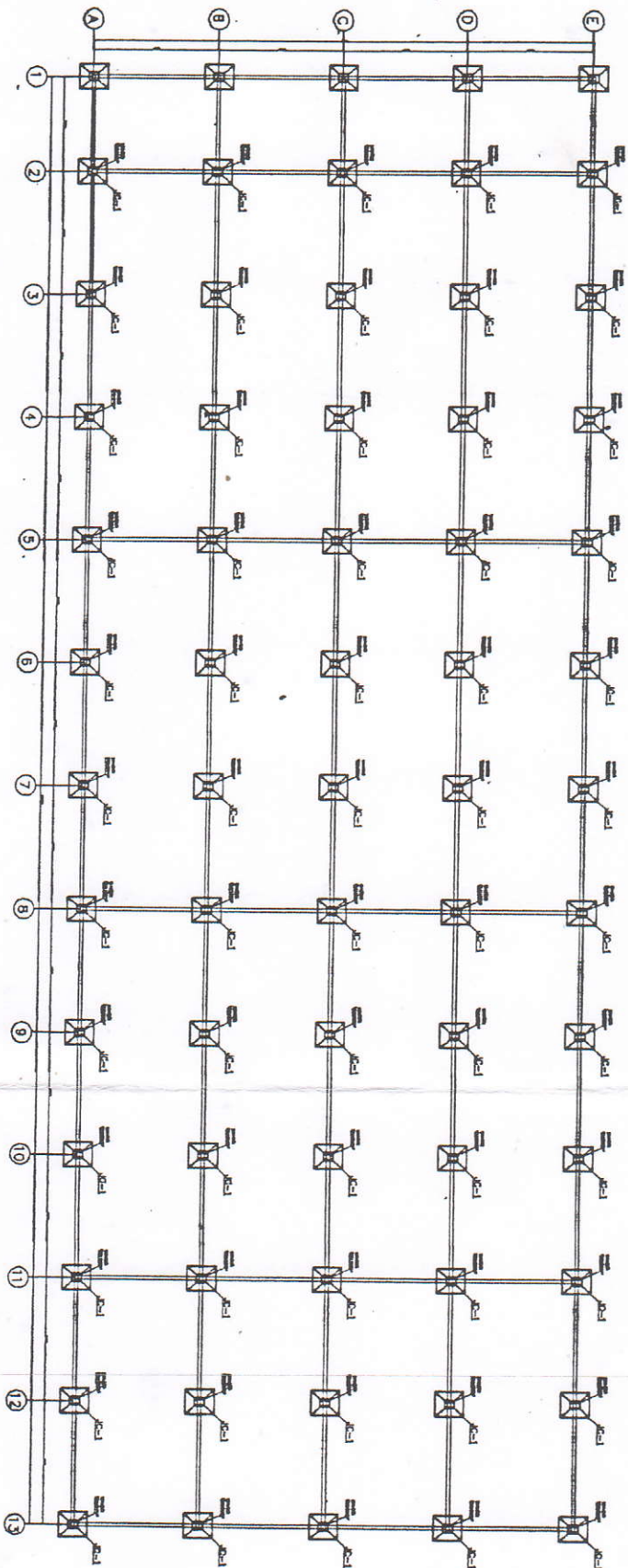
- 1、本工程地面标高+4000mm内, 墙体为240厚红砖块红砖块, 砌筑的砂浆等级不低于M5混合砂浆。
- 2、地面标高+4000mm至+9000mm之间采用840型暗黄色彩钢瓦单板, 厚度为0.426mm
- 3、本图尺寸单位为毫米
- 4、我公司因有实体工厂在仰光, 所以可以将单瓦机设备运至工地生产, 保证无接点, 更利于防水处理和防锈处理
- 5、外门采用4000mm\*4000mm镀锌管双开门
- 6、筒采用型钢筒1200mm\*2350mm

投资 公司	乔娜实业 (缅甸) 有限公司	设计 公司	中兴钢结构建筑工程有限公司	工程名称		图纸 说明	前后立面分板效果图	设计		图号	乔娜003
				项目名称	乔娜实业 (缅甸) 有限公司及地源工厂二车间			审核	比列		
				二车间					日期		









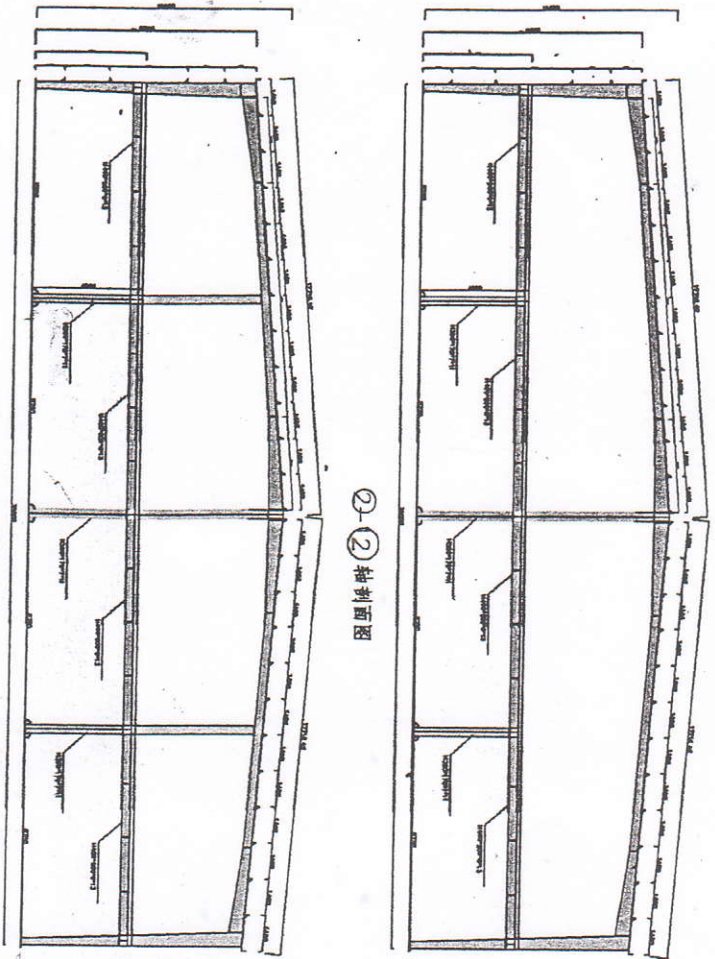
# Foundation Circle

一、说明:

- 1、本工程采用独立基础,基础的混凝土为C25
- 2、垫层用C25混凝土,厚度为100mm
- 3、本图尺寸单位为毫米
- 4、短柱核心与基础核心重合
- 5、基础圈梁标高为+50mm
- 6、预留柱的锚固密度及其形式和底层柱的锚固相同

投资公司		设计公司		工程名称	图纸说明	设计	图号	乔娜009
乔娜实业(缅甸)有限公司		中兴钢结构建筑工程有限公司		项目名称	基础圈梁平面布置图	审核	比例	
				二车间			日期	



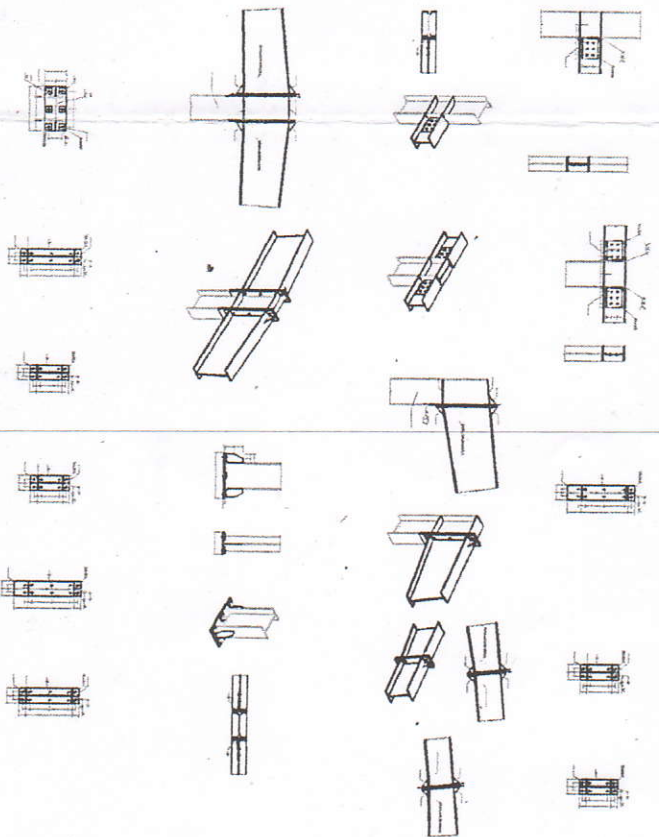


②-② 轴立面图

①-① 轴立面图

## Side Facade Steel Frame renderings

- 说明:
- 1、本工程前后墙裙内地面标高+9000mm, 檐高11400mm
  - 2、本图尺寸单位为毫米
  - 3、主钢柱为H400\*200\*8\*13 (国Q235B)
  - 4、抗风柱为H350\*175\*7\*11 (国Q235B)
  - 5、主钢梁为H400\*200\*8\*13 (国Q235B)
  - 6、次钢梁为H350\*175\*7\*11 (国Q235B)
  - 7、所有连接板均为 (Q345B) 钢板, 规格不等



投资公司		设计公司		中兴钢结构建筑工程有限公司		工程名称		乔娜实业 (缅甸) 有限公司瓦排亚工厂二车间		图纸说明		制立面钢架效果图		设计		图号		乔娜004	
乔娜实业 (缅甸) 有限公司		设计公司		中兴钢结构建筑工程有限公司		项目名称		二车间		说明		制立面钢架效果图		审核		日期			

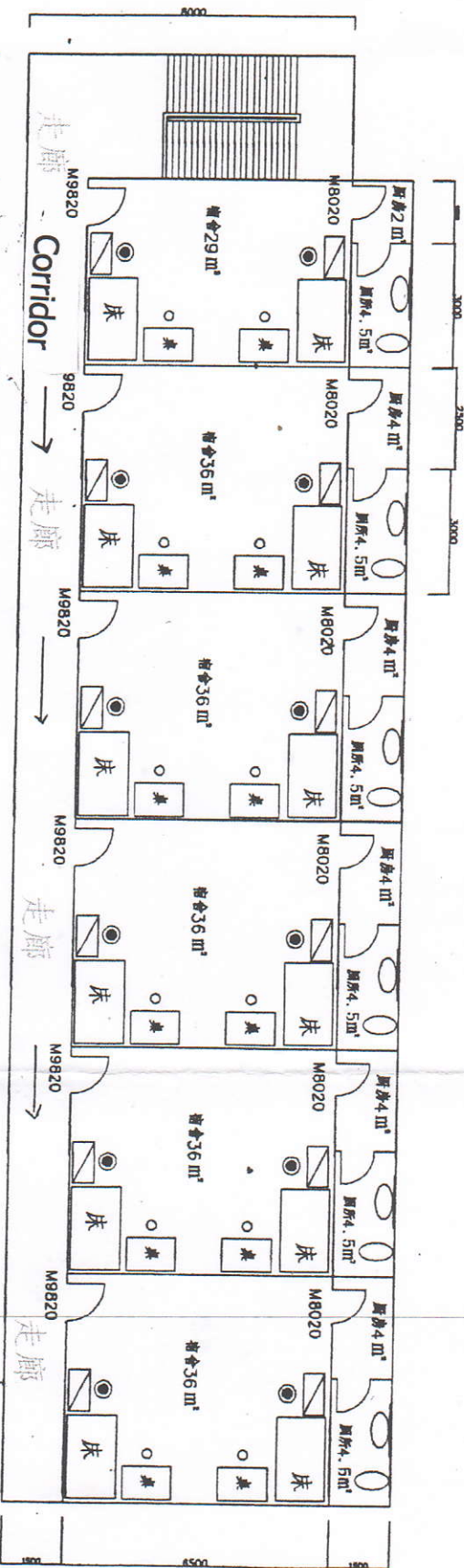












Second Floor Plan

投资公司		设计公司		中兴钢结构建筑工程有限公司		工程名称		项目名称	
乔娜实业（缅甸）有限公司						乔娜实业（缅甸）有限公司瓦拉基工厂二楼图		宿舍楼	







Appendix E :  
Environmental Quality Monitoring Report: Ambient  
Air, Noise Level and Water Quality Analysis Result

# **MOUNTAIN TOP GLOBAL LTD.**

## **ENVIRONMENTAL QUALITY MONITROING REPORT**

30<sup>th</sup> September, 2021

**Prepared by**



**HEXAGONAL ANGLE INTERNATIONAL CONSULTANTS CO., LTD.**

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Yangon, Myanmar.  
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Email: [info@hexagonalangle.com](mailto:info@hexagonalangle.com)  
Website: [www.hexagonalangle.com](http://www.hexagonalangle.com)

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# CHAPTER 1

## ENVIRONMENTAL QUALITY MONITORING REPORT

### 1.1. INTRODUCTION

Environmental quality monitoring was conducted by Hexagonal Angle Consulting Team upon request of Mountain Top Global Co., Ltd. at the project area which is located at Shwepyithar Township on 25<sup>th</sup> September, 2021. The environmental quality monitoring includes outdoor air quality measurement, temperature, humidity, noise measurement and water quality testing. During that day, the average temperature was 30.2°C and humidity was 76.6%.

Outdoor air quality, temperature and humidity are measured by using the OCEANUS-AQM09 device. The detailed information of the measurement devices is mentioned in the **APPENDIX**.

#### 1.1.1. Overview of the Project Area

The Project Site is located in No. (176), Bo Taik Chun Street, Myay Tine (49) Ward, Wartayar Industrial Zone, Shwepyithar Township, Yangon Region. The factory is located in North latitudes 16° 59' 1.39" and East longitudes 96° 3' 11.23". Location map of the project area is as shown in Figure 1-1.

Since the project factory is located at the Wartayar Industrial Zone and, its neighborhood is bordered by other factories and undeveloped areas and factories around the project area.

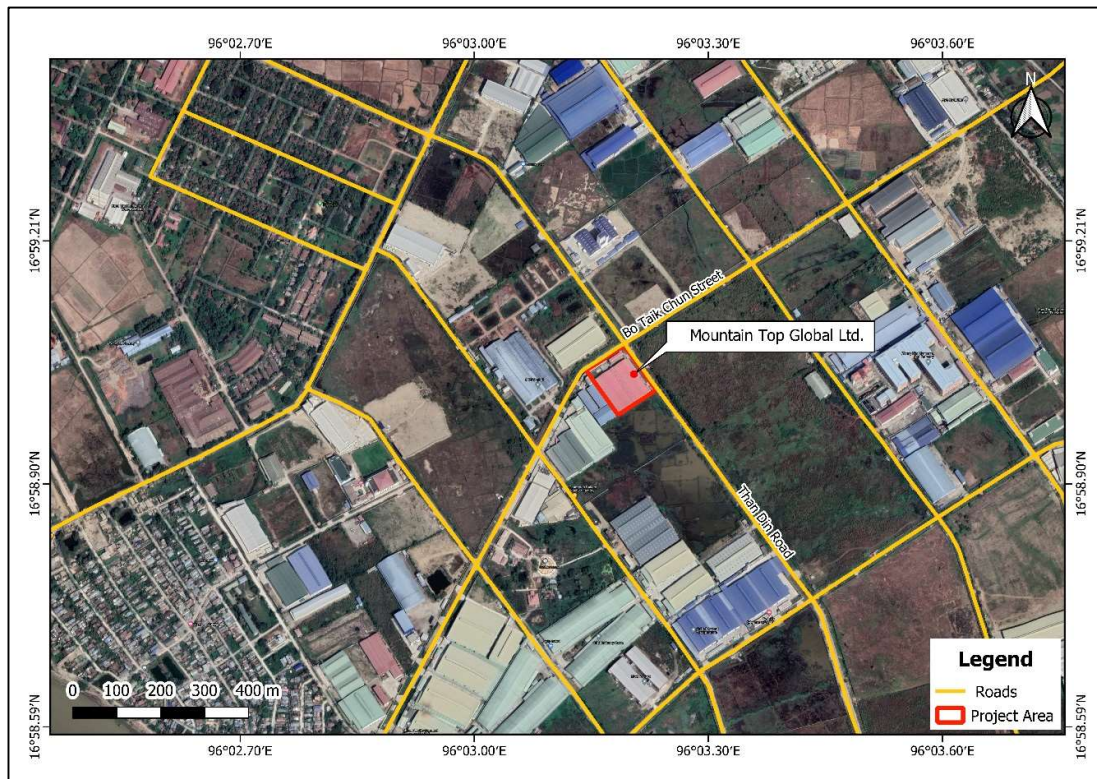
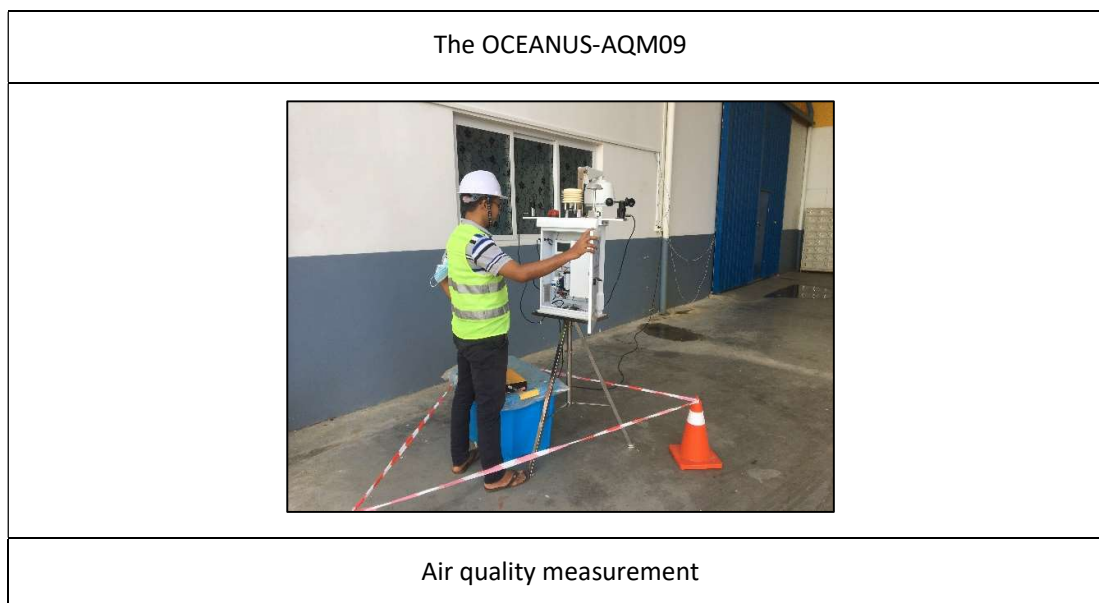


Figure 1-1 Overview Map of the Project Area







**Figure 1-3 Air Quality Monitoring (25<sup>th</sup> September 2021)**

The emission of harmful gaseous pollutants in the atmosphere is a major health issue. The shoe operations will be generated the different kinds of air pollution, depending upon the kinds of fuels use in generator. In the project factory, there are currently generator using for the production process. Therefore, the 24-hr measurements of air quality are performed by the consultants during the field trip in 25<sup>th</sup> September 2021 as displayed in Figure 1-3. These measurements were made in accordance with the guidelines of National Environmental Quality (Emission) Guidelines in the project site area. The measured parameters are dust (PM<sub>10</sub> and PM<sub>2.5</sub>), gas (NO<sub>2</sub>, CO, SO<sub>2</sub>, O<sub>3</sub>), total suspended particulate (TSP), relative humidity, air pressure and temperature etc., for outdoor air quality. Both results of the study and guidelines are as shown in Table 1-1.

According to the result, Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>) are under standard guidelines, making environment safe for the workers. Moreover, parameters such as Nitrogen Dioxide (NO<sub>2</sub>), Sulphur Dioxide (SO<sub>2</sub>) and Carbon Monoxide (CO) are 3.42 µg/m<sup>3</sup>, 8 µg/m<sup>3</sup> and 0.3 ppm respectively and it is under standard guidelines. The rest parameters are also agreed with the standard limitations as shown in Table 1-1.

**Table 1-1 Results of the Ambient Air Monitoring Measurement**

No.	Parameter	Recorded Period	Result	Unit	Average Period		WHO Guideline Value	NEQG* Guideline Value
1	Particulate Matter PM <sub>10</sub>	24-hr	16.9	µg/m <sup>3</sup> µg/m <sup>3</sup>	1 24	Year Hour	-	*20 µg/m <sup>3</sup> *50 µg/m <sup>3</sup>
2	Particulate Matter PM <sub>2.5</sub>	24-hr	11.74	µg/m <sup>3</sup> µg/m <sup>3</sup>	1 24	Year Hour	25µg/m <sup>3</sup>	*10 µg/m <sup>3</sup> *25 µg/m <sup>3</sup>

No.	Parameter	Recorded Period	Result	Unit	Average Period		WHO Guideline Value	NEQG* Guideline Value
3	Total Suspended Particulate (TSP)	24-hr	22.72	$\mu\text{g}/\text{m}^3$	24 Hours		NG	NG
4	Sulphur Dioxide ( $\text{SO}_2$ )	24-hr	8	$\mu\text{g}/\text{m}^3$ $\mu\text{g}/\text{m}^3$	10 24	Mins Hours	8 ppb	* 500 $\mu\text{g}/\text{m}^3$ * 20 $\mu\text{g}/\text{m}^3$
5	Nitrogen Dioxide ( $\text{NO}_2$ )	24-hr	3.42	$\mu\text{g}/\text{m}^3$ $\mu\text{g}/\text{m}^3$	1 1	Year Hour	21 ppb	*40 $\mu\text{g}/\text{m}^3$ *200 $\mu\text{g}/\text{m}^3$
6	Carbon Monoxide (CO)	24-hr	0.3	ppm	24 Hours		9 ppm	*150
7	Ozone ( $\text{O}_3$ )	24-hr	11.5	$\mu\text{g}/\text{m}^3$	8 Hours		NG	100
8	Relative Humidity	24-hr	76.6	%	24 Hours		NG	NG
9	Temperature	24-hr	30.2	$^{\circ}\text{C}$	24 Hours		NG	NG
10	Air Pressure	24-hr	1006.5	hPa	24 Hours		NG	NG
11	Wind Direction	24-hr	225	degree	24 Hours		NG	NG
12	Wind Speed	24-hr	0.15	m/s	24 Hours		NG	NG

\*National Environmental Quality (Emission) Guidelines (2015)

NG=No Guideline

### 1.2.2. Noise

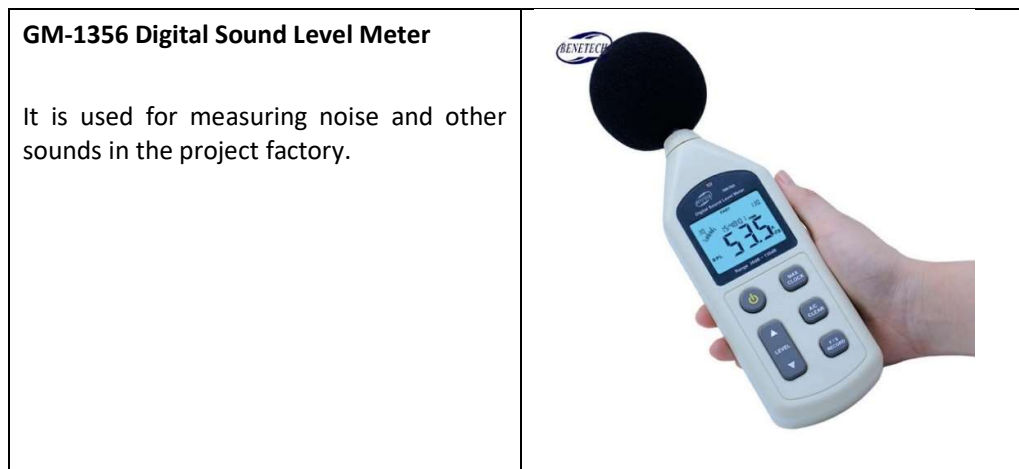
WHO has described noise pollution as an underestimated threat that can cause hearing loss, cardiovascular problems, cognitive impairment, stress and suffering from depression. Noise pollution can affect people in several ways, some of which includes cardiovascular diseases and sleep disturbances. MONREC (Ministry of Natural Resources and Environmental Conservation) has issued National Environmental Quality (Emission) Guidelines to provide the basis for regulations and control of noise level. Noise impacts should not exceed the levels presented in Table 1-2.

**Table 1-2 Noise Level Standard**

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

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

A reconnaissance survey of noise level measurements was made in the shoe factory in order to ensure and protect from the hazardous work environment. The data were collected on 25<sup>th</sup> September 2021. Noise measurements are needed to make in the factory as it helps in identifying work locations where there are noise problems, employees who may be affected, and in checking the compliance with noise regulations, noise control and community annoyance. It is also important to determine that if noise is a potential problem in the workplace. Equipment that is used to measure ambient noise measurement is as shown below in Figure 1-4. The stations which were made noise measurements are shown in Figure 1-5.

**Figure 1-4 Equipment Used to Measure Noise Levels**



**Figure 1-5 Noise quality measurement stations**

The measurements of noise quality were made in loading/unloading place between two production halls at the same time with the outdoor air monitoring. The measurement was made in between the two production factories because the operation is starting. However, there were no fully operation in the factory. Therefore, the measurement was made to know the noise pollution in the compound of the factory.

In measuring noise measurement, it is noted that minimum noise level is 44.7 dBA and 85.1 dBA at the maximum. There is no heavy activity in the loading/unloading place, except the generator is operating at the distance at that time for electricity to power outdoor air monitoring device and the average noise level is 64.25 dBA. Thus, the measurement was relevant to the standard noise level. The measurement result and the photo made in the field visit are shown in Figure 1-6, Figure 1-7 and the results are in Table 1-3.

**Table 1-3 Monitoring Measurement of Noise (dBA)**

No.	Measurement Place	Current activity during monitoring	Noise Level (dBA)			NEQG <sup>1</sup> standard	
			Day Time			Residential, Institutional, educational	Industrial, commercial
			Minimum dBA	Maximum dBA	Average dBA		
1	Loading/Unloading place	Generator is operating at the distance	44.7	85.1	64.25	55	70

<sup>1</sup>National Environmental Quality (Emission) Guidelines, 29 Dec 2016

\*Average equivalent for one hour  
\*\*Average maximum for one hour

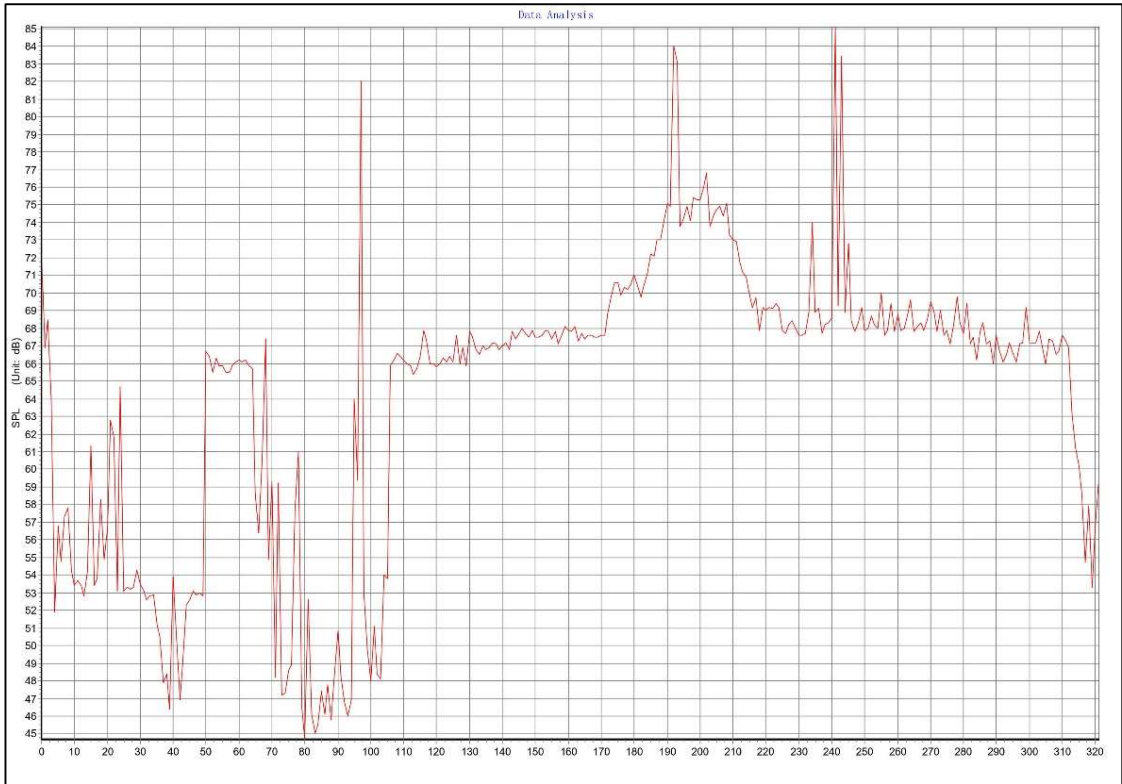


Figure 1-6 Noise Level Graph of the Factory

Table 1-4



Loading/Unloading Place

Figure 1-7 Noise Level Measurement in the Factory

1.2.3. Water Quality

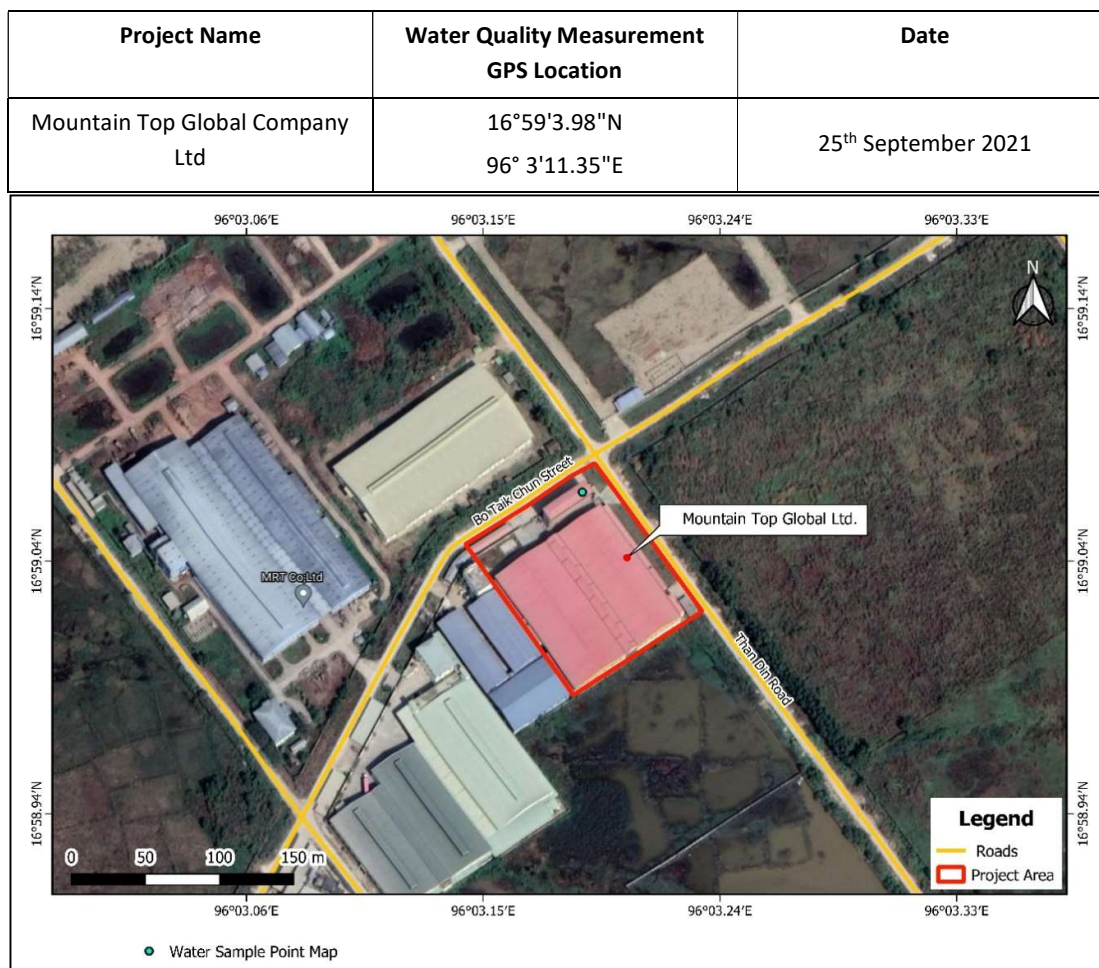
The production process does not produce waste-water, therefore water sample was collected from drinking water pipe for workers, shown in Figure 1-8. The process was conducted on 25<sup>th</sup> September 2021 then sent to the laboratory. As the result, pH level of water is neutral stage and the other parameters such as Chloride, Conductivity, Manganese, Sulphate and other parameters are



under the guideline. Water sample collection map of Mountain Top Global Ltd. is shown in Figure 1-9. The result of water sample is as shown in Table 1-5 and original laboratory test result is attached in **Appendix B**.



**Figure 1-8** Water Sample Collected from Drinking Water Pipe



**Figure 1-9 Location of Water Sample**

**Table 1-5 Domestic Water Quality Result**

No.	Parameter	Result	Unit	Method	WHO Guideline Value	Remark
1	Acidity	11	mg/L	Titration Method	NA	-
2	Alkalinity	17	mg/L	Hanna (HI97104)- Alkalinity Photometer	NA	-
3	Bicarbonate	14.21	mg/L	Titration Method	NA	-
4	Calcium Hardness	1.96	mg/L	EDTA Titrimetric Method	NA	-

No.	Parameter	Result	Unit	Method	WHO Guideline Value	Remark
5	Carbonate	Nil	mg/L	Titration Method	NA	-
6	Chloride	14.49	mg/L	Argentometric Method	250 mg/L	Under the guideline
7	Color (True)	1	TCU	Hanna (HI 97727) -Color of water Portable Photometer	15 TCU	Under the guideline
8	Conductivity	104	μS/cm	Hanna (HI 991300) – pH, EC, TDS and Temperature Meter	2500 μS/cm	Under the guideline
9	Iron	Nil	mg/L	Phenanthroline Method	0.3 mg/L	-
10	Magnesium Hardness	1.96	mg/L	EDTA Titrimetric Method	NA	-
11	Manganese	0.007	mg/L	1 –(2-pyridylazo) 2-Naphthol (PAN) Method	0.4 mg/L	Under the guideline
12	P-Alkalinity	Nil	mg/L	Hanna (HI97104) – Alkalinity Photometer	Na	-
13	PH	6.65	-	Hanna (HI 2211)- pH and Temperature Meter	6.5-8.5	Agree with the guideline
14	Phosphate	Nil	mg/L	Ascorbic Acid Method	500 mg/L	-
15	Salinity	26.18	mg/L	Argentometric Method	NA	-

No.	Parameter	Result	Unit	Method	WHO Guideline Value	Remark
16	Sodium Chloride	23.89	mg/L	Argentometric Method	NA	-
17	Sulphate	<2	mg/L	USEPA SulfaVer 4 Method	250 mg/L	Under the guideline
18	Total Dissolved Solids	69	ppm	Hanna (HI 991300) – pH, EC, TDS and Temperature Meter	1000 mg/L	Under the guideline
19	Total Hardness	3.92	mg/L	EDTA Titrimetric Method	500 mg/L	Under the guideline
20	Total Solids	79	mg/L	Calculation Method	NA	-
21	Total Suspended Solids	10	mg/L	Dried at 103 – 105° C	NA	-
22	Turbidity	Nil	NTU	Milwaukee (MI 415) – Turbidity Meter	5 NTU	-

\*WHO Guideline Value

NA=Not Available

**Appendix A**  
**Air Quality Results**



**Air Quality Sampling Result (လေအရည်အသွေးတိုင်းတာမှုရလဒ်)**

No. (စဉ်)	Parameter (အရည်အသွေး)	Recorded Period	Result (ရလဒ်)	Unit (ယူနစ်)	Average Period (ပျမ်းမျှကာလ)		*Guideline Value (ထုတ်လွှတ်မှုစံနှုန်း)
1	Particulate Matter PM <sub>10</sub>	24-hr	16.9	μg/m <sup>3</sup> μg/m <sup>3</sup>	1 24	Year Hour	*20 μg/m <sup>3</sup> *50 μg/m <sup>3</sup>
2	Particulate Matter PM <sub>2.5</sub>	24-hr	11.74	μg/m <sup>3</sup> μg/m <sup>3</sup>	1 24	Year Hour	*10 μg/m <sup>3</sup> *25 μg/m <sup>3</sup>
3	Total Suspended Particulate (TSP)	24-hr	22.72	μg/m <sup>3</sup>	24 Hours		NG
4	Sulphur Dioxide (SO <sub>2</sub> ) ဆာလဖာဒိုင်အောက်ဆိုဒ်	24-hr	8	μg/m <sup>3</sup> μg/m <sup>3</sup>	10 24	Mins Hours	* 500 μg/m <sup>3</sup> * 20 μg/m <sup>3</sup>
5	Nitrogen Dioxide (NO <sub>2</sub> ) နိုက်ထရိုဂျင်ဒိုင်အောက်ဆိုဒ်	24-hr	3.42	μg/m <sup>3</sup> μg/m <sup>3</sup>	1 1	Year Hour	*40 μg/m <sup>3</sup> *200 μg/m <sup>3</sup>
6	Carbon Monoxide (CO) ကာဗွန်မိုနောက်ဆိုဒ်	24-hr	0.3	ppm	24 Hours		NG
7	Ozone (O <sub>3</sub> )	24-hr	11.5	μg/m <sup>3</sup>	8 Hours		100
8	Relative Humidity စိုထိုင်းစ	24-hr	76.6	%	24 Hours		NG
9	Temperature အပူချိန်	24-hr	30.2	Degree Celsius	24 Hours		NG
10	Air Pressure	24-hr	1006.5	hPa	24 Hours		NG
11	Wind Direction	24-hr	225	degree	24 Hours		NG
12	Wind Speed	24-hr	0.15	m/s	24 Hours		NG

\*National Environmental Quality (Emission) Guideline 2015

NG=No Guideline

Analyzed by



Win Thein

Environmental & Transport Engineer  
Hexagonal Angle International Consultants Co., Ltd.

Checked by



Ei Ei Zaw

General Manager (Environmental & Social Specialist)  
Hexagonal Angle International Consultants Co., Ltd.

**Appendix B**  
**Water Quality Sampling Results**



### LABORATORY ANALYSIS REPORT

- 1 Client Name : Mountain Top Global Co.,Ltd
- 2 Location : No.176, Myay Tine Ward (49) Ward, Wartayar Industrial Zone,  
Shwepyithar Township, Yangon Region  
သံဒင်းရွေးလမ်းနှင့် ဗိုလ်တိုက်ချွန်းလမ်းထောင့်
- 3 Type of Sample : Drinking Water
- 4 Sample No. : 00299/2021
- 5 Contact Person : Ko Win Naing Oo
- 6 Phone No. : 09-898333722
- 7 Date Received : 25.09.2021
- 8 Date of Test Performed : 27.09.2021
- 9 Date of Issued : 29.09.2021
- 10 Result :

No.	Parameter	Result	Unit	WHO STD 2018	Method
1	Acidity	11.00	mg/L	NA	Titration Method
2	Alkalinity	17	mg/L	NA	Hanna (HI97104) - Alkalinity Photometer
3	Bicarbonate	14.21	mg/L	NA	Titration Method
4	Calcium Hardness	1.96	mg/L	NA	EDTA Titrimetric Method
5	Carbonate	Nil	mg/L	NA	Titration Method
6	Chloride	14.49	mg/L	250 mg/L	Argentometric Method
7	Color (True)	1	TCU	15 TCU	Hanna (HI 97727) - Color of water Portable Photometer
8	Conductivity	104	μS/cm	2500 μS/cm	Hanna (HI 991300)-pH,EC,TDS and Temperature Meter
9	Iron	Nil	mg/L	0.3 mg/L	Phenanthroline Method
10	Magnesium Hardness	1.96	mg/L	NA	EDTA Titrimetric Method
11	Manganese	0.007	mg/L	0.4 mg/L	1-(2-pyridylazo)2-Naphthol (PAN) Method
12	P-Alkalinity	Nil	mg/L	NA	Hanna (HI97104) - Alkalinity Photometer
13	pH	6.65	-	6.5-8.5	Hanna (HI 2211)-pH and Temperature Meter



### LABORATORY ANALYSIS REPORT

- 1 Client Name : Mountain Top Global Co.,Ltd
- 2 Location : No.176, Myay Tine Ward (49) Ward, Wartayar Industrial Zone,  
Shwepyithar Township, Yangon Region  
သံဒင်းရွေးလမ်းနှင့် ဗိုလ်တိုက်ချွန်းလမ်းထောင့်
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- 7 Date Received : 25.09.2021
- 8 Date of Test Performed : 27.09.2021
- 9 Date of Issued : 29.09.2021
- 10 Result :

No.	Parameter	Result	Unit	WHO STD 2018	Method
14	Phosphate	Nil	mg/L	500 mg/L	Ascorbic Acid Method
15	Salinity	26.18	mg/L	NA	Argentometric Method
16	Sodium Chloride	23.89	mg/L	NA	Argentometric Method
17	Sulphate	< 2	mg/L	250 mg/L	USEPA SulfaVer 4 Method
18	Total Dissolved Solids	69	ppm	1000 mg/L	Hanna (HI 991300)-pH,EC,TDS and Temperature Meter
19	Total Hardness	3.92	mg/L	500 mg/L	EDTA Titrimetric Method
20	Total Solids	79	mg/L	NA	Calculation Method
21	Total Suspended Solids	10	mg/L	NA	Dried at 103 - 105°C
22	Turbidity	Nil	NTU	5 NTU	Milwaukee (MI 415) - Turbidity Meter

**Remark:**

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

**Tested By**

Name : HTET HTET KYAW  
Position : Laboratory Technician  
Signature :

**Approved By**

Name : MAY THU ZAW MYINT  
Position : Chief Technical Officer  
Signature :



LAB-FO-024-00

Appendix F :  
Overview of Policy, Legal and Institutional Framework for  
Footwear Project



## 1 OVERVIEW OF THE POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK

The following section provide an extracted section concerning regulatory requirements that will be applicable to the Project and national guidelines that are of relevance to the proposed Project.

### 1.1 CORPORATE ENVIRONMENTAL AND SOCIAL POLICIES

The Project Proponent will develop an Environmental Policy which includes the company's commitments to health, safety and environment. This Policy is now preparing.

#### 1.1.1 Policies

Myanmar has developed a Goals and Policies to uplift the country's economy in all aspects. The relevant are described in Table 1.1 and the Project Proponent commits to support to meet these goals.

**Table 1.1 Myanmar Relevant Policies**

Policies	Descriptions
The National Environment Policy, 2019	<p>As per Clause 7 in this Policy, there builds on Myanmar's 1994 National Environmental Policy and reaffirms its core values:</p> <ul style="list-style-type: none"> <li>• The wealth of the nation is its people, its cultural heritage, its environment and its natural resources.</li> <li>• It is the responsibility of the State and every citizen to preserve our natural resources in the interests of present and future generations.</li> <li>• Environmental protection should always be the primary objective in seeking development.</li> </ul> <p>In order to meet the visions, the Government of the Republic of the Union of Myanmar adopts the following 23 National Environmental Policy principles as the guiding framework for achieving: a clean environment and healthy, functioning ecosystems; sustainable economic and social development; and the mainstreaming of environmental protection and management:</p> <p><i>The project proponent wishing to implement the project to align with this policy and comply the rules and regulations in order to support this.</i></p>
Myanmar Climate Change Policy, 2019	<p>This is established with the vision to be a climate-resilient, low carbon society that is sustainable, prosperous and inclusive, for the wellbeing of present and future generations.</p> <p>In Clause 12, there clearly set-up a guiding principles for</p> <ul style="list-style-type: none"> <li>• Sustainable development</li> <li>• Precaution</li> <li>• Prevention</li> <li>• Environmental integrity</li> <li>• Shared responsibility and cooperation</li> <li>• Inclusiveness</li> <li>• Good governance</li> <li>• Climate justice and equity</li> <li>• Gender equality and women's empowerment</li> </ul> <p><i>The project proponent commits to support the Government in order to meet the above-mentioned principles</i></p>
The Constitution of the Republic of the Union of Myanmar, 2008	<p>The Constitution of the Union of Myanmar is the supreme law of the country and has provisions regarding the protection of the environment in Myanmar.</p> <p><i>The Project Proponent commits to comply as these three Articles in the Constitution provide a basis for legalising and institutionalising environmental health impact assessment and social impact assessment.</i></p>

	<p>There stipulates that:</p> <ul style="list-style-type: none"> <li>• The Union is the ultimate owner of all lands and all natural resources above and below the ground, above and beneath the water and in the atmosphere in the Union; The Union shall enact necessary law to supervise extraction and utilization of State owned natural resources by economics forces (Article 37 (a,b));</li> <li>• The Union shall protect and conserve natural environment (Article 45).</li> <li>• Every citizen has the duty to assist the Union in carrying out the following matters: <ul style="list-style-type: none"> <li>▪ preservation and safeguarding of cultural heritage;</li> <li>▪ environmental conservation;</li> <li>▪ striving for development of human resources;</li> <li>▪ protection and preservation of public property (Article 390).</li> </ul> </li> </ul>
--	---

## 1.2 MYANMAR LEGAL FRAMEWORK

Environmental legislation and arrangements for environmental conservation in Myanmar are developing rapidly. The laws governing for environmental conservation, impact assessment, procedures and relevant section have been explored in section 1.2.1 and section 1.2.2. The Project Proponent will comply all the rules and regulations that have been prescribed in Myanmar with good practices.

### 1.2.1 Myanmar Legislation Relevant to the Project

Laws related to environmental and social issues and hence relevant to the EIA Study for the proposed Project are included in *Table 1.2*.

**Table 1.2 Myanmar Legislation and Relevance to Project**

Laws and Regulations	Description
<b>The Environmental Conservation Law, 2012</b>	
	<ul style="list-style-type: none"> <li>▪ Section 7(O) states that the Ministry to manage a proponent to provide compensation for environmental impact and contribute funds.</li> <li>▪ Section 14 states for the requirement of emissions to the environment to meet stipulated environmental quality standards.</li> <li>▪ Section 15 states for the requirement of proponent to provide onsite controlling equipment to monitor, control, manage, reduce or eliminate pollutants, or if impracticable, arrange environmentally-sound disposal.</li> <li>▪ Section 23&amp;24 mentions the need for prior permission from the Ministry for the business that have been categorized for causing impact on the environmental quality and right to issuing permit with terms and conditions relating to environmental conservation after scrutinizing.</li> <li>▪ Section 29 provides that the proponent shall not violate any prohibition contained in the rules, notifications, orders, directives and procedures under the Environmental Conservation Law.</li> </ul>
<b>The Environmental Conservation Rules, 2014</b>	
The Ministry of Natural Resources and Environmental Conservation, in exercise of power conferred under sub-section (a) of section 42 of the Environmental Conservation Law, issues this rules by No. 50 of 2014 on the date of 5 June, 2014.	
Section 56	The person who carries out any project, business or activity shall arrange and carry out for conducting the environmental impact assessment for any project, business or activity by a qualified third person or organization accepted by the Ministry.
Section 69	Any person shall not emit, cause to emit, dispose, cause to dispose, pile and cause to pile, by any means, the pollutants and the hazardous waste or hazardous material stipulated by notification under the Law and any of these rules at any place which may affect the public directly or indirectly.

Laws and Regulations	Description
	Any person shall not carry out to damage the ecosystem and the natural environment which is changing due to such system, except for carrying out with the permission of the Ministry for the interest of the people.
<b>EIA Procedure(2015)</b>	
The EIA Procedure sets out the procedures for completing an IEE, EIA and/or EMP in Myanmar. This includes information on project categorisation, responsibilities of project developers and ministries, EIA review, monitoring and auditing, among other issues.	
Section 102 to 105, there prescribed responsibility for adverse impacts,	
<ul style="list-style-type: none"> <li>▪ <i>The proponent has to bear full legal and financial responsibility for actions and omissions and those of other related to the project proponents.</i></li> <li>▪ <i>That proponent has responsible to support programs for livelihood restoration and resettlement in consultation with all stakeholders.</i></li> <li>▪ <i>And the proponent has full responsibility to implement the EMP, the requirements set forth in ECC, Project commitments and conditions when providing services to the Project and inform the Ministry with detailed information as to the propose project's potential adverse impacts.</i></li> </ul>	
Section 106 to 110, regarding for the monitoring, <i>the project proponent has responsible to undertake comprehensive self-monitoring</i>	
<ul style="list-style-type: none"> <li>▪ to notify and identify in writing to the Ministry for any breaches of its obligations or other performance failures or violations of the ECC and EMP</li> <li>▪ to submit monitoring reports to the Ministry</li> <li>▪ to submit the monitoring report within ten (10) days of completing a monitoring report and the information to be included.</li> </ul>	
Section 113,115, 117, there stipulated, for the purposes of monitoring and inspection, the event of emergency, the proponent has the responsibilities to	
<ul style="list-style-type: none"> <li>▪ grant the ministry and/or its representatives;</li> <li>▪ grant the Ministry access to any places relating to project activities;</li> </ul>	
<b>National Environmental Quality (Emissions) Guidelines (2015)</b>	
The NEQ guidelines set out emission standards for air, noise and effluent discharges for oil and gas terminal operations. The project shall consider emissions standards in its environment impact assessment and environmental management plan.	
<b>Myanmar Investment Law, 2016, The Pyidaungsu Hluttaw Law No. 40/2016</b>	
<ul style="list-style-type: none"> <li>▪ Section (50)(d), it is stipulated that the investor have to register the land lease contract at the office of Registry of Deeds in accordance with the Registration Act.</li> <li>▪ Section (51), it is mentioned for appointment, replacement, providing for the employment of staff and workers, ensuring to comply the entitlements and rights in the labor laws and rules, settling dispute regarding HR issues.</li> <li>▪ Section (65), regarding for responsibilities of investors, it is prescribed as that the investor have to <ul style="list-style-type: none"> <li>▪ respect and comply with the customs, traditions and traditional culture of the ethnic groups in the Union (a);</li> <li>▪ inform to the Commission if it is found that natural mineral resources or antique objects and treasure trove are not related to the investment permitted(e);</li> <li>▪ not make any significant alteration of topography or elevation of the land on which is entitled to lease or to use, without the approval of the Commission(f).</li> <li>▪ abide by applicable laws, rules, procedures and best standards practiced internationally for investment(g);</li> <li>▪ list and keep proper records of books of account and financial statement(h);</li> <li>▪ pay wages and salaries to employees in accordance with applicable laws, rules, procedures, directive and so forth during the period of suspension of investment for a credible reason(j);</li> <li>▪ shall pay compensation and indemnification in accordance with applicable laws to the relevant employee or his successor for injury, disability, disease and death due to the work(k);</li> <li>▪ supervise foreign experts, supervisors and their families, who employ in their investment, to abide by the applicable laws, rules, orders and directives, and the culture and traditions of Myanmar(l);</li> </ul> </li> </ul>	

Laws and Regulations	Description
	<ul style="list-style-type: none"> <li>▪ respect and comply with the labor laws(m);</li> <li>▪ have the right to sue and to be sued in accordance with the laws(n);</li> <li>▪ allow the Commission to inspect in any places, when the Commission informs the prior notice to inspect the investment(p);</li> <li>▪ take in advance permit or endorsement of the Commission for the investments which need to obtain prior approval under the Environmental Conservation Law and the procedures of environmental impact assessment, before undertaking the assessment, and shall submit the situation of environmental and social impact assessment to the Commission along the period of activities of the investments which obtained permit or endorsement of the Commission (q).</li> </ul>
<b>Myanmar Investment Rules, Notification no. 35/2017</b>	
	<ul style="list-style-type: none"> <li>▪ Section 202, stated that the investor shall comply with all terms and conditions in the permit and other applicable laws when the investment is carried out.</li> <li>▪ Section 206, stated that if the investor desires to appoint expert foreigner as senior manager, technical and operational expert or advisor according to subsection (a) of the section 51 of the Law, he shall submit the application attached with passport, expertise evidence or degree certificate and summary of biography of such foreigner to the Commission and obtain the approval.</li> </ul>
<b>The Import and Export Law, 2012</b>	
	<ul style="list-style-type: none"> <li>▪ Section 7, states that a person who obtained any license shall not violate the conditions contained in the license.</li> </ul>
<b>The Forest Law (2018)</b>	
The Forest Law is enacted by Pyihtaungsu Hluttaw in September, 2018. It empowers, to declare for the reserved forest for the maintaining a sustained yield of the forest produce, to manage the forest land.	
	<ul style="list-style-type: none"> <li>▪ Section 12(a), mentioned that it needs prior approval from the Ministry if desirous to implement the development work or economic project within a forest land and forest covered land. <ul style="list-style-type: none"> <li>▪ (c) Whoever desirous to undertake as in sub-section (a), has to comply the Environmental Conservation Law and the stipulations from respective Laws.</li> </ul> </li> </ul>
<b>Conservation of Water Resources and Rivers Law (2006)</b>	
In Section (11)(a), (19), it outlines prohibitions for the following activities:	
	<ul style="list-style-type: none"> <li>▪ No person shall dispose of engine oil, chemical, poisonous material and other materials which may cause environmental damage, or dispose of explosives from the bank or from a vessel which is plying, vessel which has berthed, anchored, stranded or sunk.</li> <li>▪ No one shall dispose of any substance into the river creek that may cause damage to waterway or change of watercourse from the bank or vessel.”</li> </ul>
The empowerment of this Law is provided to the Ministry of Transport for controlling navigation of vessels in the rivers and creeks as well as communicating with local and foreign government and organizations for conservation of water resources, rivers and creeks. Also, to carry out conservation works for water resources, rivers and creeks, in accordance with the relevant international conventions, regional agreements and bilateral agreements for environmental conservation.	
<b>The Protection and Preservation of Antique Objects Law (2015)</b>	
	<ul style="list-style-type: none"> <li>▪ Section 12 states that the person who finds any object which has no owner or custodian, needs to inform the relevant Ward or village-tract administrator if he knows or it seems reasonable to assume that the said object is an antique object.</li> <li>▪ Section 13 states a procedure to inform and the responsibility to inspect whether it is a real ancient monument or not and keep or cause to protect as may be necessary in accordance with the stipulation</li> </ul>
<b>The Protection and Preservation of Ancient Monuments Law (2015)</b>	
	<ul style="list-style-type: none"> <li>▪ Section 12 states that a person who finds an ancient monument over one hundred years old under the water or above ground shall promptly inform the relevant Ward or Village-Tract Administrative Office.</li> <li>▪ Section 13 states a procedure to inform and the responsibility to inspect whether it is a real ancient monument or not and keep or cause to protect as may be necessary in accordance with the stipulation.</li> <li>▪ Section 20 states no one shall damage ancient monuments including using machinery which causes vibration and discharging chemical substance.</li> </ul>
<b>Myanmar Fire Force Law, 2015</b>	

Laws and Regulations	Description
	<p>The relevant government department or organization shall obtain the opinion of the Fire Services Department for the purpose of fire precaution and prevention, when laying down plans for construction for town, village and downtown or village development plans.</p> <p>According to Section 25: The factory, workshop, highway bus, airport, jetty, hotel, motel, guest house, collective-owned building, market, work-site or business exposed to fire hazard of the owner or manager shall;</p> <ul style="list-style-type: none"> <li>(a) Not fail to form the reserve fire brigade</li> <li>(a) Not fail to provide materials and apparatuses for fire safety; in conformity with the directive of the Fire Services Department</li> </ul>
	<p><b>Prevention from Danger of Hazardous Chemical and Associated Material Law (Pyidaungsu Hluttaw Law No 28/2013)</b></p> <ul style="list-style-type: none"> <li>▪ Chapter 7 – “Any person, who wants to do the business of chemical and associated materials, shall apply to the central body for the acquisition of the license, attached with the management plan for the environmental conservation in accord with the stipulations”.</li> <li>▪ Chapter 8 – “20. License holder shall apply to the central supervising body in accord with the stipulation for the relevant chemicals and associated materials using for his chemicals and associated materials business” for a certificate.</li> <li>▪ “22. The registered certificate holder shall abide by the regulations contained in the registered certificate and shall follow the order and directives issued from time to time by the central supervising body”.</li> <li>▪ Section 15 states that a) before works, license holder shall be inspected by the relevant supervising and inspection team for safety and machinery/equipment check and b) The persons who are discharging the duty shall be asked to attend foreign training or preventative trainings conducted by government departments and organisations.</li> <li>▪ Section 16 provides that licence holders shall a) follow the licence regulations, b) follow directives on safe handling and shall ask workers to strictly follow c) shall provide necessary safety equipment and issue free personal protective equipment to workers, d) provide training in occupational safety e) determine the hazard to the environment, people and animals f) provide fit for work medical check-up and keep records g) send permission letter to Department of Township Administration if the chemicals and associated material are permitted to store h) acquire in advance guidance and agreement from fire service department if using inflammable materials or explosives i) transport only the permitted amount of chemicals in accordance with prescriptive stipulations j) obtain approval of central supervising body if transporting chemical and associated material from the permitted region to any other region h) abide and operate in accordance with related environmental laws to avoid impacts and damage to the environment.</li> <li>▪ Section 17 states the licence holder must have insurance in accordance with stipulations in case of compensation is required for losses related to people, animals and environment.</li> <li>▪ Section 23 states the registered certificate holder shall apply again for using chemical which are not in the registered list.</li> <li>▪ Section 27 states the license holder shall a) classify the hazard level of chemicals and related substances in advance b) show Material Safety Data Sheet and warning signage c) provide safety equipment, personal protective equipment and training on their use d) possess, transport, store, use and discharge chemicals and related materials in accordance with stipulations, e) not import or export chemicals and related materials banned by the central supervising board.</li> </ul>
	<p><b>Myanmar Insurance Law (1993)</b></p> <p>The Myanmar Insurance is established under this Law as a legal entity having perpetual succession, capable of suing and being sued in its own name. The rules for establishing insurances in the country are established.</p> <ul style="list-style-type: none"> <li>▪ Section 15 states it is compulsory for owners of motor vehicles to have Third Party Liability Insurance with Myanmar Insurance</li> <li>▪ Section 16 states it is compulsory for organisations operating as an enterprise which may cause damage to life and property of the public or may pollute the environment to have General Liability Insurance with the Myanmar Insurance.</li> </ul>
	<p><b>The Law On Standardization (2014)</b></p> <p>This is for the reducing the technological barriers for the trade and supportive for the development</p>



Laws and Regulations	Description
	international free trade zone and for the development of Myanmar economy and social, the standardization will utilize for the smoothness of technology transfer and invention. There it empowers to organize the council for setting up the policy, guideline and to implement to practice the national standard in respective production and service.
<b>Motor Vehicle Law (2015)</b>	
	This is for reducing environmental pollution caused by motor vehicles and the Department has the right to issue directives, the standards, guidelines for the purposes of improving, manufacturing, assembling, maintaining to be safe in accident and environment conservation.
<b>Public Health Law, 1972</b>	
	The project owner will cooperate with the authorized person or organization in line with the section 3 and 5 of said law.
	<ul style="list-style-type: none"> <li>• Section 3: The project owner will abide by any instruction or stipulation for public health.</li> <li>• Section 5: The project owner will accept any inspection, anytime, anywhere if it is needed.</li> </ul>
<b>The Protection and Prevention of Communicable Disease Law, 1995</b>	
	<ul style="list-style-type: none"> <li>• Section 3 of Chapter 2 states that the Department of Health will carry out immunisations and health education activities related to communicable diseases</li> <li>• Section 4 of Chapter 2 states that the Department of Health will carry out immunisation or other measures in the event of a Principal Epidemic Disease or a Notifiable Disease occurs and the public will abide by the measures.</li> <li>• Section 9 of Chapter 5 of this law states that all persons are responsible for reporting an outbreak of a communicable disease to the nearest Health Officer.</li> <li>• Section 11 of Chapter 6 states that Health Officer may undertake investigations and medical examinations to prevent the control the spread of Principal Epidemic Disease.</li> </ul>
<b>The Control of Smoking and Consumption of Tobacco Product Law, 2006</b>	
	Chapter (6), Section (9), states that the person-charge has to keep the caption and mark referring that it is a non-smoking area, arrange the specific place where smoking is allowed and keep the caption and mark also referring that it is a specific place where smoking is allowed, supervise and carry out measures so that no one shall smoke at the non-smoking area and accept the inspection when the supervisory body comes to the place for which he is responsible.
<b>Employment and Skill Development Law, 2013</b>	
	5. (a) (1) If the employer has appointed the employee to work for an employment, the employment agreement shall be made within 30 days. But it shall not be related with government department and organization for a permanent employment.
15. The Project Proponent	
(a)	shall carry out the training for each work or compounding the work individually or group-wise by opening on-job training, training systematically at worksite, sending outside training and training by using information technology system, for arranging the training program to enhance the employment skill of the workers;
(b)	appointing the youths of 16 years as apprentice, shall arrange the training for technology relating to the employment systematically in accord with the regulations prescribed by the skill development team.
<b>The Settlement of Labour Dispute Law, 2012</b>	
	The Pyidaungsu Hluttaw hereby had enacted 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.
	<ul style="list-style-type: none"> <li>• Section 38 provides that no employer will fail to negotiate and coordinate in respect of a complaint within the prescribed period without sufficient cause</li> <li>• Section 39 provides that no employer shall alter the conditions of service of workers involved in disputes prior to investigation by tribunals</li> <li>• Section 40 provides that no party shall strike or lock-out without negotiation, conciliation and arbitration by Arbitration Body.</li> <li>• Section 51 provides that employer if commits acts without sufficient cause, may be liable to pay full compensation to workers as determined by Arbitration Body or Tribunal.</li> </ul>
<b>The Workmen Compensation Act, 1923 (amended 2005)</b>	

Laws and Regulations	Description
	<p>The Workmen's compensation act had been promulgated in 1923, amended in 2005, to provide for the payment by certain classes of employers to their workmen of compensation for injury by accident. There it clearly described for the liability for compensation of employer's, amount of compensation, compensation to be paid when due and penalty for default, method of calculating wages, review, commutation of half-monthly payments, payment of a lump sum amount, distribution of compensation, compensation not to be assigned, attached or charged, notice and claim, power to require from employers statements regarding fatal accidents, reports of fatal accidents and serious bodily injuries, medical examination, contracting, remedies of employer against stranger, compensation to be first charge on assets transferred by employer, special provisions relating to masters and seamen. The amendment law is for revising the monetary amount to update.</p>
	<p><b>Labour Organization Law, 2011</b></p>
	<p>This Law was enacted, to protect the rights of the workers, to have good relations among the workers or between the employer and the worker, and to enable to form and carry out the labour organizations systematically and independently.</p> <ul style="list-style-type: none"> <li>• Section 17 provides that Labour Organisations are free to organise and negotiate workers rights if not meeting labour laws.</li> <li>• Section 18 provides that Labour Organisations may demand re-appointment of worker if cause of dismissal is related to labour organisation membership or activities or not conform with labour laws.</li> <li>• Section 19 provides that Labour Organisations have the right to send representatives to conciliation tribunals.</li> <li>• Section 20 provides that Labour Organisations have the right to participate and discuss workers rights and interests with government and employers</li> <li>• Section 21 provides that Labour Organisation have the right to participate in collective bargaining in accordance with labour laws.</li> <li>• Section 22 provides that Labour Organisation may take collective actions in accordance with the relevant procedures, regulations and law.</li> </ul>
	<p><b>Minimum Wages Law, 2013</b></p>
	<p>This Law was enacted to meet with the essential needs of the workers, and their families, who are working at the commercial, production and service, agricultural and livestock breeding businesses and with the purpose of increasing the capacity of the workers and for the development of competitiveness.</p> <ul style="list-style-type: none"> <li>• Section(12), (a-e), it is stipulated that the employer shall not pay wage less than the minimum wage stipulated, not have the right to deduct any other wage;</li> <li>• Section(13) (a-g), it is stipulated that the employer shall inform rates of minimum wage relating to the business, allow the entry and inspection of the inspection officer, give the sick worker holiday for medical treatment in accord with stipulation and give holiday for the matter of funeral of the family of worker without deducting from the minimum wage.</li> </ul>
	<p><b>Payment of Wages Law, 2016</b></p>
	<p>Salaries are to be paid at the end of the month or, depending on the size of the employing enterprise, between 5-10 days before the end of the month. The employer is permitted and required to withhold income tax and social security payments. Other deductions, e.g. for absence, may only be withheld in accordance with the law.</p> <ul style="list-style-type: none"> <li>• Section 3: The employer (a) will pay for salary either Myanmar Kyats or Foreign Cash permitted by National Bank of Myanmar. When delivery the salary (b) If the employer needs to pay the other opportunities or advantages, he can pay cash together with other materials according employee's attitude.</li> <li>• Section 4: When the contract finish, employer need to pay the salary (not more than one month) to employees. For the permanent worker, need to pay per monthly. If more than 100 employees, need to pay within the 5 days from the end of month. If fire the employees, need to pay salary within two days after fire. When employee dies due to the accident, need to pay money as an insurance to employee's family within two days.</li> <li>• Section 5: If the employer has difficulties to pay wages on time because of significant events (eg natural disaster), the employer must report to the Department with evidence of payment at later date agreed with the employee.</li> <li>• Section 9: When cut the salary due to the employees' absence, total cut salary not more than 50 % of his salary.</li> </ul>

Laws and Regulations	Description
<ul style="list-style-type: none"> <li>Section 10: Employer need to approval form the department as a penalty and cannot more than actual ravage rate when cut salary. No cut salary from the employees under 16 age.</li> <li>Section 14: If an Employee carries out overtime work, he/she must be allowed the presiding overtime rate as set by the Law.</li> </ul>	
<b>Social Security Law, 2012</b>	
The Establishments Applied this regulations as guiding body for better social providing for mine workers. The prescriptions most relevant to the project are:	
<ul style="list-style-type: none"> <li>Section 18 (b), it is stipulated that the employer can deduct contributions to be paid by worker from his wages together with contribution to be paid by him and pay to the social security fund and in such case he can incur the expense.</li> <li>Section 51: The employer (a) shall pay contribution monthly to Employment Injury Benefit Fund at the rates stipulated under section 50. Moreover he shall also bear the expenses for paying as such; (b) shall pay defaulting fee stipulated under section 88, in addition to the contribution if fails to contribute after effecting insurance for employment injury benefit.</li> <li>Section 53 ( a) The employers and workers shall co-ordinate with the Social Security Board or insurance agency in respect of keeping plans for safety and health in order to prevent employment injury, contracting disease and decease owing to occupation and in addition to safety and educational work of the workers and accident at the establishment;</li> <li>Section 54 - The employer shall report to the relevant township social security office immediately if a serious employment accident occurs to his insured worker. There shall not be any delay without sufficient cause to report as such. A team of officers and other staff who inspect the establishments, if it is found out the employment injury, death, and contracting disease, shall report to the relevant township social security office in accord with the stipulations.</li> <li>Section 75, there it is clearly prescribed for keeping records of work and lists.</li> </ul>	
<b>Law protecting Ethnic Right, 2015</b>	
This is for the Equal right between the Ethnic living in Myanmar. It enacted that if an ethnic loose the right, he can complain to the Regional or State Government to get the equal chance and find the equal right.	
<ul style="list-style-type: none"> <li>Section 5 of Chapter IV provides that project matters shall be informed, coordinated and undertaken in consultation with ethnic groups if projects are in areas with ethnic groups.</li> </ul>	
The Succeeding laws to protect the right of Myanmar national similar in nature to this are	
<p><b>1. Monogamy Law (2015):</b> Concerning all those who are living in Myanmar, Myanmar Citizens who live outside of Myanmar, and foreigners who marry Myanmar citizens while living in Myanmar for preventing misconducting marriages.</p>	
<p><b>2. Buddhist Women Special Marriage Law (2015):</b> Concerning the marriage between Buddhist Woman and other religious man. There prescribed the legal procedure, the conditions to be complied by non-Buddhist husband, the customs for dividing property when divorcing.</p>	
<p><b>3. Religious Conversion Law (2015):</b> This is enacted for the freedom to convert from one religion to another, or a person without a religion has the freedom to convert to a religion. There prohibited to apply for a religious conversion with an intent to insult, disrespect, destroy, or abuse a religion.</p>	
<p><b>4. Population Control Healthcare Law (2015);</b> This is for alleviate poverty, provide adequate quality healthcare, and ensure that family planning improves maternal and child health in the country. This Empowers region or state government that concerned with the special zone for healthcare to form region or state population control healthcare group to implementing the task as per the directives of the Ministry and region or state government and the Union Territory Governing body.</p>	
<b>Leaves and Holidays Act, 1951</b>	
Under the Leave and Holidays Act (1951), every employee shall be granted paid public holidays as announced by the Government in the Myanmar Gazette. On average, Myanmar has 26 public holidays per year, depending on the date of the variable holidays. Myanmar law recognizes various types of leave. Leave is governed by the Leave and Holidays Act (1951), but additional rules may apply in accordance with other	

Laws and Regulations	Description
	laws, such as the Social Security Law (2012) for employees contributing to the Social Security Fund.
<b>Occupational Safety and Health, 2019 (Pyidaungsu Hluttaw Law No.8.2019)</b>	
<p>The Project Proponent commits to comply for:</p> <ul style="list-style-type: none"> <li>• Responsibilities of the employers and the employee</li> <li>• Responsibilities of the manufacturer, traders, installation or deployment, and construction and demolition</li> <li>• Information/Notice, investigation and reporting</li> </ul>	

### 1.2.2 *International Agreements and Treaty*

Relevant international conventions to which Myanmar is a signatory include those related to waste management, biodiversity conservation and labor conventions. The key international conventions of relevance to the Project are included in *Table 1.3*.

**Table 1.3 International Conventions of Relevance to the Project**

Legislation	Relevance	Ratification Status (in Myanmar)	Project Compliance
<b>Environmental</b>			
Vienna Convention for the Protection of the Ozone Layer 1988 and Montreal Protocol on Substances that Deplete the Ozone Layer 1989	Not relevant to the Project as the Project will not use any ozone depleting substances.	Accession 16 <sup>th</sup> Sep 1998 (Vienna) & Accession 24 <sup>th</sup> Nov 1993 (Montreal)	The Project commits not to utilize ozone depleting substances.
Convention on Biological Diversity 1992	The Project will not be undertaken in habitats for biodiversity.	Ratified 25 <sup>th</sup> Nov 1994	The Project commits to comply as per Myanmar's
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal	The Project may generate hazardous wastes.	Entered into force 6 <sup>th</sup> April 2015	The Project commits to comply as per Myanmar's
United Nations Framework Convention on Climate Change 1992 (UNFCCC) and Kyoto Protocol 1997	The Project will form part of Myanmar's total emissions output.	Entered in force 23 <sup>rd</sup> Feb 1995 (UNFCCC) and 16 <sup>th</sup> Feb 2005 (Kyoto Protocol)	The Project commits to comply as per Myanmar's
Asia Least Cost Greenhouse Gas (GHG) Abatement Strategy (ALGAS) 1998	The Project will produce air emissions from the vessels.	1998	The Project commits to comply as per Myanmar's

**1.3 PROPONENT'S CONTRACTUAL AND OTHER COMMITMENTS**

The Project Proponent will comply with the Myanmar Environmental Conservation Law, Environmental Conservation Rules, Environmental Quality (Emission) Standards and all necessary international standards.

The Project commits to comply, undertake the following:

- The Project Proponent will comply with commitments, mitigation measures and management plans stated in this EMP report.
- The Project Proponent is responsible for its actions and omissions and those of its contractors, Sub-contractors, officers, employees, agents, representatives, and consultants employed, hired, or authorized by the company acting for or on behalf of the Project.
- Support programs for livelihood restoration and resettlement in consultation with the PAPs, related government agencies, and organizations and other concerned persons for all Adverse Impacts.
- Fully implement the EMP, all Project commitments, and conditions, and is liable to ensure that all contractors and subcontractors of the Project comply fully with all applicable Laws, the Rules, this Procedure, the EMP, Project commitments and conditions when providing services to the Project.
- Be responsible for, and shall fully and effectively implement, all requirements set forth in the ECC, applicable Laws, the Rules, this Procedure and standards.
- Timely notify and identify in writing to the Ministry, providing detailed information as to the proposed Project's potential Adverse Impacts.



- Respect and comply with the customs, traditions and traditional culture of the ethnic groups in the Union;
- Abide by the terms and conditions, stipulations of special licenses, permits, and business operation certificates issued to them, including the rules, notifications, orders, and directives and procedures issued by the MIC and the applicable laws, terms and conditions of contract and tax obligations;
- Carry out in accordance with the stipulations of the relevant department if it is, by the nature of business or by other need, required to obtain any license or permit from the relevant Union Ministries government departments and governmental organizations, or to carry out registration;
- Immediately inform the Commission if it is found that natural mineral resources or antique objects and treasure trove not related to the investment permitted above and under the land on which the investor is entitled to lease or use and not included in the original contracts.
- To inform the village administrative office and the Department of Historical Research if any historical thing is found during the project operations.
- Abide by the applicable laws, rules, procedures and best standards practiced internationally for this investment so as not to cause damage, pollution, and loss to the natural and social environment and not to cause damage to cultural heritage;
- Close and discontinue the investment only after payment of compensation to employees in accordance with applicable laws for any breach of employment contracts, closure of investment, sale and transfer of investment, discontinuation of investment, or reduction of workforce;
- Pay wages and salaries to employees in accordance with applicable laws, rules, procedures, directives and so forth during the period of suspension of investment for a credible reason;
- Pay compensation and indemnification in accordance with applicable laws to the relevant employee or his successor for injury, disability, disease and death due to the work;
- Supervise foreign experts, supervisors and their families, who employ in its investment, to abide by the applicable laws, rules, orders and directives, and the culture and traditions of Myanmar;
- Respect and comply with the labor laws;
- Have the right to sue and to be sued in accordance with the laws;
- Pay effective compensation for loss incurred to the victim, if there is damage to the natural environment and socioeconomic losses caused by logging or extraction of natural resources which are not related to the scope of the permissible investment, except from carrying out the activities required to conduct investment in a Permit or an Endorsement.
- Ensure equal rights for local workers and avoid salary bias, i.e. ensure that local and foreign workers have the same salary at the same level.
- Ensure that all foreign employees apply for the proper work permit and visa through the Myanmar Investment Commission (MIC).
- Provide rights and benefits including but not limited to, leave, holidays, overtime pay, compensation and social security. Most of the relevant particulars are in the Myanmar Companies Act.

- Settle disputes, within the law, between workers, employers, consulting experts or any other personnel involved in the business operation.

#### 1.4 INSTITUTIONAL FRAMEWORK

In Myanmar, matters pertaining to Health, Safety and Environment (HSE) requirements are generally under the jurisdiction of the ministries and state-owned enterprises. Key ministries and agencies that have jurisdiction over HSE matters in mining operations are included in *Table 1.4*.

**Table 1.4 Key Ministries and Agencies Involved in HSE**

Ministry/Agency	Responsibility
Ministry of Natural Resources and Environmental Conservation (MONREC)	The Environmental Conservation Department (ECD) of MONREC has ultimate responsibility in the review and approval, or otherwise, of submissions under the IEE/EIA process.
Myanmar Investment Commission (MIC)	MIC is a government agency responsible for coordinating with ministries (such as the MOEE) and other state entities to facilitate foreign investment in Myanmar. The MIC is also responsible for granting MIC permits which enable foreign investors to carry out business activities under the Myanmar Investment Law (2016).

#### 1.5 PROJECT'S ENVIRONMENTAL AND SOCIAL STANDARDS

MONREC has established environmental quality standards, the National Environmental Quality Emission Guidelines (2015)(NEQEG). The NEQEG provide the basis for regulation and control of noise and air emissions and effluent discharges from projects in order to prevent pollution and protect the environment and public health.

The Project Proponent will implement the project by complying as per NEQEG for all phases (construction, operation, disclosure and post-disclosure) where applicable.

In NEQEG guideline, there prescribe the limit for Tanning and Leather Finishing (2.3.2.2) in Garments, Textile and Leather Products (2.3.2). This guideline applies to textile manufacturing using natural fibers (made entirely from chemicals), and regenerated fibers (made from natural materials by processing these materials to form a fiber structure). It does not include polymer synthesis and natural raw material production.

##### 1.5.1 Effluent Levels

Effluent and storm water flows should be managed so as to achieve the following effluent levels as per prescribed in section (2.3.2) Garments, Textile and Leather Products; (2.3.2.2) Tanning and Leather Finishing.

**Table 1.5 NEQEG on Effluent Discharge Levels**

Parameter	Unit	Guideline Value
5-day Biological oxygen demand	mg/l	30
Adsorbable organic halogens	mg/l	1
Ammonia	mg/l	10
Cadmium	mg/l	0.02
Chemical oxygen demand	mg/l	160
Chromium (hexavalent)	mg/l	0.1

Chromium (total)	mg/l	0.5
Cobalt	mg/l	0.5
Color	m <sup>-1</sup>	7 (436 nm <sup>a</sup> , yellow) 5 (525 nm, red) 3 (620 nm, blue)
Copper	mg/l	0.5
Nickel	mg/l	0.5
Oil and grease	mg/l	10
Pesticides	mg/l	0.05-0.10 <sup>b</sup>
pH	S.U. <sup>c</sup>	6-9
Phenol	mg/l	0.5
Sulfide	mg/l	1
Temperature increase	°C	<3 <sup>d</sup>
Total coliform bacteria	100 ml	400
Total nitrogen	mg/l	10
Total phosphorus	mg/l	2
Total suspended solids	mg/l	50
Zinc	mg/l	2

<sup>a</sup>Nanometers

<sup>b</sup>0.05 mg/l for total pesticides (organophosphorus pesticides excluded), 0.10 mg/l for organophosphorus pesticides

<sup>c</sup>Standard unit

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

### 1.5.2 Air and Noise Emission

The principle sources of air emission are fugitive dust from earth works and materials handling and transport facilities. Prevention and control of air emissions should be sufficient to achieve the general air emission guideline for ambient air quality. The air emission parameters are taken from *Section 2.3.2.2. Tanning and Leather Finishing* and noise from *Section 1.3* of the NEQEG and shown in Table 1.6 and

Table 1.7 respectively.

**Table 1.6 Air Emissions Levels (for leather finishing)**

Parameter	Unit	Guideline Value µg/m <sup>3</sup>
Upholstery leather	kg of hazardous air pollutant	3.3
Water resistant/specially leather	loss per 100 m <sup>2</sup> of leather processed	2.7
Non-water resistant leather		1.8

**Table 1.7** *NEQEG Noise Level Parameters*

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

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

Appendix G :  
Commitment Letter of Project Proponent



# Mountain Top Global Ltd.

No.176 Thandin Street, Wartaya Woodbase zone ,Shwe Pyi Thar Township, Yangon, Myanmar PH:09-892962700,09-765380539

Date: August 2022

To  
Director  
Environmental Conservation Department (Yangon Region)  
Ministry of Natural Resources and Environmental Conservation  
Yangon, Myanmar

CC:  
Director General  
Ministry of Natural Resources and Environmental Conservation  
Office No.(53), Ottrathiri Township  
Nay Pyi Taw, Myanmar

**Subject:** Commitments of Environmental Management Plan (EMP) regarding the Mountain Top Footwear Production Factory Project in Shwe Pyi Thar Township, Yangon Region

**Ref:** (1) Letter No. EIA-2/general (Report Distribution ) (130/2022) of Environmental Conservation Department, Director General's Office with the date of 26-01-2022  
(2) Letter No. 3/3 (1) (1485/2022) of Environmental Conservation Department, Sittwe Township, Rakhine State with the date of 27-06-2022  
(3) Letter No. 3/3 (1) (1826/2022) of Environmental Conservation Department, Sittwe Township, Rakhine State with the date of 29-07-2022

Dear Sir,

We refer to the captioned EMP, which were prepared and finalized by National Engineering & Planning Services Co., Ltd in accordance with the Environmental Conservation Law, Rules and Procedures under the instructions of Ministry of Natural Resources and Environmental Conservation dated on December 29, 2015.

Intending to be legally bound hereby and financially liable to the Ministry of Natural Resources and Environmental Conservation hereunder, we:

Endorse and confirm to Ministry of Natural Resources and Environmental Conservation.

- a. The accuracy and completeness of the content of EMP,
- b. Confirm and undertake to Ministry of Natural Resources and Environmental Conservation that the EMP have been prepared in strict compliance with applicable Environmental Conservation Law, Rules and Procedures including Environmental Impact Assessment Procedure: Paragraph 76 (2015), and other related laws and regulations for the type of project, and
- c.
- d. Confirm and undertake to Ministry of Natural Resources and Environmental Conservation that the project established by YACHENG FOOTWEAR COMPANY LIMITED in respect of the FOOTWEAR PRODUCTION FACTORY PROJECT shall at all times comply fully with:
  - (i) any and all commitments and obligations as set second in the EMP and

# **Mountain Top Global Ltd.**

**No.176 Thandin Street, Wartaya Woodbase zone ,Shwe Pyi Thar  
Township, Yangon, Myanmar PH:09-892962700,09-765380539**

(ii) any and all plans and the various components thereof, including without limitation, impact avoidance, mitigation, and remediation measures, and with respect to both (i) and (ii), including

(iii) but not limited to such commitments, obligations, plans and measures as relate to the development, construction, commissioning, operation and maintenance of the project, and any circumstance in which work done or to be done, or services performed or to be performed, in connection with the project's development, construction, commissioning, operation and maintenance is carried out or intended or required to be carried out by any contractor, subcontractor or other party.

The issuance of this confirmation and undertaking has been duly authorized by all necessary corporate actions and a copy of the resolution of the Board of Directors authorizing it and the power of attorney explicitly granting signing authorization to the individual who has signed below are attached as schedules hereto.

\_\_\_\_\_  
[Name and Position of Authorized Person of Developer]

  
**MR. YANG JU-HSUEH**  
**DIRECTOR**  
**MOUNTAIN TOP GLOBAL LIMITED.**