The Environmental Impact Assessment undertaken by Kaung Kyaw Say Engineering Co.,Ltd for Manufacturing and Assembly of Motor Vehicles Project, implemented by Gold AYA Motors International Group Co.,Ltd located at Plot No.B-1-1 of Block Factory Area Zone 2C, Myotha Industrial Park Between Myotha and Nabu Aine village, total land area (20.084)Acres in Ngazun Township, Myingyan District, Mandalay Division Region, Union of Myanmar,

# Gold A Y A Motors International Group Co.,Ltd





Scoping Report Approved 18-11-2020 Original Submission 28-7-2018

Project Proponent Gold AYA Motors International Group Co.,Ltd Plot No.B-1-1 of Block Factory Area Zone 2C, Myotha Industrial Park Between Myotha and Nabu Aine village, Ngazun Township, Myingyan District of Mandalay Division Region, Union of Myanmar Mobile 09264808234, email: myatnoeoo.0412@gmail.com

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#### **Comment Response Table**

ပတ်ဂန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန၊မန္တလေးတိုင်းဒေသကြီး၏(၈-ղ-၂ဂ)၂၄)ရက်စွဲပါစာအမှတ်အီးအိုင်အေ-၂/၆/ဂုအီးအိုင်အေ (၅၅၆/၂ဂ)၂၄)အရ Gold A Y A Motors International Group Co.,Ltd ၏မော်တော်ယာဉ်အမျိုးမျိုးတပ်ဆင်ထုတ်လုပ်သည့်စီမံကိန်းအတွက် ပတ်ဂန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းအစီရင်ခံစာအား သဘောထား မှတ်ချက်ပြန်ကြားခြင်းအပေါ် ဖြေကြားချက်များ။

စဉ်	RT Meeting $\wp$ Member	အကြံပြုချက်	ာ်များအ	ပေါ်ပြင်ဆင်တင်ပြ		အပေါ်ပြင်ဆင်ခြင်းမရှိသည့်အ		ပြင်ဆင်တင်ပြချက်	
_ <u>₽</u>	များ၏သဘောထားမှတ်ချက်၊	၁	ပည့်အး	ချက်များ	တွက်ပြင်ဆင်တင်ပြရန်အချက်များ			မြင်္သေင်င်နှင်မြေျက်	
၁	အကျဉ်းချုပ်အစီရင်ခံစာ								
	အစီရင်ခံစာ၌အခြားဆောင်ရွက်နိုင်သေ	အခြားဆောင်	င်ရွက်နိ	င်သောနည်းလမ်း	စိစစ်သုံးသပ်ရေး	အဖွဲ့ ဂင်များ၏သဘောထားမှ	အရြာ	းနည်းလမ်းများကိုပိုမိုပြည့်စုံစွာဖော်ပြအပ်ပါ	
	ာနည်းလမ်းများနှင့်စပ်	အားယေဘူပ	ညူသာဖ	ဖော်ပြထားပါသည်။	တ်ချက်အတိုင်းဖြ	ည့်စွက်ဖော်ပြ ရန်၊		။စာ(၁ဂ) (၃၅)	
	လျဉ်း၍ထည့်သွင်းဖော်ပြရန်၊								
	ပတ်ပန်းကျင်အကြောင်းဖော်ပြ ချက်	ဖော်ပြထားမှု	မရှိပါ။		စိစစ်သုံးသပ်ရေး	အဖွဲ့ ဂင်များ၏သဘောထား	ဖြည့်စွ	ဂှက်ဖော်ပြအပ်ပါသည်။	
	တွင် Physical Component နှင့်စပ်				မှတ်ချက်အတိုင်း	ဖြည့်စွက်ဖော်ပြ ရန်၊	စာ ( :	၁၃ )၊ စာ( ၃၇ )	
	လျဉ်း၍ လေ၊ဆူညံသံ၊ မြေအရည် အ								
	သွေးတို့အတွက် တိုင်းတာထား သည့်								
	ရလဒ်များကို စံချိန်စံညွှန်း နှင့် နှိုင်းယှဉ်								
	ဖော်ပြထားသည့် ဇယားပုံစံဖြင့် ထည့်								
	သွင်းဖော်ပြ ရန်၊								
	စာမျက်နှာ ၂၇ စောင့်ကြပ်ကြည့်ရှုမှုအ စီး	အစဉ်အားဇယ	ားဖြင့်	NO2, SO2 တို့ အား	<b>—</b> •	Monitoring Point အတွက် P	Point	NO2 , SO2 Parameter ကိုဖြည့်စွက်အပ်	
	ထည့်သွင်းထားရာ ၄င်းဇယားပါ လေအရ			တိုင်းတာထားသော်ဖ		of Compliance ကိုတည်နေရ	-	ပါသည်။တိုင်းတာမည့်နေရာများကိုနေရာအ	
	SO2 Parameter အားထည့် သွင်းတိုင်းဝ			မည့် တည်နေရာဖေ		မည်၊ ကိုဩဒိနိတ်အမှတ်ဖြင့်တ	၁ိကျ	တိ အကျဖော်ပြအပ်ပါသည်။ စာ (၂၃)	
	အတွက် မည်သည့်အတွက်ကြောင့် ထည့်			ရုံအတွင်းနှင့် ပတ်ပန်		စွာဖော်ပြ ရန်၊		စာ(၄၇)(၁၈၁)	
	မပြုကြောင်းကိုထည့်သွင်း ဖော်ပြရန်နှင့် (		နေရာ	ဖော်ပြထားပြီး လတ္တီ				လမ်းညွှန်မှုအတိုင်းတည်နေရာအမည်၊	
	၌ လည်း Construction Site ဟုသာယေ	ဘူယျဖော်ပြ		ကျူဖော်ပြသည့်နေရ	ာသည်ညောင်ဦး			ကိုဩဒိနိတ် အမှတ်ဖြင့်တိကျစွာဖော်ပြ	
	ခြင်းအစား၊ နေရာအတိအ ကျဖြင့်ထည့်သွင်းဖော်ပြရန်၊ မြို့ နယ်တွင်		မြို့ နယ်တွင်ကျရော	ာက်နေပါသည်။			အပ်ပါသည်။		
	အများပြည်သူသို့သတင်းအချက်အလက်ဖ			EIA အတည်ပြုပြီး ပါ	EIA Procedure အပိုဒ် ၆၁ အပိုဒ်ခွဲ (က) EIA			လိုက်နာဆောင်ရွက်ထားပါသည်။	
	တင်ပြခြင်း၌(၂)ကြိမ်ထုတ်ပြန်ထားကြောင်း (GAD, က Website တွင်ထုတ်			• • — •	Procedure အပိုဒ် ၆၅ အရအများပြည်သူ သို့			အထောက်အထားအားနောက်ဆက်တွဲတွင်	
	MMID)ဟုဖော်ပြထားသော်လည်း၄င်းထုဖ	<u>ာ်ပြ</u> န်ထား	မည်ဟု	ဖော်ပြထားပါသည်။	သတင်းအချင	သတင်းအချက်အလက်ထုတ်ဖော်တင်ပြပြီးအ		ဖော်ပြထားပါသည်။ စာ (၁၉၇)	

	သည့်အထေက်အထားများကိုထည့်သွင်း၊	ဖော်ပြရန်၊	ထောက်အထားများကိုထည့်သွင်းဖော်ပြရန်၊	
J	နိုဒါန်း	·		ပြင်ဆင်ရန်မရှိပါ။
9	မူဂါဒ၊ဥပဒေနှင့်အဖွဲ့အစည်းဆိုင် ရာမူဘော	<b>ာ</b> င်၊		ပြင်ဆင်ရန်မရှိပါ။
9	စီမံကိန်းအကြောင်းအရာဖော်ပြချက်နှင့်အ	ပြင်ဆင်ရန်မရှိပါ။		
9	အနီးပတ်ဂန်းကျင်အကြောင်းအရာများဖေ	<b>ာ်</b> ချက်။		
	လေအရည်အသွေးအား ၃ မိုင် ပတ်	Comment Response Table ဖော်ပြ	စိစစ်သုံးသပ်ရေးအဖွဲ့ ပင်များ၏သဘောထား	စိစစ်သုံးသပ်ရေးအဖွဲ့ ပင်များ၏သဘော ထားမှတ်
	လည်လေ့လာမှု၌ ၅ နေရာ သတ်မှတ်	ချက်တွင် Project Affected Area	မှတ်ချက်အတိုင်းဖြည့်စွက်ဖော်ပြရန်၊	ချက်အတိုင်း Report တွင်ဖော်ပြ အပ်ပါသည်။
	ကာတိုင်းတာရသည့် အကြောင်းရင်းကို	အဖြစ်သတ် မှတ်ထားသဖြင့် တိုင်းတာ		စာ ( ၁၀၄ )
	ထည့်သွင်း ဖော်ပြရန်၊ တိုင်းတာမှတ်	<u>ခြ</u> င်း ဖြစ်ကြောင်း ဖော်ပြ ထားသော်		၃မိုင်ပတ်လည်အတွင်း၅နေရာသတ်မှတ်ရခြင်းသည်
	(၅) ခု၏ နေရာ များအား Google Map	လည်း Report တွင်ဖော်ပြမှု မရှိပါ။		Project Affected Area အဖြစ် သတ်မှတ်ထား
	ပေါ်၌ ထည့်သွင်းဖော်ပြရန်၊ တိုင်းတာ		မှန်ကန်သည့်တိုင်းတာမှု Point တည်နေရာ	ခြင်းသာဖြစ်ပြီး တိုင်းတာသည့်နေရာသည် ထိခိုက်မှု
	အမှတ်နေရာ (၁) တွင် PM2.5, PM10	တိုင်းတာမှုအမှတ်(၅) ခုအား Google	ဖော်ပြရန်နှင့် Goodle Map ပေါ် ၌ထည့်သွင်း	ဖြစ်နိုင်ခြေများ ထဲမှ စက်ရုံ ပင်းအတွင်း ၌သာတိုင်း
	တန်ဖိုးသည် NEQEG တန်ဖိုးထက်နှစ်	Map တွင်ထည့်သွင်း ဖော်ပြမှုမရှိပါ၊	ဖော်ပြရန်၊	တာ ထားပြီး တိုင်းတာသည့်နေရာများကို Google
	ဆနီးပါး ကျော်လွန်ရှင်း လင်းစွာထည့်			Map ဖြင့် ဖော်ပြအပ်ပါသည်။ စာ ( ၁၀၀)၊(၁၀၅)၊
	သွင်းဖော်ပြရန်၊		လေအရည်အသွေးတိုင်းတာမှုနှင့် စပ် လျဉ်း၍	တိုင်းတာရရှိသည့်တန်ဖိုးသည်သတ်မှတ်စံ ချိန်ထက်
		Season နှင့် Dry Season (၂)	Representative Time and Location	ကျော်လွန်နေ ခြင်းကို လေတိုက် အချိန်ဖြစ်သော
		ရာသီတိုင်းတာ ထားကြောင်း၊ဖော်ပြ	ဖြစ်သည့်သာ မန်အချိန်တွင် ပြန်လည်တိုင်းတာ	ကြောင့်လေတွင်းမှဖုန်များပါဂင်နိုင်ပါသည်။ သာမန်
		ထားပြီး၊ Guideline Value ထက်	ဖော်ပြရန်၊	အချိန်သည်မည် သည့်အချိန်ဖြစ် သည်ကိုဖော်ပြ
		ကျော်လွန်မှုအားရှင်းလင်းချက်တွင်		ရန်လိုပါသည်။ လေမတိုက်သောအချိန်ကိုဆိုလိုပါ
		``တိုင်းတာချိန်တွင် လေတိုက်ခိုက်မှုရှိ		ကအဆိုပါအချိန်ကိုသိရှိရန်လက်တွေ့ တွင်မဖြစ်
		ပြီးလေတွင်းဖုန်ပါ ပင်မှုကြောင့်"ဟူ		နိုင်ပါ။
		သောရှင်းလင်း ချက်ဖြင့်တင်ပြထားပါ	Deining Correspond	Daining Co
		သည်။ ထို့ ပြင်တိုင်းတာမှု Result အား	Raining Season နှင့် Dry Season (၂)	Raining Season နှင့် Dry Season (၂) ရာသီအ
		Season (၂) ခုလုံးကို ကိုယ်စား	ရာသီအတွက်တိုင်းတာ ဖော်ပြ ထားခြင်းရှိမရှိ၊	တွက်တိုင်းတာမှုကို Remark တွင်ဖော်ပြအပ်ပါ
		ပြုရြင်းရှိ၊မရှိ Remark တွင်ရှင်း	Remark တွင်ရှင်းလင်း ဖော်ပြရန်၊	သည်။ စာ ( ၁၀၆ )
		လင်းဖော်ပြရန်လိုအပ်ပါသည်။		တိုင်းတာမှုကိုမူလတစ်ကြိမ်နှင့်သဘော ထားမှတ် ချက်အရတစ်ကြိမ် ပေါင်း(၂) ကြိမ်တိုင်းတာထားပြီး
				ဖြစ်သဖြင့် Season (၂) ခုလုံးကိုကိုယ်စားပြုပါသည်။

			စာ (၁၀၆)(၁၀၇)	
			Season	Period
			Raining Season	Jun-July 2019
			Dry Season	April,2018
	စာမျက်နာ ၉၈			
	နေရာဖော်ပြချက်မှာ လုပ်ငန်းနှင့် သက်	ကွဲလွဲချက်များအပေါ် ရှင်းလင်းချက်ဖြင့်ဖော်ပြ	Table 38 The Air Qualit	y Management &
	ဆိုင်မှုမရှိသည့် ညောင်ဦးမြို ့နယ်	ရန်၊	Comparism with NFQEO	G တွင်ဖော်ပြထားသည့်
	တည်နေရာဖြစ်နေသည် ကိုစိစစ်တွေ		Air Quality Result Parar	
	ရှိရပါသည်။ စာ မျက်နာ ၉၈ ဇယားနှင့်		Coordinate အမှတ် များဝ	ူညီမှုမရှိရြခင်းသည်၊Dry
	စာမျက် နာ ၁၀၂ Table 38 The Air		Season တိုင်းတာ	
	Quality Management &		ချိန်သည်ဆောက်လုပ်ရေးဂ	ဘာလဖြစ်ခြင်းကြောင့်ပြင <u>်</u>
	Comparism with NEWEG တွင်ဖော်		ပတွင်သာတိုင်းတာရပြီး W	et Seasen တိုင်းတာ
	ပြထားသည့်Air Quality Result		ချိန်တွင်စက်ရုံပြီးစီးနေသဖြ	
	Parametersများ၏Dataနှင့်		ထားခြင်းတို့ ကြောင့် Data	
	Coordinateအမှတ်များတူညီမှုမရှိ		အမှတ်များပါမတူညီရခြင်း	
	သည့်အပေါ် ရှင်း လင်းချက်ဖြင့်ဖော်ပြ		ချက်ဖြင့် ဖော်ပြအပ်ပါသည်	ဂ္။ စာ(၁၀၅) (၁၀၇)
	ရန်လိုအပ်ပါ သည်။		(၁೧၈)	
စာမျက်နာ ၉၇ တွင် လေအရည်	တစ်စုတစ်စည်းတည်း ပြင်ဆင်တင်ပြ		ပြင်ဆင်တင်ပြအပ်ပါသည်။	
အသွေး အကြောင်းဖော်ပြထား ပြီး၊		တ်ချက်အတိုင်းပြင်ဆင်ဖော်ပြရန်နှင့် ခေါင်းစဉ်၊		
Natural Hazard, Geology/	7.4.1. Air Quality ခေါင်းစဉ် ဖြင့်	ခေါင်းစဉ်ခွဲအလိုက်စ နစ်တကျဖော်ပြရန်၊		
Seismology, Hydrology ဖြင့်ထည့်	လည်းကောင်း၊ စာမျက်နှာ ၁၀၂ 6.3.8			
သွင်းထားပြီးနောက် Air Quality ခေါင်း	Air Qualityခေါင်းစဉ်ဖြင့်လည်းကောင်း			
စဉ်ဖြင့်ပြန်လည်ထည့်သွင်းထားရာဖော်	ဖော်ပြထားပြီး ခေါင်းစဉ်၊ ခေါင်းစဉ်ခွဲအ			
ပြချက်ခေါင်းစဉ်များအားတစ်စုတစ်	လိုက်စနစ်တကျဖော်ပြရန်လိုအပ်ပါ			
စည်း ရှင်းလင်းစွာထည့်သွင်းဖော်ပြရန်၊ ဆူညံသံအား ၃ မိုင်ပတ်လည် လေ့လာ	သည်။	စိစစ်သုံးသပ်ရေးအဖွဲ့ ပင်များ၏သဘောထားမှ	၃မိုင်ပတ်လည်အတွင်း၅နေ	ကာသလို့ဟုလိုပြင်းသည်
	တွင်ဖော်ပြထားသည့်တိုင်း တာ Point		Project Affected Area ဒ	
မှု၌ ၅ နေရာ သတ်မှတ်ကာတိုင်းတာရ သည့်အကြောင်းရင်းကိုထည့်သွင်းဖော်	တည်နေရာသည်လုပ်ငန်းနှင့်သက်ဆိုင်	တချကများအတုင်းပြင်ဆင်ဖော်ပြရန်နှင့်တိုင်း တာမှုတည်နေရာ၊ Result	သာဖြစ်ပြီး ဆူညံမှု တိုင်းတ	
<u> </u>	ြလည်စေနမျာသည်(ပုပ်မေးနှင့်သက်ဆိုင	USUL CESUIT	ြသာဖြစ်ပြီး ဆူညမှု တိုင်းတ	ာသည့်ဖန်မျာသည်ထ

	ပြရန်၊တိုင်းတာမှတ် (၅) အားGoogle Mapပေါ် ၌ဝ ပြရန်၊ရလဒ်များကိုနိုင်းယှ ညံသံ၊မြေ(၃)ခုအားဇယာ ဖြင့်နိုင်းယှဉ်ဖော်ပြခြင်းထ ရာ ခေါင်းစဉ်များအောက် ဖော်ပြရန်၊	ထည့်သွင်းဖော် ဉ်ရာ၌လေ၊ဆူ းတစ်ခုတည်း က်သက်ဆိုင်	မှမရှိသည့်ညောင်ဦးမြို သည်ကိုလည်းကောင်း၊ Result အား စာမျက်နှာ ဖော်ပြချက်များ ဝ ကိုလည်း ကောင်းတွေ့ ရှိ Map တွင်လည်းဖော်ပြ မှု	ဂူညီမှုမရှိသည် ရဲရပြီး၊ Google	ကွဲလွဲမှုအားရှင်းလ	၁င်းရန်၊	ခိုက်မှုဖြစ်နိုင်ခြေများထဲမှ စက်ရုံပင်းအတွင်း၌သာ တိုင်းတာထားပြီးတိုင်းတာသည့်နေရာများကို Google Map ဖြင့် ဖော်ပြအပ်ပါသည်။၊ တိုင်းတာမှု များကိုသီးခြားစီနိုင်း ယှဉ်ထားပါသည်။ စာ (၁၀၅)မှ(၁၁၁)
	ယေဘူယျဖော်ပြချက်ဖြင့် မပြုဘဲမည်သို့သော အမ များကြောင့်သက်ရောက်မှ ရှင်းလင်းစွာထည့်သွင်း မေ	ကြောင်းအရင်း မှုမရှိခြင်းကို	ပြင်ဆင်လာခြင်းမရှိပါ။			အဖွဲ့ ဂင်များ၏သဘောထားမှ င်းပြင်ဆင်ဖော် ပြရန်	လေ၊ဆူညံသံ၊မြေတို့ အပေါ် ထိခိုက်မှုမရှိကြောင်း၊တို့ ကို အခန်း၆.၁၀.၂ စာ(၁၄၀) တွင်ဖော်ပြအပ်ပါ သည်။
	လူမှုစီးပွါးနှင့်စပ်လျဉ်း၍ အချက်အလက်များကိုထ သည့်အပြင်စီမံကိန်းအနေ လည်အတွင်းရှိ ကျေ စီးပွါးဆိုင်ရာအချက်အလ ထည့် သွင်း ဖော်ပြရန်၊	နဖြင့် ၃မိုင်ပတ် မူရွာများ၏လူမှု	ပြင်ဆင်လာခြင်းမရှိပါ။			အဖွဲ့ ဂင်များ၏သဘောထား ဝိုင်းပြင်ဆင်ဖော်ပြရန်	စီမံကိန်းမှ ၃မိုင်ပတ်လည်အတွင်းရှိကျေးရွာများကို အနီးဆုံးရှိနပရတ်ရွာ၊သံဘိုရွာ နှင့် ပေါက်စိန်းရွာအား ဖော်ပြထားပါသည်။ထပ်မံရရှိသည့်ထန်းချောင်းကျေး ရွာ၊ တည်ပင်ကျေးရွာနှင့် အိုင်သာကျေးရွာတို့ ၏လူမှု စီးပွါးဆိုင်ရာအချက်အလက်အချို့ ကို ဖြည့်စွက်ဖော် ပြအပ်ပါသည်။ အခန်းဂု.ဂု.၅.၁ စာ (၁၁၆)
G	ပတ်ပန်းကျင်သက်ရောက်	မှုနှင့်ဘေးအွန္တရ	ာယ်ရှိမှုဆန်းစစ်ခြင်းနှင့်လေ	ျာ့နည်းစေရေးလ	<b>ာ</b> ပ်ငန်းများ၊		
	စာမျက်နှာ ၁၁၁ တွင် Impact identified ဆောင်ရွက်ထား၍ဇ ယားဖြင့်ဖော်ပြထားေ သာ်လည်း ၄င်းဇယားပါသတ်မှ တ်ချက်နှင့် စာမျက်နှာ ၁၁၃ ပါသတ်မှတ် ချက်များအား	ရှင်းလင်းမှုမရှိပါ၊ during operat ကြောင့် လေထု Scoping of In Air Emission o Impacts in C Construction Impact (B-) ဖြ အားတစ်နေရာင်	စာမျက်နှာ ၁၁၅၊ 7.4. ion stage (OP) အခန်း ညစ် ညမ်းမှုဖြစ် ပေါ်နိုင် npact အခန်းတွင် Gener ထွက်ရှိကြောင်း၊ စာမျက်နှာ peration Stage (OS) activities, Loading U o ကြောင်းစသည်ဖြင့် Op ၊ ခေါင်းစဉ်တစ် ခုစီဖြင့်	2 Identification တွင် Spraying ကြောင်း၊ စာမျင rator နှင့် Work ၁ ၁၂၈၊ 7.10.2 အခန်းတွင် Vo Unloading ငြေ eration Phase Impact များအ	on of Impacts Paint လုပ်ငန်း ဘိနှာ ၁၁၇၊ 7.7 Ishop လုပ်ငန်းမှ Evaluation of Paicle Passing, ကြာင့် Negative	စိစစ်သုံးသပ်ရေးအဖွဲ့ ဂင်များ ၏သဘောထားမှတ်ချက်နှင့် အတူ Impact များကို Operation Phase တစ်စု တစ်ဂေး တည်းဖော်ပြရန်၊	Impact Assessment Methodology အရ Indntification, Scoping နှင့် Evaluation အဖြစ် ၃ ပိုင်းခွဲခြားထားပြီး၊ စာမျက်နှာ (၁၃၁)တွင်ဖော်ပြထား သည်မှာ Identification of Impact ဖြစ်ပြီး၊ စာမျက်နှာ (၁၃၃)ပါဇယားသည် Summary of Scoping of Impact ဖြစ်ပါသည်။ သဘောထား မှတ်ချက်အရ Impact များကို Evaluation of Impact on Pollution (Operation Phase) တွင် တစ်စုတစ်ပေးတည်းဖော်ပြအပ်ပါသည်။အခန်း ၆.၁၀.၂ စာ(၁၄၀ )The Summary of

ဖော်ပြထားကြောင်းရှ င်းလင်းဖော်ပြရန်၊	7.10.2 ഇലുറി how n area b	ားတစ်စု တစ်စည်းတည်း ဆန်းစစ်ဖော်ပြ ရန်လိုအပ်ပါသည်။ E Evaluation of Impacts in Operation Stage (OS) အခန်း၊ မိနာ ၁၂၈-၁၂၉ တွင် "There are no base line data recorded much dust particles in the air and how much polluted in this poth inside factory and due to the vehicle passing" ဟု Base data မရှိ၍ Air Pollution အခြေအနေမသိရှိနိုင် ဟုဖော်ပြ သည်။	Pollution 3	Data မရှိ၍ Air ခြေ အနေ မသိ ပြထားခြင်းအား နဲ၊	စာ (၁၄၁) တွင် အဆိုပြုစက်ရုံင တော်ယာဉ်များ ဖုန်ထမှုပေါ် မူဝ	al & Social Impacts ကို ဇယား ၆၇ င်ဖော်ပြထားပါသည်။ တွင်လေညစ်ညမ်းမှုသည် မော် း ဖြတ်သန်းသွားလာ ခြင်းအပေါ် ာည်နေမှုကြောင့် ယခင် Baseline င့် နိုင်းယှဉ်မှုမပြုနိုင်သည့်အပေါ် င်းဖြစ်ပါသည်။	
7.11 The Summary of Impacts အခန်း၊ စာမျက်နှာ ၁၃၁ တွင် Emission from generator and engine test running are anticipated" ဟုဖော်ပြထားခြင်း၊ 8.4.3 Mitigation and Consideration Measures (Operation Phase) အခန်း၊ စာမျက်နှာ ၁၃၆ တွင် "To check the painiting boots enclosure and exhaust"ဟုဖော်ပြထားသဖြင့်ပြန် လည်ဆန်းစစ်ဖော်ပြရန်လိုအပ်ပါသည်။				လုပ်ငန်းစဉ်ကြောင့် လေ အရည် အ သွေးထိခိုက်မှု (Impact) ဖော်ပြ ချက် နှင့် ၎င်းထိခိုက်မှု (Mitigation) ကို လျှော့ချမည့်ဖော်ပြချက် ဆီလျှော်မှုမ ရှိခြင်း အပေါ် ပြန်လည်ဆန်း စစ် ဖော်ပြ		Engine Testing ကြောင့်ဖြစ်နိုင်သော ထိခိုက် မှုအ တွက် Filter ပါသော ventilation စနစ်ကို တပ်ဆင် ရန်ဟုဖော်ပြ ထားပြီး၊ ရေဖြန်းစနစ်ပါသော Painting Boot ကြောင့်လေအရည်အသွေးအပေါ် ထိခိုက်နိုင်မှု မရှိသော်လည်းထိခိုက်မှုလျှော့ချနိုင်ရန် ပိတ်ဆို့ မှုမ ရှိရန်စစ်ဆေးမှုလိုအပ်သော ကြောင့်"To check the painiting boots enclosure and exhaust" ဟု ဖော်ပြထားခြင်းဖြစ်ပါသည်။ ပိုမိုရှင်းလင်းစေရန် Impact တွင် Painting Boot Function ဟုဖော်ပြ အပ်ပါသည်။ စာ (၁၄၂)	
တမျက်နာ ၁၁၆ မှ ၁၂၀		စာမျက်နာ ၁၁၅၊ 7.4.2 Identification of Impacts during operat		ge လုပ်ငန်းစဉ်မှထွက်ရှိမည့်ဒ		လုပ်ငန်းစဉ်မှထွက်ရှိမည့်အသံဆ <u>ူ</u> ညံ	
ထိ လေအရည်အသွေး၊ ရေအ ရည် အသွေး၊ ဆူညံသံတို့၏ တိုင်းတာ နေရာ၊ တိုင်းတာ သည့်နည်းလမ်း တို့ ကို		တို့ ကြောင့် အသံ ဆူညံနိုင်ကြောင်း စာမျက်နှာ ၁၁၇ 7.7 Scoping of Impacts အခန်းတွင် Operation G Vehicle Assembling Activities ကြောင့်ဆူညံမှုရှိနိုင်ကြောင်း စာမျက်		Impact Identii Generator, ကိုတစ်စုတစ်စဉ ာ်နာ ၁၂၈ ပြရန်၊		မှု နှင့် ပတ်သက် ပြီး Impact Identification ကိုတစ်စုတစ်စည်း တည်းဖော်ပြအပ်ပါသည်။ စာ(၁၄၂)	
ထည့်သွင်းဖော်ပြရာ ၄င်း ပါအ 7.10.2 Evalution of Impacts in Operation Stage (OS) အခန်းတွ ချက်များကို လက်ရှိပတ်ဂန်း Testing, Diesel Power Generation, Transportation Vehicles ဖြေ ကျင်အခန်း၌ထည့်သွင်းဖော်ပြ ဖော်ပြထားရာ အ ချက်အလက်များတူညီမှုမရှိပါ။ ထို့ ပြင် လုပ်ငန်း လည ရမည်ဖြစ်ပြီး ယခုအခန်းသည် ကာ လ ထိခိုက်မှု လျှော့ချမည့်လုပ် ငန်းစဉ်အနေဖြင့် 8.2 The mitigal ထိခိုက်မှုများကိုသတ်မှတ်ခြင်း impacts အခန်း၊ စာမျက်နာ ၁၃၄ တွင် ear plug များ ထောက်ပံ့ပေးမ			ကြောင့်ဟု စာမျက်နှာ ၁၃၆ သည်ပတ်မှု ထားသည့် Op ation of ကာလ၌ "Avo		ration I	"Avoid construction at night time" ကိုပယ်ဖျက်ထားပါသည်။	

အခန်းဖြစ်၍ စီမံကိန်းကြောင့်	ပင် များစိုက်ပျိုး မည်ဟုဖော်ပြထားရာပြည့်စုံလုံလောက် မှုမရှိသည့် အ	_	ဟုဖော် ပြချက်၏ဆက်	<b>ာ</b> ပ်မှု
ရေ၊ လေ၊ မြေအပေါ် မည်ကဲ့	Mitigation and Consideration Measures (Operation Phase) 32	•	အားဖော်ပြရန်၊	
သို့ထိခိုက်ကြောင်းအားသတ်	စာမျက် နာ ၁၃၆ " Avoid construction at night time" ဟုဖော်ပြချ	•		
မှတ်ဖော်ထုတ်၍ရှင်းလင်းဖော်	Operation ကာလနှင့်တည်ဆောက် သည့် လုပ်ငန်း မဆောင်ရွက်ခြင်	းဟု စသည်		
ပြရန်၊	ဖြင့် Operation Phase ၏ Noise Pollution အားတစ် နေရာစီ၊ ခေါင်း	ော်တစ်ခု		
	စီဖြင့် Impactများအား ဖော်ပြထားရာ Operation Phase တွင် ဖြစ်ဖေ	ပါ မည့်		
	Impact Identification များအားတစ်စုတစ်စည်းတည်း ဆန်းစစ် ဖော်	ပြရန်လို		
	အပ်ပါ သည်။			
စာမျက်နှာ ၁၂၁ ပါထိခိုက်မှု	စာမျက်နှာ ၁၁၅ 7.4.2 Identification of Impact during	Opeation P	hase တွင်ထွက်ရှိမည့်	Impact Identifivation ကိုတစ်စုတစ်စည်း
သတ်မှတ်ချက်ပါ စွန့်ပစ်ရေ	operation stage (OP) အခန်းတွင် Dining Area နှင့် Toilets မှ	ရေဆိုးနှင့် ပ	တ်သက်ပြီး Impact	တည်းပြင်ဆင်တင်ပြအပ်ပါသည်။ အခန်း
တွင် လုပ်ငန်းမှ စွန့် ပစ်ရေ	Bio Waste ထွက်ရှိ ပြီး Production Process မှ Wastewater	Identifivati	on ကိုတစ်စုတစ်စည်း	(റു.၁၀.၁) ഇ (၁၄၂) wastewater
ထွက်ရှိမှုမရှိ သဖြင့် D ဟု	မထွက်ကြောင်း စာမျက်နာ ၁၁၇ 7.7 Scoping of Impacts	တည်းဖော်ပြ	ရန်နှင့် Wastewater	စွန့် ထုတ်မှုမရှိပါ။ water result ကို annex
သတ်မှတ်ထား ကြောင်းဖော်	အခန်းတွင် Wastewater Treatment မလုပ်ဘဲတိုက်ရိုက်စွန့် ထုတ်	Result စိစစ်	တင်ပြရန်၊	တွင်ဖော်ပြထားပါသည်။
ပြထားပြီး စာမျက် နာ ၂၄	ပါက Water Pollution ဖြစ်နိုင် ကြောင်းစာမျက်နာ ၁၂၈ 7.10.2			
တွင် မော်တော်ယာဉ်ရေဆေး	Evaluation of Impacts in Operation Stage (OS) အခန်း တွင်			
ခြင်းလုပ်ငန်းမှ စွန့်ပစ်ရေ	လုပ်ငန်းစဉ်မှစွန့် ပစ်ရေဆိုးမထွက်ရှိကြောင်း ဖော်ပြရာ Waste			
ထွက်ရှိကြောင်း ဖော်ပြထား	water ဆန်းစစ်သည့်အချက်အလက်များ Wastewater Result			
သ ဖြင့် ထိခိုက်မှုအဆင့်ဖော်	စိစစ်တင်ပြရန်လိုအပ်ပါသည်။			Paint Process မဆောင်ရွက်မီ Rain Test,
ပြချက်အားသတ်မှတ်ရာ၌တိ	Painting Process မထောင် ရွက်မီ vehicle parts များအား	Painting Pr	ocess မဆောင်ရွက်မီ	Car Wash တွင်ရေဆေးလုပ်ငန်းမှ ရေကိုအ
ကျသေချာဖိုထည့်သွင်းးဖော်ပြ	သန့် ရှင်းဆေးကြောခြင်းလုပ်ငန်း စဉ်မှထွက်ရှိမည့် စွန့် ပစ်ရေနှင့်	Vehicle Pai	rts များအား သန့် ရှင်း	စဉ်ပြန်လည်အသုံးပြုသည့်စနစ် ကိုသုံးပြီး
ရန်၊	ပတ်သက်ပြီးဖော်ပြမှုမရှိပါ။		ခြင်းလုပ်ငန်းစဉ်မှထွက်	စွန့် ထုတ်မှုမရှိပါ။စွန့် ပစ်အရည်မထွက်ရှိ
11			ာရေနှင့်ပတ်သက်ပြီး	ကြောင်းဆန်းစစ်မှုကို စာ ( ၉၄ )တွင် ဇယား
		ဖြည့်စွက်ဖေ	—	နှင့်တကွဖော်ပြထားပါသည်။
		ر کے ت	<b>.</b>	
	စာမျက်နာ ၁၁၅ နှင့် ၁၁၇ ဖော်ပြချက်တွင် Wastewater	Impact Ide	entification နှင့်	လုပ်ငန်းစဉ်တွင်အသုံးပြုသောရေကိုRecycle
	ထွက်ရှိကြောင်းဖော်ပြထား ပြီး Comment Response Table	Mitigation	Measure ဖော်ပြချက်	စနစ်ကိုအသုံးပြုပြီးပြန်လည်အသုံးချသော
	ဖော်ပြချက်၌လုပ်ငန်းစဉ်မှထွက်ရှိသည့် ရေဆိုးကို Recycle			ကြောင့်ပြင်ပသို့ လုပ်ငန်းမှစွန့် ပစ်ရေမရှိ
	အသုံးပြုသောကြောင့် ပြင်ပသို့ စွန့် ထုတ်သည့် စွန့် ပစ်ရေမရှိ	7 7 -	၂ ၂၂၂ ၂င်ဆင်ဖော်ပြရန်၊	ကြောင်းကိုဆိုလိုပါသည်။ထို့ အတွက်ထိ
			<u> </u>	

	ကြောင်းဖော်ပြထားရာတင်ပြသည့်အချက်အလက်များကျိုး				ခိုက်မှုအဆင့်ကို D ဟုဖော်ပြုခင်းဖြစ်ပါသည်။
					Summary of Mitigation Measure
	ကြောင်းညီညွတ်မှုမရှိသည်ကို စိစစ်တွေ့ ရှိရပါသည်။				
					(Operation Phase)တွင်လည်းWastewater
		-   -			ကိုဖြည့်စွက်ဖော်ပြအပ်ပါ သည်။ စာ (၁၄၇)
မြေအရည်အသွေး၌ oil	Comment Response Table တွင်ကွန်ကရစ် ကြမ်းခင်းဖြစ်ခြ		စ်သုံးသပ်ရေးအဖွဲ့ ဂင်မ	)	ာသွေး၌မြေပေါ် သို့ ဆီဖိတ်ခဲ့လျှင် oil spillage
spillage to the ground	ကြောင့်ဖိတ်စဉ်ပါက ပြန်လည် ကောက်ယူနိုင်သည့်အတွက် ဝ		၏သဘောထားမှတ်ချ		und ဖော်ပြထားခြင်းသာဖြစ် ပြီးမြေသားပေါ် တွင်
ဖြစ်နိုင်ကြောင်း ဖော်ပြ	စိုက်မှုအား D သတ်မှတ်ကြောင်း ရှင်းလင်းထားရာ စာမျက်နာ	က်	များအတိုင်းမြေအရည်	လုပ်ကိုင်ခြင်	းမရှိပါ။ စက်ရုံတွင်ကျွမ်းကျင်လုပ်သားများကိုသာ
ထားပြီး သတ်မှတ်ချက်၌ D	၁၁၇ တွင် Rating သတ်မှတ် ချက်အရ "D" အား "No impac	t ක	သွေး၌ Oil spillage to	လုပ်ကိုင်စေ	ပြီးအသုံးပြုသည့်ဆီများဖိတ်စဉ်မှုမရှိစေရန်အထူး
ဟုသတ်မှတ်ထားသဖြင့်	or impacts are negligible, no further study requires	th	e groundနှင့်ပတ်သက်	ကြပ်မတ် ေ	ဆာင်ရွက်လျက်ရှိပြီး၊မတော်တဆအနေ ဖြင့်သာ
လုပ် ငန်း၏အမှန်တကယ်	ဟုအ ဓိပ္ပါယ်ဖွင့်ဆို ထားပြီး ဤလုပ်ငန်း မှ Oil Spillage	ပြီး	အ မှန်တကယ်သက်	ဖိတ်စင်မှုရှိခဲ့	ပါကလည်းစက်ရုံသည်ကွန်ကရိနင့် Eposy
သက်ရောက်မှုအပေါ် ဆန်း	ဖြစ်ပါက ကွန်ကရစ်ပေါ် မှဇိတ်ကျလာသောဆီများသည် အက်	ന്റ 🏻 ഒ	pက်မှုအပေါ် ဆန်းစစ်ပြီး	ကြမ်းခင်းမျာ	းခင်းထားသောကြောင့်ဖိတ်စဉ်မှုသည် မြေပေါ်
စစ်ပြီးမှသေချာ သတ်မှတ်	ကြောင်းများမှတဆင့် စိမ့် ပင်နိုင်ပြီး အောက်ခံမြေဆီလွှာကို	မှ	သေချာစွာသတ်မှတ်	သို့ တိုက်ရို	က်မကျနိုင်ဘဲ ဖိတ်စဉ်မှုရှိ ပါကလည်းပြန် လည်း
ဖော်ပြရန်၊	စိမ့်ဂင်နိုင်သဖြင့်လုပ်ငန်း ၏ အမှန်တကယ်သက်ရောက်မှုအရ	ပါ် ဖြေ	က်ပြရန်	ကောက်ယူန်	နိုင်သောကြောင့်ထိခိုက်မှုသတ်မှတ်ချက်ကိုထိခို
	ဆန်းစစ် ပြီးမှသေချာသတ်မှတ်ဖော်ပြရန်လိုအပ်ပါသည်။			က် မှုမရှိကြေ	ြာင်းDဟုသတ်မှတ်ခြင်းဖြစ်ပါသည်။စာ (၁၄၂)
စာမျက်နှာ ၁၃၈ စီမံခန့်	Comment Response Table တွင် စာမျက်နှာ ၁၃၂၊ ၁၃၃ ဇယ	ားတွင်	စိစစ်သုံးသပ်ရေးအဖွဲ့ ဂ	င်များ Tra	ffic Management အပေါ် ဆန်းစစ်တင်ပြထား
ခွဲမှုအ စီအစဉ် တွင်	"Existing Social Infracture" ခေါင်းစဉ်ဖြင့် ဖြည့်စွက်ထားသဥ	ည်ဟု	၏သဘောထားမှတ်ချဂ	ဂ်အ ပါ ၁	သည်။စာ (၁၄ဂ)
Traffice Management	ရှင်းလင်းထားသော်လည်း Chapter 7 :Environmental Impa	ict	တိုင်း စီမံကိန်းမှဆောင်	Exis	sting Social Infracture and Services
Plan အားထည့် သွင်းဖော်	Assessment & Mitigation Measures စာမျက်နှာ ၁၃၂ Tabl	e 65	ရွက်သွားလာသည့်	(Tra	affic Management) ခေါင်းစဉ်အ ဖြစ် ထိခိုက်မှု
ပြထားပြီး ထိခိုက်မှု သတ်	The Summary of Environmental and Social Impacts og	3	Transporataion	ကိုင	သည့်သွင်းဆန်းစစ်ထားပါသည်။ စာ (၁၄ဂ)နှင့်
မှတ်ရာ၌ ထည့်သွင်းစဉ်း	"The positive impact is assumed by the development of	of	လုပ်ငန်းစဉ်ကြောင့် ပတ်	ဂ်ဂန်း စာ	(၁၄၂)ပါဇယား ၆၇
စားထား ခြင်းမရှိသဖြင့်	facilities related to the project service and many social		ကျင်အပေါ် ထိခိုက်မှုအ	EMI	P തിTransportation and Traffice
ထည့်သွင်းဖော်ပြရန်၊	infractures will be improved ဟူ၍သာဖော်ပြထားသည်ကို		တွက်ဆန်းစစ်ဖော်ပြရန်	Mai	nagement Plan တွင်လည်းထပ်မံဆန်း စစ်ဖော်
	တွေ့ ရှိရ သဖြင့်စီမံကိန်းမှ ဆောင် ရွက်သွားလာ သည့် Transp	ort		[ϥα	ဘးပါသည်။ စာ ( ၁၆၁ ) ဇယား ဂု၈ စာ(၁ဂု၈)
	လုပ်ငန်းစဉ်ကြောင့် ပတ်လန်း ကျင်အပေါ် ထိ ခိုက်မှုအတွက်				
	ဆန်းစစ်ဖော်ပြ မှုမရှိပါ။				
သဘာပဘေးနှင့် စက်မှု	7.7 Scoping of Impacts အခန်း၊ Table 58 Summary of	စိစစ်သုံ	းသပ်ရေးအဖွဲ့ ဂင်များ၏၁	ဘဘောထားမှ	တ် သဘာဂဘေးနှင့် စက်မှုဆိုင်ရာ အွန္တရာယ်
ဆိုင်ရာ အန္တ ရာယ်များ	Scoping of Environmental and Social Impact	ချက်အ	တိုင်းသဘာဂဘေးနှင့် စဂ	ာ်မှုဆိုင်ရာ •	များအား ဆန်းစစ်ဖော်ပြအပ်ပါသည်။ စာ
အားဆန်းစစ်ဖော် ပြပြီး	Assessment စာမျက်နှာ ၁၁၉ တွင် "There are chances of	ജ്യണ	ယ်များအားဆန်း စစ်ဖော်[	ပြီးလျှော့ပါး	(၁၄၁)

	လျော့ပါးစေရေးနည်း ၊	negative ir	mpacts due to the natural disaster and	စေရေးနည်းင		 <sub>ဍရန်</sub>	ထိခိုက်မှုလျော့ချရေးအား စာ (၁၄၅) တို့
		machines a	and normal machines using in the		တွင်ဖော်ပြအပ်ပါသည်။		
	, , _	production	process are needed to be anticipated"	eeded to be anticipated"			
		ဟုသာဖော်ဖြ	ပုထား ပြီးဆန်းစစ် ဖော်ပြမှုနင့် လျော့ပါးစေ ဖေ	୍ଟ୍ର ବ୍ୟ			
		နည်းလမ်းမျ	ားဖော်ပြဓူမရှိပါ။				
7	ဆက်စပ်သက်ရောက်မှုဆန်းဖ	<u> </u>		1			
ရ	ပတ်ပန်းကျင်စီမံခန့် ခွဲမှုအစီအ	<b>ာ</b> စစဉ်					
	ပတ်ပန်းကျင်စီမံခန့် ခွဲမှုအစီဒ		သည်ပြင်ပအဖွဲ့ အစည်းဖြစ် ပြီးလိုအပ်သည်မျ	ားကို EMP Team	SPC နှင့်ချိတ်ဆက်ဆောင်	EMP <sup>-</sup>	Team အကြောင်း စာ(၁၇၁)အ ခန်း ၁၀.၅
	စဉ်အား အကောင်အထည်ဖေ	တ် မှကြီးဖြ	ကြပ်ညွှန် ကြား မည်ဟု Comment Respons	se Table တွင်ရှင်း	ရွက်မှုအား ဖော်ပြရန်၊	တွင်ဖေ	ဖာ်ပြထားပါသည်။ SPCသည်ပြင်ပအဖွဲ့
	ရန်အတွက် EMP Team or	လင်း (	 ထားသော် လည်း ပတ်ဂန်း ကျင်စီမံခန့် ခွဲမှု ဒ	အစီအစဉ်တွင် EMP		အစည်	ဦးဖြစ်ပြီး လိုအပ်သည့်ကဣာအတွက်သီး
	SPC မှတာဂန်ယူမည်ဖြစ်	Team	Member ශ් Duty and Responsibility න	ာဖော်ပြထား ပြီး		သန့်	တာပန် လို အပ်သည်များကို EMP Team
	ကြောင်း ဖော်ပြထားရာ	SPC §	နှင့် ချိတ် ဆက်ဆောင် ရွက်မှုအားဖော်ပြမှုမရှိ၊	ပါ။ ထို့ ပြင် စာ		မှကြီး	ကြပ်ညွှန်ကြားတာဂန်ပေး ရန်ဖြစ်ပါသည်။
	၎င်းအဖွဲ့ ၌ ပါပင် သည့်	မျက်နှ	ာ ၁၇၁ တွင် MIC (Ayarwaddy) အား Regu	ular Report တင်ပြ		လုပ်င	န်းသဘာဂအရ SPC အဖွဲ့ အမျိုးမျိုး နှင့်
	အဖွဲ့ ပင်များနှင့် ၎င်းတို့၏	မည်ဟ	၇ ဖော်ပြ ထားသဖြင့်ဆက်နွယ်မှုအားဖော် ပြ	ရန်လိုအပ်ပါသည်။		SPCo	ဂွင်ပါဂင် သောအဖွဲ့ ဂင်များသည် ပြောင်း
	လုပ်ငန်းတာဂန်များကိုရှင်းလ	င်း SPC န	နှင့်ချိတ်ဆက်ဆောင်ရွက် မှုအားဖော်ပြရန်၊			လဲနိုင်	ပါသည်။ Sub Contractသဘောမျိုးဖြစ်ပါ
	စွာထည့်သွင်းဖော်ပြရန်၊					သည်။	1
		MIC (	Ayarwaddy) နှင့် ယခု လုပ်ငန်း၏ ဆက်နွပါ	ဉ်မှုအားဖော်			
		ပြရန်၊	ပတ်ဂန်းကျင်စီမံခန့် ခွဲမှုအစီအစဉ်အား အကေ	ဘင်အထည် ဖော်	MIC (Ayarwaddy) နှင့်	MIC (	(Ayarwaddy) ကိုမှားယွင်းဖော်ပြရြင်း
		ရန်အဖ	ဘွက် EMP Team or SPC မှတာဂန်ယူမည်[	ဖြစ် ကြောင်း	ယခုလုပ်ငန်း ၏	ဖြစ်ပါဒ	သည်။ ပယ်ဖျက်ထားပါသည်။
		ဖော်ပြ	ထားရာ ၎င်းအ ဖွဲ့ ၌ ပါပင်သည့် အဖွဲ့ ပင်များ	နှင့် ၎င်းတို့၏	ဆက်နွယ်မှုအားဖော်		
		လုပ်င	န်းတာပန်များ ကိုရှင်းလင်းစွာ ထည့်သွင်းဖော်	် ပြရန်၊	ပြရန်၊		
		SPC c	သည်ပြင်ပအဖွဲ့ အစည်း ဖြစ်ပြီးလိုအပ်သည်မျ	ားကို EMP Team			
		မှကြီးကြပ်ညွှန် ကြားမည် ဟုComment Response Table					
			င်းလင်းထားသော်လည်း ပတ်ဂန်းကျင်စီမံခန့်				
			Team Member ණි Duty and Responsibil	_			
		ပြီး SP	'C နှင့် ချိတ်ဆက်ဆောင်ရွက်မှုအားဖော် ပြမှုဖ	မရှိပါ။ ထို့ ပြင် စာ			
		မျက်န	ာ ၁၇၁ တွင် MIC (Ayarwaddy) အား Regi	ular Report တင်ပြ			

မည်ဟ	၇ ဖော်ပြထားသဖြင့် ဆက် နွယ် မှုအားဖော်	ပြရန်လိုအပ်ပါ သည်။			
စာမျက်နှာ ၁၄၀ ပါ လေအ ရည်	Diesel Engine ကဲ့သို့ သော	စွမ်းအင်ထုတ်လွှတ်ပေး	သည့်လုပ်ငန်းမရှိပါက	Small Combustion Facilities Emission	
အသွေး ဇယား ၄.၃ For small	စက်ငယ်များအတွက်ဟု Comment	ထည့်သွင်းခြင်းမပြုရန်၊		Guideline ကိုပယ်ဖျက်ထားပါသည်။	
combustion Facilities Emission	Response Table				
Guideline သတ်မှတ်	တွင်ရှင်းလင်းထားသော်လည်း NEQEG				
ချက်အားထည့်သွင်းဖော်ပြထား	1.1 Small Combustion Facilities				
ရာမည်သို့သောအကြောင်းရင်း ကြောင့်	Emission Guideline သည် ၃ မှ ၅၀				
ထည့်သွင်းထားသည် ကို	မဂ္ဂါဂပ်ရရှိသည့်စွမ်းအင်				
ရှင်းလင်းဖော်ပြရန်၊	ထုတ်လွှတ်ပေးသည့်လုပ်ငန်းအတွက်				
	သတ်မှတ်ထားသည့်လမ်း				
	ညွှန်ချက်ဖြစ်ပါသည်။				
Implementation ၌မည်သည့်	စိစစ်သုံးသပ်ရေးအဖွဲ့ ဂင်များ၏	စိစစ်သုံးသပ်ရေးအဖွဲ့ ဂင်များ၏ သ		Implementation ကိုဖော်ပြထားပါ သည်။စာ(၁၅၁)	
အဆင့်၌ အကောင်အထည်	သဘောထားပြန်ကြားထားသည့်	ဘောထားပြန်ကြားထားသည့် အ			
ဖော်မည်ဖြစ်ကြောင်းထည့်သွင်း	အကောင်အထည်ဖော်ဆောင်	ကောင်အထည်ဖော်ဆေ	ာင်ရွက် မည့်		
ဖော်ပြရမည်ဖြစ်သော်လည်း	ရွက်မည့်အစီအစဉ်၊ စီမံခန့် ခွဲမှု	အစီအစဉ်၊ စီမံခန့် ခွဲမှုေ	ဆာင်ရွက် ချက်များ		
Management Action အား	ဆောင်ရွက်ချက်များ (Action Plan)	(Action Plan) ဖြည့်စွက်	ာ် ဖော်ပြရန်။		
ထည့်သွင်းထားသည့်အတွက်ပြန်လည်	ဖော်ပြမှုမရှိပါ။				
ဖော်ပြရန်၊	စာမျက်နှာ ၉၈ တွင် လက်ရှိ	စာမျက်နှာ ၉၈ တွင် လ	က်ရှိ လေအ	စီမံကိန်းနေရာတွင်ယခင်ကလေအရည်အ	
	လေအရည်အသွေးအားနေရာ (Point)	ရည်အသွေးအားနေရာ (	(Point) ၅ခု	သွေးတိုင်းတာထားရှိမှု (Baseline Data)	
	၅ခုအားတိုင်းတာဖော်ပြ	အားတိုင်းတာဖော်ပြ ထ		မရှိသောကြောင့်လေထုညစ်ညမ်းခြင်းကွာ	
	ထားသော်လည်း စာမျက်နှာ ၁၄၃ တွင်	စာမျက်နာ ၁၄၃ တွင် B	aseline Data	ခြားမှုမည်မှုရှိသည်ကိုနိူင်းယှဉ်မှုမပြုနိုင်	
	Baseline Data Recorded မရှိသဖြင့်	Recorded မရှိသဖြင့် ဖေ	လထု ညစ်ညမ်း	သည်ကိုဆိုလိုပါသည်။	
	လေထု ညစ်ညမ်းမှုအခြေအနေ	မှုအခြေအနေမသိရှိကြေ	ြာင်း ဖော်ပြမှု အား		
	မသိရှိကြောင်း ဖော်ပြမှုအား	ရှင်းလင်းရန်။			
	ရှင်းလင်းရန်လိုအပ်ပါသည်။				
စာမျက်နှာ ၁၄၁ မှ အထိ	ပတ်ဂန်းကျင်ထိခိုက်မှုဆိုင်ရာ လုပ်ထုံး လ	ုပ်နည်း အပိုဒ် ၆၃ ခွဲ <b>ဇ</b>	ပတ်ပန်းကျင်ထိခိုက်မှုဆို		
ဖော်ပြထားသည့်ဆူညံသံနှင့်တုန်ခါမှု၊	အပိုဒ်ခွဲငယ် ၆ ပါသတ်မှတ်ချက် အတိုင်း	ဖော်ပြမှုမရှိပါ။	ထုံးလုပ်နည်း အပိုဒ် ၆၃	ခွဲ α အပိုဒ် ဖည့်စွက်ဖော်ပြအပ်ပါသည်။ စာ(	

ရေနင့်စွမ်းအင်စီမံခန့်ခွဲမှု၊ စွန့်ပစ်ရေစီမံခန့် ခွဲမှု၊ Traffice Management Plan စိမ်းလန်းစို ပြေရေးအစီအစဉ်၊ Solid Waste Management, Hazardous Waste Management, Emergency Prepareness Plan တိုကို လုပ်ထုံးလုပ်နည်း အပိုဒ် ၆၃ (၈) အပိုဒ် (၆) ပါ ခေါင်းစဉ်ခွဲပါ ပါဂင်ရမည့်အချက် များအတိုင်းတိကျစွာရေးသား ဖော်ပြရန် လိုအပ်ကြောင်း စိစစ် တွေ့ ရှိရပါသည်။ Implementation Action තී ဖော်ပြရာ၌ မြေပြင်၌ လက်တွေ့ အကောင်အထည်ဖော်နိုင်မည့် စီမံကိန်း အဆိုပြုသူမှအမှန် တ ကယ်လိုက်နာဆောင်ရွက်နိုင် မည့်အချက်များသာဖြစ်သင့်ပါ သည်။ တစ်ဖက်ပါအချက်များကိုအလေးထား လိုက်နာ၍ ပြန်လည်ဖော် ပြရန်၊

တမျက်နှာ ၁၄၄ Noise & Vibration Management Plan တွင် "The Noise comes from air conditioners and ventilation fans which are under the acceptance standard level and no others noise and vibration would come from the hotel that could be impact to the neighbors during operation phase" ဟုဇော် ပြရာ တင်ပြပါ လုပ်ငန်းနှင့်သက် ဆိုင်မှုမရှိသည်ကို တွေ့ ရှိရပါသည်။ Water pump and compressor ကြောင့် ဆူညံသံထွက်ရှိမည်။ ၄င်းဆူညံမှု လျှော့ချ ရန်သင့်တော်သည့်စက်ပစ္စည်းတပ်ဆင်မည်ဟုဇော်ပြချက်မှာ Mitigation အ ဆင့်သာဖြစ်ပြီး Management plan ဇော်ပြမှု မရှိပါ။ ထို့ ပြင် 8.2 The mitigation of Impacts အခန်း စာမျက်နှာ ၁၃၄၊ ၁၃၆ ဇော်ပြချက်နှင့်လည်းကိုက်ညီမှုမရှိပါ။

စာမျက်နှာ ၁၄၅ Water and Energy Management Plan တွင် Car Washing Process ဆောင်ရွက်ကြောင်းဖော်ပြပြီး၊ စွန့် ပစ်ရေ စီမံခန့် ခွဲမှုအစီအစဉ် တွင် မပါရှိပါ။

စာမျက်နှာ ၈၈ တွင် Paint Shop ပါရှိပြီး၊ စာမျက်နှာ ၁၁၆၊ ၁၃၄၊ ၁၅၂၊ ၁၅၅ တွင် Spraying Paint Process ဖော်ပြထားသ ဖြင့် Paint Boots wash water မှ overspray အားရယူခြင်းဖြင့် Sludge ထွက်ရှိမည်ဖြစ်ရာ Hazardous Waste Management Plan တွင် Paint Sludge နှင့်ပတ်သက်ပြီး ဖော်ပြမှုမရှိပါ။ ခွဲငယ် ၆ ပါသတ်မှတ်ချက် အတိုင်း ဖော်ပြရန်။ Hotel လုပ်ငန်းနှင့်ယခုလုပ်ငန်း ဆက် နွယ်မှုအားရှင်းလင်းချက်ဖြင့် ဖော်ပြရန်၊

လုပ်ငန်းစဉ်ကြောင့်အသံဆူညံမှုေ လျှာ့ ချမည့်နည်းလမ်းဖော်ပြချက် နှင့် စီမံခန့် ခွဲမည့်အစီအစဉ် ချိတ် ဆက်ဖော်ပြရန်၊

Car Washing Process မှစွန့် ပစ် ရေ စီမံခန့် ခွဲမှုအစီအစဉ်အားဖြည့် စွက်ဖော် ပြရန်၊

Paint Boots wash water မှ overspray အားရယူခြင်းဖြင့် Sludge ထွက်ရှိမည်ဖြစ်ရာ Hazardous Waste Management Plan တွင် Paint Sludge နှင့်ပတ် သက်ပြီး ဖော်ပြရန်။ ാഖ്വ~ാറ്റ )

Hotel လုပ်ငန်းဟုမှားယွင်းဖော်ပြထားမှု အားပယ်ဖျက်ပြင်ဆင်ဖော်ပြထားပါ သည်။

လုပ်ငန်းစဉ်ကြောင့်အသံဆူညံမှုလျှော့ ချမည့်နည်းလမ်းဖော်ပြချက်နှင့် စီမံခန့် ခွဲမည့်အစီအစဉ် ချိတ်ဆက်မှုကိုဖော် ပြအပ်ပါသည်။ စာ ( ၁၅၅ )

Car Washing Process တွင်အသုံးပြု သည့်ရေနှင့် ပတ်သက်သောစွန့် ပစ်ရေ စီမံခန့် ခွဲမှုအစီအစဉ်အားဖြည့်စွက်ဖော် ပြအပ်ပါသည်။ စာ (၉၄ ) Paint Boots wash water မှ overs pray အားရယူခြင်းဖြင့် Sludge ထွက် ရှိမည်ဖြစ်ရာ Hazardous Waste Management Plan တွင်Paint Sludge နှင့်ပတ်သက်၍ မြို့တော် စည်ပင်နှင့်ချိတ်ဆက်စွန့် ပစ်မည်ဖြစ် ကြောင်းဖော်ပြအပ်ပါသည်။ စာ (၉၄ )

စာမျက်နာ ၁၇၅ စောင့်ကြပ် ကြည့်ရှုမှုအစီအစဉ် အား ဇယား ဖြင့်ထည့်သွင်းထားရာ ၎င်းဇယားပါ လေအရည်အသွေး၌ NO2, SO2 Parameter ဖော်ပြမှုမရှိဘဲ Comment Response Table တွင် Operation Stage နှင့် Monitoring Report တွင်ဖော် ပြမည် ဟုရှင်းလင်းထားပါ

စိစစ် သုံးသပ်ရေးအဖွဲ့ ဂင်များ၏ သဘောထားမှတ်ချက်အတိုင်း ပြင်ဆင် ဖြည့်စွက်ဖော်ပြရန်။ စိစစ် သုံးသပ်ရေးအဖွဲ့ ပင်များ၏ သဘောထား မှတ် ချက်အတိုင်းပြင်ဆင်ဖြည့်စွက်ဖော်ပြအပ်ပါသည်။ တိုင်းတာမည့်နေရာအတိအ ကျ GIS

	c c oc rc	0 C C	0 0 1 0 0 0 0 0 0			r c c cr	C 0 C
	အား ထည့်သွင်းတိုင်းတာခြင်းမ		သည်။ထို့ ပြင်တိုင်းတာမည့်နေ ရာနှင့်ပတ်			ဖြင့်လည်းဖော်ပြး	အပ်ပါသည်။
	မည်သည့်အတွက်ကြောင့် ထဥ		သက်၍ စိစစ် သုံးသပ်ရေးအဖွဲ့ ဂင်များ၏သ			စာ ( ၁၈၁ )	
	<u>ခြင်း မပြုကြောင်းကို ထည့်သွင</u> ်		ဘောထားမှတ်ချက်အတိုင်းပြင်ဆင် လာမှုမ				
	တိုင်းတာမည့်နေရာ၌ လည်း C	Construction	ရှိပါ။ဖော်ပြမှုမရှိဘဲ Comment Response				
	Site ဟု သာယေဘူယျဖော်ပြု		Table တွင် Operation Stage နှင့်				
	အတိအ ကျဖြင့်ထည့် သွင်းဖေ	ာ်ပြရန်၊ လေအ	Monitoring Report တွင် ဖော်ပြမည် ဟုရှင်	•			
	ရည်အ သွေး၊ ဆူညံသံ တိုင်းတ		လင်းထားပါ သည်။ထို့ ပြင်တိုင်းတာမည့်နေ				
	နေရာအား Construction Site	e, Factory	ရာနှင့်ပတ်သက်၍ စိစစ် သုံးသပ်				
	surrounding ဟုယေ ဘူယျဖေ	တ်ပြခြင်း အစား	ရေးအဖွဲ့ ()င်များ၏သဘောထားမှတ်ချက်အ				
	နေရာ အတိအကျဖြင့်ထည့်သွပ်	င်းဖော်ပြရန်၊	တိုင်းပြင်ဆင်လာမှုမရှိပါ။				
e			အချက်အလက်များထုတ်ဖော်တင်ပြုခင်း။				
	စာမျက်နာ ၁၈၃ တွင် အများ					ားအဖွဲ့ ဂင်များ၏	အများပြည်သူသိရှိနိုင်ရန်သတင်း
	ပြည်သူသို့ သတင်းအချက်	Website တွင်တစ်	င် ပြမည်ဟုရှင်းလင်းထားရာ EIA Procedure	အပိုဒ် ၆၁ အပိုဒ်ခွဲ	သဘောထားမှင	က်ချက်အတိုင်း	ထုတ်ပြန်ချက်အားဖော်ပြအပ်ပါ
	အလက်ထုတ်ဖော်တင်ပြုရင်း	(က) တွင်အဆိုပြ	စီမံကိန်း၊ ယင်း ၏ဆိုးကျိုးသက်ရောက်မှုများန	င့် သက်ဆိုင်သော	အများပြည်သူသိ	ပို့ သတင်းအ	သည်။ စာ (၁၉၄ )
	၌ Website Link (၂)ခု ဖော်	သတင်းအချက် ဒ	ာလက်များကို အများပြည်သူ နှင့် လူမှုအဖွဲ့ အ	စည်းများသိရှိနိုင်စေ	ချက်အလက်ထု	- တ်ဖော်တင်ပြရန်	
	ပြ ထားပြီး၊ ၎င်းထုတ်ပြန်	ရန်သက်ဆိုင်ရာစ	ဒေသနှင့် နိုင်ငံပိုင် မီဒီယာများမှလည်းကောင်း၊ စီမံကိန်းသို့ မဟုတ် 📗 နှင့်ထုတ်ပြန်သဥ			ည့်အထောက်အ	
	ထားသည့် အထောက်အ	စီမံကိန်းအ ဆိုပြု	သူ၏ ဂက်ဘ် ဆိုဒ်မှလည်းကောင်း စာကြည့် တိုက်များပြည် သူ့ ထားများဖြည့်စွင်			 ဘ်ဖော်ပြ ရန်။	
	ထားများကိုထည့်သွင်းဖော်ပြ	ခန်းမများစသည့် :		ကာင်း၊ စီမံကိန်းနေ	3 323		
	ရန်၊		သာ အောင် ဆိုင်းဘုတ် များစိုက်ထူ၍ လည်း၊				
			လမ်း များဖြင့်လည်း ကောင်း၊ သတင်းစာ ရှင်းc	_			
		· · · · · · · · · · · · · · · · · · ·	ချိန်နှင့်တပြေးညီဖော်ထုတ်တင်ပြုခြင်း" ဟုပါရှိ				
		_	ထုတ် ဖော်ပြရမည်ဟုလည်း ကောင်း၊ EIA Pr	_			
			့် တင်သွင်း ပြီးနောက်၁၅ရက်ထက်နောက် မဂ				
			ာလည်းကောင်း ဖော်ပြပါ ရှိပါသည်။				
	စီမံကိန်းမှလုပ်ငန်းလည်ပတ်အ			စိစစ်သုံးသပ်ရေးအ	ဖွဲ့ ပင်များ၏ သ	စီမံကိန်းမှလုပ်ငန်	း လည်ပတ်အ ဆင့်တစ် လျောက်
	လုံးဆက်လက်ဆောင်ရွက်မည့်	တိုင်ပင်ဆွေးနွေး		ဘောထားမှတ်ချက်	အတိုင်းဖြည့်	လုံး ဆက် လက်	ထာင်ရွက်မည့် တိုင်ပင်ဆွေးနွေး
	မှုများကို ထည့်သွင်းဖော်ပြရန်၊		ရွက်မည်ဟု ဖော်ပြထားပါသည်။ စွက်ဖော်ပြရန်၊			မှုများကိုထည့်သွင်းဖော် ပြထားပါသည်။ စာ (၁၉၅)	
20	စိစစ်သုံးသပ်ရေးအဖွဲ့ ပင်များ၏	ဆွေးနွေးပြောကြား	ချက်များ၊				= =

Project Related Heal	llth Problems Comment Response Table တွင်			SKD Process of Assembly Motor	Acciden	nt နင့် Injuries သည်မည်သည့်လုပ်ငန်းနင့်အချိန်မဆို	
(Accidents & Injuires	5)	Project Related Hea	alth Problems	Vehicle လုပ်ငန်းမှ Project		င်သော်လည်းယခုစီ မံကိန်းအတွက်လိုအပ်သောအ	
နှင့်ပတ်သက်သေ data	များအား	(Accidents & Injurie	es)	Related Health Problems		င်းများအားလုံးပြည်ပတွင်ထုတ်လုပ်သောကြောင့်အ	
source နှင့်တကွ ဖော်ပြ	•	မရှိကြောင်းရှင်းလင်း (	တားရာ SKD	(Accidents & Injuries)		တ်အပိုင်းများထုတ်လုပ်ခြင်းကြောင့်ကျန်းမာရေးထိ	
1, 0 5	Process of Assembly Motor			ဖြစ်ပေါ် မှုမရှိနိုင်ကြောင်း Reference		အား ချန်လုပ်ထားမည် ဟုဆိုလိုရင်းဖြစ်ပါကြောင်း	
	Vehicle လုပ်ငန်းမှ Pro			နှင့်တကွ ရှင်းလင်းတင်ပြ ရန်။		ကင်ပြအပ်ပါသည်။	
		Health Problems (A	ccidents &		_	Related Health Problems ဆိုင် ရာ (Accidents &	
		Injuries) ဖြစ်ပေါ် မှုမရိ	ရှိနိုင် ကြောင်း			) ကို Health Impact တွင်သီးခြားဖော်ပြအပ်ပါသည်။	
		Reference နှင့်တကွ				၅ ) ထပ်မံအသေးစိပ်ကို အခန်း ၁၀.၄.၁၀	
		ရှင်းလင်းတင်ပြရန်လိုး	အပ်ပါ သည်။		,	tional Health & Safety Management တွင်ဖော်	
						သည်။ စာ ( ၁၆၁ )	
စက်မှုဇုန်တွင်တည်ဆေ	ာက်ထားသောကြ	ဘာင့် Community	ဖော်ပြမှုမရှိပါ။	စိစစ်သုံးသပ်ရေးအဖွဲ့ (၊င်များ၏ သဘောထား			
Health အတွက်ပြသသ	ာနာ မဖြစ် ပေါ်နိုင်	 သော်လည်း အလုပ်		မှတ်ချက်အတိုင်းဖြည့်စွက် ဖော်ပြရန်၊		သဘောထားမှတ်ချက်အရ During Construction	
သမားများ၏ ကျန်းမာေ	ရးထိခိုက် မှုအားဖ	သသေချာချာ ဖော်ပြ				Phase- Noise, Accidents, Chemical Ergonomic	
ရန်၊		_				etc.,During Operation Phase- Noise,	
<b>During Construction</b>	Phase- Noise, A	Accidents, Chemical				Accidents, Chemical Ergonomic etc., တို့ ကို	
Ergonomic etc., Durir	ng Operation Ph	nase- Noise,				အခန်း ၉.၄.၁၀ Occupational Health & Safety	
Accidents, Chemical	Ergonomic etc.	ı				Management တွင်ဖော်ပြထားပါ သည်။ စာ(၁၆၂ )	
Noise & Vibration	Occupational I	Health and Safety Ma	anagement	Wedding and Cutting Tools, Compressors Wedding and Cutting 1		Wedding and Cutting Tools, Compressors	
အတွက်အလုပ်သမား	Plan အခန်း၊ စာ	ာမျက်နာ ၁၅၂ တွင် လုပ်	ငန်းခွင်အတွင်း	and Pneumatic Tools, Conveyors	and	and Pneumatic Tools, Conveyors and	
များအားမည်ကဲ့သို့	ဆူညံမှုမှာ Gene	erator အခန်းဟုဖော်ပြင	သား ပြီး	Transport Systems စသည့် Machin	ery and	Transport Systems စသည့် Machinery and	
ကာကွယ်ပေးမည်ဖြစ်	၎င်းအခန်း ဆူညံ	ဂ္ဂ်မှု လျှော့ချ ရန်အတွက်	Sound Proof	Equipment များကြောင့် လည်းကောင်	` `	Equipment များကြောင့် လည်းကောင်း Assembly	
ကြောင်း အသေးစိတ်	Housing နှင့် Ex	xhaust Silencer တပ်ခ	၀င်မည်ဟုဖော်ပြ	Assembly Operations ကြောင့်လည်း	း ကောင်း	Operations ကြောင့်လည်း ကောင်း Forklifts and	
ဖော်ပြပေးရန်	ထားသော်လည်	: Wedding and Cuttir	ng Tools,	Forklifts and Cranes, Dropping or		Cranes, Dropping or Handling of Parts စသည့်	
	Compressors and Pneumatic Tools, Conveyors			Handling of Parts စသည့် Materia		Materia Handlingလုပ်ငန်း များမှထွက်ရှိ သည့် ဆူ	
	and Transport Systems စသည့် Machinery and			Handling လုပ်ငန်း များမှထွက်ရှိ သည့် ဆူညံမှု		ညံမှု ကြောင့် လုပ်သားများအပေါ် ထိခိုက်မှု မရှိစေ	
	Equipment မျာ	းကြောင့် လည်းကောင်း	Assembly	ကြောင့် လုပ်သားများအပေါ် ထိခိုက်မှု မရှိစေ		ရေး ဆောင်ရွက်မည့် အစီအစဉ်ဖြည့်စွက်ဖော်ပြ	
	Operations 6	ကြာင့်လည်း ကောင်း Fo	rklifts and	ရေး ဆောင်ရွက်မည့် အစီအစဉ်ဖြည့်		အပ်ပါသည်။ စာ(၁၆၃)	

	Cranes, Dropping or Handling of Parts စသည့် Materia Handling လုပ်ငန်းမှထွက်ရှိ သည့် ဆူညံမှုကြောင့် လုပ်သားများအပေါ် ထိခိုက်မှု မရှိစေရေး ဆောင်ရွက်မည့် အစီအစဉ်မပါရှိပါ။		စွက်ဖော်ပြ		
OHS Plan အားမည်သူ ကောင်အထည်ဖော်ဆေ မည်သည့်အချိန် အတိဒ အစီအမံအား ထည့် သွစ်	တင်ရွက်မည့် လုံ ၈ ကျရေး၍ ရွဂ	omment Response Table တွင်လူမှုဇူ စရေးဌာန၏ လမ်း ညွှန်မှုအတိုင်းဆောင် က်မည် ဟုသာဖော်ပြထားပြီး အစီရင်ခံ တွင်မပါရှိပါ။	-	ပ်ရေးအဖွဲ့ ဂင်များ၏ သဘော  က်အတိုင်းဖြည့်စွက် ဖော်ပြရန်၊	OHS Plan အားမည်သူက အ ကောင်အ ထည် ဖော်ဆောင်ရွက်မည်၊မည်သည့်အချိန် လုပ်ဆောင် မည်တို့ ကိုဖော်ပြအပ်ပါသည်။ စာ (၁၆၁)
Monitoring Plan အားအသေး စိတ်ထည့်သွင်းဖော်ပြ ရန်၊	တိကျစွာဖော်ပြ ဖ မပါရှိခြင်း၊ Oper ဖော်ပြမှုတွင် Co ဟုဖော်ပြခြင်း၊ R	n ဖော်ပြချက် တွင် Location မှုမရှိခြင်း၊ Wastewater Category ation ကာလ Water Quality အတွက် nstruction Site Location esponsible Organization တွင် Sub ctor မှ ဆောင် ရွက်မည်ဟုဖော်ပြထား ရပါသည်။	ဘောထား ဖော်ပြရန်န စီမံကိန်းအ လုပ်ငန်းမှ	ပ်ရေးအဖွဲ့ ဂင်များ၏ သ မှတ်ချက်အတိုင်းဖြည့်စွက် ပင့် တာဂန်ယူမည့်အဖွဲ့ သည် ဆိုပြုသူ (Proponent) သို့ မ ဟုတ် ဆောင်ရွက်မည့် EMP ntation Body စသည်ဖြင့် ဖော်ပြရန်၊	Monitoring Plan ဖော်ပြချက် တွင် Location တိကျစွာဖော်ပြခြင်း၊ Waste Water ကိုထည့်သွင်း ထားခြင်းနှင့် တိုင်းတာ မည့်နေရာများ (GIS) နှင့် တာပန်ယူမည့်အ ဖွဲ့ တို့ ကို စီမံကိန်းအဆိုပြုသူ (Proponent) သို့ မ ဟုတ် လုပ်ငန်းမှ ဆောင်ရွက်မည့် EMP Team အဖြစ်ပြောင်း လဲဖော်ပြထားပါ သည်။ အခန်း ၈.၄.၁၆ စာ (၇၈)
စွန့်ပစ်ရည်ထွက်ရှိမှုမ ရှိဟုဖော်ပြထားပြီး Recycling ပြန်အသုံး ပြူခြင်းအား ပြန်လည် စိစစ်ရန်၊	Comment Response Table တွင်စွန့် ပစ်ရေမစွန့် ထုတ်ဟုပြင် ဆင်ဖော်ပြထားသော်လည်း အစီ ရင်ခံစာ		ထွက်ရှိသဉ	ဆောင်ရွက်မည့် စွန့် ပစ်ရေ သို့ Production Process က်ရှင်းလင်းဖော်ပြရန်၊	စီမံကိန်း၏လုပ်ငန်းစဉ်တွင်မော်တော်ကားတပ်ဆင် ပြီးနောက်မိုးရေလုံချုံမှုအတွက် Rain Test ပါရှိပြီး ထိုသို့ စမ်းသပ်ခြင်းသည် ကားရေဆေးသကဲ့သို့ ဖြစ်ပြီး အဆိုပါရေ ကိုလည်းပြန်လည်အသုံးပြုသည့် Recycling ပြုလုပ်သောကြောင့်စွန့် ပစ်ရေမရှိပါ။ Recycling ဆောင်ရွက်မည့် စွန့် ပစ်ရေ ထွက်ရှိ သည့် Production Process ကိုဖော် ပြအပ်ပါသည်။ စာ ( ၉၄ - ၉၅ )(၁၅၉)
Oil & Grease များ ဖော်ပြမှုမရှိပါ။ သုံးစွဲခြင်း ကြောင့် ထည့်သွင်းဖော်ပြရန်၊			စိစစ်သုံးသပ်ရေးအဖွဲ့ ဂင်များ၏ သဘောထား မှတ်ချက်အတိုင်းဖြည့်စွက် ဖော်ပြရန်၊		Oil & Grease များ သုံးစွဲခြင်းကြောင့်စွန့် ပစ်အ ရည်တွင်စီမံထားရှိမှုကို Wastewater Management ကဏ္ဍ တွင် Oil Trap ဖြင့်ဖယ်ရှားနိုင် ကြောင်းစာ (၁၅၈)တွင်ဖော်ပြထားပါသည်။
IFC Guideline ကို ဖော်ပြရာ၌ မလုံ		Comment Response Table තුරි		စိစစ်သုံးသပ်ရေးအဖွဲ့ ဂင်များ၏	စိစစ်သုံးသပ်ရေးအဖွဲ့ ဂင်များ၏ သဘောထား

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လောက်ပါ၊ ကျန်းမာ ရေး အချက်ဒ		ရုံအရ Monitoring Report			•	ဂ်ချက်အတိုင်း <u>ဖြ</u> ည့်	• • •	တိုင်း ဖြည့်စွက်ဖော်ပြအပ်ပါသည်။	
			နဲတွင်ဖြည့်စွက် ဖော်ပြ	9	စွက်ဖော်ပြရန်၊			စာ (၁၆၄)	
သေချာရေး ဆွဲရန်။			ဖာ်ပြထားပါ သည်။		- 1				
စာမျက်နာ ၁၆၁ AIDS ဆိုသည့်	ပြင်ဆင်ထားဝေ	တ်လည်း Re	port တွင်ပါရှိ သည့် Ai	ds	စိ	ဝိစစ်သုံးသပ်	ရေးအဖွဲ့ ပင်များ၏	သ ဘောထား	Aids ဟုပြင်ဆင်တင်ပြအပ်ပါသည်။
အသုံးအနှုန်းအား Aids ဆိုသည့်	ဖော်ဆောင်သဉ	<b>ွှဲ့စကားလုံး</b> အ	ဘး AIDS စကားလုံးဖေ	<u> </u> တ်ပြထား	မှ	မှတ်ချက်အဖ	ဘိုင်းဖြည့်စွက် ဖော်	ပြရန်၊	
အသုံးအနှုန်းဖြင့်ပြင်ဆင်ရန်	သည်များ ရှိနေ	ပါ သည်။							
စီမံကိန်းဆောင်ရွက်သည့်ဧရိယာ ၂	၂၀.၀၄ നേ	Comment	: Response Table တွ	င် ကိန်းပြဉ	ည့်	စီမံကိန်	းဧရိယာအမှန်စိစစ်	ဧရိယာအမှ	န် ၂၀.၀၄ေကေ ကိုဖော်ပြ အပ်ပါသည်။
၂၀.၁၀ ဧကဟု အမျိုးမျိုး ထည့်သွ	င်း ထားသဖြင့်	ယူ၍ ဖော်ပြ	ပျထားခြင်းဖြစ်သည်ဟုရှ	ရှင်းလင်းထ	ဘး	ဖော်ပြရ	န်၊		
စီမံကိန်းဆောင်ရွက်မည့် ဧရိယာဇ	ကအားရှင်း	ရာပေ ၆၉၆	၉.၉၆ ကွာခြားသည့်ဧရိပ	သာဖြစ်ပါ၁	သည်။				
လင်းစွာ ထည့်သွင်းဖော်ပြရန်၊				_	_				
ဘေးအွန္တရာယ်ရှိသော ရေနံနှင့်ရေ	နှံထွက်ပစ္စည်း တ	ာစ်မျိုးမျိုး ထုပ်	ာ်ပိုးထည့်သွင်းပစ္စည်း	ဖော်ပြမှုဖ	မရှိပါ။	၊ စိစစ်သုံ	းသပ်ရေးအဖွဲ့ ဂင်မျ	ား၏ သ	ရေနံ၏ ဘေးအွန္တရာယ်ရှိသည့် သဘာဂ
အားလုံးတွင်တံဆိပ်နှိပ်ခြင်း၊ ဖောင်	်းကြွပုံဖော်ခြင်း၊ ဖ	ဆေးဖြင့်ရေးသ	ဘးခြင်း၊ ပုံနှိပ်ခြင်းတို့			ဘောထ	ားမှတ်ချက်အတိုင်		ကို သတိပေးသည့် စာနင့်သင်္ကေတ
ဖြစ်စေ အခြားနည်း တစ်ရပ်ရပ်ဖြင့်						ဖော်ပြရေ			တို့ ကိုဖော်ပြသည့်အမှတ်အသားများကို
ထိုသို့ ဖော်ပြရန်မဖြစ်နိုင်ပါက ထုဝ									ကပ်ထားပါသည်။ စာ ( ၁၆၇ )
သို့ မဟုတ် ရေနံ၏ ဘေးအွန္တရာယ်									
ပေးချက်ကိုမြင်သာသည့်နေရာတွင်	. —	•	_ "						
ဖြစ်စေရေးသား ဖော်ပြရမည်။	л		٠.						
යි.ද.ද Geology/ Seismology ක	ားဖော်ပြထားရာ	စိမံကိန်းဒေ	Seismology ജാം	ည ကိုင်းတာမှုဖ	မရိ	လုပ်ငန်		ဘဲ တိုင်းတာ	လိုက်နာပယ်ဖျက်ထားပါသည်။
သ၏ Geopogy ကိုသာအကျဉ်းချ		•			и		ာ ထည့်သွင်းရြင်းမ	•	
အကြောင်းဖော်ပြထားခြင်းမရှိ သဖြ						וויים	.,	LJCT"	
၁၀.၄.၁၃ Parameter for the na			_  မျို့ သာစက်မှုဇုန်ကော်မ	ာကို၏	გიჩ	 စ်သုံးသပ်မ	ရးအဖွဲ့ ဂင်များ၏	Parameter fo	or the natural disaster နှင့်ပတ်သက်
နှင့်ပတ်သက် ၍စီမံကိန်းဧရိယာတွ			မျှ သာမဟုမှုဇူနှဖတာ လမ်းညွှန်မှုဖြင့် ဆောင်မှ			•	တ်ချက်အတိုင်း		သာတွင် ဖြစ်ပေါ်နိုင်သည့် disaster များ
disaster များကိုလေ့လာ ဖော်ပြပြီ		_	ဖြစ်ကြောင်းဖော်ပြထား - 	~ _		စေဘထားမှ သို့စွက် ဖော်			ည်းပြုပြီးအဆိုပါdisaster များနှင့်ပတ်သက်
	-		deal/1/ceeses/fm38	الطحاد	면산	آهي دري		-	
ပတ်သက်၍ဆောင်ရွက် မည့်အစီဒ	രാഗ്രാവിലു								မည့်အစီအ စဉ်ကိုဖော်ပြအပ်ပါသည်။
C C O A: O !!!	c	2 0	D : 1 D : :			1		အခန်း ၉.၄.၁	•
စာမျက်နှာ ၆၇ ရှိ Air Quality		•	Period အား Raining				• •	•	Air Quality တိုင်းတာဖော်ပြချက်၌
တိုင်းတာဖော် ပြချက်၌ Season	•	_	လည်း တိုင်းတာမှု Res	_		_	•	•	Season အလိုက်တိုင်းတာဖော်ပြ
အလိုက်တိုင်းတာဖော်ပြရန်၊	Season (၁) ඉ	ဘသာဖော်ပြဖ	ထားပြီးတိုင်းတာထားသ	ာည့် Seas	onမ၁	သိရှိရပါ။	ဖြည့်စွက် ဖော်ပြရ	\$1	ထားပါသည်။

	စီမံကိန်းဖရိယာ၏ Climate ကို ဖော်ပြစ				စီမံကိန်းဧရိယာနှင့်သက်	စီမံကိန်းတည်ရှိရာမြို့ သာစက်မှုဇုန်နှင့် ငါန်းဖွန်မြို့
	တို့ ကို ၂၀၁၈ ခုနှစ်အတွက်သာဖော်ပြဝ	တးသဖြင့် စီမံကိန်းဧရိ	အချက်အလက်ဖော်ပြ	ရာ၌မိတ္ထီ	ဆိုင်သည့်အ ချက်အ	နယ်တို့ နှင့်သက်ဆိုင်သည့် Climate ဆိုင်ရာအ
	ယာ၏ Climate ကိုဖော်ပြရာတွင်Long	Term Average ဖြစ်ရပါ	လာမြို့ ၏အချက်အလ	ာက်များ	လက်သာဖော်ပြရန်၊	ချက်အလက်များမရှိသည့်အ တွက်အနီးစပ်ဆုံးမိထ္ထီ
	မည်။ အနည်းဆုံး (၁၀)နှစ်စာကို ဖော်ပြ	ရန်လိုအပ်ပါသည်။ အပူ	ဖြည့်စွက်ဖော်ပြထားပါ	ါသည်။		လာစခန်း၏တိုင်းတာရရှိချက်များကိုဖော်ပြထားခြင်း
	ရျိန်၊ မိုးရေချိန် အပြင် လေတိုက် ရာအ <u>ရ</u>	ုပ်နှင့် လေတိုက်နှုန်းကို				ဖြစ်ပါသည်။
	ဖော်ပြသင့်ပါသည်။					
	Plan တွေကိုဖော်ပြထား သော်လည်း M	lanagement Action	Management Actio အာ	ားယေ မြ	စိစစ်သုံးသပ်ရေးအဖွဲ့ ဂင်များ၏ ၁	သ စောင့်ကြပ်ကြည့်ရှုခြင်း တွင် Frequency
	အားသေချာစွာ ဖော်ပြ ရန်လိုအပ်သဖြင့်	ပြန်လည်ပြင် ဆင်ရန်	ဘူယျဆန်စွာဖော်ပြထားပ	ပါသည်။ (	ဘောထားမှတ်ချက်အတိုင်းဖြည့်စု	gက် သတ်မှတ်ချက် ဖြင့်ညီအောင်တစ်နှစ် ၂
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၁၁	အထွေထွေ					
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	Spelling Error များ Report (၁) အုပ်င	ပုံးအတွက်ပြင်ဆင်ရန်။				လိုက်နာဆောင်ရွက်ထားပါသည်။

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#### **List of Abbreviations**

LIBO OF TROOF OF TREE OF THE PROPERTY OF THE P							
AIDS	Acquired Immuno Defiency Syndrome						
BC	Before Construction						
CDC	City Development Committee						
CS	Closure Stage						
DC	During Construction						
DRM	Disaster Risk Management						
ECC	Environmental Compliance Certificate						
ECD	Environmental Conservation Department						
EIA	Environmental Impact Assessment						
EMP	Environmental Management Plan						
GAD	General Administration Department						
HIV	Human Immunodefiency Virus						
MONREC	Ministry of Natural Resources & Environmental Conservation						
OS	Operation Stage						
OHS	Occupational Health & Safty						
PAP	Project Affected People						
RRD	Department of Relief and Resettlement						
SIA	Social Impact Assessment						
SPC	Sub Project Contract						

**Executive Summary (Myanmar)** 

ယခုအခါပြည်ထောင်စုမြန်မာနိုင်ငံတော်သည်ခောတ်မီဖွံ့ ဖြိုးတိုးတက်သောစက်မှုနိုင်ငံဖြစ်ပေါ် လာပြီးတိုင်းရင်းသား ပြည်သူလူထုများစီးပွါးရေးနှင့်လူမှုရေးမြင့်မားလာစေရေးအတွက်ဝန်ဆောင်မှုလုပ်ငန်းများ၊ထုတ်လုပ်မှုလုပ်ငန်းများ အပါအဝင်၊ အသေးစား၊အလတ်စားနှင့်အကြီးစားစက်မှုလုပ်ငန်းများဖွံ့ ဖြိုးတိုးတက်လာစေရန်ဆောင်ရွက်ရာတွင်နိုင်ငံ တော်၏သဘာဝပတ်ဝန်းကျင်ကိုမထိခိုက်စေဘဲသို့ မဟုတ်ထိခိုက်မှုအနည်းဆုံးနှင့်ရေရှည်ဖွံ့ ဖြိုးတိုးတက်ရေးတို့ ကိုအလေး ထားလုပ်ကိုင်လျက်ရှိပါသည်။

မန္တလေးတိုင်းဒေသကြီးသည်မြန်မာနိုင်ငံ၏ရှေးယခင်မင်းနေပြည်တော်တည်ရှိရာသေဖြစ်ပြီးယဉ်ကျေးမှုအမွေအနစ်များ ထွန်းကားရာဒေသဟုတင်စားခေါ် ဝေါ် ရသည့်ဒေသဖြစ်ပါသည်။မြန်မာနိုင်ငံ၏တိုးတက်ပြောင်းလဲမှုတွင်စက်မှုကုန်ထုတ်

ကဏ္ဍသည်အထူးအရေးထားရမည့်ကဏ္ဍတစ်ခုဖြစ်ပါသည်။

ယခုစီမံကိန်းကိုနိုင်ငံခြားရင်းနှီးမှုပုံစံဖြင့်တည်ဆောက်ရန် Gold A Y A Motors International Group Co.,Ltd ကမန္တလေးတိုင်းဒေသကြီးအစိုးရအဖွဲ့ နှင့်အတူတကွသက်ဆိုင်ရာဌာနဆိုင်ရာများအပါအဝင်မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှု ကော်မရှင်အဖွဲ့ မှခွင့်ပြုချက်တောင်းခံပြီးနိုင်ငံခြားသားရင်းနှီးမြှုပ်နှံမှုသည့်ဥပဒေနှင့်အညီအကောင်အထည်ဖေါ် ဆောင် ရွက်သွားမည့်စီမံကိန်းဖြစ်ပါသည်။

ပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းလုပ်ငန်းဆောင်ရွက်ရာတွင်အဓိကတွေ့ ရှိရသောအချက်များကိုအောက်ပါအတိုင်းအကျဉ်းချုံး

ဖော်ပြအပ်ပါသည်။

- ဒေသအတွက်ဖွံ့ဖြိုးရေးလုပ်ငန်းများတွင်လိုအပ်သောစီမံကိန်းတစ်ခုဖြစ်ပါသည်။
- မူလမြေကိုပိုမိုအကျိုးရှိစွာပြောင်းလဲလုပ်ကိုင်သောစီမံကိန်းတစ်ခုဖြစ်ပါသည်။
- ပတ်ဝန်းကျင်ထိခိုက်မှုမရှိသောစီမံကိန်းဟုမှတ်ယူနိုင်ပါသည်။

စီမံကိန်းအကြောင်းအရာ။

ိုးအေဝိုင်အေမော်တာအင်တာနေရှင်နယ်အုပ်စုကုမ္ပဏီလီမိတက်သည်ဖက်စပ်မော်တော်ယာဉ်အုပ်စုကုမ္ပဏီအဖြစ်၂၀၁၇ ခုနှစ်တွင်စတင်တည်ထောင်ခဲ့ပါသည်။ မြန်မာနိုင်ငံတွင်မှတ်ပုံတင်ထားပြီးမတည်ရင်းနှီးငွေအမေရိကန်ဒေါ် လာ ၁၅. ၃၂ သန်း ဖြစ်ပါသည်။

မန္တလေးတိုင်းအတွင်းရှိမြိုသာစက်မှုဇုန်စီမံကိန်းသည်ပြည်တွင်းပြည်ပတို့မှရင်းနှီးမြှုပ်နှံသူများအားမြေနေရာများကိုနှစ်တို၊ နှစ်ရှည်ငှားရမ်းလုပ်ကိုင်ခွင့်ပေးမည့်လုပ်ငန်းဖြစ်ပါသည်။ယခုစီမံကိန်းတည်ဆောက်ထားသည့်စက်မှုမြိုတော်အားခောတ်မီ နည်းစနစ်များအသုံးပြုပြီး၊အများပိုင်ကုမ္ပဏီအဖြစ်တည်ထောင်လုပ်ကိုင်စေရန်အတွက်မန္တလေးတိုင်းဒေသကြီးအစိုးရက အားပေးကူညီပံ့ပိုးထားပါသည်။ယခုတည်ဆောက်သည့်စက်မှုဇုန်သည်အာရှအမြန်လမ်း၊အာရှရထားလမ်းကွန်ယက်၊ဧရာဝ တီမြစ်နှင့်အပြည်ပြည်ဆိုင်ရာလေဆိပ်တို့နှင့်ဆက်သွယ်ထားရှိပါသည်။

ဤစီမံကိန်းသည် Gold A Y A Motors International Group Co.,Ltdကမန္တလေးတိုင်းဒေသကြီးမြင်းခြံခရိုင်၊ငါန်းဇွန်မြို့ နယ်မြိုသာစက်မှုဇုန်၊မြိုသာနှင့်နဘူးအိုင်ကျေးရွာရှိမြေကွက်အမှတ်(ဘီ-၁-၁)၊မြေတိုင်းရပ်ကွက်အမှတ်(စက်မှုဇုန်နယ်မြေ၊ ဇုန်-၂-စီ)မြေအကျယ်(၂၀. ၀၈၄)ဧကရှိမြေပေါ် တွင်မော်တော်ယာဉ်အမျိုးမျိုးတပ်ဆင်ထုတ်လုပ်သည့်စက်ရုံစီမံကိန်းကို နိုင်ငံခြားသားများရင်းနှီးမြှုပ်နှံသည့်ဥပဒေနှင့်အညီအကောင်အထည်ဖေါ် ဆောင်ရွက်မည့်စီမံကိန်းဖြစ်ပါသည်။

ယခုစီမံကိန်းကိုအောက်ပါအတိုင်းရည်ရွယ်ချက်များထားရှိပါသည်။

(က)မြို့ပြနှင့်လူမှုဖွံ့ဖြိုးမှုတိုးတက်စေပြီးဆင်းရဲမှုလျော့ချစေရန်၊

(ခ)ကျွှမ်းကျင်သူများမွေးထုတ်၍ စက်မှုကဏ္ဍဖွံ့ဖြိုးတိုးတက်လာစေရန်၊

(ဂ)စက်မှုကဏ္ဍတွင်နိုင်ငံတကာမှရင်းနှီးမြှုပ်နှံမှုများဆွဲဆောင်နိုင်စေရန်၊

(ဃ်)စက်မှုဇုန်ဖွံ့ဖြိုးမှု၊အလုပ်အကိုင်အခွင့်အလမ်းများရရှိလာမှုတို့နှင့်အတူလူနေမှုအဆင့်ဖွံ့ဖြိုးတိုးတက်လာစေ ရန်၊

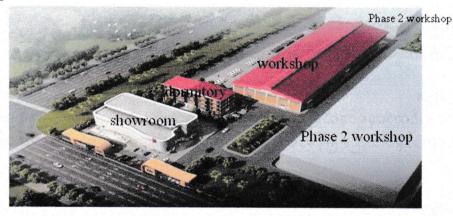
(င်)နိုင်ငံတော်အတွက်ဘဏ္ဍာငွေတိုးတက်ရရှိလာစေရန်၊

စီမံကိန်းသည်မြေ၂၀. ဝ၈၄ဧကပေါ် တွင်တည်ရှိပါသည်။ပထမအဆင့်အတွက်အသုံးပြုမည့်မြေ၁၄၅၃၇. ၈၉စတုရန်းမီတာ ပေါ် တွင်ပြခန်းများအတွက်မြေဧရိယာ၃၆၅၈. ၂၈စတုရန်းမီတာ၊ လူနေအိပ်ခန်း ၂၇၂၈ စတုရန်းမီတာနှင့်စက်ရုံအတွက် ၈၁၅၁. ၆၁ စတုရန်းမီတာတို့အသုံးပြုသွားမည်ဖြစ်ပါသည်။

စီမံကိန်းကို Phase I နှင့် Phase II ဟူ၍ခွဲခြားထားပြီး၊ Phase I တွင် Workshop, Showroom Domitory တို့ပါဝင်ပါသည်။ အခြားသောစီမံကိန်းများကဲ့သို့ Phase Iနှင့် Phase II တို့ တစ် ပြိုင်နက်တည်ဆောက်ခြင်းမဟုတ်ဘဲ Phase I အရလုပ်ငန်းစတင်ဖေါ် ထုတ်ပြီးစီးမှသာ Phase II ကိုဆက်လက်လုပ်ကိုင်သွားနိုင်မည့်စီမံကိန်းဖြစ်ပါသည်။

စီမံကိန်းတည်နေရာ။ ယခုစီမံကိန်းသည်မြောက်လတ္တီတွတ်၂၁˚၄၃ႛ၅၂" နှင့်၊ အရှေ့လောင်ဂျီ တွတ် ၉၅˚၃၇ႛ၃၀" တွင်တည်ရှိပါသည်။ စက်ရုံနေရာချထားရှိမှု၊

အောက်ပါပုံသည်စက်ရုံစီမံကိန်းတည်ဆောက်ပြီးစီးသွားပါကကားပြခန်း၊ဝန်ထမ်းနေအိမ်နှင့်စက်ရုံများထားရှိမှုကိုတွေ့ မြင်ရမည့်ပုံဖြစ်ပါသည်။



Better And Ingenious Choice

စီမံကိန်းအမျိုးအစား၊

ယခုစီမံကိန်းသည်သယ်ယူပို့ဆောင်ရေးနှင့်စက်မှုကဏ္ဍဖွံ့ ဖြိုးရေးအတွက်သာမကဘဲ၊စီးပွါးရေး၊လူမှုရေးမြို့ရွာဖွံ့ဖြိုးရေးတို့ အပြင်တစ်ဦးချင်းနှင့် နိုင်ငံတော်၏ဝင်ငွေများတိုးတက်လာစေရန်တို့ကိုအထောက်အကူပြုမည့်စီမံကိန်းလုပ်ငန်းအမျိုးအ စားဖြစ်ပါသည်။

စီမံကိန်း၏ရည်ရွယ်ချက်နှင့်လုပ်ဆောင်မည့်နည်းစဉ်အကျဉ်းချုပ်။

ဂိုးအေဝိုင်အေမော်တာအင်တာနေရှင်နယ်အုပ်စုကုမ္ပဏီလီမိတက်သည် BAIC DAoDa နှင့် BAIC ChangHe Brand ကုန်အမှတ်တံဆိပ်များပါသည့်မော်တော်ယာဉ်နှင့်အပိုပစ္စည်းများရောင်းချခြင်း၊ရောင်းချပြီးနောက်ဝန်ဆောင်မှုတို့အပါအ ဝင်မော်တော်ယာဉ်အရစ်ကျရောင်းချခြင်းတို့ကိုပါတာဝန်ယူလုပ်ကိုင်မည်ဖြစ်ပါသည်။

လက်ရှိတွင်အမျိုးအစား(၇)မျိုးဖြစ်သော အိမ်စီးကား၊ SUV, MPV လုပ်ငန်းသုံးကား၊ ပစ်ကပ်ကား၊ အထူးကားနှင့် စွမ်းအင်အသစ်သုံးကားများကိုထုတ်လုပ်သွားမည်ဖြစ်ပါသည်။ ရန်ကုန်နှင့်မန္တလေးမြိုတို့တွင်အရောင်းကိုယ်စားလှယ် များရှိမည်ဖြစ်သည်။အဓိကလုပ်ငန်းများမှာကားရောင်းမှု၊ကိုယ်စားလှယ်ခန့်ထားမှု၊ဈေးကွက်၊ရောင်းချပြီးနောက်ဝန် ဆောင်မှု၊ဝယ်ယူသူများနှင့်ဆက်သွယ်ချိတ်ဆက်မှု၊စွမ်းအင်သစ်သုံးကားများအရောင်းအဝယ်၊အများနှင့်ဆက်ဆံမှု၊လူ သားအရင်းအမြစ်၊ဘဏ္ဍာရေးဆိုင်ရာ၊ အိုင်တီ နှင့် ဝယ်ယူခြင်းတို့ဖြစ်ပါသည်။

#### ထုတ်လုပ်မည့်မော်တော်ယာဉ်အမျိူးအစား။

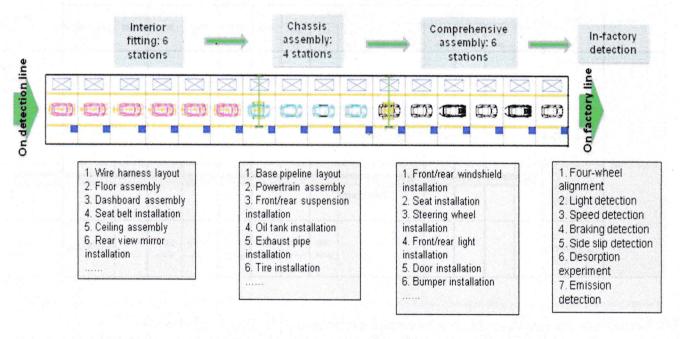
No.	Type of Vehicles Model	Specification
1	CHANGHE Q35 SUV	1.5L Elite Version, AT,
		Smart Version
2	CHANGHE M 60 MPV –	1.5 T Standard
	1.5 T Standard	
3	CHANGHE A 6, Sedan Car	CTV Elite Version
4	DODA V-8 MPV	Business Type
5	DODA K-9 Pick-up	4 x 4 Diesel Version
6	CHANGHE Q-7 SUV	CTV, Luxury Version
7	CHANGHE M20S MPV	5 MT, Standard

ထုတ်လုပ်မှုနည်းအဆင့်ဆင့်ပုံစံ

ယခုစီမံကိန်းသည်မော်တော်ယာဉ်ထုတ်လုပ်ရောင်းချခြင်းဟုဆိုသော်လည်းမော်တော်ယာဉ်အစိတ်အပိုင်းအားလုံးကိုနိုင်ငံ ခြားမှတင်သွင်းလာပြီးယခုစက်ရုံတွင်တပ်ဆင်ထုတ်လုပ်ရောင်းချခြင်းသာဖြစ်ပါသည်။မော်တော်ယာဉ်တပ်ဆင်ထုတ်လုပ် သည့်လုပ်ငန်းစဉ်အဆင့်ဆင့်ကိုအောက်ပါအတိုင်းဖော်ပြထားပါသည်။

## O BAIC Part 3 | Process planning (SKD)

#### 3.4. Final assembly process



Better And Ingenious Choice

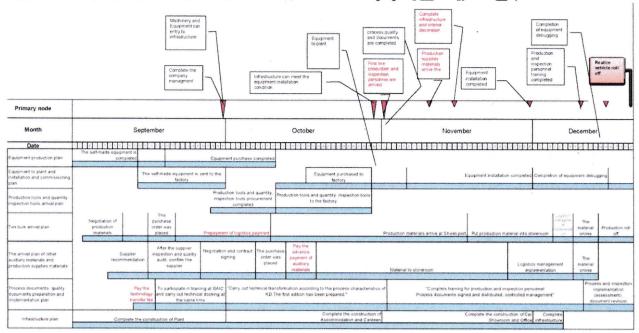
စီမံကိန်းလုပ်ဆောင်မည့်ကာလ။

စီမံကိန်းကိုပြည်တွင်းလုပ်သားဦးရေ၁၁၀နှင့်နိုင်ငံခြားသား၁၅ဦးတို့ဖြင့် မော်တော်ယာဉ်အမျိုးမျိုးတို့ကိုနှစ်ရှည် (နှစ်၅၀) သတ်မှတ်လုပ်ဆောင်သွားမည်ဖြစ်ပါသည်။

Gold A Y A Motors International Company Limited

(၁)ကုမ္ပဏီစတင်သည့်နေ ၂၈-၆-၂၀၁၇ (၂)MIC ခွင့်ပြုသည့်နေ ၂၇-၃-၂၀၁၈ (၃)စီးပွါးဖြစ်စတင်လုပ်ကိုင်သည့်နေ ၂၅-၆-၂၀၁၉

# စက်ရုံတည်ဆောက်ရေးလုပ်ငန်းစီမံကိန်းအချိန်ဇယား။ (နောက်ဆက်တွဲတွင်ပုံကြီးပါရှိပါသည်။)



# စီမံကိန်းစတင်ဆောင်ရွက်သည့်အချိန်မှစ၍စီမံကိန်းပိတ်သိမ်းသည့်အဆင့်အထိဆောင်ရွက်မည့်အဆင့်လိုက်အကောင်အ ထည်ဖော်မည့်အချိန်ဇယား။

Project Plan

									P	roject							
Content	Item			20	18			20	19								备注
	17 Scare	2017	lst qtr	2nd qtr	3rd •qtr	4th qtr	1st qtr	2nd qtr	3rd qtr	4th qtr	2020	2021	2022	2023	2024	2025-2087	<b>2</b>
																	50 years contra
	lease landing										1	1					& 20 years extension
	100		CONS	truction	start da	rte: - 20.	5 2018	Finishe	d date -	end					a		
	onstruction pla	n	1														
Project Plan																	
	equipment	At ti	re end (	of the ve	ear of 20	18. alli	the eau	oment	becan	to ente	the fac	torv. Ac	wil 2019 f	inish all e	auiomer	nt installation.	June 2019
	installation										nice separate						
									600	1000	5000	10000	15000	20000	30000		-4
					1			1	OUU	1000	2000	10000	15000	20000	30000	50000 units	all are per years

When the land lease expires, the company will continue to lease the land, upgrade the plant, upgrade the equipment and upgrade the products, and continue to operate

စီမံကိန်းအချိန်ဇယား (အကြိုတည်ဆောက်ရေး၊တည်ဆောက်ရေးနှင့်ပုံမှန်လည်ပတ်ကာလ)

စဉ်	ဖော်ပြချက်	စီမံကိန်းကာလ									
L		2017	2018	2019	2020~24	2025~87					
က	အကြိုတည်ဆောက်ရေးကာလ										
9	တည်ဆောက်ရေးကာလ										
0	ပုံမှန်လည်ပတ်စဉ်ကာလ	- April									
	(၁)ထုတ်လုပ်ရေးနှင့်ပြုပြင်ထိန်းသိမ်းခြင်း										
Miles and Consens	(၂)ပတ်ဝန်းကျင်နှင့်စွန်ပစ်အမှိုက်စီမံခန်ခွဲမှု					-					
· ·	(၃)စောင့်ကြပ်ကြည့်ရှုခြင်း				-	-					

ဇယား (၄)စီမံကိန်းအကြောင်းအချက်များ။ The salient data of the project (Myanmar)

စဉ်	(// 1	ဖော်ပြချက်	u u	အရေအတွက်	မှတ်ချက်		
0	စီမံကိန်းအမျိုး	ങ്ങമാ:		JV (မြန်မာ ၂၀% + နိုင်ငံခြား ၈၀%)	ဖက်စပ်ရင်းနှီးမြှုပ်နှံမှု		
J	ရင်းနှီးမြှုပ်နှံမှုဖ	റലാന്ത	မြန်မာ	အမေရိကန်ဒေါ် လာ ၃. ၁၃ သန်း	အမေရိကန်ဒေါ် လာနှင့်ညီမျှသောမြန်မာကျပ်		
		နိုင်ငံခြား အမေရိကန်ဒေါ် လာ ၁၂. ၁၉ သ			ငွေအပါအဝင်စုစု ပေါင်းရင်းနှီးမြှုပ်နှံမှုပမာဏ (15.32 Million US\$)		
			စုစုပေါင်း	အမေရိကန်ဒေါ်လာ ၁၅. ၃၂ သန်း	(13.32 Willion 030)		
9	ကုမ္ပဏီတည်ဖ			28-6-2017	(Company Registration No. 100642476)		
9	လုပ်ငန်းစတင်	လည်ပတ်သဉ	<u>ာ့</u> ်နေ	25-6-2019			
ງ	လိုင်စင်များ			မြန်မာရင်းနှီးမြှုပ်နှံမှုကော်မရှင်ခွင့်ပြု မိန့်၊ ဝ၆၇/၂၀၁၈ (၂၇-၃-၂၀၁၈) စီးပွါးရေးနှင့်ကူးသန်းရောင်းဝယ်ရေး ဝန်ကြီးဌာန၊ထကသလိုင်စင်- ၀၁၁၉၄၅ (၁၇-၀၈-၂၀၁၈) စီမံကိန်း၊ဘဏ္ဍာရေးနှင့်စက်မှုဝန်ကြီး ဌာန၊ ပုဂ္ဂလိကစက်မှုလုပ်ငန်းမှတ်ပုံ တင်လက်မှတ်၊ မတလ/ကြီး/၂၄၄၉ (၆-၈-၂၀၁၉) စက်မှုဝန်ကြီးဌာန၊လျှပ်စစ်-စစ်ဆေး ရေး၊ လျှပ်စစ်ဓာတ်အားအသုံးပြုခြင်း ဆိုင်ရာအန္တရာယ်ကင်းရှင်းကြောင်း လက်မှတ်၊ EI-MDY-187 (18-6- 21~17-6-22) စက်မှုဝန်ကြီးဌာန၊လျှပ်စစ်-စစ်ဆေး ရေး၊(၁)လျှပ်စစ်ဓာတ်အားထုတ်လုပ် ခြင်းနှင့်အသုံးပြုခြင်းဆိုင်ရာမှတ်ပုံ တင်၊-076/2019 (21-6-19~20-6-23) (၂)လျှပ်စစ်ဓာတ်အားထုတ်လုပ်ခြင်း နှင့်အသုံးပြုခြင်းဆိုင်ရာမှတ်ပုံတင်အ မှတ်၊-077/2019 (21-6-19~20-6-23)			
G	ကုန်ကြမ်းတင်	သွင်းသည့်နိုင်	ċ	တရုတ် + ပြည်တွင်း ပစ္စည်းများ	နောက်ဆက်တွဲတွင်ကြည့်ရှုရန်		
5	ကုန်ချောတင်	ပို့သည့်နိုင်ငံ		ပြည်တွင်းဈေးကွက်အတွက်သာ			
0	ထုတ်ကုန်နှင့်ပ	ാഴാന്ത		မော်တော်ယာဉ်အမျိုးမျိုးနှစ်စဉ် ပျမ်းမျှစီးရေ၁ဝဝဝမှ၃၇၅ဝဝခန့်	(Changhe –Q35SuV,M60MPV-1.5 std, A6 Sedan Car, Q7-SUV, M20SMPV, DODA V8-MPV, K9-Pick-up)		
6	အလုပ်ချိန်	နေ့စဉ်(ဝ၈၊ဝ	0-၁5100)	၈ နာရီ နေ့လည်နားချိန်(၁၁၊၃၀-၁၂၊၃၀)	အချိန်နှင့်ထုတ်ကုန်လိုအပ်ချက်အ ရအချိန်ပိုလုပ်ကိုင်ပါသည်။		
		အပတ်စဉ်		၄၀ နာရီ (၅ရက်)			
	နှစ်စဉ်		၂၅၀ ရက်ခန့်				
00	စက်ပစ္စည်းစာရင်း		စက်ပစ္စည်းတင်သွင်းသည့်စာရင်း	နောက်ဆက်တွဲ			
၁၁	လုပ်သားဦးရေ			110 nos. 15 nos.	ပြည်တွင်းလုပ်သား 88%, ပြည်ပပညာရှင် 12%		
၁၂	နှစ်စဉ်လောင်စာဆီလိုအပ်ချက်(ဒီဇယ်)			ခါတ်ဆီ(၃၈၄၀ ဂါလံ)၊ ဒီဇယ်ဆီ (၃၆၀၁၆၀ ဂါလံ)	မီးစက်၊ရုံးသုံးကားနှင့်ကားသစ်များ အတွက်		
၁၃	နှစ်စဉ်ချောဆီ	လိုအပ်ချက်		2,040 gals	မော်တော်ယာဉ်သစ်များစက်စမ်း သပ်ခြင်းနှင့်မီးစက်အတွက်		

29	နှစ်စဉ်လောင်စာ(ထင်း)လိုအပ်ချက်	-	ထင်းလောင်စာသုံးဘွိုင်လာမရှိပါ
၁၅	နှစ်စဉ်လျှပ်စစ်လိုအပ်ချက်	5,500,000 units	လိုင်းအားနှင့်မီးစက်
၁၆	နှစ်စဉ်ရေလိုအပ်ချက်	185,600gals	အဝီစိတွင်း (၆လက္မွ) ၁ တွင်း
၁၇	စွန့်ပစ်အစိုင်အခဲ	0.2 ~1.0 tons per day	စက်မှုဇုန်သို့စွန့်ပစ်
၁၈	စွန့်ပစ်အရည်	10m <sup>3</sup> ~50m <sup>3</sup> per year	စွန့်ပစ်အရည်
	(ရေအိမ်နှင့်တစ်ကိုယ်ရေသုံး၊မီးဖိုချောင်)		ပြင်ပသို့စွန့်ထုတ်ချက်ခြင်းမရှိ။

Need of EIA
ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းသည်အဆိုပြုစီမံကိန်းကြောင့်ပတ်ဝန်းကျင်အပေါ် မည်သို့သောသက်ရောက်မှုများ
ဖြစ်ပေါ် စေနိုင်ပြီး၊အဆိုပါသက်ရောက်မှုကြောင့်နောက်ဆက်တွဲမည်သို့ ခံစားရနိုင်သည်ကိုကြိုတင်မှန်းဆတိုင်းတာခြင်း
ဖြစ်ပါသည်။ဖေါ် ပြပါသက်ရောက်မှုတွင်ကောင်းသည့်သက်ရောက်မှုနှင့်မကောင်းသည့်သက်ရောက်မှုဟူ၍လည်းရှိနိုင်
ပြီးအဆိုပါအချက်သည်ပင်လျှင်ရေရှည်ဖွံ့ဖြိုးတိုးတက်မှုအတွက်အရေးပါသောအချက်တစ်ခုပင်ဖြစ်ပါသည်။
မြန်မာနိုင်ငံသည်လုပ်သားအရင်းအမြစ်ကြွယ်ဝသောနိုင်ငံဖြစ်သည်နှင့်အညီစက်မှုနှင့်အလုပ်အကိုင်ဖွံ့ ဖြိုးတိုးတက်
ရေးသည်နိုင်ငံတော်၏အရေးပါသောစီးပွါးရေးတစ်ခုဖြစ်ပါသည်။ ယခုအခါနိုင်ငံတော်သည်စီးပွါးရေးဖွံ့ ဖြိုးတိုးတက်
ရေးအတွက်ဆောင်ရွက်နေသည့်အလျှောက်ပြည်တွင်းပြည်ပရင်းနှီးမြှုပ်နှံမှုများလည်းအရှိန်အဟုန်ဖြင့်ဝင်ရောက်လာ
လျက်ရှိရာ၊ ပြည်ပနှင့်ပြည်တွင်းမှနိုင်ငံသားများဖက်စပ်ရင်းနှီးမြှုပ်နှံမှုစီမံကိန်းသည်လည်း တစ်ခုအပါအဝင်ဖြစ်ပါသည်။

Gold A Y A Motors International Group Co.,Ltd၏ မန္တလေးတိုင်းဒေသကြီးမြင်းခြံခရိုင်၊ငါန်းဇွန်မြို့ နယ်မြိုသာ စက်မှုဇုန်၊မြိုသာနှင့်နဘူးအိုင်ကျေးရွာရှိမြေကွက်အမှတ်(ဘီ-၁-၁)မြေတိုင်းရပ်ကွက်အမှတ်(စက်မှုဇုန် နယ်မြေ၊ဇုန်-၂-စီ)မြေအကျယ်(၂ဝ. ဝ၈၄)ဧကရှိမြေပေါ် တွင်မော်တော်ယာဉ်အမျိုးမျိုးတပ်ဆင်ထုတ်လုပ်သည့်စက်ရုံစီမံကိန်းသည် ဒေသအတွက်သာမကဘဲနိုင်ငံတော်အတွက် GDP တိုးတက်လာစေရန်အမှန်တကယ်လိုအပ်ချက်အရတည်ဆောက်ရန် လျှာထားရခြင်းဖြစ်ပါသည်။



EIA အစီရင်ခံစာရေးဆွဲဆောင်ရွက်ရခြင်းနှင့်ရွက်ခဲ့သည့်နောက်ခံအချက်အလက်များ၊ ယခုစီမံကိန်းသည်မြန်မာနိုင်ငံ၏ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာလုပ်ထုံးလုပ်နည်းတွင်ပါရှိသည့်စီမံကိန်းအ မျိုးအစားသတ်မှတ်ချက်များအရသတ္တုနှင့်စက်ပစ္စည်းများထုတ်လုပ်ခြင်းလုပ်ငန်းမော်တော်ယာဉ်နှင့်မော်တော်ဆိုင်ကယ် တပ်ဆင်ထုတ်လုပ်ခြင်းလုပ်ငန်းခေါင်းစဉ်အောက်တွင်ပါရှိပြီး EIA လုပ်ဆောင်ရမည်ဖြစ်သဖြင့်လိုက်နာဆောင်ရွက် ခြင်းဖြစ်ပါသည်။

သတ္တုစက်ပစ္စည်းနှင့်လျှပ်စစ်ပစ္စည်းများထုတ်လုပ်ခြင်းလုပ်ငန်း (၂၀၁၅ ပတ်ဝန်းကျင်ဆိုင်ရာလုပ်ထုံးလုပ်နည်း)

<u> </u>	, 0C 1 v v			/
စဉ်	ရင်းနှီးမြှုပ်နှံမှုစီမံကိန်းအမျိုး	ကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းပြုလုပ်ရန်လို	ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းပြုလုပ်ရန်လို	မှတ်ချက်
	အစား	အပ်သည့်အရွယ်အစား	အပ်သည့်အရွယ်အစား	
ලග	မော်တော်ယာဉ်နှင့်မော်	ထုတ်လုပ်မှုဧရိယာစတုရန်းမီတာ၅၀၀၀နှင့်အ	ဝန်ကြီးဌာနကပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်း	
	တော်ဆိုင်ကယ်တပ်ဆင်	ထက်သို့မဟုတ်အော်ဂဲနစ်ပျော်ဝင်ပစ္စည်းတစ်	ပြုလုပ်ရန်လိုအပ်သည်ဟုသတ်မှတ်သည့်စီမံကိန်း	
	ထုတ်လုပ်ခြင်း	နာရီလျှင်၆ကီလိုဂရမ်နှင့်အထက်သုံးစွဲခြင်း	လုပ်ငန်းအားလုံး	

နယ်ပယ်သတ်မှတ်ခြင်**း။** 

ာထက်ဖေါ်ပြပါဇယားအရယခုစီမံကိန်းသည်ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းပြုလုပ်ရန်လိုအပ်သည့်စီမံကိန်းဟု သတ်မှတ်ရမည်ဖြစ်ပါသည်။

ယခုတင်ပြသည့် Environmental & Social Impact Assessment (Scoping Report) အစီရင်ခံစာသည် မန္တလေးတိုင်း ဒေသကြီး၊မြင်းခြံခရိုင်၊ငါန်းဇွန်မြို့ နယ်၊မြိုသာစက်မှုဇုန်၊မြိုသာနှင့်နဘူးအိုင်ကျေးရွာရှိမြေကွက်အမှတ်(ဘီ-၁-၁)၊မြေတိုင်း ရပ်ကွက်အမှတ်(စက်မှုဇုန် နယ်မြေ၊ဇုန်-၂-စီ)မြေအကျယ်(၂ဝ. ဝ၈၄)ဧကရှိမြေပေါ် တွင်မော်တော်ယာဉ်အမျိုးမျိုးတပ် ဆင်ထုတ်လုပ်သည့်စက်ရုံစီမံကိန်း၏Phase I, Phase II အပါအဝင် Project တစ်ခုလုံးအတွက်တင်ပြခြင်းဖြစ်ပါသည်။ နယ်ပယ်အတိုင်းအတာသတ်မှတ်ခြင်းကိုအောက်ပါအတိုင်းဖေါ် ပြအတည်ပြုသတ်မှတ်ပြီးဖြစ်ပါသည်။

- စီမံကိန်းဧရိယာအတွင်းလေ့လာမည့်နယ်မြေဧရိယာ၊သက်ရောက်မှုရှိမည့်နယ်မြေဧရိယာ၊အချိန်ကန့်သတ်ချက်၊စီမံ
   ကိန်းအဆင့်နှင့်အကျိုးသက်ဆိုင်သူများကိုတိုင်းတာ၍အချက်အလက်များကောက်ခံခြင်း။
- ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းအတွက်လိုက်နာရန်လိုအပ်သည့်တည်ဆဲစည်းမျဉ်း၊စည်းကမ်းနှင့်စံချိန်စံ ညွှန်းများဖေါ် ပြခြင်း။
- အဆိုပြုစီမံကိန်းနှင့်မူလရှိသည့်ပတ်ဝန်းကျင်ဆိုင်ရာအခြေခံအချက်အလက်နှင့်အကြောင်းအရာများစုဆောင်း ခြင်း၊ဆန်းစစ်ခြင်းနှင့်ဆက်လက်လေ့လာရန်လိုအပ်မှုရှိမရှိဆန်းစစ်ခြင်း။
- အဆိုပြုစီမံကိန်းအတွက်နယ်ပယ်အနီးပတ်ဝန်းကျင်အတွင်းရှိထိလွယ်ခိုက်လွယ်သည့်အခြေအနေများကို ဖေါ်ပြသတ်မှတ်ခြင်း၊အချက်အလက်စုဆောင်းခြင်း၊လေ့လာစုံစမ်းမှုများမည်သို့ဆောင်ရွက်ရမည်၊နောက်ထပ် ဆက်လက်လေ့လာမှုများနှင့်စုံစမ်းစစ်ဆေးမှုများလိုအပ်မှုရှိမရှိစသည်တို့ဖေါ်ပြခြင်း။
- စက်ရုံမှထွက်ရှိလာနိုင်ချေရှိသောပတ်ဝန်းကျင်ထိခိုက်နိုင်မှုများဖေါ် ထုတ်သတ်မှတ်ခြင်း။
- ထိခိုက်မှုအလားအလာများကိုလျော့ပါးနိုင်သည့်နည်းများနှင့်လက်တွေကြသောထိခိုက်မှုကိုလျော့ပါးစေရန် နည်းလမ်းများဖေါ်ပြခြင်းနှင့်ဖေါ် ထုတ်တိုင်းတာခြင်း။
- အနီးအနားသို့ တိုင်အလားအလာရှိသောဆူညံမှုများကိုထုတ်နှုတ်စီစစ်ရန်နှင့်လိုအပ်လျှင်လျော့ပါးစေမည့် နည်းများကိုအဆိုပြုရည်ညွှန်းရန်
- စီမံကိန်းအတွက်လိုအပ်သည့်အများပြည်သူသဘောထားကောက်ယူမှုအပေါ် နည်းပညာအကြံနှင့်အထောက်အကူ
   ပြုနိုင်ရန်။

ဇယား ( ၁ )စက်ရုံစီမံကိန်းပိုင်ရှင်၊ဖော်ဆောင်သူနှင့်ပတ်ဝန်းကျင်ဆိုင်ရာ EIA တာဝန်ယူသည့်အဖွဲ့။

Item	Description
ကုမ္ပဏီအမည်	Gole A Y A Motors International Group Co.,Ltd,
စီမံကိန်းအမည်	မော်တော်ယာဉ်အမျိုးမျိုးတပ်ဆင်ထုတ်လုပ်သည့်စက်ရုံစီမံကိန်း
စီမံကိန်းဖော်ဆောင်သူ၊ပိုင်းရှင်	Mr. Li- Jifeng (General Manager) (Contact Person: Ms. Htoo Htet Htet Aung)
လိပ်စာ	<b>စက်ရုံလိပ်စာ</b> - မြေကွက်အမှတ် (ဘီ-၁-၁)မြေတိုင်းရပ်ကွက်အမှတ်(စက်မှုဇုန်
	နယ်မြေ၊ဇုန်-၂-စီ)မြိုသာစက်မှုဇုန်၊ငါန်းဇွန်မြို့ နယ်၊မြင်းခြံခရိုင်၊မန္တလေးတိုင်းဒေသ
	ကြီး၊ ဖုံး၊ဝ၉၂၆၄၈၀၈၂၃၄ email; htoohhaung@pai.com.mm
	ရုံးလိပ်စာ- အမှတ် (အေ-၂)၆၃လမ်း၊ လမ်း၃၀နှင့်၃၁ ကြား၊ချမ်းအေးသာဇံရပ်
	ကွက်၊မန္တလေးမြို့ ၊မန္တလေးတိုင်းဒေသကြီး၊ ဖုံး၊ဝ၉၂၅၆၄၈၆၉၃ email;
	htoohhaung@pai.com.mm
Tel;	Mobile 09778153256
Email;	htoohhaung@pai.com.mm
EIA အစီရင်ခံစာအပေါ်	ကောင်းကျော်စေအင်ဂျင်နီယာလုပ်ငန်းကုမ္ပဏီလီမိတက်။
တာဝန်ယူသည့်အဖွဲ့	(Contact Person: Ms. Myint Myint Thein)
လိပ်စာ	အမှတ်၃၁၊ပင်လုံရိပ်မွန်၅လမ်း၊သင်္ဃန်းကျွန်းမြှိုနယ်၊ရန်ကုန်မြို့
	ဖုံး ၀၁-၇၅၇၁၂၈၄ - ၀၉၂၅၀၀၇၃၃၁၂ email: mdoffice@kaungkyawsay.com

Overall Framework of Environmental Impact Assessment

			20	018		
Item	April	May	June	July	Aug	Sep
Selection of EIA		1				
Consultant						
Base line Survey						
Water Sampling						
Soil Sampling						
Air Measurement				•		
Noise and Traffic						
Flaura and Fauna						
Survey						
Culture Survey						
EIA Preparation						
Stakeholders Meeting						
Scoping & EIA report						

**ဥပဒေ၊နည်းဥပဒေ၊လုပ်ထုံးလုပ်နည်း၊မူဝါဒနှင့်ဥပဒေမူဘောင်များ။** စီမံကိန်းဖော်ဆောင်သူသည်အောက်ဖော်ပြပါဥပဒေ၊နည်းဥပဒေ၊လုပ်ထုံးလုပ်နည်း၊မူဝါဒနှင့်ဥပဒေမူဘောင်များနှင့်အ ခါအားလျော်စွာထုတ်ပြန်သည့်ဆက်စပ်အမိန့်ကြေငြာချက်များကိုလိုက်နာသွားမည်ဖြစ်ပါသည်။ ဇယား (၆) ဥပဒေ၊နည်းဥပဒေ၊လုပ်ထုံးလုပ်နည်း၊မူဝါဒနှင့်ဥပဒေမူဘောင်များ။

		1.6	IL 4
စဉ်	ဥပဒေများ	စဉ်	ဥပဒေများ
၁	ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဥပဒေ ၂၀၁၂	၃၁	ကုန်သွယ်ခွန်ဥပဒေ (၂၀၁၄)
J	ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးနည်းဥပဒေ ၂၀၁၄	77	မြေအောက်ရေဥပဒေ (၁၉၃၀)
9	ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာလုပ်ထုံးလုပ်နည်း ၂၀၁၅	99	အင်ဂျင်နီယာကောင်စီဥပဒေ (၂၀၁၃)
9	အမျိုးသားပတ်ဝန်းကျင်အရေအသွေးဆိုင်ရာ(စွန့် ထုတ်မှု)လမ်းညွှန်	29	လျှပ်စစ်ဥပဒေ (၂၀၁၄)
	၂၀၁၅		
ງ	မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုဥပဒေ ၂၀၁၆	29	မြန်မာ့စံချိန်စံညွှန်းဥပဒေ (၂၀၁၄)
G	မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုနည်းဥပဒေ ၂၀၁၇	၃၆	ရေအရင်းအမြစ်နှင့်မြစ်ချောင်းထိန်းသိမ်းရေးဥပဒေ ၂၀၀၆

5	မြေလွှတ်၊မြေလတ်၊မြေရိုင်းများစီမံခန့်ခွဲရေးဥပဒေ ၂၀၁၂	55	ဆေးလိပ်နှင့်ဆေးရွက်ကြီးထွက်ပစ္စည်းသောက်သုံးမှု ထိန်းချုပ်ရေးဥပဒေ၊ ၂၀၀၆
<b>n</b>	အလုပ်သမာအဖွဲ့ အစည်းဥပဒေ ၂၀၁၁	၃၈	ရှေးဟောင်းဝတ္ထုပစ္စည်းကာကွယ်စောင့်ရှောက်ရေးဥပဒေ ၂၀၁၅
6	အလုပ်သမားအငြင်းပွါးမှုဖြေရှင်းရေးဥပဒေ ၂၀၁၂	99	ယဉ်ကျေးမှုအမွေအနှစ်ဒေသများ ကာကွယ်ထိန်းသိမ်းရေးဥပဒေ
C		10	Jose
00	လူမှုဖူလုံရေးဥပဒေ ၂၀၁၂	90	ရှေးဟောင်းအဆောက်အအုံများကာကွယ်စောင့်ရှောက်ရေးဥပဒေ ၂၀၁၅
၁၁	အနဲဆုံးလုပ်ခကြေးငွေဥပဒေ ၂၀၁၃	90	စက်မှုဇုန်ဥပဒေ ၂၀၂၀
၁၂	အခကြေးငွေပေးချေရေးဥပဒေ ၂၀၁၆	9J	ပုဂ္ဂလိကစက်မှုလုပ်ငန်းဥပဒေ ၁၉၉၀
၁၃	ခွင့်နှင့်အလုပ်ပိတ်ရက်များဥပဒေ ၁၉၅၁	99	လုပ်ငန်းခွင်ဘေးအန္တရာယ်ကင်းရှင်းရေးနှင့်ကျန်းမာရေးဆိုင်ရာဥပဒေ
,	0.11	/\	Jose
90	စက်ရုံဥပဒေ ပြင်ဆင်သည့်အက်ဥပဒေ ၁၉၅၁ (၂၀၁၆)	99	အလုပ်ရုံများအက်ဥပဒေ (၁၉၅၁)
၁၅	အလုပ်သမားလျော်ကြေးအက်ဥပဒေ ၁၉၅၁	99	မြန်မာနိုင်ငံလူဝင်မှုကြီးကြပ်ရေးလတ်တလောပြဌာန်းချက်များအက်ဉ
			<b>ს</b> და ( ეც
၁၆	အလုပ်အကိုင်နှင့်ကျွမ်းကျင်မှုဖွံ့ ဖြိုးတိုးတက်ရေးဥပဒေ ၂၀၁၃	99	အင်ဂျင်နီယာကောင်စီဥပဒေ (၂၀၁၃)
၁၇	ရေနံနှင့်ရေနံထွက်ပစ္စည်းဆိုင်ရာဥပဒေ ၂၀၁၇		
၁၈	ရေနံနည်းဥပဒေများ၁၉၃၇		
၁၉	ယာဉ်အန္တရာယ်ကင်းရှင်းရေးနှင့်မော်တော်ယာဉ်စီမံခန့်ခွဲမှုဥပဒေ		
	Jo Jo		
Jo	ယာဉ်အန္တရာယ်ကင်းရှင်းရေးနှင့်မော်တော်ယာဉ်စီမံခန်ခွဲမှုနည်းဥပ		
	3 10 11		
၂၁	ပြည်သူကျန်းမာရေးဥပဒေ၁၉၇၂		
JJ	ကူးစက်ရောဂါများတာကွယ်နှိမ်နင်းရေးဥပဒေ ၁၉၉၅		
19	မြန်မာ့အာမခံလုပ်ငန်းဥပဒေ ၁၉၉၃		
J9	မြန်မာနိုင်ငံမီးသတ်တပ်ဖွဲ့ ဥပဒေ ၂၀၁၅		
Jo	ပို့ကုန်သွင်းကုန်ဥပဒေ၊၂၀၁၃		
JG	တိုင်းရင်းသားလူမျိုးများ၏အခွင့်အရေးကာကွယ်စောင့်ရှောက်သည့်န ည်းဥပဒေ ၂၀၁၅	z-	
JS	တိုင်းရင်းသားလူမျိုးများ၏အခွင့်အရေးကာကွယ်စောင့်ရှောက်သည့်န		
	ည်းဥပဒေ ၂၀၁၉		
၂၈	မန္တလေးတိုင်းဒေသကြီးလွှတ်တော်မှပြဌာန်းသည့်ဥပဒေများအနက်ဆ		
	က်စပ်သည့် ဥပဒေများ၊ နည်းဥပဒေများ။		
Je	ဘာဆယ်ကွန်ဗင်းရှင်း ၂၀၁၇		
90	ဇီဝမျိုးစုံကွဲနှင့်သဘာဝထိန်းသိမ်းရေးနယ်မြေများကာကွယ်စောင့်ရှော		
	က်ခြင်းဆိုင် ရာဥပဒေ (၂၀၁၈)		

ကြခြင်းဆိုင် ရာဥပဒေ (၂၀၁၈) ဇယား ( ၇ ) စီမံကိန်းအဆိုပြုသူကလိုက်နာမည့်ကတိကဝတ်များ။

	T	303 (130 030)	
ကတိကဝတ်၏အတိုချုပ်အမည်	အ မှတ်	ကတိကဝတ်အားရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက်
	စဉ်		(အခန်း)
ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်သည်တိကျခိုင် မာကြောင်းနှင့်ပြည့်စုံကြောင်း	0	ယခုတင်ပြသည့်ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်	အခန်း (၃. ၄)
9790770.900700		သည်သက်ဆိုင်ရာပညာရှင်များနှင့်တတ်ကျွမ်းသူပု ဂြိုလ်များတို့ မှသေ ချာစွာကိုယ်တိုင်ကွင်းဆင်းစစ်	(က-၁)
		ဆေးကောက်ယူပြီးပြန်လည်တင်ပြုခြင်းဖြစ်သော	
		ကြောင့်တိကျခိုင်မာကြောင်းတင်ပြအပ်ပါသည်။	
ဤလုပ်ထုံးလုပ်နည်းအပါအဝင်သက်ဆိုင်ရာဥပ	J	ယခုအစီရင်ခံစာကိုပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဥပဒေ၊	အခန်း (၃. ၄)
ဒေများကိုတိကျစွာလိုက်နာ၍ပတ်ဝန်းကျင်စီမံ ခန့်ခွဲမှုအစီအစဉ် ကိုဆောင်ရွက်ထားကြောင်း		နည်းဥပဒေတို့နှင့်လုပ်ထုံးလုပ်နည်းအပါအဝင်၊အမျိုး သားပတ်ဝန်းကျင်ဆိုင်ရာအရည်အသွေး(ထုတ်လွှတ်မှု	(m-J)
***************************************		)လမ်းညွှန်ချက်များကိုတိကျစွာလိုက်နာ၍ဤပတ်ဝန်း	* /
		ကျင်ဆိုင်ရာစီမံခန့်ခွဲမှုအစီအစဉ်အစီရင်ခံစာတို့ကို	
0.00 T C C C C C C C C C C C C C C C C C C		ရေးဆွဲတင်ပြထားပါကြောင်း တင်ပြအပ်ပါသည်။	
စီမံကိန်းဖေါ် ဆောင်သူသည်ပတ်ဝန်းကျင်စီမံခန့် ခွဲမှုအစီရင်ခံစာပါကတိကဝတ်၊ပတ်ဝန်းကျင်ထိ	9	စီမံကိန်းပိုင်ရှင်သည်ယခုအစီရင်ခံစာဖြင့်တင်ပြထား သည့်အပေါ် သိရှိနားလည်သည့်အတိုင်းပတ်ဝန်းကျင်	အခန်း (၃. ၄)
ခွမှိမှိအစီရင်ခံစာဝ(ကဝ)ကဝဝ)၊ဝဝ)ဝဝန်းကျင်ထ ခုက်မှုလျော့ချရေးလုပ်ငန်းများနှင့်စောင့်ကြပ်	×	ဆိုင်ရာစီမံခန့် ခွဲမှုအစီအစဉ်၊ကတိကဝတ်၊ပတ်ဝန်း	(m-5)

ကြည့်ရှုခြင်းအစီအစဉ်များကိုအပြည့်အဝအစဉ် အမြဲလိုက်နာဆောင်ရွက်မည်ဖြစ်ကြောင်း		ကျင်ထိခိုက်မှုလျော့ချရေးလုပ်ငန်းများနှင့်စောင့်ကြပ် ကြည့်ရှုခြင်းအစီအစဉ် များကိုအပြည့် အဝအစဉ်အ မြဲလိုက်နာဆောင်ရွက်မည်ဖြစ်ကြောင်းဝန်ခံအပ်ပါ သည်။	
စီမံကိန်းလုပ်ငန်းများပြီးစီး၍ စီမံကိန်းပိတ်သိမ်း ချိန်တွင်လူမှုဝန်းကျင်အားထိခိုက်မှုအနည်းဆုံး ဖြစ်စေရန်ဆောင်ရွက်မည်ဖြစ်ကြောင်း နှင့်ထိ ခိုက်မှုများရှိလာပါကထိခိုက်မှုအနည်းဆုံးဖြစ်စေ မည့်အစီအစဉ်များကိုလည်းလုပ်ဆောင်သွားမည် ဖြစ်ကြောင်းကတိဝန်ခံချက်။	9	စီမံကိန်းဖော်ဆောင်သူသည်စီမံကိန်းလုပ်ငန်းများပြီးစီး ၍စီမံကိန်းပိတ်သိမ်းချိန်တွင်လူမှုဝန်းကျင်အားထိခိုက် မှုအနည်းဆုံးဖြစ်စေရန် ဆောင်ရွက်မည်ဖြစ်ကြောင်း နှင့်ထိခိုက်မှုများရှိလာပါကထိခိုက်မှုအနည်းဆုံးဖြစ်စေ မည့်အစီအစဉ်များကိုလည်းလုပ်ဆောင်သွားမည် ဖြစ်ကြောင်းဝန်ခံအပ်ပါသည်။	အခန်း (၃. ၄) (က-၃)
စောင့်ကြပ်ကြည့်ရှုမှုအစီအစဉ်အစီရင်ခံစာပေးပို့ ရန်ကတိဝန်ခံချက်။	<b>ე</b>	စီမံကိန်းပိုင်ရှင်သည်ပတ်ဝန်းကျင်ဆိုင်ရာဆန်းစစ်ခြင်း ဆိုင်ရာလုပ်ထုံးလုပ်နည်းအပိုဒ်(၁၀၈)အရပတ်ဝန်း ကျင်စီမံခန့် ခွဲမှုအစီအစဉ်၏ဇယားပါအတိုင်းစောင့် ကြပ်ကြည့်ရှုမှုအစီအစဉ်ကိုဝန်ကြီးဌာနသို့၆လတစ် ကြိမ်သို့မဟုတ်ဝန်ကြီးဌာနကသတ်မှတ်ထားသည့်အ တိုင်းတင်ပြမည်ဖြစ်ကြောင်းဝန်ခံအပ်ပါသည်။	အခန်း (၈. ၁၆)
ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်အတွက်လျာ ထားရံပုံငွေအပေါ် ကတိဝန်ခံချက်။	ઉ	ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်၊စောင့်ကြပ်ကြည့်ရှု ခြင်းအစီအစဉ်၊ CSRလုပ်ငန်းများအတွက်လျာထားရံ ပုံငွေဖြင့်လုံလောက်မှုမရှိပါကအနီးစပ်ဆုံးBODအ စည်းအဝေးသို့တင်ပြတောင်းခံသွားမည်ဖြစ်ပါသည်။	အခန်း (၈. ၂၀) (၉-၄)
စီမံကိန်းဖော်ဆောင်သူသည်ဥပဒေ၊နည်းဥပဒေ၊ လုပ်ထုံးလုပ်နည်းများကိုလိုက်နာမည်ဖြစ် ကြောင်းကတိဝန်ခံချက်	5	စီမံကိန်းဖော်ဆောင်သူသည်အခန်း၄တွင်ဖော်ပြထား သည့်ဥပဒေ၊နည်းဥပဒေ၊လုပ်ထုံးလုပ်နည်းများကိုလိုက် နာမည်ဖြစ် ကြောင်းကတိဝန်ခံချက်	အခန်း (၄)

အခြားဆောင်ရွက်နိုင်သောနည်းလမ်းများ၊

အခြားဆောင်ရွက်နိုင်သောနည်းလမ်းများကိုဆန်းစစ်ရာတွင် စီမံကိန်းတည်နေရာရွေးချယ်ခြင်း၊ ဆောက်လုပ်ရေးနည်း စနစ်များ၊ နည်းပညာရွေးချယ်မှု၊ အသုံးပြုမည့်ပစ္စည်းများရွေးချယ်ခြင်း၊ ထုတ်လုပ်မှုလုပ်ငန်းစဉ် နှင့် စီမံကိန်းတည် ဆောက်ခြင်းမရှိခဲ့လျှင် စသည့်အချက်များပါဝင်စွာဆောင်ရွက်ခဲ့ပါသည်။ အဆိုပါဆန်းစစ်မှုကို အကြိုတည်ဆောက်ခြင်း၊ ဆောက်လုပ်ရေးကာလ၊ ပုံမှန်စက်လည်ပတ်ကာလ နှင့်စက်ရုံပိတ်သိမ်းသည့်ကာလ တို့ အတွက်လွှမ်းခြုံစိစစ်ထားပါသည်။

စီမံကိန်းတည်နေရာရွေးချယ်ခြင်း၊

ယခုစီမံကိန်းသည်စက်မှုဇုန်အတွင်းသတ်မှတ်ထားသောအကွက်အမှတ်ကိုပတ်ဝန်းကျင်နှင့်လူမှုဆိုင်ရာထိခိုက်နိုင်မှုများနှင့် လုပ်ငန်းလည်ပတ်ရန်အောက်ပါအချက်များအရအကောင်းဆုံးသောနေရာဖြစ်ကြောင်းရွေးချယ်ထားပါသည်။ အကောင်းဆုံးပထဝီအနေအထားဖြစ်ခြင်း၊

စီမံကိန်းအတွက်အချက်အချာအကျဆုံးနေရာဖြစ်ခြင်း၊

- မြိုသာစက်မှုဇုန်တွင်တည်ဆောက်မည့်အဆိုပါစီမံကိန်းသည်နေရာအနေအထားအရအသင့်တော်ဆုံးသောနေ ရာဖြစ်ခြင်း။
- ဒေသဖွံ့ဖြိုးရေးအတွက်အဓိကအထောက်အကူပြုမည့်စီမံကိန်းဖြစ်သောကြောင့်ဒေသခံများစိတ်ထက်သန်စွာပါဝင် ဆောင်ရွက်လိုခြင်း။
- မူလကစိုက်ပျိုးမြေဖြစ်သော်လည်းပိုမိုအကျိုးရှိနိုင်သည့်နည်းလမ်းနှင့်စီးပွါးဖြစ်ဆောင်ရွက်ခြင်း။
- အလားတူမြေနေရာရရှိရန်ခက်ခဲခြင်း။

ဆောက်လုပ်ရေးကဏ္ဏရွေးချယ်ခြင်း-

ထူးခြားသောသဘာဝဘေးအန္တရာယ်များကျရောက်နိုင်ခြင်းမရှိသောကြောင့်အုတ်မြစ်ချလုပ်ငန်းနည်းလမ်းကိုအသုံးပြု ပါသည်။ ဒီဇိုင်းကာလကပင်မြန်မာနှင့်တရုတ်စံချိန်စံညွှန်းများကို စီမံကိန်းအချိန်ဇယား၊ လုံခြုံမှု၊ စီးပွါးရေးကိုက်ညီမှု၊ တရုတ်ကျွမ်းကျင်သူများအတွက်ဒေသခံလုပ်သားရရှိမှုတို့ ကိုထည့်သွင်းတွက်ချက်ထားပါသည်။ စီမံကိန်းသည်၁ဝနှစ်၊ ၂ကြိမ်သက်တမ်းတိုးနိုင်သည့်နှစ်၅ဝ စီမံကိန်းဖြစ်ပြီး၊ စုစုပေါင်း နှစ်၇ဝ ကြာမြင့်နိုင်သောကြောင့်၊ ပိတ်သိမ်းချိန်အတွက် အစီအစဉ်များကိုအဆိုပါကာလတွင်ရှိမည့်သက်ဆိုင်ရာဥပဒေ၊လုပ်ထုံးလုပ်နည်းများ ကိုလိုက်နာသွားရမည်ဖြစ်ပါသည်။

နည်းပညာကဏ္ဍရွေးချယ်မှု၊

ဆောက်လုပ်ရေးကာလအတွင်း၊ လိုအပ်သောဆောက်လုပ်မှုများကို ပတ်ဝန်းကျင်ဆိုင်နှင့် လိုက်လျောညီထွေသော အသံ လျှော့ချခြင်း၊အသံဆူညံမှုမရှိသောစက်များအသုံးပြုခြင်း၊ လေအရည်အသွေးကောင်းမွန်စေရန်လမ်းများကိုရေဖြန်းခြင်းစ သည်တို့ ကိုလုပ်ကိုင်ပါသည်။ ထုတ်လုပ်မှုကဏ္ဍတွင် မော်တော်ယာဉ်ထုတ်လုပ်ခြင်းသည် ထူးခြားသောနည်းပညာ အသစ် မဟုတ်သောကြောင့်မူလအသုံးပြုသည့်မော်တော်ယာဉ်ထုတ်လုပ်မှုနည်းစနစ်ကိုသာဆက်လက်အသုံးပြုသွားမည်ဖြစ်ပါ သည်။

The following table shows the plan of alternative use of local products.

အသုံးပြုသည့်ပစ္စည်းများရွေးချယ်ခြင်း၊

အသုံးပြုသည့်ပစ္စည်းများကိုမူပြည်တွင်းဖြစ်များနှင့်အစားထိုးသွားရန်အစီအစဉ်ရှိပါသည်။ ပြည်တွင်းမှပစ္စည်းများကိုအစားထိုးသွားရန်အစီအစဉ်များကိုအောက်ပါဇယားတွင်ဖော်ပြထားပါသည်။

No.	Year of Production	Imported	Local	Remarks (Local Products)					
140.		Part (%)	Product (%)	Remarks (Local Floducts)					
1	1 <sup>st</sup> ~3 <sup>rd</sup> Year	99.71%	0.29%	Battery					
2	4 <sup>th</sup> Year	96.64%	3.36%	Battery, Tyres					
3	5 <sup>th</sup> Year	76.00%	24.00%	6 pieces of white body assembly incl; floor, roof, welding					
		70.0070	24.0070	Assembly Jig, Painting Equipment w/o ED coating					
4	6 <sup>th</sup> Year	65.00%	35.00%	Floor Welding Assembly					
5	7 <sup>th</sup> Year	61.50%	38.50%	Roof Welding Assembly					
6	8 <sup>th</sup> Year	51.00%	49.00%	Left and Right Side Wall Welding Assembly					
7	9 <sup>th</sup> Year	38.00%	62.00%	Left and Right Side Wall Welding Assembly (Additional)					
8	10 <sup>th</sup> Year	18.50%	81.50%	Electricstatic Coating, Complete Coating System					
9	11 <sup>th</sup> Year on ward	0%	100%	Achieving 100% local production					

• လေ့လာခဲ့သောအဓိကအစားထိုးစီမံကိန်း၊နှိုင်းယှဉ်လေ့လာခြင်း၏ရလဒ်များ။ မူလစီမံကိန်းအရသတ်မှတ်ထားသည့်နေရာများသည်လယ်ယာမြေသာဖြစ်ပြီးစီးပွါးတွက်လုပ်ကိုင်နိုင်ခြင်းမရှိသော ကြောင့်စီမံကိန်းဖေါ် ဆောင်လုပ်ကိုင်ရန်အခက်အခဲမရှိသည်ကိုတွေ့ ရှိရပါသည်။

• ရွေးချယ်ထားသောအစားထိုးစီမံကိန်းကြောင့်ဖြစ်ပေါ် လာနိုင်သည့် သိသာထင်ရှားသောပတ်ဝန်းကျင်ထိ ခိုက်မှုတစ်ခုချင်းစီအားအတိုချုပ်ရှင်းလင်းဖေါ်ပြချက်။

ယခုစီမံကိန်းကိုအောက်ပါအတိုင်းစီမံကိန်းမတည်ဆောက်မီအစားထိုးစီမံကိန်းများအဖြစ်လေ့လာရွေးချယ်ခဲ့သော်လည်းယ ခုစီမံကိန်းသည်သာအကောင်းဆုံးဖြစ်သည်ကိုတွေ့ ရပါသည်။သို့ ဖြစ်ပါသဖြင့်ရွေးချယ်ထားသောအစားထိုးစီမံကိန်း များကိုယင်းတို့ အားရွေးချယ်ရသည့်အကြောင်းရင်းများကိုအောက်ပါအတိုင်းဖေါ်ပြအပ်ပါသည်။

- မြိုသာစက်မှုဇုန်တွင်တည်ဆောက်မည့်အဆိုပါစီမံကိန်းသည်နေရာအနေအထားအရအသင့်တော်ဆုံးသောနေ ရာဖြစ်ခြင်း။
- ဒေသဖွံ့ဖြိုးရေးအတွက်အဓိကအထောက်အကူပြုမည့်စီမံကိန်းဖြစ်သောကြောင့်ဒေသခံများစိတ်ထက်သန်စွာပါဝင် ဆောင်ရွက်လိုခြင်း။

- မူလကစိုက်ပျိုးမြေဖြစ်သော်လည်းပိုမိုအကျိုးရှိနိုင်သည့်နည်းလမ်းနှင့်စီးပွါးဖြစ်ဆောင်ရွက်ခြင်း။
- အလားတူမြေနေရာရရှိရန်ခက်ခဲခြင်း။

စီမံကိန်းအခြားသောနည်းလမ်းများတွေ့ ရှိချက်နှင့် ရလဒ်။

အောက်ပါတို့ သည်စီမံကိန်းမစတင်မီဖြစ်မြောက်နိုင်စွမ်းလေ့လာခြင်းမှတွေ့ ရှိချက်များဖြစ်ပါသည်။ ပူအိုက်ခြောက်သွေ့ ပြီး၊ အောင်မြင်သောစိုက်ပျိုးရေးနှင့်ဆက်စပ်စီးပွါးရေးရရှိရန်အခွင့်အလမ်းနည်းပါးသည်။ စက်မှုဇုန်စီမံကိန်းလုပ်ကိုင်ရန် သာဖြစ်နိုင်သည်။

အခြားနည်းများအပေါ် ရှိုင်းယှဉ်မှုနှင့်ရွေးချယ်ရသည့် အကြောင်းရင်း၊

စီမံကိန်းမစတင်မီအခြားနည်းလမ်းများကိုလေ့လာခဲ့သော်လည်း၊ ရွေးချယ်ထားသောနည်းလမ်းသည်သာအကောင်းဆုံး သောရွေးချယ်စရာတစ်ခုဖြစ်ပါသည်။အခြားသောနည်းလမ်းများနှင့်ရွေးချယ်ရသည့်အကြောင်းရင်းကိုအောက်ပါအတိုင်း ဖော်ပြအပ်ပါသည်။

- မြေကွက်သည်လျာထားသောစီမံကိန်းအတွက်အကောင်းဆုံးသောနေ ရာဖြစ်ပါသည်။
- ဒေသဖွံ ့ဖြိုးရေးအတွက်အထောက်အကူဖြစ်စေမည့်စီမံကိန်းဖြစ်ကြောင်း၊ ရွာသားများကလည်းစီမံကိန်းအပေါ် ယုံကြည်မှုနှင့်တက်ကြွစွာပါဝင်ကြပါသည်။
- ပိုမိုကောင်းမွန်သောမြေအသုံးချမှုဖော်ဆောင်လုပ်ကိုင်ခြင်းဖြစ်သည်။
- ယခုမြေကဲ့သို့ ကျယ်ပြန့် သောမြေကွက်ရရှိရန်ခက်ခဲခြင်း

လက်ရှိပတ်ဝန်းကျင်အခြေအနေ။

ယခုစီမီကိန်းသည် မန္တလေးတိုင်းဒေသကြီး၊မြင်းခြံခရိုင်၊ငါန်းဇွန်မြို့ နယ်မြိုသာစက်မှုဇုန်၊မြိုသာနှင့်နဘူးအိုင်ကျေးရွာရှိမြေ ကွက်အမှတ်(ဘီ-၁-၁)၊မြေတိုင်းရပ်ကွက်အမှတ်(စက်မှုဇုန်နယ်မြေ၊ ဇုန်-၂-စီ)မြေအကျယ်(၂၀, ၀၈၄)ဧကရှိမြေပေါ် တွင် တည်ရှိပါသည်။ မြောက်လတ္တီတွတ်၂၁˚ ၄၃ႛ၅၂" နှင့် ၊ အရှေလောင်ဂျီ တွတ် ၉၅˚ ၃၇ႛ၃၀" တွင်တည်ရှိပါသည်။ စီမံ ကိန်းသည်မန္တလေး-မြိုသာကားလမ်းပေါ်မြိုသာနှင့်နဘူးအိုင်ကျေးရွာအကြားတွင်တည်ရှိပါသည်။စက်ရုံ၏ပတ်ဝန်းကျင်အနီးအနားတွင်လယ်ကွင်းများသာရှိပါသည်။ မြေမျက်နှာပြင်သွင်ပြင်မှာမြေပြန့် ဖြစ်ပါသည်။

ရာသီဥတု။

ငါ်န်းဇွန်မြို့နယ်သည် မန္တလေးတိုင်းအတွင်းရှိပြီးမြန်မာနိုင်ငံ၏အခြားသောဒေသများကဲ့သို့သမပိုင်းဒေသရာသီ၃ မျိုးရှိ ပါသည်။နွေ၊မိုး၊ဆောင်း ရာသီများအဖြစ်၄လစီအလှည့်ကျဖြစ်ပေါ် ပါသည်။အပူချိန်အနေဖြင့် ၁၂<sup>၀</sup>မှ၄၂<sup>၀</sup>စင်တီဂရိတ် အတွင်းရှိတတ်ပါသည်။

ရာသီဥတုမှတ်တမ်း၊

No	Year	Precip	oitation	Temperature (C°)		
110	1 Cal	Days	Inch	Highest	Coolest	
1	2014	49	27.73	42	12	
2	2015	55	30.17	42	12	
3	2016	51	40.40	44	11	
4	2017	61	40.58	43	12	
5	2018	58	38.0	48	12	

(from Nganzun Township Regional Datas Book 2018 May-2)

သက်မွေးဝမ်းကြောင်းမှု။

ငါန်းဇွန်မြိုနယ်တွင်နေထိုင်ကြသူများ၏သက်မွေးဝမ်းကြောင်းမှုသည်စုံလင်ပြီး၊အရောင်းအဝယ်နှင့်လခစား၊ဝန်ထမ်းနှင့် နေ့စားလုပ်သူများပါဝင်သည်သာမကပဲစစ်မှုထမ်းများ၊နိုင်ငံခြားတွင်သွားရောက်လုပ်ကိုင်ကြသူများပါဝင်ပါသည်။ Physical Component

လေအရည်အသွေးအားတိုင်းတာနှိုင်းယှဉ်ထားမှု၊

No	Danamatan	Unit/	NEORG		Pt.1	Pt.2	Pt.3	Pt.4	Pt.5 21°43'49.98"N, 95°37'31.38"E	T
140	Parameter	Lat/Long	NEQEG	WHO	21°43'51.27"N, 95°37'37.93"E	21°43'51.37"N, 95°37'36.47"E	21°43'51.53"N, 95°37'34.37"E	21°43'50.59"N, 95°37'35.33"E		Remarks
1	PM <sub>2.5</sub>	mg/Nm <sup>3</sup>	25	25	24	14	24	25	23	
2	PM <sub>10</sub> ,	mg/Nm <sup>3</sup>	50	50	42	49	38	39	37	
3	НСНО	mg/Nm <sup>3</sup>	-		0.02	0.02	0.02	0.02	0.11	
4	Volatile organic compounds (VOC)	mg/Nm <sup>3</sup>		-	1.49	1.38	0.16	1.19	1.06	
5	NO <sub>2</sub>	mg/Nm³	-	T27	0.16	0.15	0.16	0.16	0.16	
6	$SO_2$	mg/Nm <sup>3</sup>	•		0016	0.15	016	0.16	021	
7	CO	mg/Nm³	· -	-	0.2	0.2	0.2	0.2	0.2	

ဆူညံသံတိုင်းတာရှိုင်းယှဉ်ထားမှု၊

PN.1 21°43'51.27"N, 95°37'37.93"E			PN.2 21°43'51.37"N, 95°37'36.47"E			PN.3		PtN4			PN.5 21°43'49.98"N, 95°37'31.38"E		EQEG (dB)			
						21°43′51.53″N, 95°37′34.37″E			21°43'50.59"N, 95°37'35.33"E							
Noise (db)	Temp (C°)	RH (%)	Noise (db)	Temp (C°)	RH (%)	Noise (db)	Temp (C°)	RH (%)	Noise (db)	Temp (C°)	RH (%)	Noise (db)	Temp (C°)	RH (%)	Day	Night
68	32.8	78.2	65	32.7	78.1	65	32.8	79.5	65	32.8	78.5	69	32.8	78.7	70	70

မြေအရည်အသွေးတိုင်းတာနှိုင်းယှဉ်ထားမှု၊

No	Parameter	S.1	S.2	S.3	S.4	S.5	ELO	Remarks	
		21°43'53.34"N, 95°37'30.18"E	21°43'52.76"N, 95°37'38.24"E	21°43'49.34"N, 95°37'37.94"E	21°43'49.61"N, 95°37'32.28"E	21°43'47.81"N, 95°37'29.81"E	FAO Standard		
1	Moisture (%)	78%	78%	78%	75%	78%	10	It is more than the minimum limit	
2	PH	7.1	7.1	7.2	7.1	7.1	7~9	Within the acceptable Level	

### ပတ်ဝန်းကျင်နှင့်လူမှုစီးပွါးရေးအပေါ် သိသာထင်ရှားသည့်အဓိကထိခိုက်မှုများနှင့်ထိခိုက်မှုလျော့ချရေးနည်းလမ်း များ။

ယခုစီမံကိန်းကြောင့်ဖြစ်ပေါ် နိုင်သည့်ထိခိုက်မှုများကိုယေဘူယျအားဖြင့် ၂ပိုင်းခွဲခြားနိုင်ပါသည်။ ၁. စီမံကိန်းတည်ဆောက်မှုကာလဆောက်လုပ်ရေးလုပ်ငန်းစဉ်များကြောင့်ယာယီသို့ မဟုတ်အချိန်တိုအ တွင်းထိခိုက်မှုများ။ ၂. ရေရှည်သို့ မဟုတ်အမြဲတမ်းလုပ်ငန်းစဉ်များကြောင့်ထိခိုက်နိုင်မှုများ။

• စီမံကိန်းကြောင့်ထိခိုက်ခံရနိုင်သည့်ပတ်ဝန်းကျင်အကြောင်းအတိုချုပ်ရှင်းလင်းဖေါ်ပြချက်။ စီမံကိန်းကြောင့်ထိခိုက်ခံရနိုင်သည့်သဘာသပတ်ဝန်းကျင်နှင့်လူမှုစီးပွါးအကျိုးသက်ရောက်နိုင်မှုများကိုအောက်ပါအ တိုင်းအတိုချုပ်ရှင်းလင်းဖေါ်ပြအပ်ပါသည်။ ဇယား (၆၇) စီမံကိန်းကြောင့်သဘာဝပတ်ဝန်းကျင်နှင့်လူမှုစီးပွါးအကျိုးသက်ရောက်နိုင်မှုများ။ သက်ရောက်မှုများကိုအဆင့် (၄)ဆင့်ခွဲကာဖေါ်ပြထားပါသည်။ A- သိတာသောဆိုကျိုးသက်ရောက်မှု B- ဆိုကိုးသက်ရောက်မှုအနဲငယ်ရှိ B+ တာင်းကျိုးသက်ရောက်မှု

ကောင်းကျိုးသက်ရောက်မှုအနဲငယ်ရှိ

အကျိုးသက်ရောက်မှုမရှိုင်းလင်းသဖြင့်ထဝ်မံလေ့လာသင့်သည်။ အကျိုးသက်ရောက်မှုမရှို့သို့ )မရှိသလောက်ဖြစ်၊ထပ်မံလေ့လာရန်မလိုအဝ်။

		Scopi Resul		Assess Result		ဆန်းစစ်ခြင်း (တွေ့ရှိချက်)
အမျိုးအစား	Assessment Parameter	Before/During Construction	Operation Stage(OS)	Before/During Construction (BC/DC)	Operation Stage(OS)	
ညစ်ညမ်းမှု	လေအရည်အသွေး	B-	В-	В-	B-	BC/DC: ဆောက်လုပ်ရေးလုပ်ငန်းခွင်မြေပြုပြင်ခြင်းများမှထွက်ရှိသောဖုန်မှုန့့်၊ သဲမှုန့် များသည်ပတ်ဝန်းကျင်နေရာများသို့ ပြန့် လွင့်ပြီးလေထုကိုညစ်ညမ်းစေနိုင် ပါသည်။ OS: လေထုညစ်ညမ်းမှုအနည်းငယ်ရှိနိုင်ပါသည်။ အဘယ်ကြောင့်ဆိုသော်လုပ်ငန်း ခွင် ထဲသို ့လာရောက်သည့်မော်တော်ယာဉ်များသာမကဘဲထုတ်လုပ်သည့်မော်တော် ယာဉ်များစက်စမ်းသပ်မှုကြောင့်လေထုညစ်ညမ်းမှုကိုဖြစ်စေနိုင်ပါသည်။
	ရေ အရည်အသွေး	D	D	D	D	BC/DC: ဆောက်လုပ်ရေးလုပ်ငန်းခွင်များမှထွက်ရှိလာမည့်ရွံ ပျော်ရည်များနှင့် ညစ်ညမ်းရေများသည်ရေအရည်အသွေးကိုကျဆင်းစေမည်ဖြစ်ပါသည်။ OS: ရေအရည်အသွေးကျဆင်းမှုသည်အနီးအနားရှိရေတွင်းရေကန်များအတွင်း သို့ စီးဝင်ပါကရေ၏အရည်အသွေးအပေါ် ထိခိုက်နိုင်ပါသည်။
	စွန်ပစ်ပစ္စည်း	В-	D	В-	D	BC/DC: ဆောက်လုပ်ရေးဆိုင်ရာစွန့်ပစ်အမှိုက်များကြောင့်ထိခိုက်နိုင်ပါသည်။ OS:Process flow အရစွန်ပစ်အမှိုက်များမထွက်ရှိပါ။မီးဖိုချောင်ထွက်အမှိုက် များ၊ တစ်ကိုယ်ရေနှင့်အခြားသောထုတ်ပိုးပစ္စည်းများမှစွန့်ပစ်အမှိုက်များကြောင့် ထိခိုက်နိုင်ပါသည်။
	စွန်ပစ်အရည်	В-	D	D	D	BC/DC:စီမံကိန်းဖေါ် ကာလစွန်ပစ်အရည်များမထွက်ရှိပါ။ OS: ယေဘူရအားဖြင့်မော်တော်ယာဉ်တပ်ဆင်သည့်လုပ်ငန်းမှစွန့်ပစ်အရည် မထွက်ရှိပါ။ သို့ ရာတွင်လုပ်ငန်းတစ်ခုချင်းစီမှထွက်ရှိသည့်စက်ဆီနှင့်အညစ် အကြေးများ ကိုမူစနစ်တကျစီစစ်လုပ်ကိုင်ခြင်းမရှိပါကထိခိုက်နိုင်ပါသည်။
	မြေဆီလွှာအပေါ် ထိခိုက်မှု	D	D	D	D	BC/DC:ဆောက်လုပ်ရေးကာလမြေတူးဖော်မှုများကြောင့်မြေဆီလွှာထိခို က်မှုကို ဖြစ်စေနိုင်သော်လည်းပတ်ဝန်းကျင်၏မြေဆီလွှာအပေါ် ထိခိုက်မှုမရှိနိုင်ပါ။ OS: လုပ်ငန်းတည်ဆောက်ပြီးပုံမှန်လုပ်ငန်းများမှစွန် ့ပစ်ဆီနှင့်အမှိုက်များကြောင့် မြေဆီလွှာအပေါ် ထိခိုက်မှုဖြစ်ပေါ် စေနိုင်ပါသည်။
	အသံနှင့်တုန်ခါမှု	В-	В-	В-	В-	BC/DC:ဆောက်လုပ်ရေးဆိုင်ရာစက်ယန္တယားများကြောင့်အသံဆူညံမှုနှင့် တုန် ခါမှုများဖြစ်ပေါ် စေနိုင်ပါသည်။ OS: ယေဘူရအားဖြင့်၊ မီးစက်များလည်ပတ်မှု၊အင်ဂျင်နှင့်မော်တော်ယာဉ်စမ်း သပ်မှုတို့ကြောင့်အသံဆူညံမှုနှင့်တုန်ခါမှုများရှိနိုင်ပါသည်။
	မြေနိမ့်ကျဆင်းမှု	B-	B-	D	С	BC/DC:ဆောက်လုပ်ရေးကာလအတွင်းမြေနိမ့်ဆင်းမှုထက်မြေဖို့ ခြင်းမျာ

						ကြောင့် မြေမြင့်တက်မှုများဖြစ်ပေါ် နိုင်ပါသည်။ OS: စီမံကိန်းတည်ဆောက်ပြီးအဆိုပါဧရိယာအတွင်းမြေအောက်ရေထုတ်ယူသုံးစွဲ ခြင်းကြောင့်မြေနိမ့်ဆင်းမှုဖြစ်ပေါ် စေနိုင်ပါသည်။
	<b>ာနံ</b> ့ဆိုးများ	B-	В-	B-	В-	BC/DC: ဆောက်လုပ်ရေးကာလတွင်စက်ယန္တယားများကြောင့်အနံ ့ဆိုးများ ရှိနိုင်ပါသည်။ OS: မော်တော်ယာဉ်စက်စမ်းသပ်ခြင်းလုပ်ငန်းများကြောင့်မီးခိုးနှင့်အနှံ့များဖြစ်ပေ ြိနိုင်ပါသည်။
သဘာဂ ပတ်ဂန်း	သစ်တောကြိုးဝိုင်း	D	D	D	D	စီမံကိန်းဧရိယာအတွင်းနှင့်အနီးတွင်ကာကွယ်ထိန်းသိမ်းထားသောဉယျာဉ်နှ င့် သစ်တောကြိုးဝိုင်းများမရှိပါ။
ကျင်	အပင်၊သတ္တဂါနှင့် ဂေဟစနစ်	С	С	С	С	စီမံကိန်းဒေသရှိမှီခိုနေထိုင်သည့်တိရိစ္ဆာန်နှင့်အပင်များဆိုင်ရာမှတ်တမ်းများမ ရှိပါ။ စီမံကိန်းကြောင့်အနီးပတ်ဝန်းကျင်ဂေဟစနစ်ကိုထိခိုက်နိုင်ရန်မရှိပါ။
	ဇလဗေဒဆိုင်ရာ	В-	B-	В-	В-	BC/DC:ဆေက်လုပ်ရေးကာလမြေအောက်ရေကိုထုတ်ယူသုံးစွဲသဖြင့်ထိခို က်မှုရှိနိုင်ပါသည်။ OS: မြေအောက်ရေထုတ်ယူသုံးစွဲခြင်းကြောင့်ထိခိုက်မှုရှိနိုင်ပါသည်။
	မြေမျက်နှာပြင်နှင့် ဘူမိဗေဒဆိုင်ရာ	D	D	D	D	စီမံကိန်းဖေါ် ဆောင်သည့်မြေနှင့်အနီးပတ်ဝန်းကျင်သည်မြေပြန် ့သာဖြစ်သော ကြောင့်မူလမြေမျက်နှာပြင်နှင့်ဘူမိဗေဒဆိုင်ရာကိုထိခိုက်နိုင်မှုမရှိပါ။
လူမှုပတ်ဂန်း ကျင်	အဓ္ဓမရွှေပြောင်းစေ မူ	D	D	D	D	စီမံကိန်းကြောင့်မူလနေထိုင်သူများအတွက်ပြောင်းရွေ ့နေရာချထားမှုများမရှိပါ။
	အကျိုးမြတ်နှင့် ထိခိုက်မှုအပေါ်ခွဲေ ဝမှုမှားယွင်းခြင်း	С	С	С	С	မူလနေထိုင်သူများမရှိပါ။ စီမံကိန်းးအနီးတွင်နေထိုင်သူများနှင့်တွေ ့ ဆုံဆွေးနွေးမှုရလဒ်အရဒေသခံများက
	ဒေသခံများနှင့်သ ဘောထားကွဲလွဲမူ၊ ဝိရောဓိ၊အငြင်းပွါး မှု	D	D ·	D	D	လည်းစီမံကိန်းအပေါ် ထောက်ခံမှုများပြုလုပ်ခဲ့ပါသည်။
	လိင်(ကျား/မ)ဖြစ် တည်မှု	D	D	D	D	
	ကလေးအခွင့်အရေး	D	D	D	D	
	အနည်းစုဖြစ်သော လူမျိုးစုနှင့်ဒေသခံ တိုင်းရင်းသားများ	D	D	D	D	
	ဆင်းရဲမှု	A+	A+	A+	A+	စီမံကိန်းအနီးနေထိုင်သူများစီးပွါးရေးနှင့်အလုပ်အကိုင်များပိုမိုဖြစ်ထွန်းလာမှု ကြောင့် ဆင်းရဲမှုလျော့နဲပပျောက်သွားနိုင်ကြောင်းတွေ့ ရှိရပါသည်။
	နေထိုင်မှုနှင့်အသက် မွေးမှု	A+	A+	A+	A+	BC/DC:OS: ဒေသစီးပွါးရေးနှင့်အလုပ်အကိုင်များပိုမိုတိုးတက်ဖွံ ့ဖြိုးလာနိုင် သဖြင့်ဒေသခံများအတွက်သိသာသောကောင်းကျိုးများသက်ရောက်နိုင်မည်ဖြ စိနိုင်ပါသည်။
	လက်ရှိလူမှုအ ဆောက်အအုံနှင့်ဝ န်ဆောင်မှုများ	B+	B+	B+	B+	BC/DC: လမ်းပမ်းဆက်သွယ်မှုနှင့်ယာဉ်သွားလာမှုများပိုမိုများပြားလာနိုင်သကဲ့ သို့ ကောင်းမွန်လာနိုင်ပါသည်။ OS: စီမံကိန်းပြီးစီးပြီးအဆိုပါမြေပေါ် တွင်ဖြစ်ပေါ် လာမည့်မြို ့ပြစီမံကိန်းလမ်းများ
	ရေသုံးစွဲမှု	B-	D	D	D	နှင့်အဆောက်အဦးများသည်ပိုမိုကောင်းမွန်လာမည်ဖြစ်ပါသည်။ BC/DC: ရေသုံးစွဲမှုကြောင့်မူလရေအသုံးချစနစ်အပေါ် ထိခိုက်နိုင်မှုများရှိနိုင်ပါ သည်။
* og				National descriptions of the state of the st		OS: စီမံကိန်းများအတွက်လိုအပ်သည့်ရေကိုအဝီစိတွင်းမှထိန်းချုပ်ရယူသုံးစွဲခြင်း ကြောင့်မူလစနစ်များအပေါ် ထိခိုက်မှုမရှိစေရေးအလေးထားဆောင်ရွက်ရမ ည်ဖြစ်ပါ သည်။
	ယဉ်ကျေးမှုအမွေအ နစ်	С	С	C	C	စီမံကိန်းတည်ဆောက်သည့်နေရာအနီးတွင်မူလကတည်းကယဉ်ကျေးမှုဆိုင်ရ ာအ

						ဆောက်အဦးများမရှိသည့်အပြင်၊စီမံကိန်း၏အနီးအနားတွင်ရှိသောယဉ်ကျေး မှုဆိုင် ရာအဆောက်အဦးများကိုယခုစီမံကိန်းကြောင့်လုံးဝထိခိုက်နိုင်မှုများမရှိပါ။ တိုးတက်လာသည့်နေထိုင်သူများနှင့်စီမံကိန်းမှလျာထားချက်ဖြစ်သောလူမှုရေ းရံပုံငွေ များကြောင့်ပင်ကောင်းကျိုးသက်ရောက်မှုအချို့ ရှိလာနိုင်ပါသည်။
	မြေပြင်အနေအထ ား၊တောတောင်ရေ မြေရှုခင်း	С	С	С	С	စီမံကိန်းတည်ဆောက်သည့်မူလနေရာကိုစနစ်တကျမြေဖေါ် ထုတ်မှုကြောင့်ြေ မပြင်အနေအထားပိုမိုကောင်းမွန်လာနိုင်သည်။
	AIDS/HIV ကဲ့သို သောအွန္တရာယ်(သို) ကူးစက်ရောဂါများ	В-	В-	B-	В-	ပတ်ဝန်းကျင်နှင့်မြေအနေအထားများပိုမိုကောင်းမွန်လာနိုင်သော်လည်း တိုးတက်လာမည့်လူဦးရေကြောင့်ကူးစက်ရောဂါများပိုမိုလာနိုင်သည့်အလား အလာရှိသဖြင့်အထူးဂရုစိုက်ရမည်ဖြစ်ပါသည်။
	လုပ်ခွင်အခြေအနေ (လုပ်ငန်းခွင်ဘေး တင်းလုံခြုံမှု)	В-	В-	B-	В-	BC/DC: OS: စီမံကိန်းအဆင့်ဆင့်တိုင်းအတွက်လုပ်ငန်းခွင်ထိခိုက်မှုအန္တရာယ်ရှိနိုင်ပါသည် ။
အခြား	မတော်တဆထိနိုက် မှု	В-	В-	B-	В-	BC/DC: စီမံကိန်းကာလအတွင်းမတော်တဆထိခိုက်မှုများရှိနိုင်ပါသည်။ OS: စီမံကိန်းမည်သည့်အဆင့်ပြီးဆုံးစေကာမှုတိုးတက်လာသောမော်တော်ယာဉ် များကြောင့်ယာဉ်ထိခိုက်မှုအန္တရာယ်ရှိနိုင်ပါသည်။
	က္သမွာ့ပူနွေးမှု	B-	B-	B-	В-	BC/DC:ဆောက်လုပ်ရေးဆိုင်ရာစက်များ၊မော်တော်ယာဉ်များများကြောင့် လေထု ညစ်ညမ်းးမှုပိုမိုဖြစ်ပေါ် လာနိုင်ပါသည်။ OS: ပုံမှန်အချိန်တွင်အသုံးပြုမည့်မော်တော်ယာဉ်များသွားလာမှု၊စက်များလည် ပတ် မှုနှင့်အမှိုက်များမီးရှိုမှုကြောင့်ဖန်လုံအိမ်ဓါတ်ငွေ ့များထုတ်လွတ်မှုတိုးပွါးလာ နိုင်ပါသည်။

ဇယား (၆၈)ထိခိုက်မှုအပေါ် အဆင့်သတ်မှတ်ချက်အချုပ်။

စဉ်	ထိခိုက်မှု။	Rating Significance
0	ပတ်ဝန်းကျင်လေထုအပေါ် သက်ရောက်မှု(ညစ်ညမ်းမှု)	Low (outside) High (inside)
J	သဘာဝပတ်ဝန်းကျင်အပေါ် သက်ရောက်မှု(ရေအရင်းအမြစ်)	High (w/o treatment system Low (With treatment system
9	အသံနှင့်တုန်ခါမှု	Low-Medium (w/o Generator Running) High (with Generator Running)
9	မြေပတ်ဝန်းကျင်အပေါ် သက်ရောက်မှု(မြေဆီလွှာညစ်ညမ်းမှု)	Low (Construction Period)
၅	ဇီဝလောကအပေါ် သက်ရောက်မှု	Low
ઉ	ဒေသခံများကျန်းမာရေးနှင့်လုံခြုံရေးအပေါ် သက်ရောက်မှု	Low but A+
5	အလုပ်အကိုင်ပွင့်လင်းမှုအပေါ် သက်ရောက်မှု	High A+
6	လုပ်ငန်းခွင်ကျန်းမာရေးနှင့်လုံခြုံရေးအပေါ် သက်ရောက်မှု	Low but A+
၉	အခွင့်အလမ်းများနှင့်သွားလာမှုကန်သတ်မှုများ	-
00	ဒေသစိုက်ပျိုးလုပ်ကိုင်သူများအပေါ် အစားထိုးစီးပွါးရေး	-
၁၁	အထွေထွေစီးပွါးရေးဖွံ့ဖြိုးတိုးတက်မှု	High A+
၁၂	ကုန်စည်သယ်ယူပို့ဆောင်မှု	High A+

ယခုစီမံကိန်းသည်စက်မှုဇုန်မြေပေါ် တွင်လုပ်ငန်းအသစ်ဖေါ် ထုတ်ခြင်းဖြစ်သော်လည်းသဘာဝပတ်ဝန်းကျင်ကိုထိခိုက်မှုမ ရှိပါ။ထို့အပြင်ပိုမိုကောင်းမွန်ထိရောက်သည့်ထုတ်လုပ်မှုနည်းစနစ်နှင့်စက်များကိုတပ်ဆင်အသုံးပြုသွားမည်ဖြစ်သော ကြောင့်ယခင်စက်မှုဇုန်မဖော်ထုတ်မီကလယ်ယာလုပ်ငန်းများထက်ကောင်းကျိုးများပိုမိုပေးနိုင်သည့်စီမံကိန်းဖြစ်သည်ကို တွေ့ ရှိရပါသည်။ ထိခိုက်မှုလျော့ချသည့်လုပ်ငန်းများကိုဆက်လက်ဖော်ပြအပ်ပါသည်။ ဇယား (၇၀) ထိခိုက်မှုလျော့ချသည့်လုပ်ငန်းများ (မဆောက်လုပ်မီကာလ)

အမျိုးအစား	အရုက်အလက်	Mitigation and Consideration Measures in (မဆောက်လုပ်မီကာလ)	တာဂန်ရှိသူ		
လူမှုပတ်ဂန်း	လေအရည်အသွေး	မရှိ			
	ရေ အရည်အသွေး	မရှိ	ဖော်ဆောင်သူ စီမံကိန်းအ ကောင်အထည် ဖော်ဆောင်သူ		
		စီမံကိန်းအဆင့်တိုင်းတွင်စွန်ပစ်အမှိုက်များလျော့ချ်ရင်း။			
020004	အသံနှင့်တုန်ခါမှု	အသံနှင့်တုန်ခါမှုဖြစ်ပေါ် နိုင်သည့်အရာများကိုလေ့လာပြီးလိုအပ်ပါကကြားခံနယ်မြေနှင့်အသံ ထိန်းတို တပ်ဆင်ခြင်း။			
ရေ အရည်အသွေး မရှိ  စွန်ပစ်ပစ္စည်း စီမံကိန်းအဆင့်တိုင်းတွင်စွန်ပစ်အမှိုက်များလျော့ချခြင်း။  အသံနှင့်တုန်ခါမှု အသံနှင့်တုန်ခါမှုမြစ်ပေါ်နိုင်သည့်အရာများကိုလေ့လာပြီးလိုအပ်ပါကကြားစံနယ်မြေနှင့်အသံ ထိန်းတို တပ်ဆင်ခြင်း။  အသံနှင့်တုန်ခါမှ အသံနှင့်တုန်ခါမှု အသံနှင့်တုန်ခါမှုဖြစ်ပေါ်နိုင်သည့်အရာများကိုလေ့လာပြီးလိုအပ်ပါကကြားစံနယ်မြေနှင့်အသံ ထိန်းတို တပ်ဆင်ခြင်း။  အပင်းသတ္တာဂါနှင့် မလိုအပ်ဘဲသစ်ပင်ခုတ်ခြင်းမပြုပါ။အပင်စိုက်ခြင်း၊လမ်းရေကန်များတည်ဆောက်ခြင်းစ လုံအပ်ဘဲသစ်ပင်ခုတ်ခြင်းမပြုပါ။အပင်စိုက်ခြင်း၊လမ်းရေကန်များတည်ဆောက်ခြင်းစ လည့်အခြေစိန်းလမ်းစေရန်အတွက်စီမံကိန်းများရေးဆွဲထားမည်။  လေပေဒအခြေအနေ မြေအောက်ရေသုံးစွဲမှုနှင့်ဆောက်လုပ်ရေးလုပ်ငန်းနှင်များမှထွက်ရှိသောစွန်ပစ်ရေကို အနယ်စစ်ကန်များစနစ်သုံးရွဲခြင်းဖြင့်ထိန်းသိမ်းမည်။  နေထိုင်မှုနှင့်အသက်မွေးမှ အခြေစံအချက်အလက်များကောက်ယူခြင်း။  လက်ရှိလူမှုအဆောက်အအုံနှင့်သွား မြေအောက်ရေသုံးစွဲမှုထိန်းချုပ်ခြင်း။  လက်ရှိလူမှုအဆောက်အအုံနှင့်သွား အသစ်တိုသွားလာနေသည့်လက်ရှိအများသုံးလမ်းများအဆင့်မြင့်ပေးခြင်းနှင့်ဖောက်လုပ်ပေး ခြင်း။  လက်ရှိလူမှုအဆောက်အအုံနှင့်သွား ကွေတောက်မြေစိပ်းနိုင်သောရောဂါများတိုအောက်ပါအတိုင်းဆောင်ရွက်ပေးရန်၊  • ကူးစက်မြစ်ပွါးနိုင်သောရောဂါများကိုအောက်ပါအတိုင်းထောင်ရွက်ပေးရန်၊  • ကူးစက်မြစ်ပွါးနိုင်သောရောဂါများတိုအောက်ပါဝင်းလုပ်ငန်းစွင်ဘေးကင်းလုံခြုံရေး  လုပ်စွင်အခြေအနေ IFC အဖွဲ့၏သတ်မှတ်လမ်းညွှန်ချက်များအတိုင်းလုပ်ငန်းစွင်ဘေးကင်းလုံခြုံရေး		စီမံကိန်းအ ကောင်အထည် ဖော်ဆောင်သူ			
		အနေ မြေအောက်ရေသုံးစွဲမှုနှင့်ဆောက်လုပ်ရေးလုပ်ငန်းခွင်များမှထွက်ရှိသောစွန့်ပစ်ရေကို အနယ်စစ်ကန်များစနစ်သုံးစွဲခြင်းဖြင့်ထိန်းသိမ်းမည်။			
	နေထိုင်မှုနှင့်အသက်မွေးမှု	အခြေခံအချက်အလက်များကောက်ယူခြင်း။	စီမံကိန်းအ ကောင်အထည် ဖော်ဆောင်သူ		
ပတ်ပန်းကျင် မျိုးပွါးကွဲပြားမှု သည့်အမြဲစိန်းလမ်းစေရန်အတွက်စီမံကိန်းများရေးဆွဲထားမည်။  လေဗေဒအခြေအနေ မြေအောက်ရေသုံးစွဲမှုနှင့်ဆောက်လုပ်ရေးလုပ်ငန်းစွင်များမှထွက်ရှိသောစွန့်ပစ် အနယ်စစ်ကန်များစနစ်သုံးစွဲခြင်းဖြင့်ထိန်းသိမ်းမည်။  လူမှုပတ်ပန်း ကျင်  ရေသုံးစွဲမှ မြေအောက်ရေသုံးစွဲမှုထိန်းချုပ်ခြင်း။  လက်ရှိလူမှုအဆောက်အအုံနှင့်သွား သေခံတိုသွားလာနေသည့်လက်ရှိအများသုံးလမ်းများအဆင့်မြင့်ပေးခြင်းနှင့်ကေတာ့မှု မြင်း။		စီမံကိန်းအ ကောင်အထည် ဖော်ဆောင်သူ			
	လာမှု	ဒေသခံတို့သွားလာနေသည့်လက်ရှိအများသုံးလမ်းများအဆင့်မြင့်ပေးခြင်းနှင့်ဖောက်လုပ်ပေး ခြင်း။	စီမံကိန်းအ ကောင်အထည် ဖော်ဆောင်သူ		
	ကူးစက်ရောဂါများ	ကူးစက်ဖြစ်ပွါးနိုင်သောရောဂါများကိုအောက်ပါအတိုင်းဆောင်ရွက်ပေးရန်၊ • ကူးစက်မှုကြိုတင်ကာကွယ်ခြင်း၊	စီမံကိန်းအ ကောင်အထည် ဖော်ဆောင်သူ		
	လုပ်ဝွင်အခြေအနေ (လုပ်ငန်းစွင်ဘေးကင်လုံရြံမှု)		စီမံကိန်းအ ကောင်အထည် ဖော်ဆောင်သူ		
အရြား	မတော်တဆထိနိုက်မှု	မတော်တဆထိခိုက်မှုများမဖြစ်စေရန်ကြိုတင်ကာကွယ်မှုများစီမံဆောင်ရွက်ခြင်း။	စီမံကိန်းအ ကောင်အထည် ဖော်ဆောင်သူ		
	က္သမ္နာ့ပူနွေးမှု	ဆောက်လုပ်ရေးသုံးယာဉ်များGHGs ထုတ်လုပ်မှုလျော့ချရန်နည်းများကြိုတင်ပြင်ဆင်ထားရှိခြင်း	စီမံကိန်းအ ကောင်အထည် ဖော်ဆောင်သူ		

ဇယား (၇၁) ထိခိုက်မှုလျော့ချသည့်လုပ်ငန်းများ(ဆောက်လုပ်ရေးကာလ)

အမျိုးအစား	အချက်အလက်	Mitigation and Consideration Measures in (ဆောက်လုပ်ဆဲကာလ)	တာဂန်ရှိ သူ		
ညစ်ညမ်းမှု	လေအရည်အသွေး	လအရည်အသွေး ဆောက်လုပ်ရေးသုံးယာဉ်များအလွန်အကျွံသုံးစွဲမှုလျော့ချခြင်း			
	ရေ အရည်အသွေး	ရ အရည်အသွေး ရေအရည်အသွေးအားစောင့်ကြပ်ကြည့်ရှုခြင်း၊ အနယ်တိုင်ကန်များ၊ရေနောက်သန်စင်စနစ်များတပ်ဆင်ခြင်း၊			
	စွန်ပစ်ပစ္စည်း အမှိုက်ပစ်ရန်နေရာသတ်မှတ်ထားရှိခြင်း၊ အမှိုက်များအားလုံးအတွက် 3R စနစ်အသုံးပြုခြင်း၊		ဖော်ဆောင်သူ စီမံကိန်းအ ကောင်အထည် ဖော်ဆောင်သူ		
	အသံနှင့်တုန်ခါမှု				
သဘာဂ ပတ်ဂန်းကျင်	အပင်၊သတ္တဂါနှင့် မျိုးပွါးကွဲပြားမှု	မလိုအပ်ဘဲသစ်ပင်ခုတ်ခြင်းမပြုပါ၊အပင်စိုက်ခြင်း၊လမ်းရေကန်များတည်ဆောက်ခြင်းစ သည့်အမြဲစိန်းလမ်းစေရန်အတွက်စီမံကိန်းများရေးဆွဲထာခြင်း။	စီမံကိန်းအ ကောင်အထည် ဇော်ဆောင်သူ		
CT COMMON MERCHANISMONIA JUNGS 1	രസാേദങ്ങളെങ്ങു	မြေအောက်ရေအသုံးချမှုထိန်းသိမ်းထားရှိခြင်း၊	စီမံကိန်းအ ကောင်အထည် ဖော်ဆောင်သူ		
လူမှုပတ်ဂန်း ကျင်	နေထိုင်မှုနှင့်အသက်မွေးမှု	သန်စင်စနစ်၊အနယ်စစ်ကန်စနစ်တို့ဖြင့်စွန်ထုတ်ရေအရည်အသွေးထိန်းချုပ်ခြင်းဖြင့်မြစ် ချောင်းများအတွင်းရှိငါးနှင့်ရေနေသတ္တဂါများအပေါ် ထိနိုက်မှုမရှိနိုင်ခြင်း၊	စီမံကိန်းအ ကောင်အထည် ဖော်ဆောင်သူ		
	ရေသုံးစွဲမှု	မြေအောက်ရေထုတ်ယူသုံးစွဲမှုကိုထိန်းသိမ်းခြင်း၊	စီမံကိန်းအ ကောင်အထည် ဖော်ဆောင်သု		
항공	လက်ရှိလူမှုအဆောက်အ အုံနှင့်သွားလာမှု	လုံခြုံစိတ်ချရသည့်အဆောက်အအုံနှင့်သွားလာမှုများအပေါ် စောင့်ကြပ်ကြည့်ရှုခြင်း၊	စီမံကိန်းအ ကောင်အထည် ဖော်ဆောင်သူ		
	AIDS/HIV ကဲ့သိုသောအွန္တရာယ်(သို)	ကူးစက်ဖြစ်ပွါးနိုင်သောရောဂါများကိုအောက်ပါအတိုင်းဆောင်ရွက်ပေးရန်ရှိပါသည်၊ • ကူးစက်မှုကြိုတင်ကာကွယ်ခြင်း၊	စီမံကိန်းအ ကောင်အထည် ဖော်ဆောင်သူ		

	ကူးစက်ရောဂါများ	• အသိပညာဖြန့်ဂေါ်ရင်း၊	
	လုပ်ခွင်အခြေအနေ (လုပ်ငန်းခွင်ဘေးကင်လုံခြုံ မှု)	လုပ်ငန်းခွင်ကျန်းမာရေးနှင့်လုံခြုံစိတ်ချစေရေးအတွက် IFC ၏ အညွှန်းများအတိုင်း လိုက်နာပါမည်၊	စိမ်ကိန်းအ ကောင်အထည် ဖော်ဆောင်သူ
အခြား	မတော်တဆထိခိုက်မှု	မတော်တဆထိနိက်မှုများမဖြစ်စေရန်ကြိုတင်ကာကွယ်မှုများစီမံဆောင်ရွက်ခြင်း။	စီမံကိန်းအ ကောင်အထည် ဖော်ဆောင်သူ
	က္သမွာ့ပူနွေးမှု	GHGs ဆိုင်ရာလျော့ချနိုင်မှုများထိန်းသိမ်းလုပ်ဆောင်ရြင်း၊	စီမံကိန်းအ ကောင်အထည် ဖော်ဆောင်သူ

œယား (၇၂) ထိခိုက်မှုလျော့ချသည့်လုပ်ငန်းများ (ပုံမှန်လုပ်ငန်းများလုပ်ကိုင်သည့်ကာလ)

အမြိုးအ စား	အချက်အလက်	Mitigation and Consideration Measures in Operation Phase	Responsible Organization
ညစ်ညမ်း မှ	လေအရည်အသွေး	လေအရည်အသွေးအားစောင့်ကြပ်ကြည့်ရှုခြင်း၊ လေစစ်ပါသောလေလည်ပတ်စနစ်ကိုတပ်ဆင်အသုံးပြုရန်၊ ဆေးမှုတ်သည့်အခန်းလုံခြုံမှုနှင့်လေထွက်စနစ်ကိုစစ်ဆေးရန်၊	Developer/SPC
	ရေ အရည်အသွေး	ရေအရည်အသွေး ရေအရည်အသွေးအားစောင့်ကြပ်ကြည့်ရှုခြင်း၊ မြေအောက်ရေကိုထိစိုက်စေနိုင်သောရေထွက်ပေါက်နှင့်စွန်ပစ်ရေဆိုးထွက်ရှိခြင်းများကိုအစဉ်စစ်ဆေး ရန်။	
	စွန့်ပစ်ပစ္စည်း	ပုံမှန်လာရောက်သိမ်းဆည်းမှုမပြုလုပ်မီယာယီအမှိုက်ပစ်ရန်နေရာသတ်မှတ်ထားရှိခြင်း၊ အမှိုက်များအားလုံးအတွက် 3R စနစ်အသုံးပြုခြင်း၊	Developer/SPC
	အသံနှင့်တုန်ခါမှု	န်ခါမှု အသံနှင့်တုန်ခါမှုများကိုစောင့်ကြပ်ကြည့်ရှုရြင်း၊ အသံထိန်းနှင့်အသံကာများတပ်ဆင်ရန်၊ ဒီဇယ်အင်ဂျင်တွင်အသံထိန်းတပ်ဆင်ရန်၊ လုပ်သားများအား အထူးသဖြင့် ဒီဇယ်အင်ဂျင်မောင်းနှင်သူ တို့ အား နားကြပ်များပေးဂေထားရန်။	
သဘာဂ ပတ်ဂန်း	အပင်၊သတ္တဂါနှင့် မျိုးပွါးကွဲပြားမှု	မလိုအပ်ဘဲသစ်ပင်ခုတ်ခြင်းမပြုပါ၊အပင်စိုက်ခြင်း၊လမ်းရေကန်များတည်ဆောက်ခြင်း စသည့်အမြဲ စိမ်းလန်းစေရန်အတွက်စီမံကိန်းများရေးဆွဲခြင်း။	Developer/SPC Tenants
ကျင်	ဖလဗေဒအခြေအန <u>ေ</u>	မြေအောက်ရေအသုံးချမှုထိန်းသိမ်းရြင်း၊	စီမံကိန်းအ ကောင်အထည် ဖော်ဆောင်သူ
လူမှုဂန်း ကျင်	နေထိုင်မှုနှင့်အသက်မွေးမှု	သန့် စင်စနစ်၊အနယ်စစ်ကန်စနစ်တို့ဖြင့်စွန်ထုတ်ရေအရည်အသွေးထိန်းချုပ်ခြင်းဖြင့်မြစ် ရောင်းများအတွင်းရှိဝါးနှင့်ရေနေသတ္တဂါများအပေါ် ထိခိုက်မှုမရှိနိုင်ခြင်း၊	SPC
	ရေသုံးစွဲမှု	စက်ရုံ၊လူနေဆောင်၊မီးဖိုဆောင်တိုတွင်ရေအသုံးပြုခြင်းကိုအနည်းဆုံးဖြစ်စေရန်သေချာစွာ ထိန်းချုပ်ခြင်းဖြင့်၊မြေအောက်ရေထုတ်ယူသုံးစွဲမှုကိုထိန်းသိမ်းခြင်း၊	SPC
	လက်ရှိလူမှုအဆောက်အအုံ နှင့်သွားလာမှု	လုံခြုံစိတ်ချရသည့်အစဆာက်အအုံနှင့်သွားလာမှုများအပေါ် စောင့်ကြပ်ကြည့်ရှုရင်း၊	စီမံကိန်းအ ကောင်အထည် ဖော်ဆောင်သူ
	AIDS/HIV ကဲ့သိုသောအွန္တရာယ်(သို) ကူးစက်ရောဂါများ	ကူးစက်ဖြစ်ပွါးနိုင်သောရောဂါများကိုအောက်ပါအတိုင်းဆောင်ရွက်ပေးခြင်း၊ • ကူးစက်မှုကြိုတင်ကာကွယ်ခြင်း၊ • အသိပညာဖြန့်ပေခြင်း၊	Tenants
	လုပ်ခွင်အခြေအနေ (လုပ်ငန်းခွင်ဘေးကင်းလုံခြုံမှု)	လုပ်ငန်းခွင်ကျန်းမာရေးနှင့်လုံခြုံစိတ်ချစေရေးအတွက် IFC ၏ EHS အညွှန်းများအတိုင်း လိုက်နာမါမည်၊	Developer/SPC
အမြား	မတော်တဆထိနိက်မှု	မတော်တဆထိခိုက်မှုများမဖြစ်စေရန်ကြိုတင်ကာကွယ်မှုများစီမံဆောင်ရွက်စြင်း။	Developer/SPC
	က္သမ္ဘာ့ပူနွေးမှု	GHGs ဆိုင်ရာလျော့ချနိုင်မှုများထိန်းသိမ်းလုပ်ဆောင်ခြင်း၊	Developer/SPC

အဆိုပြုလုပ်ငန်းဆောင်ရွက်ခြင်းကြောင့်ဖြစ်ပေါ် လာသောအဓိကထိခိုက်နိုင်မှုများ၊ထိခိုက်မှုလျော့ပါးစေရေးနည်းလမ်း များ၊စသည်တို့ကိုစီမံကိန်းစတင်သည်မှစ၍လိုက်နာဆောင်ရွက်လျက်ရှိပါသည်။

အဆိုပါစီမံကိန်းပြီးစီး၍ ပုံမှန်လည်ပတ်သည့်အခါတွင်သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာ၊လူမှုစီးပွါးရေးဆိုင်ရာများအပေါ် ထိခိုက်နိုင်သည့်

ာ ဖုန်များထွက်ရှိမှု

၂. အသံပိုင်းဆိုင်ရာ နှင့် တုန်ခါမှု

၃. စွန်ပစ်ပစ္စည်းနှင့် ရေဆိုးရေညစ်များဆိုင်ရာ

၄. အနီးအနားတွင်ရှင်သန်သွားလာနေထိုင်သည့် သဘာဝတိရိစ္ဆာန်များအားထိခိုက်ခြင်း။

<u>ှ</u>. လုပ်သားများအတွက်အလုပ်အကိုင်အခွင့်အလမ်းများ

စသည်တို့ ကိုအဓိကထား၍ ဆန်းစစ်မှုများကိုလုပ်ကိုင်ခဲ့ပြီးလျှော့ချနိုင်သည့်အစီအစဉ်များကိုစီစဉ်ထားရှိပါသည်။

ာ. ဖုန်များအပေါ် စီမံထားရှိမှု။

ယခုစီမံကိန်းမစတင်မီကစက်မှုဇုန်မြေနေရာဖြစ်ခဲ့သော်လည်းမော်တော်ယာဉ်များဝင်ထွက်မူကြောင့်မည်မျှဖုန်ထခဲ့သည်၊ မည်မျှလေထုညစ်ညမ်းခဲ့သည်ကိုတိုင်းတာမှတ်သားမှုမရှိသဖြင့် Environmental Base Line အဖြစ်ကိန်းဂဏာန်းများမ ရရှိနိုင် ပါ။ သို့ ရာတွင်အောက်ဖေါ်ပြပါအကြောင်းအချက်များဖြစ်သည့်

• စီမံကိန်းတည်ဆောက်ရေးကာလတွင်ပို့ ဆောင်ရေးမော်တော်ယာဉ်များဝင်ထွက်သွားလာခြင်း၊

• တည်ဆောက်ရေးအတွက်အသုံးပြုသည့် စက်ယန္တရားများစက်များဖြင့်အုတ်မြစ်ချလုပ်ငန်းများလုပ်ဆောင်ခြင်း။

• မြေမှုန့် များကိုလေတိုက်ခတ်ခြင်း၊

• တူးဖေါ် သည့်မြေကြီးများနှင့်ကုန်တင်ယာဉ်များပေါ် သို့ တင်ချမှုများပြုလုပ်ခြင်း၊သယ်ယူပို့ ဆောင်ခြင်း။

စသည်တို့ ကြောင့်ပတ်ဝန်းကျင်ဒေသများအပေါ် ဖုန်မှုံများဖြစ်ပေါ် စေနိုင်ပါသည်။

ယင်းအတွက်သက်သာလျှော့နည်းစေရန်မော်တော်ယာဉ်များအရှိန်ထိန်းမောင်းနှင်ခြင်း။ကုန်ကြမ်းများ တင်/ချ ပြုလုပ် သည့်နေရာတွင်အကာအရံပြုလုပ်ပေးထားခြင်းတို့ ဖြင့်ကာကွယ်လျှော့နည်းစေနိုင်ပါသည်။

စီမံကိန်းတည်ဆောက်စဉ်စက်ပစ္စည်းများတပ်ဆင်ခြင်း၊စက်စမ်းသပ်ခြင်း၊ရွှေပြောင်းခြင်း၊စသည်တို့ ကြောင့်ဆူညံသံနှင့် တုန်ခါသံများဖြစ်ပေါ် မည်ဖြစ်ရာ၊အဆိုးဆုံးမှာ Power Generation, Pile Driving, စသည်တို့ မှထွက်ရှိသောဆူညံသံ သည်အကြီးမားဆုံးပြသာနာဖြစ်ခြင်းကြောင့်ဆူညံသံလျှော့နည်းစေသောနည်းများကိုအသုံးပြုခြင်း၊ အလုပ်ချိန်နှင့်လမ်း ကြောင်းကန့် သတ်ခြင်း၊စီမံကိန်းပတ်လည်တွင်ဆူညံသံကိုခံနိုင်သောသံအကာအကွယ်များအသုံးပြုကာယံထားခြင်းစ သည်တို့ ဖြင့်ဆောင်ရွက်သွားမည်ဖြစ်ပါသည်။

စီမံကိန်းတည်ဆောက်စဉ်နှင့်တည်ဆောက်ပြီးပုံမှန်လည်ပတ်သည့်ကာလတို့ တွင်မော်တော်ယာဉ်သစ်များရေဆေးခြင်း၊ သန့် စင်ခန်းများသုံးစွဲခြင်း၊ မီးဖိုဆောင်စသည်တို့ တွင်အသုံးပြုသည့်ရေပမာဏအားစနစ်တကျထိန်းသိမ်းဆောင်ရွက်

ခြင်းဖြင့်ရေကြောင့်ဖြစ်သောညစ်ညမ်းမှုအားကာကွယ်ဆောင်ရွက်သွားရာရောက်မည်ဖြစ်ပါသည်။

ယခုအခါစီမံကိန်း (Phase I) အတွက်စက်ရုံမှာတည်ဆောက်ပြီးဖြစ်ပြီး၊ထုတ်လုပ်မှုများစတင်လုပ်ကိုင်လျက်ရှိပါသည်။

လုပ်ငန်းများအမှန်တကယ်လည်ပတ်သည့်အခါတွင်ပုံမှန်စက်လည်ပတ်ခြင်းသာမကဘဲဝန်ထမ်းများနေ့စဉ်ပုံမှန်လှုပ်ရှားမှု များအရလေထု၊အမှိုက်၊စွန့် ပစ်ရေဆိုးနှင့်ညစ်ညမ်းမှုများထွက်ရှိမည်ကို၄င်း၊မီးလောင်မှုမဖြစ်စေရန်၄င်းအပြည်ပြည် ဆိုင်ရာစံချိန်စံညွှန်းများနှင့်ကိုက်ညီသည့်စံနစ်များအတိုင်းပတ်ဝန်းကျင်ထိခိုက်မှုများမဖြစ်စေရန်လုပ်ဆောင်နေသည် ကိုတွေ့ရပါသည်။ ၂. အသံပိုင်းဆိုင်ရာနှင့် တုန်ခါမှုများအပေါ် စီမံထားရှိမှု။ စီမံကိန်းကြောင့်အသံဆူညံမှုအဓိကဖြစ်ပေါ်ခြင်းသည်၊ အလုပ်သမားများနှင့်စက်ယန္တရားများကြောင့်မူလထက်ဒေသနှင့် ပတ်ဝန်းကျင်အပေါ် အသံဆူညံမှုများတိုးပွါးလာနိုင်ပါသည်။ ယင်းအတွက်သက်ဆိုင်ရာ တည်ဆောက်ရေးအဖွဲ့များမှ လည်းတတ်နိုင်သမျှအသံဆူညံမှုမရှိစေရန်ထိန်းသိမ်းလုပ်ကိုင်သည်ကိုတွေ့ ရှိရပါသည်။ တည်ဆောက်မှုများကိုနေ့ အချိန် တွင်သာပြုလုပ်ပြီးည၈နာရီထက်နောက်ကျစွာလုပ်ကိုင်ခြင်းမှရှောင်ရှားရမည်ဖြစ်ပါသည်။တည်ဆောက်မှုများပြီးစီးသည့် အခါယခုစက်ရုံ၏ပုံမှန်လုပ်ငန်းစဉ်များလည်ပတ်ရာတွင်ထွက်ရှိမည့်အသံမှာမော်တော်ယာဉ်စက်စမ်းသပ်အသံနှင့်လေ အေးပေးစက်၏ထွက်ရှိမည့်အသံတို့ သာဖြစ်ပြီး၊၎င်းတိုမှာသတ်မှတ်စံ၏လက်ခံနိုင်သောအဆင့်တွင်သာရှိပြီး အဆိုပါအသံ မှအပအခြားသောဆူညံသည့်အသံများနှင့်တုန်ခါမှုများထွက်လာမည်မဟုတ်ပါ။

စီမံကိန်းတခုလုံးအတွက်လိုအပ်သည့်လျှပ်စစ်ဓါတ်အားကိုနိုင်ငံတော်၏လျှပ်စစ်ဓါတ်အားပေးရေးကွန်ယက်မှရယူမည် ဖြစ်သော်လည်းလျှပ်စစ်ဓါတ်အားပြတ်လပ်သည့်အခါကိုယ်ပိုင်မီးစက်ဖြင့်လည်ပတ်ရန်စီစဉ်ထားသည်ကိုတွေ့ ရှိရပါသည်။ အဆိုပါမီးစက်ကြီးများ၏လည်ပတ်ချိန်တွင်ထွက်ရှိလာမည့်စက်လည်ပတ်မှုအသံသည်ကျယ်လောင်နိုင်သကဲ့သို့ မရပ်မနားထွက်ပေါ် လာမည့်အသံဆူညံချိန်သည်ပတ်ဝန်းကျင်အတွက်နားမခံနိုင်စရာထိခိုက်နိုင်မှုတစ်ခုအဖြစ်လေ့လာ ဆန်းစစ်မှုအရသိရှိရပါသည်။(စက်ရုံလုပ်ငန်းကိုနေအချိန်သာလုပ်ကိုင်ပြီးညပိုင်းလုပ်ကိုင်မှုမရှိပါ။)

၃. စွန့် ပစ်ပစ္စည်းနှင့်ရေဆိုးရေညစ်များဆိုင်ရာလေ့လာဆန်းစစ်မှုနှင့်စီမံထားရှိမှု။ ပုံမှန်လည်ပတ်မှုလမ်းစဉ်အရစွန့် ပစ်ပစ္စည်းနှင့်ရေဆိုးရေညစ်များသည်အောက်ပါအတိုင်းထွက်ရှိနိုင်ကြောင်း Process Flow ဆိုင်ရာမှတ်တမ်းများနှင့်ကွင်းဆင်းစစ်ဆေးမှုအရသိရှိနိုင်ပါသည်။

(က) ရေချိုးခန်း၊ရေအိမ်များမှထွက်ရှိသောအညစ်အကြေးများ၊

(ခ) မီးဖိုဆောင်များမှထွက်ရှိသောအညစ်အကြေးများ၊

(ဂ) မော်တော်ယာဉ်သစ်များရေဆေးခြင်းမှထွက်ရှိသောအညစ်အကြေးများ၊

Project အမှန်တကယ်လည်ပတ်သည့်အခါတွင်လုပ်ငန်းစဉ်၏သဘောတရားအရ မော်တော်ယာဉ်ရေဆေးသည့်လုပ် ငန်းအဆင့်မှစွန့် ပစ်ရေဆိုးများထွက်ရှိနိုင်ပါသည်။အဆိုပါစွန့်ပစ်အရည်ကိုပြန်လည်အသုံးပြုသည့် Recycle စနစ်ကို အသုံးပြုထားပြီးပြင်ပသို့စွန့်ထုတ်ခြင်းမပြုပါ။ စက်ရုံ၊ရုံးခန်း၊လူနေဆောင်တို့၏ပုံမှန်ရေချိုးခန်း၊မီးဖို၊ရေအိမ်များမှထွက်ရှိ သည့်အညစ်အကြေးများကိုလည်းစံချိန်စံညွှန်းများနှင့်ကိုက်ညီသည့်ရေဆိုးများသန့် စင်သည့်စံနစ်(Septic Tank) များ ပါရှိသည့်အပြင်၊လိုအပ်လျှင်မြိုနယ်စည်ပင်သာယာအဖွဲ့သို့ဆက်သွယ်စွန့်ပစ်သောစနစ်ကိုအသုံးပြုသောကြောင့်ပတ် ဝန်းကျင်ထိခိုက်မှုမရှိစေရန်ဆောင်ရွက်လျက်ရှိသည်ကိုတွေ့ ရပါသည်။ ထို့ အပြင်အသံနှင့်တုန်ခါမှုများကြောင့်ထိခိုက် ရန်လည်းမရှိကြောင်းတွေ့ ရှိရပါသည်။

(မှတ်ချက်)။ ။ယခုအခါစီမံကိန်းဒေသသို့ကွင်းဆင်းတိုင်းတာစစ်ဆေးရာတွင်ယခုစီမံကိန်းသည်ဆောက်လုပ်ရေးလုပ်ငန်း များပြီးဆုံးပြီးပုံမှန်လည်ပတ်လုပ်ကိုင်နေသည်ကိုတွေ့ရှိရပါသည်။(စက်ရုံလုပ်ငန်းကိုနေ့အချိန်နံနက်စနာရီမှညနေ၅နာရီအ တွင်းသာလုပ်ကိုင်ပြီးညပိုင်းလုပ်ကိုင်မှုမရှိပါ။)

ပတ်ဝန်းကျင်ထိခိုက်မှုလျော့ချရေးနှင့်စောင့်ကြပ်ကြည့်ရှုနိုင်စေရန်အစီအစဉ်နှင့်အဖွဲ့အစည်းကိုလည်းဖွဲ့စည်းလုပ်ဆောင် ထားပါသည်။ပတ်ဝန်းကျင်စိမ်းလမ်းစိုပြေစေရေး၊အရေးပေါ် နှင့်ကယ်ဆယ်ရေးတို့ဆောက်ရွက်သွားနိုင်စေရန်ဖွဲစည်းမှု များနှင့်လုပ်ဆောင်ရန်အစီအစဉ်များကိုရေးဆွဲတင်ပြထားပါသည်။ ဇယား (၈၀)ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်ချုပ်နှင့်ရံပုံငွေလျာထားချက်။(ပုံမှန်လုပ်ငန်းလည်ပတ်စဉ်ကာလ)

အမျိုး အစား	အချက် အလက်	ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု	တာဝန်ယူ သည့်အဖွဲ့	ရန်ပုံငွေလျာ ထား ချက် (ကျပ်)
ညစ်ငြမ်းမှု	လေအရည်အ သွေး	လေဝင်ထွက်မှုစနစ်ကောင်းမွန်စေရန်တံခါး ပေါက်ကြီးများကိုတပ်ဆင်အသုံးပြု၍အပူ ချိန်နှင့်လေအရည်အသွေးကိုထိန်းသိမ်းရန်။	EMP team/SPC	1,000,000

	အသံဆူညံမှု	အသံလုံသည့်မီးစက်နှင့်ကွန်ပရက်စာများအ	EMP team/SPC	500,000
		စားထိုးသုံးစွဲခြင်း၊ညအချိန်အလုပ်လုပ်ခြင်း မုရှောင်လျားခြင်း၊မော်တော်ယာဉ်များအရှိန်		
		မှေရှောင်လျားခြင်း၊မောတောဘာညများအချိန်		
		တွက်နားကြပ်တပ်စေခြင်း		
	ရေနှင့်စွမ်းအင်	အဝီစိတွင်းနှင့်ရေအရည်အသွေးစစ်ဆေး	EMP team/SPC	1,000,000
	အသုံးပြုမှု	ခြင်းသုံးစွဲမှုထိန်းချုပ်ခြင်း၊သုံးနိုင်သည့်ရေ		. ,
	LOUL	များပြန်လည်အသုံးပြုခြင်း၊နေ့လည်ထမင်း		an N
		စားချိန်တွင်လေအေးပေးစက်များအားရပ်		
		နားထားခြင်း ဖြင့်ရေအသုံးပြုမှုထိန်းသိမ်း		
		ခြင်း၊ချွှေတာစေခြင်း၊လေထုညစ်ညမ်းမှု		
		လျော့ချစေခြင်း၊		
	ရေဆိုးထွက်ရှိ	septic tank တပ်ဆင်အသုံးပြုခြင်း၊သန့်	EMP team/SPC	12,000,000
	ð.	စင်သည့်ရေ၏အရည်အသွေးကိုစစ်ဆေး		
		ခြင်း၊ပြန်လည်အသုံးပြုစေခြင်းဖြင့်မြေ		
		အောက်ရေထိန်းသိမ်းခြင်း၊ (၂)		
	ယာဉ်သွားလာ	ယာဉ်သွားလာမှုအရှိန်လျော့ချစေခြင်း၊ယဉ်	စီမံကိန်းဖေါ်ဆောင်	50,000
	JF Ö	များ၊မော်တော်ဆိုင်ကယ်များ၊စက်ဘီးများအ	သူ	
	25555	တွက်ရပ်နားရန်နေရာစီစဉ်ပေးခြင်း၊		200.000
	စွန်ပစ်အစိုင် အခဲ	စွန့်ပစ်အမှိုက်များအားလုံး3R စနစ်အသုံး		200,000
	300	ပြုစေခြင်း၊အမှိုက် များဝယ်ယူသူသို့ပြန် လည်ရောင်းချခြင်း၊စည်ပင်သာယာသို့ချိတ်	စီမံကိန်းဖေါ်ဆောင်	
		ဆက်စွန့်ပစ်ခြင်းမပြုလုပ်မီကောင်းမွန်စွာသို	သူ	
		လှောင်ထားရှိစေခြင်း၊		
သဘာဝ	အပင်နှင့်သက်	အပင်များစိုက်ပျိုးခြင်း		200,000
ပတ်	ရှိများအပေါ် စီ	4 1 410	စီမံကိန်းဖေါ် ဆောင်	
ဝန်းကျင်	စဉ်ထားရှိမှု		သူ	
	စိမ်းလန်းစိုပြေ	စိုက်ပျိုးထားသည့်အပင်များစိမ်းလန်းစိုပြေ	EMP team/SPC	300,000
	စီစဉ်ထားရှိမှု	စေရန်နေ့စဉ်နှင့်လိုအပ်သလိုရေလောင်းပေး		
		ခြင်း		
လူမှုပတ်	သက်မွှေးဝမ်း	စီမံကိန်းအတွက်လိုအပ်သည့်လစ်လပ်ရာထူး		600,000
ဝန်းကျင်	ကြောင်းမှု	များအတွက်ဒေသခံများအားဦးစားပေးခန်	စီမံကိန်းဖေါ်ဆောင်	
		ထားမှု၊စဉ်ဆက်မပြတ်စွမ်းဆောင်ရည်တိုး	သူ	
	- c - c	မြင့်စေရန်လေ့ကျင့်ပေးခြင်း		
•	ကုပ်ငန်းခွင်	လုပ်ငန်းခွင်လုံခြုံရေးနှင့်ကျန်းမာရေးအ		500,000
	ကျန်းမာရေး နှင့်လုံခြုံမှုအ	တွက် IFC \ OHS လမ်းညွှန်စံချိန်စံညွှန်း		
	ရှင့်လူမြူမှုအ ပေါ် စီစဉ်ထား	များကိုလိုက်နာရန်(power fan, hood & wall mounted) စသည့်တို့ကိုတပ်ဆင်၍	e. oc m	
	999 999	လေဝင်လေထွက်နှင့်အပူချိန်၊လေထုညစ်	စီမံကိန်းဖေါ်ဆောင် သူ	
	ا تالت	ညမ်းမှုများကိုထိန်းချုပ်ရန်၊မီးစက်နှင့်ကွန်	-TL	
		ပရက်စာများကိုအသံထိန်းကိရိယာတပ်		
		ဆင်အသုံးပြုခြင်းနှင့်လုပ်သားများအတွက်		

			P	
		နားကြပ်တပ်ဆင်ပေးရန်၊ညအချိန်အလုပ်		
		လုပ်ခြင်းရှောင်ရှားရန်၊မော်တော်ယာဉ်ရေ		
		ဆေးရေသုံးစွဲမှုထိန်းချုပ်ရန်၊သန်စင်ပြီးရေ		
		တို့အားပြန်လည်အသုံးပြုစေခြင်း၊ဓာတုဗေဒ	,	
		ပစ္စည်းများအားကောင်းမွန်စွာသိုလှောင်သုံး		
		စွဲခြင်း၊ ပုံးလွတ်များကိုပစ္စည်းပေးသွင်းသူ		
		သို့ပြန်လည်ရောင်းချခြင်းမပြုမီသေချာစွာ		
		သိုလှောင်ထားရှိခြင်း၊ဆေးလိပ်မသောက်ရ၊		
		မီးသတိပြူလျှပ်စစ်ဗိုအားအန္တရာယ်စသည့်		
		သတိပေးဆိုင်းဘုတ်များကိုလိုအပ်သည့်နေ		
		ရာများတွင်တပ်ဆင်ထားရှိခြင်း၊ထိခိုက်မှု		
		များအတွက်အရေးပေါ် အသုံးပြုနိုင်ရန်သူ		
Ü		နာပြုဆေးသေတ္တာများကိုအလွယ်တကူထား		
		ရှိပေးခြင်း၊သောက်ရေသန်စီစဉ်ပေးခြင်း၊ဖျား		
		နာသူနှင့်ကိုယ်ဝန်ဆောင်များခွင့်ရက်ရယူ		
		နိုင်ရန်စီစဉ်ထားခြင်း၊သူနာပြုထားရှိပေးခြင်း		
		နှင့်လူမှုဝန်ထမ်းမှတ်ပုံတင်ထားရှိစေခြင်း၊	et e	
အခြား	အန္တရာယ်ရှိစွန့်	ဓာတုဗေဒပစ္စည်းများအားကောင်းမွန်စွာသို		1,000,000
J	ပစ်အမှိုက်များ	လှောင်သုံးစွဲခြင်း၊ပုံးလွတ်များကိုစပ်ပလိုင်ရာ	စီမံကိန်းဖေါ်ဆောင်	
	အပေါ် စီစဉ်	သို့ပြန်လည်ရောင်းချခြင်းမပြုမီသေချာစွာသို	သူ	
	ထားရှိမှု	လှောင်ထားရှိခြင်း၊ရေဆိုးများသန့်စင်ခြင်း		
	အရေးပေါ် နှင့်	အရေးပေါ် အစီအစဉ်နှင့်ကယ်ဆည်ရေးအ		1,000,000
	ကယ်ဆယ်ရေး	တွက်အဖွဲ့ဖွဲ့စည်းထားရှိခြင်း၊သင်တန်းများလို		
	အတွက်စီမံ	အပ်သလိုစီစဉ်ပေးခြင်း၊မီးသတ်ဆေးဘူးများ		
	ထားရှိမှု	ကိုမီးသတ်စံချိန်စံညွှန်းများအတိုင်းထားရှိ		
	300	ခြင်း၊အရေးပေါ် ထွက်ပေါ် က်နှင့်လမ်းညွှန်	စီမံကိန်းဖေါ်ဆောင်	
254		များကို ကြမ်းပြင်ပေါ် တွင်ရေးသားထားခြင်း၊	သူ	
		အရေး ပေါ် နှင့်မီးဘေးအချက်ပြဉဩတပ်		
		ဆင်ထား ခြင်း၊အရေးပေါ် ကာလဆက်သွယ်		
		ရန်ဖုန်းနံပါတ်များထားရှိခြင်း		
	သဘာဝဘေး	အရေးပေါ် အသုံးပြုနိုင်ရန်ဆေးများကိုအ	စီမံကိန်းဖေါ်ဆောင်	500,000
	အန္တရာယ်အ	ရေးပေါ် အတွက်သာမကဘဲဝန်ထမ်းများဖျား	သူ	
	ပေါ်စီစဉ်	နာခြင်းအတွက်လည်းပုံမှန်ဆေးကုသခွင့်နှင့်		
	ထားရှိမှု	ထောက်ပံ့မှုများစီစဉ်ထားရှိခြင်း၊အရေးပေါ်		
•		အသုံးပြုနိုင်ရန်သူနာပြုဆေးသေတ္တာများကို		
		စက်ရုံအတွင်းအလွယ်တကူထားရှိပေးခြင်း		

စက်ရုအတွင်းအလွယ်တကူထားရှိပေးခြင်း မှတ်ရက်။ ။စက်ရုံမှမည့်သည့်စွန်ပစ်အမှိုက်၊ စွန်ပစ်အရည်များကိုပတ်ဝန်းကျင်သို့စွန်ထုတ်ခြင်းမပြုပါ။

အချိန်အခါအားလျော်စွာနှင့်အရေးပေါ် အစီရင်ခံစာများပေးပို့နိုင်ရန်လည်းသက်ဆိုင်ရာအဖွဲ့အစည်းများနှင့်အထောက်အ ကူပြုအဖွဲ့များသို့ညွှန်ကြားထားချက်များယခုအစီရင်ခံစာတွင်ပါရှိပါသည်။ အသံ၊ရေ၊စွန့်ပစ်အရည်စသည်တို့ကိုမည်သည့် အချက်များ၊မည်သို့တိုင်းတာရမည်စသည်တို့ကိုလည်းအောက်ပါအတိုင်းဖေါ်ပြထားပါသည်။ အသံ

စဉ်	ညစ်ညမ်းသည့်နေရာ	အကြောင်းရင်း	ထိခိုက်မှု	ပါရာမီတာ	အညွှန်း	နည်းစနစ်	လူ	ကာလ
1	Surrounding	Traffic(Car	Noice	Sound	dB	Sound		Daily
	of Project	Parking,		Level		Level		
	Area	loading/Unloading)				Meter		

ရေနှင့်စွန့်ပစ်အရည်

စဉ်	ညစ်ညမ်းသည့်နေရာ	အကြောင်းရင်း	ထိခိုက်မှု	ပါရာမီတာ	အညွှန်း	နည်းစနစ်	လူ	ကာလ
1	Surrounding	Drain/Car Wash,etc.	Waste Water	Flow rate	BOD, COD	Lab Analysis	Person In charge	Daily Weekly Monthly

လေ

0	ာဉ်	ညစ်ညမ်းသည့်နေရာ	အကြောင်းရင်း	ထိခိုက်မှု	ပါရာမီတာ	အညွှန်း	နည်းစနစ်	လူ	ကာလ
1		Inside Factory	Emission,	Air	Exhaust Air	(Temp;humidity PM <sub>10</sub> ,NO,SO <sub>2</sub> CO)	Lab	Person	Daily,
		and/or	Exhaust(Machines		(Temp/Pressure)	Ordor level	Analysis	In	Weekly,
		Surrounding	,Vehicle,etc.)					charge	Monthly

စ္စန်ပစ်အစိုင်အခဲ

õ	1	L							
	စဉ်	ညစ်ညမ်းသည့်နေရာ	အကြောင်းရင်း	ထိခိုက်မှု	ပါရာမီတာ	အညွှန်း	နည်းစနစ်	လူ	ကာလ
	1	Surrounding	Tree	Solid	Volume/Weight	Volume	Visual,	Person	Daily,
		_	leaves	Waste			Weight	In	Weekly,
							Measurement	charge	Monthly

အချက်အလက်များကိုနေရာ၊အချိန်အပိုင်းအခြားစသည်ဖြင့်စီမံကိန်းအကြိုကာလ၊တည်ဆောက်ဆဲကာလ၊ပုံမှန် လည်ပတ်ကာလစသည်တို့အတွက်တိုင်းတာကောက်ယူရမည်ဖြစ်ပါသည်။ မှတ်ချက်။ ယခုစီမံကိန်းသည်ပုံမှန်လည်ပတ်စဉ်ကာလသို့ရောက်ရှိနေပြီဖြစ်သောကြောင့်ဆောက်လုပ်ရေးအကြိုကာ လနှင့်တည်ဆောက်ဆဲကာလတို့အတွက်ချန်လှပ်ထားမည်ဖြစ်ပါသည်။

«ယား ( ၇၉ ) စောင့်ကြပ်ကြည့်ရှုမှုအစီအစဉ်နှင့်ရံပုံငွေလျာထားချက် (လုပ်ငန်းလည်ပတ်စဉ်ကာလ)

အမျိုးအစား	အရက်အလက်	Location (Lat/Long)	တိုင်းတာမည့် အကြိမ်	လျာထား ရံပုံငွေ (ကျပ်)	တာဝန်ယူအဖွဲ့
လေအရည်အသွေး	PM <sub>2.5</sub> , PM <sub>10</sub> VOC, HCHL, NO <sub>2</sub> , SO <sub>2</sub>	(In factory and surrounding)*	တစ်နှစ် နှစ်ကြိမ်	2,000,000	Sub Project Contractor
ရေအရည်အသွေး	pH, SS, DO, BOD, COD, oil & grease, chromium	(In factory and surrounding) **	တစ်နှစ် နှစ်ကြိမ်	200,000	SPC
အစိုင်အခဲစွန်ပစ်အမှိုက်	စက်ရုံနှင့်တစ်ကိုယ်ရေအစိုင်အခဲစွန်ပစ်အမှိုက်များ အပေါ်စီစဉ်ထားရှိမှုနှင့်ပမာဏတိုင်းတာခြင်း	(In factory and surrounding)	တစ်နှစ် နှစ်ကြိမ်	200,000	EMP team
မြေအရည်အသွေး	မြေအရည်အသွေးအပေါ် ထိခိုက်နိုင်သည့်စွန့်ပစ် အရည်၊ အစိုင်အခဲစွန်ပစ်အမှိုက်များအပေါ် ထိန်းချုပ်မှု	(In factory and surrounding)	တစ်နှစ် နှစ်ကြိမ်	200,000	EMP team
အသံဆူညံမှု (တုန်ခါမှု) -	အသံဆူညံမှု	(In factory and surrounding)  ***	တစ်နှစ် နှစ်ကြိမ်	500,000	SPC
မြေနိမ့်ဆင်းမှု	မြေအနိမ့်အမြင့်စောင့်ကြ <b>်ရ</b> န်	Preservation site	တစ်နှစ် နှစ်ကြိမ်	500,000	SPC
ဆိုးဝါးအနံ့	ချက်ပြပ်မှုမှအနံ့များကိုထိန်းချုပ်ရန်၊	(In factory and surrounding)	တစ်နှစ် နှစ်ကြိမ်	1,000,000	EMP team
အောက်ခြေအနယ်ထိုင် မှု	ရေအရည်အသွေးထိန်းသိမ်းမှုနှင့်အတူတကွဆောင်ရွ ကိရန်၊	(In factory and surrounding)	တစ်နှစ် နှစ်ကြိမ်	500,000	SPC
¢00€93 €	မြေအောက်ရေသုံးစွဲမှုနှင့်ထိန်းချုပ်ရန်၊	Preservation site	တစ်နှစ် နှစ်ကြိမ်	500,000	SPC
ရေအသုံးချမှုနှင့် ဧလဗေဒအခြေအနေ	မြေနိမ့်ဆင်းမှုနှင့်အတူတကွစောင့်ကြည့် ရနိ	(In factory and	တစ်နှစ် နှစ်ကြိမ်	500,000	SPC

		surrounding)			
Risk for infectious disease such as AIDS/HIV	ကူးစက်ရောဂါများကိုစောင့်ကြပ်ကြည့်ရှုရန်၊	Each tenant/Worker	တစ်နှစ် နှစ်ကြိမ်	1,000,000	SPC/Tenant
လု <b>်ခွင်အခြေအနေ</b> (OHS)	လုပ်ငန်းခွင်ကျန်းမာရေးနှင့်ဘေးကင်းလုံခြုံမှု စောင့်ကြပ်ကြည့်ရှုရန်	Factory	တစ်နှစ် နှစ်ကြိမ်	1,000,000	SPC
မတော်တဆထိခိုက်မှု	မတော်တဆထိခိုက်နိုင်ခြေများအပေါ် စောင့်ကြပ်ရန်၊	Factory	လိုအပ်သလို	1,000,000	Tenants

မှတ်ချက်: \* P1,21°43'51.27"N, 95°37'37.93"E, P2, 21°43'51.37"N, 95°37'36.47"E P3, 21°43'51.53"N, 95°37'34.37"E P4,21°43'50.59"N, 95°37'35.33"E P5, 21°43'49.98"N, 95°37'31.38"E

\*\*PN121°43'51.27"N, 95°37'37.93"E, PN2, 21°43'51.37"N, 95°37'36.47"E PN3, 21°43'51.53"N, 95°37'34.37"E PN4, 21°43'50.59"N, 95°37'35.33"E PN5, 21°43'49.98"N, 95°37'31.38"E

တိုင်းတာရရှိချက်များကိုအမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာအရည်အသွေး(ထုတ်လွှတ်မှု)လမ်းညွှန်ချက်တန်ဖိုးများနှင့်စစ် ဆေးရမည်ဖြစ်ပါသည်။

• EIA လေ့လာမှုအတွင်းဆောင်ရွက်ခဲ့သည့်လုပ်ငန်းများ၏အကျဉ်းချုပ်။ ကောင်းကျော်စေအင်ဂျင်နီယာလုပ်ငန်းကုမ္ပဏီသည် Gold A Y A Motors International Group Co.,Ltdက မန္တလေး တိုင်းဒေသကြီးမြင်းခြံခရိုင်၊ငါန်းဇွန်မြို့ နယ်၊ မြိုသာနှင့်နဘူးအိုင်ကျေးရွာကြားတွင်တည်ရှိသော မြိုသာစက်မှုဇုန်ရှိမြေ ကွက်အမှတ် (ဘီ-၁-၁)၊ မြေတိုင်းရပ်ကွက်အမှတ်(စက်မှုဇုန် နယ်မြေ၊ဇုန်-၂-စီ)မြေအကျယ်(၂၀. ၀၈၄)ဧကရှိမြေပေါ် တွင် မော်တော်ယာဉ်အမျိုးမျိုးတပ်ဆင်ထုတ်လုပ်သည့်စက်ရုံစီမံကိန်းအပေါ် သယံဇာတနှင့်သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေး ဝန်ကြီးဌာနမှရည်ညွှန်းချက်များအတိုင်း၊ အဖွဲ့ ဝင်များလိုက်ပါလျက် ၂၀၁၈ခုနှစ်ဧပြီလ၂၈ ရက်နေ့ တွင်တကြိမ်၊ ၂၀၁၈ခု နှစ်မေလ၅ရက်နေ့ တွင်တကြိမ်၊ သွားရောက်ပြီးလိုအပ်သည့်တိုင်းတာစစ်ဆေးမှုများပြုလုပ်ခြင်း၊စီမံကိန်းကြောင့်ဖြစ်ပေါ် လာနိုင်သည့်ကောင်းကျိုးများကိုလေ့လာခဲ့သည့်အပြင်၊ အဆိုပါရက်များအတွင်းဒေသခံများတာဝန်ရှိသူများနှင့် တွေဆုံမေးမြန်းခြင်း၊အနီးအနားတွင်နေထိုင်သူများပါဝင်သောလူထုအစည်းအဝေးများလုပ်ဆောင်ခဲ့သည်သာမကဘဲ၊ ငါန်းဇွန်မြို့ နယ်အဆင့်ဌာနဆိုင်ရာများ၊ အရပ်ဘက်အဖွဲ့ အစည်းများမှတာဝန်ရှိသူများ၊ ဒေသခံများနှင့်တစုတည်းနှင့်သီး ခြားစီတွေ့ ဆုံမေးမြန်း၍ဆန္ဒသဘောထားများကိုကောက်ခံရယူနိုင်ခဲ့ပါသည်။

အစီရင်ခံစာတင်သွင်းခြင်း၊အတည်ပြုခြင်း၊ကာလတစ်လျောက်လုံး အီးအိုင်အေ တာဝန်ခံသည့်အဖွဲ့၊လုပ်ငန်းရှင်နှင့် ဒေသခံများ၊ ဆက်စပ်တာဝန်ရှိသူများတို့အကြားဆက်သွယ်ရေးလမ်းကြောင်းကိုလည်းစီစဉ်ထားပါသည်။

# ဆောင်ရွက်ခဲ့သောအများပြည်သူသဘောထားရယူခြင်းနှင့်ပြည်သူများပူးပေါင်းပါဝင်ခြင်း။

အများပြည်သူနှင့်တွေ့ဆုံဆွေးနွေးပွဲကျင်းပသည့်အခမ်းအနား။ တွေ့ ဆုံပွဲကျင်းပသွားနိုင်ရန်အတွက် Gold A Y A Motors International Group Co.,Ltd မှတာ ဝန်ရှိသူများနှင့် အတူ ၂၀၁၈ခုနှစ်ဇူလိုင်လ ၅ ရက်နေ့တွင်မြိုသာစက်မှုဇုန်နှင့်အနီးနားကျေးရွာတွင်နေထိုင်သူများနှင့် စီမံကိန်းရုံးခန်းမတွင်မြို့ နယ်အဆင့်ဌာနဆိုင်ရာများ၊ အနီးအနားတွင်နေထိုင်သူ၊သက်ဆိုင်သူများနှင့်တွေ့ ဆုံပွဲတစ်ရပ်ကျင်းပပြုလုပ်၍သက်ဆိုင် ရာဒေသခံများနှင့်တွေ့ဆုံဆွေးနွေးပြီးသဘောထားစစ်တမ်းများကောက်ယူနိုင်ခဲ့ပါသည်။

အများပြည်သူနှင့်တွေဆုံဆွေးနွေးပွဲသို့ တက်ရောက်လာကြသူများစာရင်း၊သဘောထားမှတ်ချက်များတစ်ဦးချင်းစီ၏စစ် တမ်းအဖြေများအပါအဝင်မှတ်တမ်းဓါတ်ပုံများတို့ကိုမှတ်တမ်းတင်ထားရှိပါသည်။ဤကဲ့သို့ စစ်တမ်းများကောက်ယူရာ တွင်လည်း နိုင်ငံတကာစံချိန်များ၊အညွှန်းကိန်းများနှင့်ကိုက်ညီပြီးမြန်မာနိုင်ငံသယံဇာတနှင့်သဘာဝပတ်ဝန်းကျင်ထိမ်း သိမ်းရေးဝန်ကြီးဌာနမှလက်ခံသည့်အတိုင်းဆွေးနွေးခြင်းဖြစ်ပါကြောင်းနှင့်စီမံကိန်း၏အသေးစိပ်အချက်အလက်များ ကိုလည်းသက်ဆိုင်ရာတာဝန်ရှိသူများမှရှင်းလင်းတင်ပြနိုင်ရန်ဖိတ်ခေါ်ခဲ့ပါသည်။သဘောထားကောက်ယူရာတွင်စီမံကိန်း

<sup>\*\*\*</sup> **S.1**, 21°43′53.34"N, 95°37′30.18"E **S.2**, 21°43′52.76"N, 95°37′38.24"E **S.3**, 21°43′49.34"N, 95°37′37.94"E **S.4**, 21°43′49.61"N, 95°37′32.28"E **S.5**, 21°43′47.81"N, 95°37′29.81"E

ဖေါ် ဆောင်မည့်ဒေသ၏စီမံကိန်းပတ်လည်တွင်နေထိုင်သူများကိုသာမကဘဲစီမံကိန်းအပေါ် စိတ်ဝင်စားသူများကိုပါလူထု စည်းဝေးပွဲသို့တက်ရောက်ရန်စီစဉ်ဖိတ်ကြားခဲ့ပါသည်။ ယခုစီမံကိန်းအတွက် အများပြည်သူနှင့်တွေ့ဆုံဆွေးနွေးပွဲ ကိုအောက်ပါအတိုင်းကျင်းပခဲ့ခြင်းဖြစ်ပါသည်။

ဇယား ( ၈၁ )အများပြည်သူသို့ သတင်းအချက်အလက်ထုတ်ဖော်ချက်။

စဉ်	နေ့ စွဲ	အကြောင်းအရာ	ကျင်းပသည့်နေရာ
0	၂၀၁၈ မေလ ၄ ရက်	ငါန်းဇွန်မြို့ နယ်ရှိ ဌာနဆိုင်ရာများ၊အစိုးရမဟုတ်သောအဖွဲ့ အစည်းများမှတာဝန်ရှိသူ များ၊ ရပ်မိရပ်ဖလူကြီးများနှင့်စိတ်ပါဝင်စားသူများနှင့်စီမံကိန်းအပေါ် သဘောထား ကောက်ယူခြင်း။	ငါန်းဇွန်မြို့ နယ်အထွေထွေအုပ်ချုပ် ရေးမှူးရုံး။
J	၂၀၁၈ ဇူလိုင်လ ၅ ရက်	ငါန်းဇွန်မြို့ နယ်ရှိ ဌာနဆိုင်ရာများ၊အစိုးရမဟုတ်သောအဖွဲ့ အစည်းများမှတာဝန်ရှိသူ များ၊ ရပ်မိရပ်ဖလူကြီးများနှင့်စိတ်ပါဝင်စားသူများနှင့်စီမံကိန်းအပေါ် သဘောထား ကောက်ယူခြင်း။	MMID ကုမ္ပဏီရုံးခန်းမ

အထက်ပါအစီအစဉ်အတိုင်းပြည်သူအများနှင့်တွေ့ဆုံဆွေးနွေးမှုများလုပ်ဆောင်ခဲ့ပါသည်။ယခုစီမံကိန်းအတွက် တွေ့ဆုံဆွေးနွေးပွဲ ကိုအစည်းအဝေးပုံစံနှင့်သာမကဘဲတစ်ဦးချင်းတစ်ဌာနချင်းအလိုက်လည်းတွေ့ဆုံခဲ့ပါသည်။ ပတ်ဝန်းကျင်နှင့်လူမှုဆိုင်ရာကိစ္စများနှင့်ပတ်သက်သောအကြံပြုချက်၊တိုင်ကြားချက်များကိုစီမံကိန်းရုံးသို့တိုက်ရိုက်ဖြစ် စေ၊ရပ်ကွက်၊ကျေးရွာ၊မြိုနယ်အထွေထွေအုပ်ချုပ်ရေးမှုးရုံးများမှတဆင့်ဖြစ်စေပေးပို့နိုင်ပါသည်။

အများပြည်သူနှင့်တွေဆုံဆွေးနွေးပွဲတွင်တင်ပြသည့်သဘောထားမှတ်ချက်များနှင့်ကုမ္ပဏီမှလိုက်နာဆောင်ရွက် ထားရှိမှု။

ဒေသခံတက်ရောက်သူများ၏သဘောထားနှင့်တောင်းဆိုမှုများကိုအောက်ပါအတိုင်းမှတ်တမ်းတင်အပ်ပါသည်။ ဇယား(၈၂)ဆွေးနွေးပွဲမှရရှိသောအကြံပြုချက်များနှင့်ယင်းအပေါ် ဆောင်ရွက်မည့် အစီအစဉ်၊ကတိကဝတ်၊

	( ) ( ) ( ) ( ) ( )	
စဉ်	ဒေသခံတက်ရောက်သူများ၏သဘောထားနှင့်တောင်းဆိုမှုများ	ကုမ္ပဏီမှဆောင်ရွက်ပေးမှု။
0	အလုပ်အကိုင်အခွင့်အလမ်းများခေါ် ယူခန့်ထားရာတွင်ဒေသခံများအားဦးစားပေးခန့်ထားပေးပါရန်။	ဦးစားပေးခန့်အပ်လျက်ရှိပါသည်
J	ဒေသခံများအားသင်တန်းခေါ် ယူပို့ချပြီးခန့်ထားစေလိုကြောင်း။	ဝန်ကြီးဌာန၊ဒေသခံအာဏာပိုင်အဖွဲ့တို့နှင့်လို အပ်သလိုစီစဉ်လျက်ရှိပါသည်
9	မော်တော်ယာဉ်များကိုဘဏ်နှင့်ချိတ်ဆက်သည့်အရစ်ကျစနစ်ဖြင့်ရောင်းချပေးစေလိုပါကြောင်း။	ဘဏ်နှင့်ချိတ်ဆက်လုပ်ဆောင်ရန်ရှိပါသည်။

# စီမံကိန်းဒေသခံများအပေါ် ထိခိုက်မှုနှင့်ဒေသဖွံ့ဖြိုးရေးအတွက်ဆောင်ရွက်ပေးမည့်လုပ်ငန်းများ။

၁. စီမံကိန်းတွင်လိုအပ်သည့်အလုပ်ရာထူးများအတွက်ဒေသခံများအားဦးစားပေးခန့်ထားရန်၊

၂. ထိခိုက်မှုလျော့ချရေး၊စောင့်ကြပ်ကြည့်ရှုခြင်းတို့အတတ်နိုင်ဆုံးလုပ်ဆောင်ရန်နှင့်ဒေသဖွံ့ဖြိုးရေးတို့အတွက်အားပေး မြင့်တင်ရန်၊

၃. လူမှုဆိုင်ရာတာဝန်ယူမှုရှိသည့်လုပ်ငန်းများအစဉ်ဆောင်ရွက်ပေးရန်၊

လျာထားရံပုံငွေဖြင့်လုံလောက်မှုမရှိပါကစီမံကိန်းဖော်ဆောင်သူသည်လိုအပ်သည့်အသုံးစရိတ်အတွက်နီးစပ်ရာဒါရိုက်တာ အဖွဲ့အစည်းအဝေးသို့တင်ပြတောင်းခံအသုံးပြုသွားမည်ဖြစ်ပါသည်။

ဇယား(၉ဝ) စီမံကိန်းပုံမှန်လည်ပတ်စဉ်ကာလအတွင်းဆက်လက်ဆောင်ရွက်မည့်အနာဂါတ်အများပြည်သူနှင့်တွေ့ ဆုံ

ဆွေးနွေးမည့်အစီအစဉ်လျှာထားချက်။

စဉ်	အနာဂါတ်အစီအစဉ်	ဖော်ပြချက်/အစီအစဉ်
0	အကြံပြုစာထည့်ပုံးကိုစစ်ဆေးရန်	လစဉ်
J	စောင့်ကြပ်ကြည့်ရှုမှုအစီရင်ခံစာတင်ပြရန်	ECD သို့ စောင့်ကြပ်ကြည့်ရှုမှုအစီရင်ခံစာကိုတစ်နှစ်(၂)ကြိမ်တင်ပြသွားရန်၊
9	အများပြည်သူနှင့်တွေ့ ဆုံဆွေးနွေးခြင်း	ECD လမ်းညွှန်ထားသည့်အတိုင်းအရေးပေါ် နှင့်မတော်တဆအချိန်များတွင် လုပ်ဆောင်ရန်၊
9	အထွေထွေတွေ့ ဆုံခြင်း	တိုင်းဒေသကြီးအစိုးရအဖွဲ့ နှင့်စက်မှုဇုန်ကော်မတီတို့ ၏ပတ်ဝန်းကျင်နှင့်လူမှု ဆိုင်ရာနှင့်သက်ဆိုင်သည့် အစည်းအဝေးများတွင်ပါဝင်ရန်၊

လူမှုစီးပွါးရေးအပေါ် သက်ရောက်မှုများနှင့်လျော့နည်းစေရန်ဆောင်ရွက်မည့်လုပ်ငန်းများ။

စီမံကိန်းအတွက်လိုအပ်သည့်လစ်လပ်နေရာများကိုဒေသခံများအတွက်ဦးစားပေးခန့်ထားခြင်းဖြင့်စီမံကိန်းကြောင့်လူမှုရေး ဆိုင်ရာကဏ္ဍတွင်ပိုမိုကောင်းမွန်နိုင်သည်ကိုတွေ့ရပါသည်။ ထိုအပြင်လိုအပ်သလိုဝန်ထမ်းများလုပ်ကိုင်မှုစွမ်းရည်တိုးမြှင့်လာစေရန်အတွက်လည်းသယံဇာတနှင့်ပတ်ဝန်းကျင်ထိန်း သိမ်းရေးဝန်ကြီးဌာနနှင့်ဆက်သွယ်ပြီးညွှန်ကြားချက်များကိုလိုက်နာခြင်းနှင့်သင်တန်းများပေးမည်ဖြစ်ပါသည်။ ပတ်ဝန်းကျင်ထိခိုက်မှုလျော့ချရေးနှင့်စောင့်ကြပ်ကြည့်ရှုနိုင်စေရန်အစီအစဉ်နှင့်အဖွဲ့အစည်းကိုလည်းဖွဲ့စည်းထားသကဲ့သို့ရံ ပုံငွေများကိုလည်းသီးခြားစွာသတ်မှတ်ထားပါသည်။

အစီရင်ခံစာ၏နိဂုံးချုပ်နှင့်အကြံပြုချက်များ။

ယခုစီမံကိန်းကိုမူလကစိုက်ပျိုးမြေနေရာပေါ် တွင်အခြား နည်းဖြင့်အကျိုးရှိစွာအသုံးပြုရန်ဖေါ် ထုတ်ခြင်းဖြစ်ပြီး၊Baseline Data ကောက်ယူရရှိချက်အရစိုက်ပျိုးရေးထက်စက်မှုလုပ် ငန်းလုပ်ဆောင်ခြင်းသည်ပိုမိုအကျိုးရှိနိုင်ပြီး၊ ပြည်သူများနှင့် တွေ့ဆုံရာတွင်စီမံကိန်းမှမော်တော်ယာဉ်တပ်ဆင်မှု၊စက်စမ်းသပ်မှုစသည်တို့မှအသံဆူညံမှုရှိနိုင်ကြောင်းနှင့်အနီးအနား တွင်နေထိုင်သူများအတွက်ထိခိုက်မှုမရှိနိုင်ကြောင်းကောင်းစွာသဘောပေါက်ကြပါသည်။အများပြည်သူတို့နှင့်ဆွေးနွေးချက် များအရစီမံကိန်းကြောင့်အလုပ်အကိုင်အခွင့်အလမ်းများတိုးပွါးမှုအပေါ် စိတ်ဝင်စားလျက်ရှိပြီးစီမံကိန်းအပေါ် ထောက်ခံမှု ရှိသောကြောင့်မှုလရှိသည့်သဘာဝပတ်ဝန်းကျင်ကိုထိခိုက်နိုင်သော်လည်း၊အဆိုပါထိခိုက်မှုများကိုလျော့ချနိုင်သည့်နည်း ပညာအသစ်နှင့်တကွစံချိန်စံညွှန်းများပြည့်မီစွာလုပ်ကိုင်သွားမည်ဖြစ်သောကြောင့်ကောင်းကျိုးများပိုမိုပေးနိုင်သည့်စီမံ ကိန်းဖြစ်သည်ကိုတွေ့ ရှိရပါသည်။

အထွေထွေအားဖြင့် အဆိုပါစီမံကိန်းသည်မြန်မာနိုင်ငံ၏ပြည်ပသွင်းကုန်လျှော့ကျလာစေရန်အတွက်ဖေါ် ဆောင်ပေး မည့်စီမံကိန်းတစ်ခုဖြစ်ပါသည်။စီမံကိန်းဖေါ် ဆောင်မှုကြောင့်သဘာဝပတ်ဝန်းကျင်ကိုသော်၎င်း၊လူမှုစီးပွါးပတ်ဝန်းကျင် ကိုသော်၎င်း၊ ထိခိုက်မှုများထက်အကျိုးပြုမှုများပိုမိုရနိုင်သကဲ့သို့ ကောင်းမွန်စွာစီမံခန့် ခွဲလုပ်ကိုင်ခြင်းဖြင့်ထိခိုက်မှုများ ကိုလည်းလျှော့ချနိုင်သည့်အပြင်ဒေသခံများအတွက်အလုပ်အကိုင်အခွင့်အလမ်းများပိုမိုပွင့်လင်းလာပြီးလူမှုစီးပွါးရေး များပိုမိုတိုးတက်လာနိုင်သည်သာမကလူတစ်ဦးချင်းဝင်ငွေနှင့်နိုင်ငံတော်၏နှစ်စဉ်ထုတ်လုပ်မှု(GDP) တန်ဖိုးကိုမြင့်တင် ပေးနိုင်သည့်အပြင်နိုင်ငံခြားပို့ ကုန်ကဏ္ဍများကိုပါပိုမိုဖွံ့ ဖြိုးတိုးတက်စေပြီးနိုင်ငံတော်အတွက်တဘက်တလမ်းမှဝင်ငွေ ခွန်များတိုးမြှင့်ရှာဖွေပေးသည့်စီမံကိန်းတစ်ခုဖြစ်ကြောင်းတွေ့ ရှိရပါသည်။

# 1. Executive Summary

The Union of Myanmar is aiming to improve its development without harming or less impact to its environment and sustainability for its national and citizen's economy and social development, services, manufacturing including small medium entrerprise and large scale industrial development to its goal of being industrialized developed country.

Mandalay Division Region is nation's central part of Myanmar. The industrial sector is one of the important priorities for Myanmar's developing process. Myothar, is not only located by road but also potential port for water transport as it is directly contact with other cities of Mandalay division region since long ago, in addition to the development of road network, within few hour driving distance to Mandalay the economic city, becoming more reliable strategic location of economic development day to day.

This project would be developed by foreign direct investment by Gold A Y A Motors International Group Co., Ltd by forming and getting approvals from Mandalay Regional Government including concerned ministries and Myanmar Investment Commission under the foreign direct investment law.

The following are the find out by environmental impact assessment.

- Supporting project of the regional development
- Could transform the land as more effective land use pattern
- It is considered as "The project with No environmental impacts

# **Description of Project**

Gold AYA Motors International Group Co.,Ltd established in June 2017 is a joint venture integrated automobile group company. The registered country of the company is the federal republic of Myanmar with an authorized capital of 50,000,000USD.

It would be implemented by Myanmar and Foreigner Investment Law in this Mandalay Myotha Industrial Development Zone by leasing land short and long term for various types of industry as local and international market demand. This project is encouraged by the Mandalay Division Regional government for productive land use as it is planned to develop with advance production technology by forming public company. The industrial park connects the Asian expressway, the Asian railway network, the Irrawaddy river, the international airport and so on.

The Manufacturing and Assembly of Motor Vehicle Plant located at Plot No.B-1-1 of Block No.Factory Area Zone 2C, Myotha Industrial Park Between Myotha and Nabu Ain village, total land area (20.084) Acres in Nganzun Township, Myingyan District of Mandalay Division Region aims to develop by the compilation of Joint Venture Investment Law.

The project would be implemented by the following objectives.

- A. To get poverty reduction and urban development by enhancing social development
- B. To get skilled labor and industrial development.
- C. To attract international investment in the industrial sector
- D. To enhance socil life style by getting employment opportunities due to the industrial zone development
- E. To increase national revenue

Company production base covers an area of 81278.36 square meters (20.084 acres). The first phase of construction covers an area of 14537.89 square meters, including 3658.28 square meters of showroom buildings, 2728 square meters of dormitory buildings and 8151.61 square meters of factory buildings.

There are phase I and Phase II to be developed where phase I (Workshop, Showroom & Domitory) is included.

Like other project, it won't be developed all phases in the same time, but sequencly phase I and Phase II.

# Location of project

The project located in the Ngazun township is positioned on the Global Polarize System of 21°43′52" N and 95°37′30"E. Nganzun, 640ft above sea level is a town in Mandalay Division Region which is in the Myingyan district and good access by road network in previous but road network at present to reach within few hours to Mandalay, Naypyitaw and even Yangon the economic capital and becoming one of strategic town not only for Mandalay division region but also for the whole nation.



the

#### Factory Lay Out

This project would be developed in total area of 20.084 Acres for development of motor assembling factory from the industrial zone developer by renting the lands.



## **Type of Project**

This project is the type of promotion to the import substitution and SME development.

This motor assembling project is the project not only for the industrial sector development but also supporting to economy, social including transport sector development, increasing personal income generation and improving GDP of the nation.

#### Objective of Project and Scope of Work

Gold AYA Motors International Group co., Ltd is engaged in BAIC DaoDa and BAIC ChangHe brand automobile product, sales, after-sales service and automobile finance.

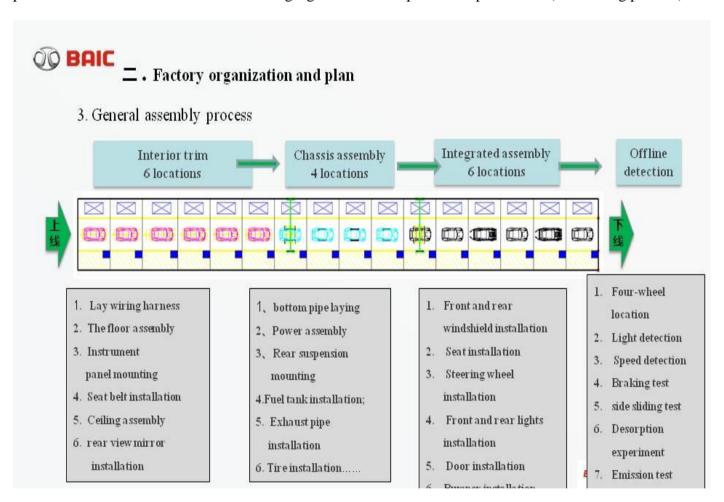
At present, the company plans to produce 7 models of seven categories, including household cars, SUV, MPV, commercial vehicles, pickups, special vehicles and new energy vehicles. Sales plan in Mandalay and Yangon have branch company. Main business covers sales, dealer network development, marketing, after-sales service, customer relationship management, new energy car business, public relations, human resources, finance, IT, purchasing, etc.

Types of Vehicles Model

<u> </u>		
No.	Type of Vehicles Model	Specification
1	CHANGHE Q35 SUV	1.5L Elite Version, AT,
		Smart Version
2	CHANGHE M 60 MPV –	1.5 T Standard
	1.5 T Standard	
3	CHANGHE A 6, Sedan Car	CTV Elite Version
4	DODA V-8 MPV	Business Type
5	DODA K-9 Pick-up	4 x 4 Diesel Version
6	CHANGHE Q-7 SUV	CTV, Luxury Version
7	CHANGHE M20S MPV	5 MT, Standard

#### **Production Process**

Eventhough the project is named as automobile manufacturing it is just the assembling process by importing all parts of vehicle from abroad. The following figure shows the process of production (assembling process).



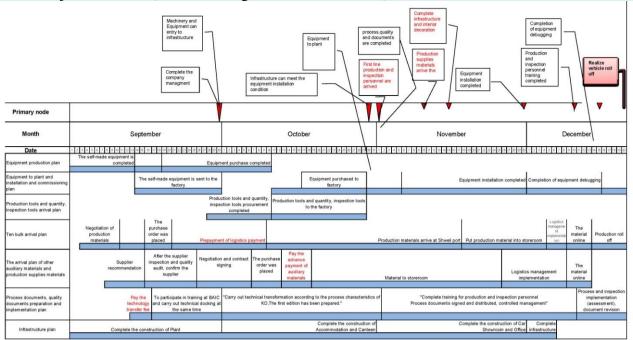
# The period of investment

The project is designed to build and operate the manufacturing and assembling of motor vehicles factory to produce variety of vehicles by employing more than 80 local workers and 20 foreign experts depending on getting orders for long term (30 years) investment.

Gold A Y A Motors International Group Co.,Ltd

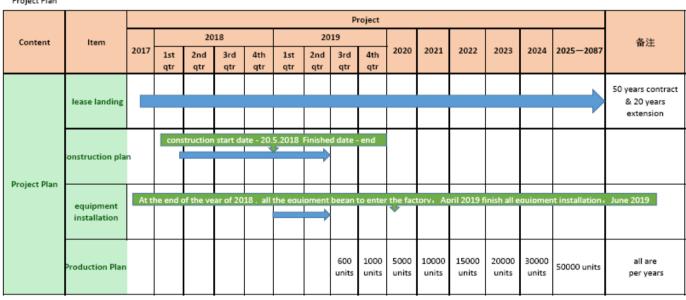
(1) Company Registration Start28-6-2017(2) MIC permit20-5-2018(3)The Official Commercial Operating Date :25-6-2019

# The Overall Project Schedule (Pls find enlarged size on the annex.)



# The project plan is as following

Project Plan



When the land lease expires, the company will continue to lease the land, upgrade the plant, upgrade the equipment and upgrade the products, and continue to operate.

Project Time & Work Schedule Pre-construction, Construction and Operation Stage

110]	Troject Time & Work Schedule Tre-construction, Construction and Operation Stage							
No	Description	Project Period						
	1	2017	2018	2019	2020~24	2025~87		
A	Pre-construction	<b></b>						
В	Construction Stage							
C	Operation Stage							
1	Production & Maintenance					<b></b>		
2	Environmental Management and Waste			_		<b>—</b>		
	Management							
3	Monitoring					<b>→</b>		

Table (4) The salient data of the project

No	le (4) The salient data of		Otv	Remarks
1	Description Tpye of project	ı	Qty JV (Myanmar 20%+Foreigner 80%)	Joint Venture Investment
2	Investment	Myanmar	1.13Million US\$	Total Investment of 15.32
2	mvestment	Foreigner	12.19Million US\$	Million US\$ including
		Total	15.32Million US\$	Myanmar kyats in US
		Total	13.32WIIII0II 03\$	Dollar equivalent
3	Date of Company Establish		28-6-2017	Company Registration
	Dute of Company Estachism		20 0 2017	No. 100642476
4	Date of Operation Start		25-6-2019	
5	Licenses		MIC Permit; 067/2018 (27-3-2018)	
			Ministry of Commerce License:	
			Export /Import No. 011945 (17-08-18)	
			MOI: Industry License; Matala /Kyi/2449 (6-	
			8-2019)	
			MOI: (Mdy) Electricity-Inspection EI-MDY-	
			187 (18-6-21~17-6-22)	
			MOI: (Mdy) Electricity-Inspection (1)	
			Electricity Production and Usage-076/2019	
			(21-6-19~20-6-23) (2) Electricity Production and Usage-	
			077/2019 (21-6-19~20-6-23)	
6	Raw materials (Import)		Import from China + Local Purchase	Details on Annex
7	Product Export (To)		Local Sale Only	Details on 7 times
8	Product Capacity		Vehicles (Approx; 1000~37500 nos) per year	(Changhe –Q35SuV,
	Trouble Supurity		concrete (representations) per year	M60MPV-1.5 std, A6
				Sedan Car, Q7-SUV,
				M20SMPV,
				DODA V8-MPV,
				K9-Pick-up)
9		Daily (08:00	8 hours per day	Overtime would be based
		~17:00) (lunch		on the demand of product
		break;		and timing
		11:30~12:30)		
		Weekly	5 days per week	_
		Yearly	250 days per year	(0 )
10	No of machines	1\	As shown on the list of imported equipments	(See Annex)
11	No. of workers (Ref; to MIC	proposl)	110 nos.	Local 88%,
12	Annual Fuel Requirement (D:	iosol)	15 nos. 3,840 gals Petrol, 360,160 gals diesel For	For generator, Truck &
12	Amuai Fuel Requirement (D.	16561)	generator, Truck	New Vehicles
	Annual Lubricant Requirement	nt (Engine Oil)	2,040 gals For Vehicles	For new vehicle (initial
	1 milai Escribuit Requielle.	(Liigiiic Oii)	2,010 gais 101 volucies	filling)+40 ltr/yr for Gen
				Set
13	Annual Fuel Wood Requirem	ent	-	No Fuel Wood boiler
14	Annual Electricity Requirement		5,500,000 units From both grid and own	From both grid and own
			geneartion	geneartion
15	Diesel Generating Set		(2 units)	Run at the black out time
			633KVA, 165KVA	only
16	Annual Water Requirement (	Approx;)	185,600gals From (4"dia tube well-2 nos.)	Mainly utilize from tube
				well and enough
17	Solid Waste		0.2 tons per day	Sold out to recycle buyer
18	Waste Water (Toilet, Person	use, Kitchen)	10m <sup>3</sup> ~50m <sup>3</sup> per year (Approx)	Use Septic Tank (No
				drain to the environment)

# **Need of EIA**

Environmental Impact Assessment is predition of impacts which could cause by implementation of this project and how could be affected to the environment by these impacts. It would be both positive and negative impact which is key for the sustainability.

The industrial development and creating employment are the key business for Myanmar where is rich in human resources. This proposed project by local and foreign joint venture investment is one of the projects proposed by local and international investors which are to be developed for nation's economic development.

This project aims to develop Motor Assembling Plant (Gold A Y A Motors International Group Co.,Ltd) located at Plot No.B-1-1 of Block Factory Area Zone 2C, Myotha Industrial Park Between Myotha and Nabu Ain village, total land area (20.084)Acres in Ngazun Township, Myingyan District of Mandalay Division Region with foreigner investment law is planned to develop not only for the region but also to increase of GDP.



The Purpose of EIA Report and the Background of EIA Assessment

The following table shows the need of EIA for the proposed project due to its size. (the regulation of Myanma Environmental Law which is enacted 2015.)

သတ္တျစက်ပစ္စည်းနှင့်လျှပ်စစ်ပစ္စည်းများထုတ်လုပ်ခြင်းလုပ်ငန်း

စဉ်	ရင်းနှီးမြှုပ်နှံမှုစီမံကိန်းအမျိုး အစား	ကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းပြုလုပ်ရန်လို အပ်သည်အရယ်အစား	ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းပြုလုပ်ရန်လို အပ်သည်အရယ်အစား	မှတ်ချက်
၆၈	မော်တော်ယာဉ်နှင့်မော် တော်ဆိုင်ကယ်တပ်ဆင် ထုတ်လုပ်ခြင်း	ထုတ်လုပ်မှုဧရိယာစတုရန်းမီတာ၅ဝဝဝနှင့်အ ထက်သို့မဟုတ်အော်ဂဲနစ်ပျော်ဝင်ပစ္စည်းတစ် နာရီလျှင်၆ကီလိုဂရမ်နှင့်အထက်သုံးစွဲခြင်း	ဝန်ကြီးဌာနကပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်း ပြုလုပ်ရန်လိုအပ်သည်ဟုသတ်မှတ်သည့်စီမံကိန်း လုပ်ငန်းအားလုံး	

#### **Scoping**

Due to the table above, this project is considered as the project type that needed to be compiled EIA report. This scoping report is for No.B-1-1 of Block Factory Area Zone 2C, Myotha Industrial Park Between Myotha and Nabu Ain village, total land area (20.084)Acres in Ngazun Township, Myingyan District of Mandalay Division Region covering the whole project of phase I & II.

The scoping and the impact assessment would be based on the following.

- The study area limit, the potential impact area, time limitation, project implementation phases and affected people and data collection
- The law, regulation, policy and standard to be inlined during environmental impact assessment
- Project background, base line data collection and dealing for further assessment is needed or not
- Describe potential impacts, data collection, methodology for assessment and needed further study or not
- Describe potential impacts which would caused by factory
- Describe mitigation to the Potential impacts

- Checking the Noise sources could effect to the nearby area and find the mitigation if it is needed
- Methodology and support for public consultation based on this project

The following table 2 shows the project owner & proponent, relevant organization of project implementation and the implementation organization of EIA. The overall frame work of Environmental Impact Assessment is shown in table 3.

(Table 1) Project Owner and Proponent, Project Implementation and Implementing Organization of EMP

Item	Description
Company name	Gold A Y A Motors International Group Co.,Ltd,
Project name	Manufacturing and Assembly of Motor Vehicles Project
Project Owner and	Mr. Li- Jifeng (Chinese) (General Manager)
Proponent	(Contact Person: Ms. Htoo Htet Htet Aung)
Address	Factory: Plot No.(B-1-1), Block-Factory Area, Zone-2C, Myotha Industrial Park, Myo Tha Tsp, Myingyan District, Mandala Division Region, Tel;+95-9-256486931 Mobile 09-264808234, email; htoohhaung@pai.com.mm  Office: No.(A-2), 63th Street, Between 30 <sup>th</sup> & 31 <sup>st</sup> Street, Chan Aye Thar Zan Quarter, Mandalay, Mandala Division Region, Tel;+95-9-256486931 Mobile 09-778153256, email; htoohhaung@pai.com.mm
Tel;	Mobile 09778153256
Email;	htoohhaung@pai.com.mm
EIA undertaker	Kaung Kyaw Say Engineering Co.,Ltd (Contact Person: Ms. Myint Myint Thein)
Address	No. 31 Pinlone Yeikmon 5 <sup>th</sup> Street, Pinlone Yeikmon, Thingungyun Tsp, Yangon, Myanmar. Tel 01-7571284 email: mdoffice@kaungkyawsay.com

Overall Framework of Environmental Impact Assessment

		2018							
Item	April	May	June	July	Aug	Sep			
MOU with Regional									
Government									
Selection of EIA Consultant	_								
Base line Survey									
Water Sampling			_						
Soil Sampling			_						
Air Measurement			_						
Noise and Traffic			_						
Flaura and Fauna Survey			_						
Culture Survey			_						
EIA Preparation									
Stakeholders Meeting									
EIA report									

# Laws, Rules, Regulation and Announcements

The project proponent would be follow all the applicable policy, legal and Institutional Framework, laws and regulations that should be compliance to this project shown here under.

	ple (7) Laws, Rules, Regulation and Announcement	-	
စဉ်	Law,Rule, regulation and Act.	စဉ	Law,Rule, regulation and Act.
0	The Environmental Conservation Law 2012	J?	The Ethnic Rights Protection Rule 2019
J	The Environmental Conservation Rules 2014	၂၈	All related Laws and Rules enacted by Mandalay Division
			Region Hluttaw
9	Environmantal Impact Assessment Procedure 2015	Je	Basel Convention (Signed in 2017)
9	The National Environmental Quality (Effluent) Guideline	90	The Protection of Biodiversity and Natural Protected Area
	2015 Myanmar Investment Law 2016	00	Law (2018) The Commercial Tax Law (2014)
<u>ე</u> ც	·	90 t	, ,
-	Myanmar Investment Rules 2017	<u>2</u>	The Underground Water Act (1930)
5	Free Land, Vacant Land, Margin Land Management Law2012	99	The Engineering Council Law (2013)
റ	Labor Organization Law 2011	29	The Electricity Law (2014)
၉	Settlement of Labour Disputes Law 2012	29	The Myanmar Standard Law (2014)
00	Social Security Law 2012	၃၆	The Conservation of Water Resources and Rivers Law 2006
၁၁	Minimum Wages Law 2013	65	The Control of Smoking and Consumption of Tobacco
			Product Law (2006)
၁၂	Payment of Wages Law 2016	၃၈	The Protection and Preservation of Antique Objects Law (2015)
၁၃	The Leaves and Holidays Act 1951	99	The Protection and Preservation of Cultural Heritage Regions Law (2019)
99	The Revision of Factory Act 1951 (2016)	90	The Protection and Preservation of Ancient Buildings Law (2015)
၁၅	Workmen Compensation Act 1951	90	The Industrial Zone Law (2020)
၁၆	Employment and Skill Development Law 2013	9J	The Private Industri Law (2015)
၁၇	Petroleum and Product of Petroleum Law 2017	99	The Occupational Safety and Health Law (2019)
၁၈	Petroleum Rules 1937	99	The Factory Act (1951)
၁၉	The Traffic Accident Prevention & Motor Vehicle	99	The Myanmar Immigration (Emergency Provisions) Act
	Management Law 2020		(1947)
Jo	The Traffic Accident Prevention & Motor Vehicle Management Rule 2022		
၂၁	Public Health Law 1972		
JJ	Prevention and Control of Communicable Diese Law 1995		
75	The Myanma Insurance Law 1993		
J9	Myanmar Fire Force Law 2015		
Jo	The Export and Import Law 2013		
JG	The Ethnic Rights Protection Law 2015		

Table (6) The Summary of Commitments

Commitment in Brief	No.	Description of Commitment	Reference in Report (Chapter)
Declaration of report is completed and accredited.	1	This environmental impact assessment (EIA) and environmental management program (EMP) report is submited after getting self assessment done by each consultants and experts in their related fields and accreditated.	Chapter (3.4) (m-0)
Confirmation of EMP report is compiled with all environmental law, rules, regulation and national effulant guidelines.	2	This report is compiled with all environmental law, rules, regulation and national effulant guidelines.	Chapter (3.4) (m-J)
Commitment to fulfil all commitments	3	The Project proponent has fully understand	Chapter (3.4)

	ı — —	T	<del></del>
to the mitigation program & monitoring		all description in this report and	(က-၃)
program as mentioned in this		Committed to fulfil all commitments to the	
environmental management program		mitigation program & monitoring program	
report		as mentioned in this environmental impact	
		assessment and environmental	
		management program report	
Commitment to conduct at least	4	The project proponent had committed to	Chapter (3.4)
impacts to social and to fulfil the		conduct at least impacts to social and to	(က-၃)
mitigation program during closure		fulfil the mitigation program during	
period at the time of project		closure period at the time of project	
completion.		completion.	
Commitment to submit the regular	5	The project proponent has committed to	Chapter
monitoring report		submit the regular monitoring report to the	(8.16)
		ministry every 6 months according to the	
		regulation of environmental impact	
		assessment procedures para (108).	
Commitment to finance to CSR	6	The project proponent had committed to	Chapter
program		refinance for CSR program if the allotment	(8.20)(9.4)
		is not enough by submitting proposal to the	
		nearest BOD meeting and get approval.	
The Project Proponent will follow		The project proponent had committed to	Chapter 4
Laws, Rules, Regulations.		follow Laws, Rules, Regulations described	Pg.58
		in Chapter 4	

#### The Alterantives

The alternative would be considered at Location of Project Site Selection, Construction Method, Technology, Material Use, Production Process and No Project etc. It would also be considered for Pre Construction, Construction, Operation, Factory Closure stages.

#### The Project Site (Location) Alternatives

The proposed project location is determined to be the best convenient location and the minimal environmental and social impacts due to the project implementation. It is;

The best geographic location and

The best strategic place for the Project

- The land plot is the best location for the proposed project
- The villagers had realized and motivately participated that the project is reliable for the supporting of regional development
- It is implementation of better land use pattern.
- It is imposible to get enough land site as it is.

#### **The Construction Alternatives**

As there is a not exposed to any natural hazard, the concrete construction would have been applied in the foundation. During the design stage, the project contractor had chosen the construction technology which is best met Myanmar and Chinese standard on project schedule, safety and quality as well as the economic benefit to the local community & labor sources addition to the Chinese esperts. As the project is planned for the vehicle manufacturing 50 years from the date of MIC approval with extanable 10 years of 2 times which is total 70 years, the alternative to the closure plan should also be adjusted with all applicable laws and legal procedures at that time.

#### **Technology Alternatives**

During construction stage, the building & facility constructions would be used environmental friendly such as avoiding or minimizing of noises by the construction machineries, water spraying during earth work and foundation to minimize dust and air pollution, etc. For manufacturing stage, the technology is not a new one. It is just duplication of existing automobile assembling plant in China under license agreement and best choice of manufacturing technic. Hense, it also has no alternatives on production technology.

#### **Alternative for Material Use**

As an alternative of material used in the production, it is planned to use locally available parts of the vehicle. The following table shows the plan of alternative use of local products.

No.	Year of Production	Imported	Local	Damarka (Lagal Draduata)
NO.		Part (%)	Product (%)	Remarks (Local Products)
1	1 <sup>st</sup> ~3 <sup>rd</sup> Year	99.71%	0.29%	Battery
2	4 <sup>th</sup> Year	96.64%	3.36%	Battery, Tyres
3	5 <sup>th</sup> Year 76.00%		24.00%	6 pieces of white body assembly incl; floor, roof, welding Assembly Jig, Painting Equipment w/o ED coating
4	6 <sup>th</sup> Year	65.00%	35.00%	Floor Welding Assembly
5	7 <sup>th</sup> Year	61.50%	38.50%	Roof Welding Assembly
6	8 <sup>th</sup> Year	51.00%	49.00%	Left and Right Side Wall Welding Assembly
7	9 <sup>th</sup> Year	38.00%	62.00%	Left and Right Side Wall Welding Assembly (Additional)
8	10 <sup>th</sup> Year	18.50%	81.50%	Electric tatic Coating, Complete Coating System
9	11 <sup>th</sup> Year on ward	0%	100%	Achieving 100% local production

#### The Results of study and the comparism to the alternatives

There was no difculties to implementing the project on the proposed land which are lowgrade agriculturable land to make beneficial economics.

# The brief on each and everyones which is potential significance environmental harmful due to the selection of these alternatives

The selected project is the best choice of among the alternatives and the reasons of why these are selected among the alternatives, are described as follow.

- The project proposed to be constructed in the Myothar Induatrial Zone is the best suitable location
- As it is the project supporting to the local development, the communities are enthusiastic to support
- It is more beneficial and economical as it is agriculturable land
- It is difficult to get the same size of land

#### **Project Alternatives Findout and Result.**

The following are found out during feasibility study before project implementation.

It is the dry land area and less chances of successful agricultural related business. Only industrial park project is possible.

#### **Comparism and Reason of Selection of Alternatives**

Eventhough alternatives were studied before construction start, it is found out that the selected project is the best option. Here are the alternatives and the reasons of selection as mentioned below.

- The land plot is the best location for the proposed project
- The villagers had realized and motivately participated that the project is reliable for the supporting of regional development
- It is implementation of better land use pattern.
- It is imposible to get enough land site like it is.

# The Description of Environment

The project located in the Ngazun township is positioned on the Global Polarize System of 21°43′52" N and 95°37′30"E. Nganzun, 640ft above sea level is a town in Mandalay Division Region which is in the Myingyan district and good access by road network in previous but road network at present to reach within few hours to Mandalay, Naypyitaw and even Yangon the economic capital and becoming one of the strategic town not only for Mandalay division region but also for the whole nation.

The topographic feature is plain ground.

#### The weather

Myothar, Nganzun Township located in Mandalay Division Region is in the dry zone region. It has hot and dry weather at about the average year temperature in the range of 12C° to 42C°.

The Weather Data Recorded

No	Vaan	Precip	itation	Temperature (C°)		
No	Year	Days	Inch	Highest	Coolest	
1	2014	49	27.73	42	12	
2	2015	55	30.17	42	12	
3	2016	51	40.40	44	11	
4	2017	61	40.58	43	12	
5	2018	58	38.0	48	12	

(from Nganzun Township Regional Datas Book 2018 May-2)

#### The Livelihood

The livelihood of the residents of Nganzun Township is variety from daily wages to the company owner and from skill labor to Director General and the resident of military personals and the oversea migrant workers and seamen etc.

#### **Physical Component**

The Air Quality Measurement & Comparism with NEQEG

		Unit/			Pt.1	Pt.2	Pt.3	Pt.4	Pt.5	
No	Parameter	Lat/Long	_	WHO	21°43'51.27"N, 95°37'37.93"E	21°43'51.37"N, 95°37'36.47"E	21°43'51.53"N, 95°37'34.37"E	21°43'50.59"N, 95°37'35.33"E	21°43'49.98"N, 95°37'31.38"E	Remarks
1	PM <sub>2.5</sub>	mg/Nm <sup>3</sup>	25	25	24	14	24	25	23	
2	PM <sub>10</sub> ,	mg/Nm <sup>3</sup>	50	50	42	49	38	39	37	
3	НСНО	mg/Nm <sup>3</sup>	-	-	0.02	0.02	0.02	0.02	0.11	
4	Volatile organic compounds (VOC)	mg/Nm³	-	-	1.49	1.38	0.16	1.19	1.06	
5	$NO_2$	mg/Nm <sup>3</sup>	-	-	0.16	0.15	0.16	0.16	0.16	
6	$SO_2$	mg/Nm <sup>3</sup>	-	-	0016	0.15	016	0.16	021	
7	CO	mg/Nm <sup>3</sup>	-	-	0.2	0.2	0.2	0.2	0.2	

# Noise Measurement and Comparism

	PN.1			PN.2			PN.3			PtN4			PN.5		EQ	EG
	1°43'51.27" 5°37'37.93'	,		°43'51.37" 5°37'36.47'	,	21°43'51.53"N, 95°37'34.37"E		21°43'50.59"N, 95°37'35.33"E		21°43'49.98"N, 95°37'31.38"E			(d	lB)		
Noise (db)	Temp (C°)	RH (%)	Noise (db)	Temp (C°)	RH (%)	Noise (db)	Temp (C°)	RH (%)	Noise (db)	Temp (C°)	RH (%)	Noise (db)	Temp (C°)	RH (%)	Day	Night
68	32.8	78.2	65	32.7	78.1	65	32.8	79.5	65	32.8	78.5	69	32.8	78.7	70	70

Soil Measurement and Comparism

	Son Medical Companion										
		S.1	S.2	S.3	S.4	S.5	FAO				
No	Parameter	21°43'53.34"N, 95°37'30.18"E	21°43'52.76"N, 95°37'38.24"E	21°43'49.34"N, 95°37'37.94"E	21°43'49.61"N, 95°37'32.28"E	21°43'47.81"N, 95°37'29.81"E	Standard	Remarks			
1	Moisture (%)	78%	78%	78%	75%	78%	10	It is more than the minimum limit			
2	PH	7.1	7.1	7.2	7.1	7.1	7~9	Within the acceptable Level			

#### The Significant Environmental & Social Impacts and Mitigation Measures

There would be 2 types of impact would caused generally.

- 1. Temporary or short term Impact caused during construction period
- 2. Impacts caused by long term or operation process

# Scoping for Environmental and Social Impact Assessment

The impacts of pollution, natural environment, social environment were classified as A to D in accordance with the following criteria.

A-: Significant Negative Impact
B-:Some Negative Impact
B+:Some Positive Impact

C: Impacts are not clear, need more investigation

D:No impact or Impacts are negligible, no further study required

The environmental and social impact assessment was conducted according to the scoping matrix below.

Table (64) The Summary of Environmental and Social Impact Assessment

	) The Summary	Scop		Asses	smen	This impact 7 issessment
Category	Assessment Item	Before/During Construction (BC/DC)	Operation Stage(OS)	Before/During Construction (BC/DC)	Operation Stage(OS)	Impacts
Pollution	Air Quality	В-	В-	В-	В-	BC/DC: Emissions from construction equipment, dust arising from construction activities.  OS: Emissions from generator and engine test running are anticipated.
	Water Quality	D	D	D	D	BC/DC: Muddy water inflows to river from construction site may effect to water quality. But not effected to the water body OS: Water pollution to the surrounding water bodies by waste water if it is not treated is anticipated. But no discharge from the factory.
	Solid Waste	D	D	D	D	BC/DC: Generation of construction waste by each works and removal of structures are anticipated. OS: All solid wastes from the production, personal including kitchen wastes are potential impact sources.
	Waste Water	D	D	D	D	BC/DC: No muddy or waste water from construction activities inflows to river and to water body OS: In general there is no waste water from the vehicle assembling process and no discharge from the factory.
	Soil Contamination	D	D	D	D	BC/DC: It could be affected to the soil only at the construction site during construction but not impact to the soil contamination.  OS: Unmanaged waste, used oil and oil spillage to the ground could cause contamination in operation stage.
	Noise and Vibration	В-	B-	В-	B-	BC/DC:Noise and vibration from operation of construction machinery and construction vehicles are anticipated.

						OS:Noise and vibration from operation generator,
						vehicle assembling activities, engine & vehicle test
	C 1	Α.		Α.	Α.	running are anticipated.
	Ground	A+	Α	A+	A+	BC/DC:Ground subsidence by construction activity is
	Subsidence		+			anticipated.
						OS: Ground subsidence by operation stage is anticipated.
	Offensive	D	D	B-	B-	BC/DC: Offensive odor during construction is
	Odor					anticipated.
						OS: Offensive odor caused by generator is anticipated.
	Bottom	D	B-	D	D	BC/DC:Construction works is not anticipated.
	Sediment					OS: No wastewater and disposal in operation stage and
						no bottom sediment would cause.
Natural	Protected Area	D	D	D	D	No natural preserve area and national parks exist in and
Environ						around the project site.
ment	Flaura/Fauna	С	С	С	С	There are no information on inhabiting situation of
	and					important animals and valuable plant species in the
	Ecosystem					surrounding area.
	Hydrology	B-	B-	D	D	BC/DC:hydrology impact to the ground water during
	Trydrology	Ъ	ם			construction is not anticipated.
						OS: Hydrology impact by using groundwater during
	Tomography	D	D	D	D	operation stage is anticipated.
	Topography	D	D	D	D	The project area is flat land, thus impact of topography
G . 1	and geology	-	_			and geology is not be anticipated.
Social	In voluntary	D	D	D	D	No resettlement is needed as the project site is relocated.
Environ	Resettlement					The positive support by the neighbors received.
ment	Misdistributio	C	C	C	C	The assessment of impact of these items for the people,
	n of benefit					who live or earn their living near project site will be SPC
	and damage					and relevant authorities.
	Local conflit	D	D	D	D	
	of interests					
	Gender	D	D	D	D	
	Children's	D	D	D	D	
	Right					
	Ethnic	D	D	D	D	
	minorities and	_				
	indigenous					
	peoples					
	Poor	A+	Α	A+	A+	The povity elimination could be expected at BC, DC and
	1 001	$\Lambda$ $\top$		$\Lambda$ $\top$	$\Lambda$ $\top$	OS by development of job opprotunities to the local
			+			residents
	Tiving and	Α .	Α	Α.	Α.	
	Living and	A+	A	A+	A+	BC/DC: OS: Positive impact on living and livelihood
	livelihood		+			could be expected as the local economy & employment
		_	_	_		will be boosted.
	Existing social	B+	В	B+	B+	BC/DC: the assessment of traffic to the nearby project
	infrastructures		+			site would be done.
	and services					OS: The positive impact is assumed by the development
						of facilities related to the project service and many social
						infrastructures will be improved.
	Water Usage	D	D	D	D	BC/DC: Impact on local water usage may occur if
						surface water would be taken not only for the
						construction activities but also usage by the tenants after
						project accomplished.
						OS: Impact on existing water usage is not expected. The
•	•	·				

						implementation of new sources for water supply to the project would be considered without causing negative impact on local existing water usage.
	Cultural heritage	С	С	С	С	There is no cultural heritage at the project site and the surrounding area and cause no impact. It would be sources to develop the cultural heritage by the allotment of CSR fund.
	Landscape	С	С	С	С	It would be positive impact to the landscapes and viewpoints in the surrounding area due to the project layout.
	Risks for infectious disease such as AIDS/HIV	D	D	D	D	Risks of infectious diseases with a fixed probability are anticipated.
	Working conditions (including occupational safety)	В-	В-	В-	С	BC/DC: Impact of working conditions during construction is anticipated. OS: Impact on working conditions during operation stage are anticipated.
Other	Accident	В-	В-	С	С	BC/DC: There are chances of accident especially in the construction stage. OS: Due to increase of traffic volume since construction, the assessments are anticipated.
	Global Warming	В-	В-	В-	В-	BC/DC: Emission of Greenhouse gases (GHGs) by construction machineries are anticipated. OS: GHGs emission in operation stage by tenants and vehicles are anticipated.

Table (65) The Summary of Impacts & Ratings

Impact	Significance Rating
Impact on Air environment (Pollution)	Low
Impact on Natural Environment (Water Resources)	Low
Impact on Noise and Vibration	Low-Medium (w/o Generator Running) High (with Generator Running)
Impact on Land Environment (Soil contamination, Ground Subsidence)	Low (Construction Period)
Impact on Biodiversity	Low
Impact on Community Safety and Health	Low but A+
Impact on Job Opportunity	High A+
Impact on Occupational Safety and Health	Low but A+
Restriction of Access	-
Economic Displacement of local Agriculturists	-
General Economic Development	High A+
Better Transportation	High A+

There is no impact than as it is implemented on agriculture land. It is also found out that could create more beneficial than agricultural business by reducing impact at good management. The mitigation to the potential impacts are shown below.

Table (67) Mitigation Measures (Pre-Construction Phase)

Category	Item	Mitigation and Consideration Measures in Pre-construction Phase	Responsible Organization
Pollution	Air Quality	None	Developer
	Water Quality	None	Developer
	Waste	Each work plan of the project will be designed to minimize waste	Developer
	Noise &	To study the sources sound making for both acceptable and	Developer
	Vibration	unacceptable and to find the buffer zone or sound prove	

Natural	Flora, Fauna	Design concept on Greening Plan	Developer
Environment	and	To avoid unnecessary of cutting trees	
	Biodiversity		
	Hydrological	There is no underground water usage at this project	Developer
	Situation		
Social	Living and	To collect the base line	Developer
Environment	Livelihood		_
	Water Usage	None	
	Existing	Securing Plan	Developer
	social	Community accessibility will be secured by improvement of	
	infrastructures	existing roads	
	and services		
	Risk and	Measures of infectious disease will be plan as following	Developer
	infectious	Prevention of spreading out	
	disease such	Training of workers	
	as AIDS/HIV		
	Working	Considering to follow OHS working condition and guideline such	Developer
	Conditions	as EHS by IFC	
	(including		
	occupational		
	safety)		
Others	Accident	Accident prevention measures would be planned	Developer
	Global	To control or minimize the mitigation measures of GHGs	Developer
	Warming		

Table ( 68 )Mitigation Measures (During Construction Phase)

Category	Item	Mitigation and Consideration Measures in	Responsible
		Pre-construction Phase	Organization
Pollution	Air Quality	As the intensive operating of the construction machinery will be avoided	Developer
	Water Quality	To monitor water quality	Developer
		Setting pond for simple turbid water treatment	
	Waste	To provide dumping site	Developer
		To implement 3R for all wastes	
	Noise &	Monitoring Noise & Vibration	Developer
	Vibration	Installation of Sound Proof	
		Avoid construction at night time	
Natural	Flora, Fauna	Implementing of Greening Plan	Developer
Environment	and	To avoid unnecessary of cutting trees	
	Biodiversity		
	Hydrological	underground water usage	Developer
	Situation		
Social	Living and	Same as mitigation measure	Developer
Environment	Livelihood		
	Water Usage	Monitoring of consumption of ground water	
	Existing	Securing Plan	Developer
	social		
	infrastructures		
	and services		
	Risk and	Prevention of spreading out	Developer
	infectious	Training of workers	
	disease such		
	as AIDS/HIV		
	Working	Follow OHS working condition and guideline such as EHS by IFC	Developer
	Conditions	*Personal protection equipment for workers such as safety	
	(including	helmets, booths, gloves, protecting cloths, spectacles and ear	
	occupational	protection	
	safety)	*Provision of adequate healthcare facilities (first aid) within	
		construction site	
		*Training of all construction workers in basic sanitation and	
		healthcare issues, general health and safety matters and on the	

	The state of the s		
Others	Accident	Accident prevention measures	Developer
	Global Warming	Control of mitigation measures of GHGs	Developer

**Table (69) Mitigation Measures (Operation Phase)** 

Category	Item	Mitigation and Consideration Measures	Responsible Organization
Pollution	Air	To monitor air quality To installed and used of ventilation with filters, To check the painting boots enclosure and exhaust	Developer
	Water	To monitor water quality To check any contamination of water table such as restricting the discharge of drain and sewer onto the ground	Developer/SPC
	Waste	To provide temporary storage site before collector come To implement 3R for all wastes	Developer/SPC
	Noise & Vibration	Monitoring Noise & Vibration Installation of Sound Proof, silencer to the diesel generator and provide ear plug to all workers especially to the operator of diesel generator	SPC
Natural Environment	Flora, Fauna and Biodiversity	Implementing of Greening Plan To avoid unnecessary of cutting trees	Developer/ Tenants/SPC
	Hydrological Situation	underground water usage	Developer
Social	Living and Livelihood	Same as mitigation measure	SPC
Environment	Water Usage	Monitoring of consumption of ground water by strictly controlling and minimizing the consumption of water used in factory, dormitory and kitchen	SPC
	Existing social infrastructures and services	Securing Plan	Developer
	Risk and infectious disease such as AIDS/HIV	Prevention of spreading out Training of workers	Tenants
	Working Conditions (including occupational safety)	Follow OHS working condition and guidline such as EHS by IFC	Tenants
Others	Accident	Accident prevention measures	Tenants
	Global Warming	Control of mitigation measures of GHGs	Tenants

The assessments were carefully done and arrange the mitigation measure environmental and socially potential impacts during operation stage to the following.

- 1. Dust pollution
- 2. Noise & Vibration
- 3. Waste and Wastewater
- 4. Flora and Fauna
- 5. Employment Opportunity

### **Dust Management Plan**

Eventhough the project site was designed in the industrial zone and no household, there are no base line data recorded how much dust particles in the air and how much polluted in this area due to the vehicles passing.

The following are the major factors to the air and noise pollution

- Supporting trucks and vehicles moving around these areas.
- Construction machineries and pile driving
- Wind blowing effect to the dust
- New vehicle engine testing

To mitigate these impacts, it is needed to control the speed of vehicles and partition to the loading and unloading area.

# Noise & Vibration Management Plan

As the major cause of noise comes from vehicles, construction machineries and communication among workers, it could be controlled by good management by the work charge or the team leader. During operation period, there will be noise coming from grinding machines and others accessories in the factory. Eventhough, the electricity supply would be taken from the grid, the diesel generator would be running for black out time and could noise which is unavoidable. To mitigate the noise from the generator set, it could be installed in sound prove housing and install exhaust cylenser which could be very much useful to avoid noise impact. It should be priotize to work in day time just as much as possible and try to avoid working not later than 8pm.

The worst noise impact would come from diesel power generator and pile driving process and the loude communication between workers. To reduce these impacts, it could control by making partition at loading unloading area and manage the working hours or vehicle rerouting.

#### **Solid Waste Management Plan**

The solid and other waste such as paper, can, bottle including kitchen waste should all be collected and stored systematically with bag before the service company come and collect or selling by lot. The nature of project is making car assembling process and solid wastes would be created from operation and process as shown below.

- a) Solid Waste from the Workshop
- b) Solid Waste from kitchen & personals

Different kinds of solid wastes such as tissue papers, packaging papers, food residues, glasses, tins, bottles, stationeries, demaged/ expired devices or appliances and other miscellaneous would be generating everyday. Food waste could be generated from the kitchen at domitory. The other solid wastes such as bins, bottles and cans are sperated and tried to apply recyclable process as much as possible. The solid and other waste such as paper, can, bottle including kitchen waste should all be collected and stored systematically with bag before selling to the service company to come and collect. By this management, it could be avoided the impact to the environment by these wastes. The company will assign workers to collect waste and woul be instructed to store waste better than shown herewith. Furthermore 3R (Reduce, Reuse and Recycle) system should be applied as much as possible. The amount of waste estimated about 20~100 Kg per day (sold to recycle company by lot) It would be contacted to city development committee for occasionally such as septic tank is full and when hazardous waste is present.

#### Waste Water Management Plan

All these stages of project implementation, washing, toilet, and kitchen are the key areas that could smart control on water usage pattern, so that it could developed on mitigation process by control the amount of water used.

The nature of project is vehicle assembling and there is waste water process which could be harmful to the environment. The following are the waste water that would comes from normal operation and process.

- a) Waste water from Kitchen, Shower and Toilets
- b) Waste water from the personal washing process

(Remarks) The proposed project is under the normal operation stage as the constructions Phase I is completed.

This project would be done to be complied with international standard and guideline to avoid environmental impact caused by not only normal operation of machineries but also daily workers activities on wastes and effluents including fire prevention.

It is also well organized and planned for mitigation and monitoring program with environmental management plan. It is also planned to organize for greening and emergency evacuation plan.

Table (80) The Summary of Environmental Management Plan & Finance (Operation Phase)

Category	Item	Environmental Management	Responsible Group	Frequency/Fi nancial Allotment(Ks)
Pollution	Air Quality	-Cleaning dust in the factory always -In case that a tenant live in the domitory which may cause exhaust gas pollution such as intensive cookingSpeed limiting to all vehicles and service machines	EMP team/SPC	Check Daily/ (1,500,000/ 3months) For air quality check
	Water Quality	-Smart control such as water saving ultra low flush toilet, spray nozzles, urinals and low flow shower heads etc., for water system should be applied for water usageNo impacts to the surface and ground water as the septic tank is istalled	EMP team/SPC	Check Daily/ (500,000/ 3months) For water quality check
	Noise	Install Sound Proof Generator and Compressor, Avoid construction and operation at night time, Speed limit for drivers, Provide ear plug for operator. Buffer zone for sound-proving to the diesel generator using at black out time. (The engine has installed the silencer) The silent split type air conditioners should be installed instead of window type	EMP team/SPC	Check Daily/ (500,000/ 3months) For Noise check
	Water & Energy Consumption	Check tube wells, water usage and water quality, Reuse of water, stop airconditioner during lunch time to save electricity	EMP team/SPC	Check Daily/ (1,500,000/ 3months)
	Waste Water	-Install oil and grease trap should be installed -Ensure no waste water should be released from the project area to public area especially without treatmentInstall septic tank and frequent check	EMP team/SPC	Check Daily/ (1,500,000/ 3months) For waste water leak check
	Traffic Management	Control speed limit to all vehicles, Provide parking lot for motor bikes and bicycles	Developer	50,000/yr
	Solid Waste	Management on solid wastes to implement 3R for all wastes, keep all solid wastes systematically store before selling out to buyer or trash by contacting city development committee, -Waste collector bins should be placed enough both inside workshop, show room, office and domitoryFood waste and bio waste should be collected and dispose daily systematically	Developer	200,000/yr
	Soil Contamination	-Ban on infiltrate liquid waste onto the ground.	EMP team/SPC	200,000/yr
	Ground Subsidence	-Check consumption of ground water and monitoring of ground subsidence.	EMP team/SPC	200,000/yr
	Offensive Odor	-Offensive odor which might be generated by the tenants would be strictly controlled.	EMP team/SPC	200,000/yr
	Bottom	-Not applicable as no discharge to river or stream	EMP team/SPC	-

	Sediment			
Natural Environment	Flora, Fauna Management	-Planting and Maintenance of trees, vegetation, lawn in the public space such as road and other open spaces.	Developer	200,000/yr
	Management on Greening	Monitor and maintain all plants to keep green, plant a new trees as much as possible	EMP team/SPC	300,000/yr
Social Environment	Livelihood	Providing priority to all local and nearby residents for all vacancies at the project, Continuous training programs are planned for capacity development	Developer	600,000/yr
	Occupational Health and Safety Management	Follow OHS working condition and guideline such as EHS by IFC, Installed ventilation for temperature & dust control (power fan, hood & wall mounted), Manage efficiently generator operation hours, Use soundproof gen set and compressor to reduce noise and provide ear plug to operator, Avoid night time operation, Manage water usage by controlling water level at dying/washing machine Chemicals are kept, handled and used well, The empty containers of chemicals are stored carefully and resell to the supplier, Hazardous waning including no smoking and high voltage signages are put on the necessary place, A nurse Aids boxes are installed work stations in the factory to get quick access The purified drinking water is provided. The necessary health cares are provided to all sick,	Developer	500,000/yr
	Risk and Infectious disease such as AIDS/HIV	wounded and allow the maternity leaves.  -Measures of infectious disease will be implemented as follows;  • Plan for prevention of infectious disease from spreading.  • Training plan for workers	EMP team/SPC	200,000/yr
Others	Accident	-Accident prevention measures inside and outside the project area will be planned.	EMP team/SPC	200,000/yr
	Global Warming	-Energy Saving devices such as LED lamps, door lock and switch card to be used to reduce energy consumption -Minimization of GHGs emission by construction machines and vehicle will be planned	EMP team/SPC	500,000/yr
	Hazardeous Waste Management	-The empty bottles and containers of Hygence and bleach used in laundry, Kitchen and spa are kept separately before disposal at special purpose company or cleansing department of city development council.	Developer	1,000,000/yr
	Emergency & Evacuation Management	Emergency Plan and Groups are formed Periodic training is provided, All emergency relief equipments such as fire extinguishers are placed as fire department standard, The evacuation maps and signs to way out are drawn on the floor, fire alarm are installed, The emergency contact numbers are informed	Developer	1,000,000/yr
	Preparaness for natural disaster	An Aids medicines are provided by the company not only for emergency but also regular medical care to all employees.  A nurse Aids boxes are installed at work stations in the factory to get quick access.	Developer	500,000/yr
Storage and Handling of Materials	Kitchen	-Store in different refrigerators for meats, vegetables and foods & beverages -Check daily for expire for all food -Provide all storages and shelves from flood water at any time -Check and prevent rottan and other insect from entering into the kitchen	EMP team/SPC	100,000/yr

Fuel	-All fuels lubricants should be store under fire prevention system including placing of fire	EMP team/SPC	100,000/yr
	extinctguishers		
	-Extra care is needed to spill out fuels and lubricants to		
	the ground		

The following table shows the detailed information on how the parameter, method and program for the point that is to be measured.

#### Noise

No	Point of	Cause	Affected	Parameter	Indication	Method	Person	Duration
	Pollution							
1	Surrounding	Traffic(Car	Noice	Sound	dB	Sound		Daily
	of Project	Parking,		Level		Level		
	Area	loading/Unloading)				Meter		

# Water & Waste Water

No	Point of	Cause	Affected	Parameter	Indication	Method	Person	Duration
	Pollution							
1	Surrounding	Washing Process Drain/Car Wash,etc.	Waste Water	Flow rate	BOD, COD	Lab Analysis	Person In charge	Daily, Weekly Monthly

# Air

No	Point of	Cause	Affected	Parameter	Indication	Method	Person	Duration
	Pollution							
1	Inside Factory	Emission,	Air	Exhaust Air	(Temp;humidity PM <sub>10</sub> ,NO,SO <sub>2</sub> CO)	Lab	Person	Daily,
	and/or	Exhaust(Machines		(Temp/Pressure)	Ordor level	Analysis	In	Weekly,
	Surrounding	,Vehicle,etc.)					charge	Monthly

#### Solid Waste

No	Point of	Cause	Affected	Parameter	Indication	Method	Person	Duration
	Pollution							
1	Surrounding	Tree	Solid	Volume/Weight	Volume	Visual,	Person	Daily,
		leaves	Waste			Weight	In	Weekly,
						Measurement	charge	Monthly

The data to be collected, locations, periods and the data collectors all should be managed pre construction, during construction and normal operation period respectively.

(Remarks, It could be omitted the pre-construction and during construction stage as the project is in the operation stage.)

Table (79) Monitoring Plan (Operation Phase)

Category	Item	Location (Lat/Long)	Frequency	Financial Allotment (ks)	Responsible Organization
Air Quality	PM <sub>2.5</sub> , PM <sub>10</sub> VOC, HCHL, NO <sub>2</sub> , SO <sub>2</sub>	(In factory and surrounding)*	Twice a year	2,000,000	Project Proponent/ EMP team
Noise and Vibration	Noise & Vibration level	(In factory and surrounding) **	Twice a year	500,000	Project Proponent/ EMP team
Solid Waste	Amount of solid waste Management of solid waste including domestic and industrial waste	(In factory and surrounding)	Twice a year	200,000	Project Proponent/ EMP team
Waste Water	pH, SS, DO, BOD, COD, oil & grease, chromium	(In factory and surrounding)	Twice a year	200,000	Project Proponent/ EMP team

Soil Contamination	Status of control of solid and liquid waste which causes soil contamination	(In factory and surrounding)  ***	Twice a year	200,000	Project Proponent/ EMP team
Ground Subsidence	Ground elevation	Preservation site	Twice a year	500,000	Project Proponent/ EMP team
Offensive Odor	Status of offensive odor control by tenants	(In factory and surrounding)	Twice a year	1,000,000	Project Proponent/ EMP team
Bottom Sediment	Combine with water quality	(In factory and surrounding)	Twice a year	500,000	Project Proponent/ EMP team
Hydrology	Consumption of ground water amount	Preservation site	Twice a year	500,000	Project Proponent/ EMP team
Water Usage Hydrological Situation	Combine with ground subsidence monitoring	(In factory and surrounding)	Twice a year	500,000	Project Proponent/ EMP team
Risk for infectious disease such as AIDS/HIV	Status of measures of infection disease	Each tenant/Worker	Twice a year	1,000,000	Project Proponent/ EMP team
Working conditions (including occupational safety)	Working condition with safety and health	Factory	Twice a year	1,000,000	Project Proponent/ EMP team
Accident	Existence of accident	Factory	Twice a year	1,000,000	Project Proponent/ EMP team

Remarks: \* P1,21°43'51.27"N, 95°37'37.93"E, P2, 21°43'51.37"N, 95°37'36.47"E P3, 21°43'51.53"N, 95°37'34.37"E P4,21°43'50.59"N, 95°37'35.33"E P5, 21°43'49.98"N, 95°37'31.38"E

The find out data should be checked with National Environmental Quality (Emission) Guidelines.

#### The Brief Summary of EIA assessment

Under the regulation of the Ministry of Natural Resources and Environmental Conservation, the assessment team of KKS Engineering Co.,Ltd conducted the assessment on April, 2018 and May, 2019 for the proposed project of Gold AYA Motors International Group Co.,Ltd located at Plot No.B-1-1 of Block No.Factory Area Zone 2C, Myotha Industrial Park Between Myotha and Nabu Ain village, total land area (20.084) Acres in Nganzun Township, Myingyan District of Mandalay Division Region, not only the potential impact caused by the project but also conducted the public consultation meeting and get consulted with government organizations, public organizations and residents accordingly.

#### The public consultation and declaration

The assessment trip was made to Myotha project side with concerned authorities from project proponent side and the assessments weres taken placed on May.4,2018 and July.5,2018 including public consultation with stakeholders and local villagers. During assessment study, it could get the base line environmental data, the potential impacts which could be affected by the project implementation and interviewed with government authorities of Nganzun township level and local villagers.

The public consultations were done accordingly as mentioned in the table above with international guideline and standards and instruction by MONREC accordingly by explaining the project in details and giving chances of their opinion and discussion. The meeting is open to all and not limited to the ones who had attended the meeting from far and nearby.

The public consultation meeting was held as following

<sup>\*\*</sup>PN121°43′51.27"N, 95°37′37.93"E, PN2, 21°43′51.37"N, 95°37′36.47"E PN3, 21°43′51.53"N, 95°37′34.37"E PN4, 21°43′50.59"N, 95°37′35.33"E PN5, 21°43′49.98"N, 95°37′31.38"E

<sup>\*\*\*</sup> **S.1**, 21°43′53.34″N, 95°37′30.18″E **S.2**, 21°43′52.76″N, 95°37′38.24″E **S.3**, 21°43′49.34″N, 95°37′37.94″E **S.4**, 21°43′49.61″N, 95°37′32.28″E **S.5**, 21°43′47.81″N, 95°37′29.81″E

Table (81) Summary of Consultation Activities Undertaken

No	Date	Description	Venue
1	May.4,2018	Government Officials of Ngazun township and all people who concerned the project	Ngazun township general administration office
2	July.5,2018	Public Consultation with Local resident, CSO, NGO, Government Officials of Ngazun township and all people who concerned the project	MMID meeting room

Furthermore, it is also announced to participate not only in the scheduled consultation meetings, but also provided the access to project office, third party office and the general administration office or ECD offices. The suggestion or complaint related to environmental and social affairs could be sent directly to the project office or through quarter or township administration office.

Table (87) The discussion points or request at the meetings and the company's commitments & progress

No.	Discussion points or request	Agreement or Commitment by Project Proponent	Progress
1	To acknowledge the vacancies at	Agreed to announce the vacancies well ahead	Done
	the factory reserve the priority	and give priority to the local residents	
	right to the local residents		
2	To provide regular capacity	Agreed as it is allocated the CSR fund	Coordination with MONREC
	training for local residents		& local authority
3	To sell vehicles to local residents	Agreed to sell vehicles with bank loan	Discussion with banks
	with bank loan program		

In addition, the development program to the people affected by this project implementation. The following are the commitment for the community development and project affected people by the implementation of this project.

- (1) To give priority of appointing to the people for geeting employment if there are vacencies.
- (2) To use prevention measures on mitigation of impacts as much as possible and to promote community development.
- (3) To promote CSR activities always.

If the allotted fund is not enough, the project proponent would be use additional fund by getting approval from the nearest board of director meeting.

Table (90) Future Plan on Public Consultation During Operation Phase

No	Future Plan	Description/Schedule
1	Checking Suggestion Box	Each and Every Month
2	Reporting Monitoring Report	Will submit the Monitoring Report twice a year to ECD
3	Public Consultation Meeting	In case of emergency situation or accident occurred and/or as it is needed under ECD guidance.
4	General Meeting	Participation with regional government or zone committee activities related with environmental social affair

#### The Impacts and Mitigation Measures on Social Economic

With the creation of jobs for local and nearby villages could definitely help income generation which is positive impact to social economic by this project.

The capacity building to the employees would be arranged together ECD of MONREC by trainings and courses when it is necessary. The organizing and fund allocation are made for mitigation and monitoring program.

#### **Conclusion and Recommendation**

It is found out the project is more beneficial than getting impact as it is well planned to implement with technical and standard for the alternative better land use to the existing dry agriculture land by avoiding impact. During the public consultation meeting the people lived in the project affected area and stakeholders all were acknowledged about the impact such as noise, waste and no waste water is generating by this project. All nearby residents are awaiting the development of employment and fully support to this project implementation. By this project implementation, it is found out that could create more beneficial by reducing impact at good management and increasing personal income and nation's GDP by creating employment opportunities and increasing revenue.

## 2. Introduction

# 2.1 The Describtion about the Project by the Project Proponent

We, Gold AYA Motors International Group co., Ltd established in June 2017, is a joint venture integrated automobile group company. The registered country of the company is the federal republic of Myanmar, with an authorized capital of 15,320,000 USD. The production base is located in block b-1-1 in zone 2C, Myotha industrial park, central Mandalay Division Region, Myanmar.

# 2.2 The project origin, the need of project, purpose of project

# The Project Origin

It is the manufacturing and assembly of motor vehicles factory project operating as Joint venture between Shining Star International Holdings Ltd of Hongkong at 60% share and Mr. Qian Haifang at 20% resided at Room2654, Building No.39, No.6, Qinqixi Road, Lt Tong District, Wuzhong City, Mingxia Province, China and U Ye Htut Lin, resided at No.(49/B2) corner of Thiri Myaing 2 Street (13) ward, Hlaing Township, Yangon from Myanmar at 20% shares to this project respectively. The Gold A Y A Motors International Group Co.,Ltd is registered at company registra office under the foreign investment law and obtained the company registration number 100642476 and the endorsement of dated 28-6-2017 from the Directorate of Investment and Company Administration.

The industrial park connects the Asian expressway, the Asian railway network, the Irrawaddy river, the international airport and so on.

Company production base covers an area of 81278.36 square meters (20.084 acres). The first phase of construction covers an area of 14537.89 square meters, including 3658.28 square meters of showroom buildings, 2728 square meters of dormitory buildings and 8151.61 square meters of factory buildings.

# **Need for Project**

With the changes on politically and socially, Myanmar is potential country to be developed with its rich in natural and human resources. However, Myanmar is needed to be developed transport sectors to be in line with the development of social and economic by production of consumer's products and industrial based products even it is agricultural, natural and human resources based country.

Regarding to this situation, it is needed motor vehicles not only for the region but also for the country as a supporting project to economic and social sector development.

#### **Purpose of Project**

To produce auto vehicles locally

To reduce trade deficic by cutting vehicle import

To increase domestic product

To increase direct and indirect employment by this project development

### The Purpose of EIA Report and the Background of EIA Assessment

This project is instructed by the ministry to be compiled EIA report. The project proponent is hired the authorized third party and it is the final stage of the approval of report as the review team meeting was held and this is the revised report made according to the comments of reviewers for the approval.

The following table shows the need of EIA for the proposed project due to its size. (the regulation of Myanma Environmental Law which is enacted 2015.)

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စဉ်	ရင်းနှီးမြှုပ်နှံမှုစီမံကိန်းအမျိုး	ကန္ဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းပြုလုပ်ရန်လို	ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းပြုလုပ်ရန်လို	မှတ်ချက်			
	ങ്കാ:	အပ်သည့်အရွယ်အစား	အပ်သည့်အရွယ်အစား				
၉၈	မော်တော်ယာဉ်နှင့်မော်	ထုတ်လုပ်မှုဧရိယာစတုရန်းမီတာ၅ဝဝဝနှင့်အ	ဝန်ကြီးဌာနကပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်း				
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	ထုတ်လုပ်ခြင်း	နာရီလျှင်၆်ကီလိုဂရမ်နှင့်အထက်သုံးစွဲခြင်း	လုပ်ငန်းအားလုံး				

# 2.3 Description of Project Proponent

Gold A Y A Motors International Group Co.,Ltd is implementing the Manufacturing and Assembly of Motor Vehicles Project. The information about the Project Owner, Project Proponent, EIA Consultant Organization, the List of Directors and Share and the Contact Person are described as following.

Table 1 Project owner, Project Proponent and EIA Consultant

Item	Description		
Company name	Gold A Y A Motors International Group Co.,Ltd,		
Project name	Manufacturing and Assembly of Motor Vehicles Project		
Project Owner and	Mr. Li- Jifeng (Chinese) (General Manager)		
Proponent	(Contact Person: Ms. Htoo Htet Htet Aung)		
Address	Factory: Plot No.(B-1-1), Block-Factory Area, Zone-2C, Myotha Industrial Park, Myo		
	Tha Tsp, Myingyan District, Mandala Division Region, Tel;+95-9-256486931 Mobile 09-		
	264808234, email; htoohhaung@pai.com.mm		
	<b>Office:</b> No.(A-2), 63th Street, Between 30 <sup>th</sup> & 31 <sup>st</sup> Street, Chan Aye Thar Zan Quarter,		
	Mandalay, Mandala Division Region, Tel;+95-9-256486931 Mobile 09-778153256, email;		
	htoohhaung@pai.com.mm		
Tel;	Mobile 09778153256		
Email;	htoohhaung@pai.com.mm		
EIA undertaker	Kaung Kyaw Say Engineering Co.,Ltd		
	(Contact Person: Ms. Myint Myint Thein)		
Address	No. 31 Pinlone Yeikmon 5 <sup>th</sup> Street, Pinlone Yeikmon, Thingungyun Tsp, Yangon,		
	Myanmar. Tel 01-7571284 email: mdoffice@kaungkyawsay.com		

# **Table 2 The List of Director and Share**

No	Name, Address and Occupation	Nationality & ID No.	Number of Shares
1	Shining Star International Holding Limited Represented by Mr. Yang Yu (Director) Shui Mu Qing Hua, Villa 9-2, New Asia Athelics, Quandu District, Kummin City, Yunnan Province, PRC	PP No. E67967120	60%
2	Mr. Ye Htun Lin (Director) No. (49/B-2), Corner of Thiri Myaing-2 Street and Paung Se Street, (13) Ward, Hlaing Township, Yangon	7/LaPaTa(Naing) 097499	20%
3	Mr. Qian Haifang (Director) Boasham Road, Shanghai Fingan District, PRC	PP No. G51499107	20%

#### **Table 3 The Contact Person and Share**

Name	Address
Contact Peraon	Mr. Li-Jifeng (General Manager)
	(Contact Person: Ms. Htoo Htet Htet Aung)
Address	Plot No.B-1-1 of Block Factory Area Zone 2C, Myotha Industrial Park,
	Between Myotha and Nabu Aine village, Ngazun Township, Myingyan,
	District of Mandalay Division Region, Union of Myanmar, Mobile
	09264808234 email; myatnoeoo.0412@gmail.com
Tel;	Mobile 09778153256
Email;	htoohhaung@pai.com.mm

#### 2.4 The Period of Investment

The investor, Mr. Li-Jifeng (the general manager of Gold AYA motors International Group Co.,Ltd) originary resided at Room2654, Building No.39, No.6, Qinqixi Road, Lt Tong District, Wuzhong City, Mingxia Province, China on behalf of Shining Star International Holdings Limited, Room 1806, 18/F, Park-In Commercial Centre 56 Dundas Street Mongkok, Kowloon, Hong Kong, plans to invest in the land of opportunity to establish a stable production base in response the expend and increasing local demand. This is why Myanmar has been selected to invest.

The project is designed to build and operate the manufacturing and assembly of motor vehicles factory to produce household cars, SUV, MPV, commercial vehicles, pickups, special vehicles and new energy vehicles by employing about 110 local workers and 15 foreign experts depending on getting orders for long term (50 years) investment.

(1) Company Registration Start
 (2) MIC permit
 (3) The Official Commercial Operating Date :

# 2.5 The Approach and Methodology

This EIA report is followed on the collection of both assessment data & public consultation (primary data) and the secondary data from the literature & publication review. The EIA must examine the potential impacts and the risk assessment. The project may have either positive and or negative impacts to the environment. It should also find the mitigation and monitoring to these impacts by organizing the environmental management plan. This EIA report is prepared by predicting, identification, evaluation and assessing the potential key impacts covering pre construction, during construction and normal operating phases. The mitigation, managing and monitoring are well planned to reduce these impacts and to get high operating efficiency.

For the environmental sustainable manner, the Environmental Management Plan is being provided by harmonizing the project development with the no impacts or less impacts to the environmentally and socially by project developer with the provision of mitigation measures for the significant negative impacts. It is also identifies the monitoring requirements needed for the implementation of the suggested mitigation measures. The commitments by the proponent are also inserted in this report.

A monitoring plan for this project providing parameters, frequency, locations and applicable monitoring method are included in this report with the closure plan.

The fomat/contents of this EIA report are listed as below.

- 1. Executive Summary (Myanmar)
- 2. Executive Summary (English)
- 3. Introduction
- 4. Policy, Law and Legal Framwork
- 5. Description of Project and Alternatives
- 6. Description of Environment
- 7. The Environmental Impact Assessment & Mitigation Measures
- 8. The Mitigation
- 9. The Cumulative Impact Assessment
- 10. The Environmental Management Plan
- 11. The Public Consultation Meeting & Disclousure
- 12. The Conclusion
- 13. Annexes

The qualitive and quantitative methodology was adopted to conduct this study. The study included of both primary and secondary data through the Focus group discussion/public consultation, Interview with local authority and Secondary data (township data book).

# 2.6 The Scope of Study and the Study Area

The scope of study is identification of key environmental and social issues which will likely arise during construction and operation phases of proposed project, along with the significant negative impacts and mitigation measures to be adopted for their minimization.

Based on the find out data of impacts and mitigation measures, it is to produce the Environmental Management Plan (EMP) with the detailed instruction on monitoring program to be compliances with national environmental and social quality standards and reporting procedure which could lead the project operation in an environmentally sustainable manner.

The study area is included nearby villages within 3 miles radius distance from the project site.

**Table 4 The Salient Data of the Project** 

No	Description		Qty	Remarks
1	Tpye of project		JV (Myanmar 20%+Foreigner 80%)	Joint Venture Investment
2	Investment	Myanmar	1.13Million US\$	Total Investment of 15.32
		Foreigner	12.19Million US\$	Million US\$ including
		Total	15.32Million US\$	Myanmar kyats in US
				Dollar equivalent
3	Date of Company Establish		28-6-2017	Company Registration
				No. 100642476
4	Date of Operation Start		25-6-2019	
5	Licenses		MIC Permit; 067/2018 (27-3-2018)	
			Ministry of Commerce License:	
			Export /Import No. 011945 (17-08-18)	
			MOI: Industry License; Matala /Kyi/2449 (6-	
			8-2019)	
			MOI: (Mdy) Electricity-Inspection EI-MDY-	
			187 (18-6-21~17-6-22)	
			MOI: (Mdy) Electricity-Inspection (1)	
			Electricity Production and Usage-076/2019	
			(21-6-19~20-6-23)	
			(2) Electricity Production and Usage-	
			077/2019 (21-6-19~20-6-23)	
6	Raw materials (Import)	Import from China + Local Purchase		Details on Annex
7	Product Export (To)		Local Sale Only	
8	Product Capacity		Vehicles (Approx; 1000~37500 nos) per year	(Changhe –Q35SuV,
				M60MPV-1.5 std, A6
				Sedan Car, Q7-SUV,
				M20SMPV,
				DODA V8-MPV,
-	XX 1: 70:	D '1 (07.20	0.1	K9-Pick-up)
9		Daily (07:30	8 hours per day	Overtime would be based
		~16:30) (lunch		on the demand of product
		break; 12:00~13:00)		and timing
	<del> </del>	Weekly	5 days per week	
	<del> </del>	Yearly	250 days per year	
10	No of machines	1 Carry	As shown on the list of imported equipments	(See Annex)
11	No. of workers (Ref; to MIC	nronosl)	As shown on the list of imported equipments  110 nos.	Local 88%,
11	110. 01 WOIRCIS (RCI, to MIC	proposi)	15 nos.	experts 12%
12	12 Annual Fuel Requirement (Diesel)		50,000 gals Petrol, 100,000gals diesel For	For generator, Truck
12	Annual Fuel Requirement (Diesel)		generator, Truck	Tor generator, rruck
	Annual Lubricant Requirement (Engine Oil)		2,000 gals For Vehicles	For vehicle (initial filling)
13	Annual Fuel Wood Requirem		-	No Fuel Wood boiler
14			5,500,000 units From both grid and own	From both grid and own
			geneartion	geneartion
			• •	

15	Diesel Generating Set	(2 units)	Run at the black out time
		633KVA, 165KVA	only
16	Annual Water Requirement (Approx;)	40,000,000gals From (6"dia tube well-1	Mainly utilize from tube
		nos.)	well and enough
17	Solid Waste	0.2 tons per day	Sold out to recycle buyer
18	Waste Water	10m <sup>3</sup> ~50m <sup>3</sup> per month (Approx)	Use Septic Tank (No
			drain to the environment)

This project could create employment as there would be 100 vacancies at the factory when it is in the full operation stage.

# 2.7 Description by the Environmental and Social Experts

Th Environmental Consultant Team of Kaung Kyaw Say Engineering Co.,Ltd was hired by the project proponent to take care the environmental and socal related EIA report. The Brief information of members of the Environmental Team of Kaung Kyaw Say Engineering Co.,Ltd. holder of Certificate for Transitional Consultant Registration No. 00038 (Organization)

**Table 5 The List of Consultants & Responsibilities** 

No	Name	Position	Responsible
1	U Htun Naing Aung (Reg. No. 00144) (Person) (B.E)(Mechanical) A.G.T.I (Mechanical Power)	Chairman, Senior Consultant	All parts of assessment & reports (Specialize in Air pollution Control, Ground Water & Hydrology, Waste Management)
2	Daw Mya Mya Aye (Reg. No. 00146) (Person) (B.A)(History)	Consultant (Social Economic & Environmental)	Social Economic & Environment
3	U Mya Cho (Reg. No. 00038) (Org.) (B,Sc,)(Forestry)	Consultant (Environmental & Forestry)	Environmental & Forestry
4	Mr. Salil Duct (Reg. No. 00038) (Org.) MBA, M.Tech (Environment Management)	Consultant (Industrial & energy audit)	Industrial Pollution Prevention & Control
5	Dr. Tint Swe (Reg. No. 00038) (Org.) (Phd) (Marinebiology)	Consultant (Marinebiology)	Marinebiology & Environment
6	Daw Khin Sint Yi (Reg. No. 00038) (Org.) M.Sc (Bottany)	Consultant (Ecology & Biodiversity)	Ecology & Biodiversity, Social Economy (Flora)
7	Dr. Khin Mar Mar (Reg. No. 00038) (Org.) M.B,M.S, MPH USMLE (Step.2)	Consultant (Health)	Public Health
8	Daw Ni Ni Aung (Reg. No. 00038) (Org.) B.A (Geography)	Consultant (Geography)	Topography & Geography
9	(Reg. No. 00038) (Org.) Daw Myint Myint Thein	Assistant Consultant	M&E , Data collect

I the undersigned certisfied this Scoping report is taken responsibility to each and every parts of the report by each consultants that is assigned for.

# (Team Leader)

No	Name	Licen No	Position	Responsible	Signature
1	U Htun Naing Aung (B.E)(Mechanical) A.G.T.I (Mechanical Power) Ph.D (Thesis)JAPAN, Environmental Reviewer Course (AIT-Vietnam)	00038 (Organization) 00144 (Personal)	Chairman, Senior Consultant	All parts of assessment & reports	dolle
2	Daw Mya Mya Aye (B.A)(History), Environmental Reviewer Course (AIT-Vietnam) RE & EE (Certificate- Germany)	00038 (Organization) 00146 (personal)	Consultant (Social Economic & Environmental)	Social Economic & Environment	Middle
3	U Mya Cho (B,Sc,)(Forestry)	00038 (Organization)	Consultant (Environmental & Forestry)	Environmental & Forestry	4
4	Daw Ni Ni Aung (B.A)(Geography)	00038 (Organization)	Geography & Environmentalist	Landuse,Metrology and Modeling for air quality Environment	GZ)
5	<b>Dr. Daw Phu Phu Sein</b> (Phd) (Geology)	00038 (Organization)	Consultant (Geologist)	Geology, Mine & Environment	业
6	<b>Dr. Tint Swe</b> (Phd) (Marine Science)	00038 (Organization)	Consultant (Fauna, Biodiversity)	Fauna, Ecology & Biodiversity	263
7	U Zin Maung Lwin BSc (Geology), Dip in Geotechnical Engineering	00038 (Organization)	Consultant (Geology)	Geotechnical Engineering	21
8	Dr. Khin Mar Mar M.B,M.S, MPH USMLE (Step.2)	00038 (Organization)	Consultant (Health)	Public Health	Kammer
9	Daw Myint Myint Thein RE & EE (Certificate- Germany)	00038 (Organization)	Assistant Consutant	Facilitating of Meeting, Socio Economy, Environmental Data Collect & Monitoring	企

Overall Framework of Environmental Impact Assessment

		2018				
Item	April	May	June	July	Aug	Sep
MOU with Regional						
Government						
Selection of EIA Consultant	-					
Base line Survey						
Water Sampling						
Soil Sampling				$\perp$		
Air Measurement			_			
Noise and Traffic						
Flaura and Fauna Survey			_			
Culture Survey			_			
EIA Preparation						-
Stakeholders Meeting						
EIA report						
						-

# 3. Policy, Law and Legal Framwork

The Environmental Impact Assessment and the report is to be carried out to be in-lined with a number of laws, rules, procedures and notifications to justify the compliance of the project and its activities with relevant Myanmar laws such as Citizen Investment Law, Road and Highway Law, Ward and Village Tract Administration Law, Farm Land Law, etc.

## 3.1 Myanmar Environmental Policy

The Government is to protect and conserve the natural environment and implies every citizen of Myanmar to assist the Government in environmental conservation. It is clearly mentioned in the constitution of the Republic of the Union of Myanmar. The National Environmental Policy was enacted in 1994 which is the basis for the integration of environmental consideration into development in Myanmar which proclaims the Government's commitment to sustainable development. The state has responsibility to preserve its natural resources in the interest of present and future generations and that environmental protection should always be the primary objective in seeking development. All natural resource management and environmental conservation work in pursuit of activities relating to biodiversity conservation is clearly mentioned in the Myanmar Agenda 21 developed in 1997.

# 3.2 Policy on environmental & social by project proponent

The Objectives of the project are as following.

- 1. For poverty reduction, social and urban development by creating direct and indirect employments
- 2. For Industrial Development and transport sector in Myanmar
- 3. To increase international investment in the industrial sectors
- 4. To elevate the livelihood of local people by providing employment opportunity by development of industries and economic zones
- 5. To increase nation's tex revenue

#### **Environmental and social goals**

The environmental and social goals are as following.

- 1. To develop the international standard production of automibiles by preventing or eliminating the environmental impacts caused by waste and waste water
- 2. To follow all procedures, methods and systems which are preventing environmental and health impact to near by local residents caused by variety of wastes
- 3. To follow all environmental laws, rules and policies which were enacted by nation

# 3.3 Environmental Law, Rules, International Convension Agreements, National and International Standards, Guidelines, Policy and Legal Fremework

The following table shows the applicable policy, legal and Institutional Framework, laws and regulations that should be compliance to this project.

Table 6 Law, Rule, Regulation and Act Compliancing to this Project

စဉ်	ဥပဒေများ	Law,Rule, regulation and Act.
Э	ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဥပဒေ ၂ဝ၁၂	The Environmental Conservation Law 2012
J	ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးနည်းဥပဒေ ၂၀၁၄	The Environmental Conservation Rules 2014
9	ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာလုပ်ထုံးလုပ်နည်း ၂၀၁၅	Environmantal Impact Assessment Procedure 2015
9	အမျိုးသားပတ်ဝန်းကျင်အရေအသွေးဆိုင်ရာ(စွန် ထုတ်မှု)လမ်းညွှန် ၂၀၁၅	The National Environmental Quality (Effluent) Guideline
		2015
၅	မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုဥပဒေ ၂ဝ၁၆	Myanmar Investment Law 2016
િ	မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုနည်းဥပဒေ ၂၀၁၇	Myanmar Investment Rules 2017
5	မြေလွတ်၊မြေလတ်၊မြေရိုင်းများစီမံခန့်ခွဲရေးဥပဒေ ၂ဝ၁၂	Free Land, Vacant Land, Margin Land Management
		Law2012
ຄ	အလုပ်သမာအဖွဲ့ အစည်းဥပဒေ ၂၀၁၁	Labor Organization Law 2011

6	အလုပ်သမားအငြင်းပွါးမှုဖြေရှင်းရေးဥပဒေ ၂၀၁၂	Settlement of Labour Disputes Law 2012
၁၀	သူမှုဖူလုံရေးဥပဒေ ၂၀၁၂ လူမှုဖူလုံရေးဥပဒေ ၂၀၁၂	Social Security Law 2012
00	အနဲဆုံးလုပ်ခကြေးငွေဥပဒေ ၂၀၁၃	Minimum Wages Law 2013
	အခကြေးငွေပေးချေရေးဥပဒေ ၂၀၁၆	Payment of Wages Law 2016
ാ	ခွင့်နှင့်အလုပ်ပိတ်ရက်များဥပဒေ ၁၉၅၁	The Leaves and Holidays Act 1951
၁၃	ခွင့်နှင့်အလုပ်ပတ်ရက်များဥပဒေ ၁၉၅၁ စက်ရုံဥပဒေ ပြင်ဆင်သည့်အက်ဥပဒေ ၁၉၅၁ (၂၀၁၆)	-
29	<del>-</del>	The Revision of Factory Act 1951 (2016)
၁၅	အလုပ်သမားလျော်ကြေးအက်ဥပဒေ ၁၉၅၁ 	Workmen Compensation Act 1951
၁၆	အလုပ်အကိုင်နှင့်ကျွမ်းကျင်မှုဖွ ဖြိုးတိုးတက်ရေးဥပဒေ ၂၀၁၃	Employment and Skill Development Law 2013
၁၇	ရေနံနှင့်ရေနံထွက်ပစ္စည်းဆိုင်ရာဥပဒေ ၂၀၁၇	Petroleum and Product of Petroleum Law 2017
၁၈	ရေနံနည်းဥပဒေများ၁၉၃၇	Petroleum Rules 1937
ာ၉	ယာဉ်အန္တရာယ်ကင်းရှင်းရေးနှင့်မော်တော်ယာဉ်စီမံခန့်ခွဲမှုဥပဒေ ၂၀၂၀	The Traffic Accident Prevention & Motor Vehicle Management Law 2020
Jo	ယာဉ်အန္တရာယ်ကင်းရှင်းရေးနှင့်မော်တော်ယာဉ်စီမံခန့်ခွဲမှုနည်းဥပဒေ ၂၀၂၂	The Traffic Accident Prevention & Motor Vehicle Management Rule 2022
၂၁	၂၂ ၂၂ ပြည်သူ့ကျန်းမာရေးဥပဒေ၁၉၇၂	Public Health Law 1972
JJ	ကူးစက်ရောဂါများကာကွယ်နှိမ်နင်းရေးဥပဒေ ၁၉၉၅	Prevention and Control of Communicable Diese Law 1995
JP	မြန်မာ့အာမခံလုပ်ငန်းဥပဒေ ၁၉၉၃	The Myanma Insurance Law 1993
<u> </u>	မြန်မာနိုင်ငံမီးသတ်တပ်ဖွဲ့ ဥပဒေ ၂၀၁၅	Myanmar Fire Force Law 2015
	ပကုန်သွင်းကုန်ဥပဒေ၊ ၂၀၁၃	The Export and Import Law 2013
<u>ქე</u> ქც	တိုင်းရင်းသားလူမျိုးများ၏အခွင့်အရေးကာကွယ်စောင့်ရှောက်သည့်နည်းဥပ	The Ethnic Rights Protection Law 2015
Jo	ဒေ ၂၀၁၅	_
75	တိုင်းရင်းသားလူမျိုးများ၏အခွင့်အရေးကာကွယ်စောင့်ရှောက်သည့်နည်းဥပ	The Ethnic Rights Protection Rule 2019
	ဒေ ၂၀၁၉	All melekad I ama and Dulas are et al. Manufala Dilas
၂၈	မန္တလေးတိုင်းဒေသကြီးလွှတ်တော်မှပြဌာန်းသည့်ဥပဒေများအနက်ဆက်စပ် သည့် ဥပဒေများ၊ နည်းဥပဒေများ။	All related Laws and Rules enacted by Mandalay Division Region Hluttaw
ام ما	ဘာဆယ်ကွန်ဗင်းရှင်း ၂၀၁၇	Basel Convention (Signed in 2017)
၂၉	ီဝမျိုးစုံကွဲနှင့်သဘာဝထိန်းသိမ်းရေးနယ်မြေများကာကွယ်စောင့်ရှောက်ခြင်း	The Protection of Biodiversity and Natural Protected Area
90	ဆိုင် ရာဥပဒေ (၂၀၁၈) - ဆိုင် ရာဥပဒေ (၂၀၁၈)	Law (2018)
၃၁	ကုန်သွယ်ခွန်ဥပဒေ (၂၀၁၄)	The Commercial Tax Law (2014)
77	မြေအောက်ရေဥပဒေ (၁၉၃၀)	The Underground Water Act (1930)
<del>7</del> 7	အင်ဂျင်နီယာကောင်စီဥပဒေ (၂၀၁၃)	The Engineering Council Law (2013)
<del>77</del>	လျှပ်စစ်ဥပဒေ (၂၀၁၄)	The Electricity Law (2014)
	မြန်မာ့စံချိန်စံညွှန်းဥပဒေ (၂၀၁၄)	The Myanmar Standard Law (2014)
<u>გე</u> გც	မြေနမ်းဖချိန်ဖည်နှင့်မြစ်ချောင်းထိန်းသိမ်းရေးဥပဒေ ၂ဝဝ၆	The Conservation of Water Resources and Rivers Law
		2006
65	ဆေးလိပ်နှင့်ဆေးရွက်ကြီးထွက်ပစ္စည်းသောက်သုံးမှု ထိန်းချုပ်ရေးဥပဒေ၊ ၂၀၀၆	The Control of Smoking and Consumption of Tobacco Product Law (2006)
၃၈	ရှေးဟောင်းဝတ္ထုပစ္စည်းကာကွယ်စောင့်ရှောက်ရေးဥပဒေ ၂ဝ၁၅	The Protection and Preservation of Antique Objects Law (2015)
99	ယဉ်ကျေးမှုအမွေအနှစ်ဒေသများ ကာကွယ်ထိန်းသိမ်းရေးဥပဒေ ၂၀၁၉	The Protection and Preservation of Cultural Heritage Regions Law (2019)
90	ရှေးဟောင်းအဆောက်အအုံများကာကွယ်စောင့်ရှောက်ရေးဥပဒေ ၂၀၁၅	The Protection and Preservation of Ancient Buildings Law (2015)
90	စက်မှုဇုန်ဥပဒေ ၂၀၂၀	The Industrial Zone Law (2020)
7 9J	ပုဂ္ဂလိကစက်မှုလုပ်ငန်းဥပဒေ ၁၉၉၀	The Private Industri Law (2015)
<del>7</del> 5	လုပ်ငန်းခွင်ဘေးအန္တရာယ်ကင်းရှင်းရေးနှင့်ကျန်းမာရေးဆိုင်ရာဥပဒေ	The Occupational Safety and Health Law (2019)
CC	၂၀၁၉ အလုပ်ရုံများအက်ဥပဒေ (၁၉၅၁)	The Factory Act (1951)
99	မြန်မာနိုင်ငံလူဝင်မှုကြီးကြပ်ရေးလတ်တလောပြဌာန်းချက်များအက်ဥပဒေ	-
99	(၁၉၄၇) (၁၉၄၇)	The Myanmar Immigration (Emergency Provisions) Act (1947)

**Applied Environmental law, regulation and standards**The environmental conservation law is enacted in 2012 by implementing of national policy by setting up of principles and guidelines for sustainable development and conservation of clean environment, natural and cultural heritage for present and future generation. There are 42 paragraphs in 14 sections of law. A person causing a point of source of pollution shall treat, emit, discharge and deposit the substances which cause

pollution in the environment in accord with stipulated environmental quality standards is stipulated in paragraph 14. Moreover, paragraph 15 of the law says that the owner or occupier of any business, material or place which caused a point source of pollution shall install or use an on-site facility or controlling equipment in order to monitor, control, manage, reduced or eliminate environmental pollution. If it is impracticable, it shall be arranged to dispose the waste in accord with environmentally sound methods.

The Environmental Conservation Rules were officially announced on 5<sup>th</sup> June, 2014.

The national standard law is enacted July 2014.

The regulation for environment conservation is enacted in June 2014.

The Environmental Impact Assessment Procedures was enacted in 2015. Under this EIA procedures, all projects undertaken in Myanmar that can cause significant adverse impacts are required to undertake an IEE or EIA and to obtain an Environmental Compliance Certificate (ECC).

#### **Institutional Framework**

There are 22 ministries under the office of the President of Myanmar. The leading ministries in charge of environmental and social consideration are the Ministry of Natural Resources and Environmental Conservation (MONREC) and the ministry of Social Welfare, Relief and Resettlement (MSWRR). The Environmental Conservation Department is responsible for Environmental Conservation Law, National Environmental Policy, Strategy, Framework, Planning and action plan for the integration of environmental consideration into the national sustainable development process. ECD is also responsible for the conservation and management of Myanmar's natural resources and sustainable utilization, pollution control on water air and land.

## **Fundamental Laws and Regulations**

It is the Citizens Investment Law. The objective of this law is to promote environmentally and socially sustainable economic growth and diversification of the productive sector of the union, providing investors with a set of fundamental and enforceable legal rights and guarantees to ensure that the investors and their investments are protected and treated with transparency, fairness and in strict accordance with the rule of law and accepted international standard and practice. The law also stated in para (3) its objective as "After exploiting abundant rich resources of the country, aiming at the people to enjoy sufficiently and to enable the surplus to export causing to open up of more employment opportunities for the people as the business developed and expand causing to develop human resources causing to develop respective regions including infrastructure, causing to rise economic enterprise and investment business, keeping abreast with the international norms.

#### The Detail of Compliance of Laws and Regulation

# (1) Environmental Conservation Law(2012)

The environmental law was enacted on 30<sup>th</sup> March 2012 prepared by MONREC. This environmental conservation law contains 14 chapters that define the rights and responsibilities of MONREC, environmental standards, environmental conservation, management in urban areas, conservation of natural and cultural resources, process for businesses to apply permission to engage in enterprise that has the potential to damage the environment, prohibitions, offenses and punishments. The article 16 in the law stipulates responsibility of business owner of industrial estate or business in the special economic zone on environmental conservation. Besides its rules as detailed enforcement regulations for ECL was got through parliament in July2013 and going to be issued. ECRs stipulates basic policy and concept on EIA application of the development of Projects (Article 55)

- The project proponent has to pay the compensation for damages if the project will causes injuries to environment under the sub-section (o) of section 7 of said law
- The project proponent has to purify, emit, dispose and keep the polluted materials in line with the stipulated standards, under section 14 of said law
- The project proponent has to install or use the apparatus which can control or help to reduce, manage, control or monitor the impacts on the environment, under section 15 of said law.

- The project proponent has to allow relevant governmental organization or department to inspect whether performing is conformity with the terms and condition included in prior permission, stipulated by the ministry, or not, under section 24 of said law.
- The project proponent has to comply with the terms and conditions included in prior permission, under section 25 of said law.
- The project proponent has to abide by the stipulations included in the rules, regulation, by-law, order, notification and procedure issued by said law, under section 29.

Additional (1) Managing to cause the polluter to compensate for environmental impact, cause to contribute fund by the organizations which obtain benefit from the natural environmental service system, cause to contribute a part of the benefit from the businesss which explore, trade and use the natural resources in environmental conservation works. Para. 7(o).

Additional (2) Aperson causing a point source of pollution shall treat, emit, discharge and deposit the substances which cause pollution in the environment in accord with stipulated environmental quality standards. Para (14)

Additional (3) The owner or occupier of any business, material or place which causes a point source of pollution shall install or use an on-site facility or controlling equipment in order to monitor, control, manage, reduce or eliminate environmental pollution. If it is impracticable, it shall be arranged to dispose the wastes in accord with environmentally sound methods. Para.(15)

Additional (4) The ministry may, in issuing the prior permission, stipulate terms and conditions relating to environmental conservation. It may conduct inspection whether or not it is performed in conformity with such terms and conditions or inform the relavent Government departments, Government organizations to carry out inspections. Para (24)

Additional (5) No one shall violate any prohibition contained in the rules, notifications, orders, directives and procedures issued under this law. Para (29)

#### Default Environmental and Social Considerations

The project proponent set default environmental and social considerations based on the project components.

To install septic tank to treat wastewater from construction camp

To make workers secure a commitment to install pre-treatment facilities for neutralization, oil separation, removal of toxic and heavy metals.,etc.

Quantitative Target Levels for Consideration of Surrounding Environment

#### (2) The Environmental Conservation Rules (2014)

- The project proponent has to avoid emit, discharge or dispose the materials which can pollute to environment, or hazardous waste or hazardous material prescribed by notification in the place where directly or indirectly injure to public under sub- rule (a) of rule 68.
- The project proponent has to avoid performing to damage to ecosystem and the environment generated by said ecosystem under sub-rule (b) of rule 68.
- The project proponent has to avoid emission, letting emit, discharge waste, let waste discharging, mounting waste, let mounting waste, under rule 69(a).
- The project proponent has to avoid performing to damage to ecosystem and the environment generated by said ecosystem under rule 69(b).

#### (3) Environment Impact Assessment Procedure (2015)

- The project proponent has to be liable for all adverse impacts caused by doing or omitting of project owner or contractor, sub-contractor, officer, employee, representative or consultant who is appointed or hired to perform on behalf of project owner, under sub-paragraph (a) of paragraph 102.
- The project proponent has to support, after consultation with effected persons by project, relevant government organization, government department and other related persons, to resettlement and rehabilitation for livelihood until the effected persons by the project receiving the stable socio-economy which is not lower than the status in pre-project, under sub-paragraph (b) of paragraph 102.

- The project proponent has to fully implement all commitments of project and conditions included in EMP. Moreover the project proponent has to be liable for contractor and sub-contractor who perform on behalf of him/her have to fully abide by the relevant laws, rules, this procedure, EMP and all conditions, under paragraph 103.
- The project proponent has to be liable and fully & effectively implement all requirements included in ECC, relevant laws and rules, this procedure and standards under rule 104.
- The project proponent has to inform the completed information, after specifying the adverse impacts caused by the project, from time to time, under paragraph 105.
- The project proponent has to continuously monitor all adverse impacts in the pre-construction phrase, construction phrase, operation phrase, suspension phrase, closure phrase and post-closure phrase, moreover has to implement the EMP with abiding the all conditions included in ECC, relevant laws & rules and this procedure, under paragraph 106.
- The project proponent has to submit, as soon as possible, the failures of his or her responsibility, other implementation, ECC or EMP. If dangerous impact caused by this failure or failure should be known by the Ministry the project proponent has to submit within 24 hours and other than this situation has to submit within 7 days from knowing it, under paragraph 107.
- The project proponent has to submit the monitoring report dually or prescribed time by Ministry in line with the schedule of EMP, under paragraph 108.
- The project proponent has to prepare the monitoring report in accord with the rule 109.
- The project proponent has to show this monitoring report in public place such as library, hall and website and office of project for the purpose to know this report by public within 10 days from the date which the report is submitted to the Ministry. Moreover has to give the copy of this report, by email or other way which way agreed with the asked person, to any asked person or organization, under paragraph 110.
- The project proponent has to allow inspector to enter and inspect in working time and if it is needed by Ministry has to allow inspector to enter and inspect in the office and work-place of project and other work-place related to this project in any time, under paragraph 113.
- The project proponent has to allow inspector to immediately enter and inspect in any time if it is emergency or failure to implement the requirements related to social or environment or caused to it, under paragraph 115.
- The project proponent has to allow inspector to inspect the contractor and sub-contractor who implement on behalf of project, under paragraph 117.

#### (4) The National Environmental Quality (Effluent) Guideline (2015)

• The project proponent will follow not to exceed all guide line values of NEQEG at the time of emit, discharge or dispose the solid and liquid wastes, or hazardous waste or hazardous materials.

#### (5) Myanmar Investment Law (2016)

- The project proponent has to lease the land or building owned by government or private with lease agreement and register it by the registration of deeps law under sub-section (a) and (d) of section 50 of said law.
- The project proponent has to appoint the nationalities in the various levels of administrative, technical and expert work by the arrangement to develop their expertise, in line with the sub-section (b) of section51of said law.
- The project proponent has to appoint the nationalities only in normal work without expertise, in line with the sub-section (c) of section51of said law.
- The project proponent has to appoint either foreigner or nationality with the appointment agreement in accord with the law, in line with the sub-section (d) of section51of said law.

- The project proponent has to comply with the international best practices, existing laws, rules and procedures to not damage, pollute, and injure to environment, cultural heritage and social, in line with the sub-section (g) of section65of said law.
- The project proponent has to close the project after paying the compensation to the employees in accord with the existing laws if violates the appointment agreement or terminate, transfer or suspend the investment or reduce the number of employees, in line with the sub-section (i) of section 65 of said law
- The project proponent has to pay the wages or salary to the employees in accord with the laws, rules, order and procedures in the suspension period, in line with the sub-section (j) of section65of said law.
- The project proponent has to pay the compensation or injured fees to the respected employees or their inheritors if injury in or loss of part of body or death caused by work, in line with the sub-section (k) of section 65of said law.
- The project proponent has to stipulate the foreign employees to respect the culture and custom and abide by the existing laws, rules, orders, directives, in line with the sub-section (l) of section65of said law..
- The project proponent has to abide by labour laws, in line with the sub-section (m) of section65of said law.
- The project proponent has to pay the compensation to the injured person for damages if damages of environment or socio-economy is occurred by misuse of project, in line with the sub-section (o) of section65of said law.
- The project proponent has to allow to inspect in anywhere of project if Myanmar Investment Commission inform to inspect the project, in line with the sub-section (p) of section65of said law..
- The project proponent has to obtain the permission of MIC before EIA process and report back this process to MIC, in line with the sub-section (q) of section 65of said law.
- The project proponent has to insure the prescribed insurance by rules, under section 73 of said law.

## (6) The Myanmar Investment Rules (2017)

The Project proponent will be followed all necessary information about the investment as,

- The submission of investment in writing
- It shall be signed by a relevant applicant
- A summary of proposed investment submitted under sub rules (c) of rule 36 shall include (a) the investor and other person involving a significant direct or indirect in the investment, (b) the principal location or locations of the investment, (c) a description of the sector and business which the investment is to be made (d) proposed amount of investment, (e) a description of the plan, including expected timetable for the implementation of the investment, (f) the number of employees to be appointed and export earnings from investment, and (g) other information to be prescribed by the Commission from time to time.
- The investor shall comply with all terms and conditions in the permit and other applicable laws when the investment is carried out. Para (202)
- The investor shall fully assist the negotiating processes with the relevant government departments and government organizations for the affected person due to investment plans. Para (203)
- 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. Para (206)
- The investor obtained the permit or tax exemption or relief shall insure the relevant insurance out of the following types of the insurance at any insurance business entitled to carry out insurance business within the Union based on the nature of the business. Para (212)
  - (a) Property and Business Interruption Insurance,
  - (b) Engineering Insurance,
  - (c) Proffessional Liability Insurance,

- (d) Bodily Injury Insurance,
- (e) Marine Insurance; or
- (f) Workmen Compensation Insurance

### (7) The Vacant, Fallow and Virgin Lands Management Law (2012)

The project proponent will follow

The submission for approval of extraction & mining in the vacant, fallow and virgin lands in the country according to the section 4 & 5 of said law,

Section 4: (d)The project proponent will apply the right to utilize land of vacant, fallow and virgin land for the purpose of government allowable other purposes in line with law.

Section 5: (e)The project proponent will apply the right to carry out purpose which is stated in section (4)(d) as joint venture of investors who have right to carry with Myanmar Citizen Investors in accordance with Foreign Investment Law.

Furthermore, the project proponent has committed to follow chapter 16 and 19 of The Vacent, Follow and Virgin Lands Management Law.

Section 16: The project proponent will follow (a) The land granted shall be used for the purpose granted and in relation to economic enterprise, (b) The enterprise shall carry out to completed within four years from the date of grant according to the purpose granted. The rescribed period may be revised by the Central Committee for losing time due to natural disaster and unstable security conditions, (c) Land granted shall not be mortgaged, giving, sold, leasing or otherwise transferred or divided without the permission of the Cabinet of the Union Government. (d)land revenuw shall be paid fully for the land granted (e) With respect to land granted the conditions prescribed by the Central Committee shall be compiled (f) Expect the purpose granted enterprise, exploring other natural resources below and above ground is prohibited, (g) If natural resources are found in the authorized land and the Government being desirous of extracting the same on commercial basic resumes the area required therefrom, it shall be surrendered as directed by the Union Government.

Section 19: The project proponent will cooperate when the Central Committee shall resume the area required in the authorized land, if one of the following situation arises, (a) If ancient culture heritage are found in the authorized land (b) If infrastructure project or Special project are desired to be constructed on the authorized land in the interest of the State, (c) Except the permitted minerals, if other natural resources are found in the authorized land which are permitted for production of mining, (d) If natural resources are found in the authorized land which are permitted for the purposes described in Section 4, Sub—section (a)(b) and (d).

#### (8) Labour Organization Law (2011)

- **Section 17** The project owner has to allow the labour organization to negotiate and settle with the employer if the workers are unable to obtain and enjoy the rights of the workers contained in the labour laws and to summit demands to the employer and claim in accord with the relevant law if the agreement cannot be reached.
- Section 18 The project proponent has to allow the demand for the re-appointment of worker who is dismissed by the employer without the conformity with the labour laws.
- **Section 19** The project proponent has to allow of sending the representatives to the Conciliation Body in settling a dispute between the employer and the worker.
- Section 20 The project proponent has to allow the labour organization to participate and discuss in discussing with the government, the employer and the complaining employees in respect of employee's rights or interest contained in the labour laws.
- Section 21 The project proponent has to allow the labour organization to participate in solving the collective bargains of the employees in accord with the labour laws.
- Section 22 The project proponent has to allow the labour organization to carry out the holding the meetings, going on strike and other collective activities in line with the procedure, regulation ,by-law and directive of relevant Chief Labour Organization .

#### (9) The Settlement of Labour Dispute Law, 2012

The Project Proponent will follows;

- The project proponent has to not absent to negotiation within the stipulated time for complaint, under section 38 of said law.
- The project proponent has to not change the existing stipulations for employees within conducting period before Tribunal, under section 39 of said law and not to close work without firmed reason.
- The project proponent has to not close the work without negotiation, discussion on dispute in accord with this law, decision by Tribunal, under section 40 of said law.
- The project proponent has to pay the compensation decided by Tribunal if violates any act or any omission to damage the interest of labour by reducing of product without efficient cause, under section 51 of said Law.

#### (10) Social Security Law

The Project Proponent will follows;

- The project proponent has to register to the respected social security office, under sub-section (a) of section 11 of said law
- The project proponent has to pay the social security fund for at least four types of social security included in sub-section (a) including sub-sub-section of (a.1 to a.5) of section 15, under section 15 of said law.
- The project proponent has to pay the fund which has to be paid myself and together with the fund which has to be paid from their salary by the employees .Moreover the project owner will pay the cost for paying the above mentioned fund only myself under sub-section (b) of section 18 of said law.
- The project proponent has to pay the fund for accidence, under sub-section (b) of section 48 of said law. (but this fund is not related to workmen compensation)
- The project proponent has to make correctly and submit the list and record provided in section 75 to respected social security office, under section 75 of said law.

#### (11) The Minimum Wages Law 2013

The Project Proponent will follows;

- The project proponent has to pay the wages in line with section 12 of said law.
- The project proponent has to notify the prescribed wages obviously in work place, under sub-section (a) of section 13 of said law.
- The project proponent has to correctly record the lists, schedules, documents and wages and report these to the relevant department and give if these are asked while inspecting, in accord with the stipulations, under sub-section (b)(c)(d) of section 13 of said law.
- The project proponent has to allow to be inspected by the inspector, under sub-section (d) and (e) of section 13 and section 18 of said law.
- The project proponent has to allow holiday for medical treatment if the employee' health is not fit to work, under sub-section (f) of section 13 of said law.
- The project proponent has to allow holidays without deducting from the wages if one of parents or one of family dies, under sub-section (g) of section 13 of said law.

#### (12) Payment of Wages Law 2016

- The project proponent has to pay the wages in accord with the section 3 and 4 of said law, under section 3 & 4 of said law.
- The project proponent has to submit with the agreements of employees & reasonable ground to department if it is difficult to pay because of force majeure included in natural disaster, under section 5 of said law.
- The project proponent has to abide by the provisions of section 7 to 13 in chapter (3) in respect of deduction from wages.

• The project proponent has to pay the overtime fees, prescribed by law, to the employees who work over working hours, under section 14 of said law.

#### (13) The Leaves and Holiday Act (1951)

The project proponent has to allow the leaves and holidays in line with the law.

#### (14) The Revision of the Factory Act 1951 (2016)

The project proponent will follow,

To pay Commercial Tax on the import goods according to the regulation (para.4 A)

To pay Commercial Tax on all export goods according to the regulation (para.5)

To register at nearest township revenue office (para 11)

To submit the quarter and annual revenue statement (para 12 A)

#### (15) Workmen's Compensation Act (1951)

The Project Proponent will follows;

**Section 13** The project proponent has to pay the compensation in line with the provisions of said whole law base on kind of injury and case by case.

# (16) Employment and Skill Development Law (2013)

The Project Proponent will follows;

- The project proponent has to appoint employees with the contract in line with the provision of section 5 of said law.
- The project proponent has to carry out the training programs with the policy of Skill Development Body to develop the employment skill of employees who is appointed or will be appointed, under section 14 of said law.
- The project proponent has to monthly pay to the fund, which is fund for development of skill of employees, not less below 0.5 percentage of the total payment to the level of worker supervisor and the workers below such level, without cutting their salaries, under sub-section (a) of section 30 of said law.
- The project proponent has to deduct from the payment of employees for above mentioned fund, under sub-section (b) of section 30 of said law.

#### (17) Petroleum and Product of Petroleum Law (2017)

- The project proponent has to obtain the license, for importation of the fuel, issued by the Ministry of Commerce and Trade under sub-section (a) of section 7 of said law and abide by the stipulations in the license.
- The project proponent has to abide by the procedure and conditions, which to be safe in transportation and storage, prescribed by the Ministry of Commerce and Trade under sub-section (c) of section 7 of said law.
- The project proponent has to obtain the license for transportation and storage of the fuel under subsection (a) of section 8 of said law and abide by the stipulations in the license.
- The project proponent has to abide by the procedure and conditions, which to be safe in transportation and storage, prescribed by the Ministry of Electricity and Energy under sub-section (d) of section 8 of said law.
- The project proponent has to transport the fuel by the vehicle or vessel which is licensed by the Ministry of Transportation and Communication under sub-section (a) of section 9 of said law.
- The project proponent has to store the fuel in the tank which is licensed by the Ministry of Natural Resource and Environmental Conservation under sub-section (a) of section 10 of said law.
- The project proponent has to show the notice of danger on the tank or container of fuel under section 11 of said law.

#### (18) The Petroleum Rules (1937)

The Project Proponent will follows;

• The project proponent will abide by the provision of chapter (3) of the Petroleum Rules for transportation and the provisions of chapter (4) of said rules for storage.

#### (19) The Traffic Accident Prevention & Motor Vehicles Management law (2020)

The Project Proponent will follows;

The project proponent has to promise to abide by the nearly all provisions of said law and rules, especially the provisions related to air pollution, noise pollution and life safety.

#### (20) The Traffic Accident Prevention & Motor Vehicles Management law (2022)

The Project Proponent will follows;

The project proponent has to promise to abide by the nearly all provisions of said law and rules, especially the provisions related to registration, driving, parking and life safety.

#### (21) The Public Health Law (1972)

The Project Proponent will follows;

- The project owner will cooperate with the authorized person or organization in line with the section 3 and 5 of said law.
- *Section 3* The project proponent has to abide by any instruction or stipulation for public health.
- Section 5 The project proponent has to allow any inspection, anytime, anywhere if it is needed

#### (22) Prevention and Control of Communicable Diseases Law (1995)

The Project Proponent will follows;

- The project proponent has to built the housing in line with the health standards, distribute the healthful drinking water & using water and arrange to systematically discharge the garbage & sewage, under clause (9) of sub-section (a) of section 3 of said law.
- The project proponent has to abide by any instruction or stipulation by Department of health and Ministry of Health, under section 4 of said law.
- The project proponent has to inform promptly to the nearest health department or hospital if the following are occurred: (section 9)
  - (a) Mass death of animals included in birds or chicken:
  - (b) Mass death of mouse;
  - (c) Suspense of occurring of communicable disease or occurring of communicable disease;
  - (d) Occurring of communicable disease which must be informed.
- The project proponent has to allow any inspection, anytime, anywhere if it is need to inspect by health officer, under section 11 of said law.

#### (23) The Myanma Insurance Law

The Project Proponent will follows:

**Section 15** - If the project proponent uses the owned vehicles the project owner has to insure the insurance for injured person.

**Section 16** The project proponent has to insure the insurance to compensate for general damages because the project may cause the damages to the environment and injury to public.

#### (24) The Myanmar Fire Force Law (2015)

- The project proponent has to institute the specific fire services, under sub-section (a) of section 25 of said law.
- The project owner has to provide materials and apparatuses for fire precaution and prevention, under Sub-section (b) of section 25 of said law.

# (25) The Export and Import Law

• The project proponent has to abide by the conditions included in permit, under section 7 of said law.

### (26) The Ethnic Rights Protection Law (2015)

- The project proponent has to follow "No ones will obstruct the favors and rights of ethic without valid reasons".
- The project proponent has to follow "No ones will utilize the description in this law for the political purpose"

- The project proponent has to follow "No ones will act, hate, angle, disagreement among national races".

#### (27) The Ethnic Rights Protection Rules (2019)

- -(A) The project proponent has to disclose clearly in advance, the damage and benefit about the project fully to the residents national races by their language and method to interpret and understanding in the region of the development of proposed project.
  - (B) The project proponent has to follow the policy, objectives, strategies and regulations of Myanmar Sustainable Development Plan-MSDP.
  - -(C) The project proponent has to follow the conducting of the environmental and social impact assessment under the instruction of the respective department to know whether it would causes to the environmental and social life of the residents.
  - -(D) The transparent discussion with the ethinic residents would be conducted at all stages of the impact assessment procedures for the environmental and social development.

#### (28) All Related Laws and Rules enacted by Mandalay Division Region Hluttaw

The project proponent will abide for compilation of all laws enacted by the Mandalay Division Region Hluttaw.

#### (29) Basel Convention

On the control of transboundary movements of hazardous wastes and their disposal

#### (30) The Protection of Biodiversity and Natural Protected Areas Law (2018)

The project proponent has to abide by the conditions included in permit, under section 7 of said law.

To carry out the protection and observation of wildlife, ecosystems an migratory animals in accordance with international convention acceded by the state

To control smuggling or trafficking of wild animals and plants their parts of body and by products

To protect prominent geological site endangered species of wild life and their natural habitats

#### (31) Commercial Tax Law 2014

The project proponent will

- The tax shall be paid for production, import and export
- submit and register about the service and shall furnish a letter of intimidation on the commencement of the operation as such to the relevant township revenue officer as stipulated by regulations.
- Shall furnish an annual return for such year to the township revenue officer within three months after the end of the relevant year

#### (32) The Underground Water Act (1930)

The project proponent has to obtain the license granted by the water officer for sinking the underground water before sinking water, under section 3 of said law

#### (33) The Engineering Council Law (2013)

- The project proponent has to appoint the employees, who obtained the registration certificate issued by the Myanmar Engineering Council, in the technical and engineering work, under section 37 of said law.
- The project proponent has to ensure the employees who are engineers abide to the provisions of Myanmar Engineering Council law, prohibitions included in the rules, order and directive issued under said law, conditions included in the registration certificate issued by the Myanmar engineering council, under section 34 of said law.

#### (34) The Electricity Law (2014)

- The project proponent has to apply necessary permit for electricity use, under section 3-(g), of said law.
- The project proponent shall follow to appoint the skillful person to all installation of electricity system, under section 46 of said law.
- The project proponent shall follow not to connect, waste and utilize the electricity without permission, under section 52 of said law.

#### (35) The Myanmar Standard Law (2014)

• The project proponent has to apply Myanmar standard to use, under the said law.

#### (36) Conservation of Water Resources and Rivers Law (2006)

- The project proponent has to avoid any performing to damage to the river, creek and water resource, under sub-section (a) of section 8 of said law.
- The project proponent has to avoid disposing the fuel, chemicals, toxic substances, other substances and explosive substances from the bank under sub-section (a) of section 11 of said law.
- The project proponent has to avoid disposing any material, which may damage or change the water way, from the bank under section 19 of said law.
- The project proponent has to avoid constructing the toilets, which are not suitable, at the bank under sub-section (a) of section 21 of said law.
- The project proponent has to avoid digging the well or lake and digging the soil without permission of Directorate under sub-section (b) of section 21 of said law.
- The project proponent has to avoid, pile sand, shingle and other heavy materials for business purposes in the bank area and water front area without the permission of the directorate. Section 22 of said law.
- The project proponent has to avoid the violation of conditions stipulated by the Directorate for prevention of water pollution, under sub-section (b) of section 24 of said law.

#### (37) The Control of Smoking and Consumption of Tobacco Product Law (2006)

- The project proponent has to keep the caption and mark referring that is non-smoking area in the project area, under sub-section (a) of section 9 of said law.
- The project proponent has to arrange the specific place for smoking in the project area and keep the caption and mark in accordance with the stipulations, under sub-section (b) of section 9 of said law.
- The project proponent has to supervise and carry out the measures so that no one shall smoke at the non-smoking area, under sub-section (c) of section 9 of said law.

The project proponent has to allow the inspection of supervisory body in the power plant area, under subsection (d) of section 9 of said law.

#### (38) The Protection and Preservation of Antique Objects Law (2015)

Purpose; To ensure the protection of ancient monument and information about it if it was in the project area. This law focuses as follow;

• The project proponent has to inform to the village-tract or ward administrator if any antique objective is found in project area under section 12 of said law.

#### (39) The Protection and Preservation of Cultural Heritage Regions Law (2019)

The project proponent has to be liable and ensure the protection of cultural heritages in the region by cooperating with concerned authorities and local and international organizations.

Purpose: To ensure the protection of cultural heritages and the cultural heritage area from the damage by the natural disaster or man-made. This law focuses as follows;

- Section 13 The project proponent has to apply to get the prior permission of Directorate of Ancient-Research to build the road, bridge or dam in the cultural heritage area.
- Section 22 The project proponent promises not to build the building which is not in line with the stipulations prescribed by the Ministry of Culture in the cultural heritage area.

#### (40) The Protection and Preservation of Ancient Monuments Law 2015

The project proponent has to be liable and ensure the protection of Ancient Monuments in the region by cooperating with concerned authorities and local and international organizations.

Purpose; to ensure the protection of ancient monument and information about it if it is in the project area. This law focuses as follows:

- Section 12 The project proponent has to report to the village-tract or ward administrators if the project proponent will find any ancient monument under the ground or on the ground or under the water.
- Section 15 The project proponent has to obtain the prior permission of Department of Ancient Research Museum if the project area is in the prescribed area of Ancient monument.
- Sub-section (f) of section 20 The project proponent has to obtain the prior permission, by written, of Department of Ancient Research and National Museum if the project proponent dispose the chemical and solid waste in the Ancient Monument area.

#### (41) The Industrial Zone Law (2020)

The project proponent has to follow-

- **Section 7** (o) To get the permission for the construction of building and road and maintenance from the management committee.
- Section 24 The investor has right the following activities (a) production of product, related products, production of packaging material and value added product, (b) distribution of raw material and finished products, road maintenance and upgrading road (c) the services related to the type of investment, (d) trading local or oversea of products from the investment.
- Section 25 The investor will apply the permission for the proposed invested work from the regional committee through the management committee.
- Section 26 The construction should be completed within the proposed period in the respected industrial zone. It would submit and get the decision from the regional committee if the construction is not completed during the proposed period. It would be accepted the revoke if it is found out no solid reason
- Section 27 The investor needed (a) to register at respected department according to law (b) To implement under the instructions of respected departments (c) to inform the progress of investment to the management committee (d) to follow the law, rule, announcement and instruction for the damaged and danger to the public in the industrial zone and under specification products, (e) to follow the law, and instruction at rule at assignment of workers, salary and overtime fee, leave, holiday, occupational safety and health including of getting the right of workers,
- Section 28 The proponent has to follow not only the environmental conservation law, but also the occupational safety and health to prevent health impact.
- Section 29 The project proponent has to follow by informing to the respective departments and the management committee for the starting of operation, closure or round up for financial closure.
- Section 30 The investor needed to follow the laws by informing respective department and management committee when transfer of partial share or whole.
- Section 31 The project proponent needed to inform the status of local and oversea workers employment.

Furthermore, it will follow chapter 16 and 19 of The Vacent, Follow and Virgin Lands Management Law.

### (42) The Private Industrial Enterprise Law (1990)

The Project Proponent will follows;

- Section 4 (a) Any person desirous of conducting any private industrial enterprise;
  - (b) Any person conducting any private industrial enterprise on the day this law is enacted:

by using any type of power which is three horsepower and above or manpower of ten wage-earning workers and above shall registrar under this law.

- Section 13 (h
- (b) shall abide the terms and conditions of the registration certificate;
  - (f) shall shift the place of enterprise, change the nature of enterprise, amalgamate enterprises and split up enterprises only with the approval of the Directorate;
  - (g) shall abide by the orders and directives issued from time to time by the Ministry and Directorate
- Section 15
- (a) appointing foreign exports and technicians with the approval of the Ministry;
- (b) carrying out change of the name of enterprise, transfer of ownership, temporary suspension or permanent closing down of the enterprise in the manner prescribed and with the approval of the Directorate;

# (43) Occupational Safety and Health Law (2019)

The project proponent has to follow under the said law.

- To appoint the person In-charge for occupational safety and health and formation of occupational safety and health committees Section 12 (a)
- To organize occupational health and safety committee to be the occupational health and safety workplace with the equal numbers of employers and employees according to the ministry's instruction at the work place which is not less then numbers of worker classified by the ministry. Section 12(b)
- The function will include (a) checking any conditions that can impair occupational safety and health, (b) advice the employer to lay down precautionary and educational plans in order not to occur occupational accidents, (c) improving the coordination between the employer and workers to get access to facilities and provide training for developing occupational safety and health condition,(d) supervision the relevant risks assessment of occupational safety and health management plan and (e) performing occupational safety and health duties assigned by ministry and department.
- The responsible person for the occupational health and safety has to follow this law, rules, announcement, instruction and regulation, to be the occupational health and safety workplace. Section 14.
- To allow the inspector who is performing the instruction to the respected employer the points to follow and report back to the inspector chief. Section 16.
- To allow the inspector for his performing works of following, (a) to allow any workplaces of entering, checking, enquiring and asking by showing its identity and without warrant. (b) to allow seeing, copping and ceased the doscuments as evidence if it is necessary, for all record of production process, papers and evidances. (c) to allow of taking photo of the process and the workplace condition, which is at danger of the condition of occupational health and safety. (d) to allow assessment and recording for noise, illumination, heat, cold, dust, emission and danger substances for the impact significant and period if it is necessary by the help of subject experts (e) to allow the inspection all workers working in the work time with the help of doctor regarding the condition or the spread out disease. Section 17
- To accept the decision of the inspectors endorsed by the chief of inspector, ordering to stop temporary of the whole or partial workplace due to the occurring or the believe of work dangerness, occupational health, risk of danger, the potential of work danger, to the following condition, (a) it is not suitable to continue of working, due to the not safety workplace, the worker's unsafe working, any present of danger substance or machineries in the workplace, the unsafe machineries layout and working condition (b) it is not suitable to continue by breaking this law, whole or partially or unfollowing (c) the condition of unsafe workplace due to some onelse, failure, negliance, (d) the condition of evacuation due to dangerous working place. Section (18)
- The project proponent will follow (a) to take assessment the significant of dangerness as necessary for the workplace, process, use substance, all machines (b) the condition of dangerness at work (c) to

arrange for check with authorized doctor, for occupational disease spreadout to workers (d) to keep workplace occupational safe and healthy based from the findout of above para (a-c) (e) to supply all PPE endorsed by the ministry of labours enough and allow them to use and work (f) to manage the prevention and evacuation management plan when it is occurred (g) to keep clinic with the supply of necessary medicine and appoint registered doctor and nurses for workplace with the minimum numbers of workers designated by the ministry (h) to arrange of attending the occupational health and safety training class for all committee members of occupational health and safety, workers, management of department including employer itself (i) to manage immediate reporting to the incharge of environmental safety and health or any one to the management (j) to manage not hurting by the process or any substance, machines or wastes to anyones who are working in the workplace (k) to manage of stop working immediately, moving workers, evacuation of workers when it is almost in danger of workplace. Change workers at different safe workplace if it is possible (1) to make and install the instruction of occupational safety and health, danger signs, notices, posters and direction signs (m) to manage of passing the dangerous places by following the prior notice (n) to manage the distribution of occupational health and safety manual palm fleaf and instructions issued by the respective ministries for the knowledge, education, general knowledge and skillfulness (o) to make fire safety management and practice the usage of fire fighting wquipments and training (p) to allow the chief inspectors and inspectors for entering the workplaces, asking of documents and evidences (or) ceasing the evidences (g) to ask workers to work only in the working hours at the unsafe workplaces (r) to bare the cost of environmental safety and health. Section 26

- The project proponent will avoid dismiss or demotion to the workers under the following (a) before getting the doctors remarks for the wounds get in the workplace and suffering from the occupational health disease (b) any complaint or report for any of occupational safety or risk condition of the health impact (c) performing the duty of the occupational safety and health committee (d) not working at the workplace which is possible unsafe working condition or occupactional disease Section 27
- The project proponent has to take responsible the following (a) to inform the case of occupational safety and health, big work injuries to the department (b) to inform the occupational health disease to any workers, any toxic or pobabilties by the using of substance together with the remark of doctor Section 34
- The project proponent will allow (a) inspection of inspectors when they learnt at the time of broke out the work injuries, the occupational health diseases, toxicity at work. (b) not to remove, destroy, inserting, changing to any potion or whole part of documents, the work injuries, the case of dangerness, work diseases, tools and equipments, and places without permission of the chief of inspectors (c) the instruction in the para(b) is not concerned the lives and properties, the safety and evacuation procedures (d) the instruction in the para (b) would be eampted by the chief of inspector the tools and equipments and work places if the condition would be worse than before Section 36

#### **(44)** The Factory Act (1951)

- The project proponent has to abide providing factory clean and free from offensive odor such as from toilet, under section 13 of said law.
- The project proponent has to abide manage without environmental impact while clearing waste, dust and waste water, under section 14 of said law.
- The project proponent has to abide providing factory with clean air ciulation and to keep affordable room temperature, under section 15 of said law.
- The project proponent has to abide providing enough toilets, under section 21 of said law.

#### (45) The Myanmar Immigration (Emergency Provisions) Act (1947)

• The project proponent has follow avoiding foreigner not entering without any passport or document, under section 3 (1) of said law.

# 3.4 Obligations and Commitments

#### The Obligation

The project proponent, committed to fulfil all commitments including the mitigation measures, the environmental management plan and monitoring program as mentioned in this environmental impact assessment report.

#### **Commitment**

The project proponent will follow all laws and rules of mentioned above.

The fund allotment for the environmental management, mitigation of impact and monitoring is allocated. If the allocated fund is not enough it would be submitted to the nearest board of directors meeting for additional fund.

# The Commitments by the Project Proponent and Third Party Organization

The accuracy and complementness of EIA

This EIA has been prepared in strict compliance with applicable laws, procedure and with TOR of EIA.

That the project will at all times comply fully with the commitments, mitigation measures and plans in the EIA report.

In addition and according to the Article 62 of Environmental Regulation, the commitments by project proponent and third party organization would also be inserted in this section as following

- the accuracy and completeness of the EIA and the EMP report;
- that the EIA and the EMP report have been prepared in strict compliance with applicable laws including EIA Procedure Notification No. 616/2015 and with the TOR for the EIA; and
- that the Project will at all times comply fully with the commitments, mitigation measures, and plans in the EIA and EMP Report.

#### The Commitment on Accuracy and Completness of the EIA Report

By following the environmental impact assessment procedures para (from 55-to 65), Kaung Kyaw Say Engineering Co.,Ltd officed in Yangon, leaded the accessment, together with project proponent and submits this Environmental Impact Assessment report in accordance with the environmental law, para 54 of environmental regulation and environmental impact assessment procedure para (24).

This report is completed and compiled with all environmental law, rules, regulation and national effulant guidelines and submits after getting self assessment done by each consultants and experts in their related fields and accreditated.

Mr. Li-Jifeng

General Manager

Gold AYA Motors International Group Co.,Ltd Plot No.B-1-1 of Block Factory Area Zone 2C, Myotha Industrial Park Between Myotha and Nabu Aine village, Ngazun Township, Myingyan District of Mandalay Division Region, Union of Myanmar Mobile 09264808234 U Htun Naing Aung
Chairman/CEO
Kaung Kyaw Say Engineering Co.,Ltd

No. 31 Pinlone Yeikmon, Thingungyun Tsp, Yangon, 11071, Myanmar

# The commitment on report carefully conducted and submitted in strict compliance with applicable laws including EIA Procedure Notification No. 616/2015 and with the TOR for the EIA

Kaung Kyaw Say Engineering Co.,Ltd has leaded the assessment, data collecting & public consultation together with stakeholders and submits this EIA report in strict compliance with applicable laws (environmental law, rule & the environmental impact assessment procedure para (55-65) and national effluent guidelines etc.) including EIA Procedure Notification No. 616/2015 and with the TOR for the EIA.

#### **U Htun Naing Aung**

Chairman/CEO Kaung Kyaw Say Engineering Co.,Ltd No. 31 Pinlone Yeikmon, Thingungyun Tsp, Yangon, 11071, Myanmar

# The commitments by the project proponent to mitigation measures and management plans mentioned in the EIA Report

We, the project proponent, committed to fulfil all commitments including the mitigation measures, the environmental management plan and monitoring program as mentioned in this environmental impact assessment report.

It is committed to conduct least impacts to social environment and to fulfil the mitigation program if there is impact during closure period at the time of project completion.

#### Mr. Li-Jifeng

General Manager

Gold AYA Motors International Group Co.,Ltd Plot No.B-1-1 of Block Factory Area Zone 2C, Myotha Industrial Park Between Myotha and Nabu Aine village, Ngazun Township, Myingyan District of Mandalay Division Region, Union of Myanmar Mobile 09264808234

#### Signature (Representative of the project proponent)

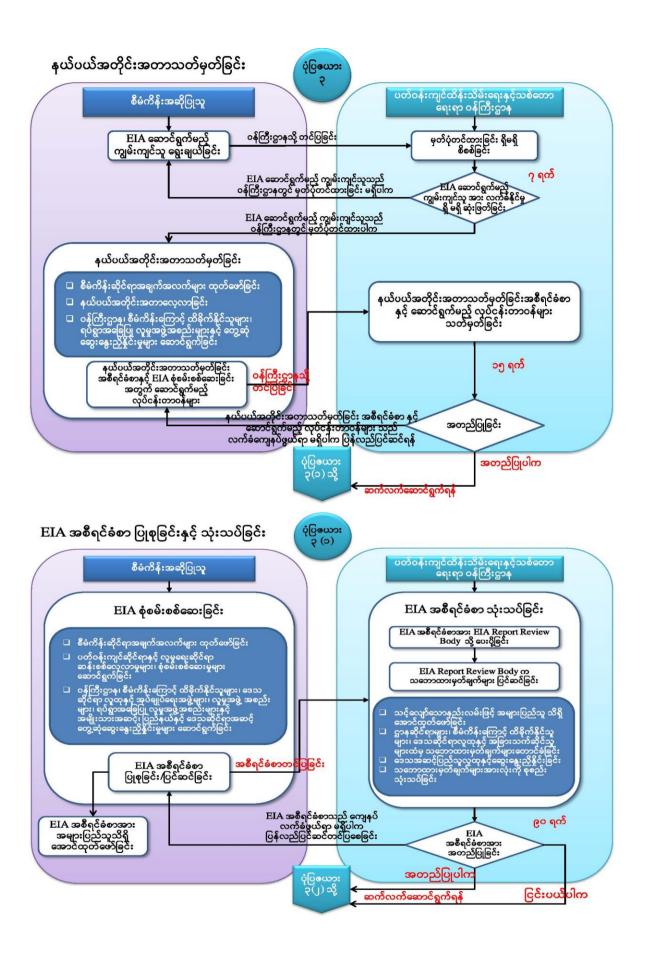
- I, the undersigned Proponent (or representative, there of), hereby state that the information provided in/with the application and the report ensure;
- a) the accuracy and completeness of the Scoping report;
- b) that the Scoping report have been prepared in strict compliance with applicable laws including EIA Procedure Notification No. 616/2015 and with the TOR for the EIA; and
- c) that the Project will at all times comply fully with the commitments, mitigation measures, and plans in the EIA and EMP Report.

Signature:	submission: (dd/mm/yyyy)	
Name:		

**Table 7 The Summary of Commitments** 

Commitment in Brief	No.	Description of Commitment	Reference in Report (Chapter)
Declaration of report is completed and accredited.		This environmental impact assessment (EIA) and environmental management program (EMP) report is submitted after getting self assessment done by each consultants and experts in their related fields and accreditated.	Chapter (3.4) (m-2)
Confirmation of EMP report is compiled with all environmental law, rules, regulation and national effulant guidelines.	2	This report is compiled with all environmental law, rules, regulation and national effulant guidelines.	Chapter (3.4) (က-၂)
Commitment to fulfil all commitments to the mitigation program & monitoring program as mentioned in this environmental management program report	3	The Project proponent has fully understand all description in this report and Committed to fulfil all commitments to the mitigation program & monitoring program as mentioned in this environmental impact assessment and environmental management program report	Chapter (3.4) (ω-ρ)
Commitment to conduct at least impacts to social and to fulfil the mitigation program during closure period at the time of project completion.	4	The project proponent had committed to conduct at least impacts to social and to fulfil the mitigation program during closure period at the time of project completion.	Chapter (3.4) (σ-ρ)
Commitment to submit the regular monitoring report	5	The project proponent has committed to submit the regular monitoring report to the ministry every 6 months according to the regulation of environmental impact assessment procedures para (108).	Chapter (8.16)
Commitment to finance to CSR program	6	The project proponent had committed to refinance for CSR program if the allotment is not enough by submitting proposal to the nearest BOD meeting and get approval.	Chapter (8.20)(9.4)
The Project Proponent will follow Laws, Rules, Regulations.		The project proponent had committed to follow Laws, Rules, Regulations described in Chapter 4	Chapter 4 Pg.67

# 3.5 Organizational Framework



**International Conventional Agreement Table 8 International and Regional Agreement and Conventions** 

Tabl	e 8 International and Regional Agreement and Conventions	
N.T		Year (Ratified/
No	Conventions	Acceded/
F .		Accepted)
	ronment	
1	Plant Protection Agreement for the Southeast Asia and Pacific Region, Rome 1956	1959
		(Ratified)
2	MARPOL: International Convention for the Prevention of Pollution from Ship 1937 and	1988
	MARPOL Protocol of 1978	(Accession)
3	ICAO: ANNEX 16 of the Convention on International Civil Aviation Environmental	Accession
	Protection Vol. I and II, Aircraft Noise and Aircraft Engine Emission	
4	Agreement on the Network of Aquaculture Centers in Asia and the Pacific, Bangkok 1988	1930
	Tigite ment on the Tietwork of Figure artists of Figure and the Fueric, Bunghok 1900	(Accession)
5	Vienna Convention for the protection of Ozone Layer, Vienne 1985	1993
	, , , , , , , , , , , , , , , , , , ,	(Ratification)
6	Montreal Protocol on substance that Deplete the Ozone Layer, Montreal 1987	1993
	1 ,	(Ratification)
7	London Amendment to the Montreal Protocol on Substances that Deplete the Ozone	1993
	Layer, London 1990	(Ratification)
8	United Nations Framework Convention on Climate Change (UNFCCC), New York 1992	1994
	control of the contro	(Ratification)
9	Convention on Biological Diversity, Rio de Janeiro 1992	1994
		(Ratification)
10	The Convention Concerning the Protection of the world Cultural and Natural Heritage,	1994
	Paris 1972	(Acceptance)
11	International Tropical Timber Agreement (ITTA), Geneva 1994	1997
11	international Tropleal Timoet Agreement (11 171), Geneva 1991	(Accession)
12	United Nations Convention to Combat Desertification in Those Countries Experiencing	1997
12	Serious Drought, Paris 1994	(Accession)
13	Convention on International Trade in Endangered Species of Wild Fauna and Flora	1997
13	· · · · · · · · · · · · · · · · · · ·	(Accession)
1.4	(CITES), Washington DC 1973; and as amended in Born, Germany 1979	
14	ASEAN Agreement on Conservation of Nature Resources, Kuala Lumpur, 1985	1997
15	Kyoto Protocol to the Convention on Climate Change, Kyoto 1997	(Signatory) 2003
13	Ryoto I fotocol to the Convention on Chinate Change, Ryoto 1997	(Accession)
16	ASEAN Agreement on Trans-boundary Haze Pollution	2003
10	ASEAN Agreement on Trans-boundary Traze I officion	(Ratification)
17	Stockholm Convention on Persistent Organic Pollutants (POPs), 2001	2004
1,	stockholm convention on resistent enganter on attacks (1 er s), 2001	(Accession)
18	Ramsar Convention on Wetlands of International Importance	2005(Accessio
		n)
19	Establishment of ASEAN Regional Center for Biodiversity	2005
		(Signatory)
20	Declaration on ASEAN Heritage Parks	2003
		(Signatory)
21	International Treaty on Plant Genetic Resources for Food and Agriculture, 2001	2004
		(Ratification)
22	Catagena Protocol on Biosafety, Cartagena, 2000	2001
		(Signatory)
23	Agreement to Promote Compliance with International Conservation and Management	1994
	Measure by Fishing Vessels on the High Seas, Rome, 1973	(Acceptance)
24	United Nations Conservation on the Law of the Sea, Montego Bay, 1982	1996
		(Ratified)
25	Agreement Relating to the Implementation of Part XI of the United Nations Convention	1996
	on the Law of Sea of 10 December 1982, New York, 1994	(Accesion)
26	Convention on the Prohibition of the Development, Production, Stockpiling and Use of	1993
-	The state of the s	

	Chemical Weapons and their Destruction Paris, 1993				
27	Treaty on the Prohibition of the Emplacement of Nuclear Weapon and other Weapons of				
	Mass Destruction on the Sea Bed and Ocean Floor and in the Subsoil there of, London,				
	Moscow, Washington, 1971				
Soci	Social, Labour and Health				
28	Universal Declaration of Human Rights (UNDHR)	Signed			
29	9 Convention on the Right of the Child				
		(acceded)			
30	Convention on Elimination of All Forms of Discrimination against Women (CEDAW)				
		(acceded)			
31	Relevant ILO Conventions in force in Myanmar				
	C1 Hours of Work (Industry)				
	C14 Weekly Rest (Industry)				
	C17 Workmen's Compensation (Accidents)				
	C19 Equality of Treatment (Accident Compensation)				
	C26 Minimum Wage Fixing Machinery				
	C29 Forced Labour Convention				
	<ul> <li>C42 Workmen's Compensation (Occupational Diseases) Revised1934</li> </ul>				
	C52 Holidays with Pay				
	C87 Freedom of Association and Protection of the Right to Organize				

# 3.6 Objective of Environmental and Social Standard

# National Environmental Quality (Emission) Guide lines 2015

• The project proponent has to emit, discharge or dispose in line with the standards stipulated in said guideline.

National Environmental Quality (Emission) Guidelines (NEQG) for waste, water, noise level and environmental monitoring parameters are referenced in this EIA report.

#### **Air Emissions**

As it has potential impact to get effected to the embient air quality by the nature of normal operation stage of the proposed project, it is needed to be complied with the air emission standard described in Chapter 1. Para.1 of NEOEG.

Table 9 Air Emissions (EOEG) (Environmental Quality Effluent Guide Line)

Parameter	Average Period	Guideline Value mg/Nm <sup>3</sup>
Nitrogen dioxides (NO <sub>2</sub> )	1 Year	40
	1-hour	200
Ozone	8 hour daily	100
	maximum	
Particulate matter PM <sub>10</sub> <sup>a</sup>	1 year	20
	24 hour	50
Particulate matter PM <sub>2.5</sub> <sup>b</sup>	1 year	10
	24 hour	25
Sulfur dioxide (SO <sub>2</sub> )	24 hours	20
	10 minute	500

<sup>&</sup>lt;sup>a</sup>Particulate metter 10 micro meters or less diameter

#### **Effluent Water Quality**

Industrial Wastewater Effluent Guideline Value

Target level of Effluent Water Quality in the Project

<sup>&</sup>lt;sup>b</sup>Particulate metter 2.5 micro meters or less diameter

**Table 10 Effluent Levels (General Application) Guide** 

Parameter	Unit	Guideline Value
5 day Biochemical oxygen	mg/l	50
demand		
Ammonia	mg/l	10
Arsenic	mg/l	0.1
Cadumm	mg/l	0.1
Chemical oxygen demand	mg/l	250
Chlorine (total residual)	mg/l	0.2
Cromium (hexavalent)	mg/l	0.1
Cromium (Total)	mg/l	0.5
Copper	mg/l	0.5
Cyanide (free)	mg/l	0.1
Cyanide (total)	mg/l	1
Cyanide (free)	mg/l	0.1
Fluoride	mg/l	20
Heavy Metal (total)	mg/l	10
Iron	mg/l	3.5
Lead	mg/l	0.1
Mercury	mg/l	0.01
Nickel	mg/l	0.5
Oil and grease	mg/l	10
рН	S.U <sup>a</sup>	6-9
Phenol	mg/l	0.5
Silver	mg/l	0.5
Sulfide	mg/l	1
Temperature increase	C°	<3 <sup>b</sup>
Total coliform baterial	100ml	400
Total phosphorus	mg/l	2
Total suspended solids	mg/l	50
Zinc	mg/l	2

<sup>&</sup>lt;sup>a</sup> Standard Unit

#### **Default Environmental and Social Considerations**

The project proponent set default environmental and social considerations based on the project components.

To install septic tank to treat wastewater from construction camp

To make tenants secure a commitment to install pre-treatment facilities for neutralization, oil separation, removal of toxic and heavy metals etc.

# **Quantitative Target Levels for Consideration of Surrounding Environment Effluent Water Quality**

Industrial Wastewater Effluent Guideline Value

Target level of Effluent Water Quality in the Project

#### **Noise**

**Construction Phase** 

The noise standard of construction activities to receptors in Myanmar would be as followings.

Noise prevention and mitigation measures should be applied where predicted or measured noise impacts from a project facility or operations exceed the applicable noise level guideline at the most sensitive point of reception. Noise impacts should not exceed the levels presented below or result in a maximum increase in back ground levels of 3dBA at the nearest receptor location off-site.

<sup>&</sup>lt;sup>b</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

**Table 11 Noise Standard** 

Dagantan	One Hour LAeq (dBA)		
Receptor	Day Time 07:00~22:00	Nigh time 22:00~07:00	
Residential, institutional, educational	55	45	
Industrial, Commercial	70	70	

# **Operation Phase**

Same as above

# **Vibration**

Construction Phase

There is no vibration standard of construction activity to receptors in Myanmar as well as south East Asia and International Organizations such as WHO and IFC.

Operation Phase

There is no vibration standard to receptor near factories in Myanmar as well as South East Asia and International Organization such as WHO and IFC.

# 4. Description of Project and Alternatives

Type of Project: This project is the vehicle assembling plant and it is the type of the project supporting to the transportation sector.

This project is a kind of project to support nation's poverty reduction and increasing GDP. It is needed not only for the region but also for the country as a supporting project to economic sector development. The following supporting documents are attached on the annexes.

- 1. Remarks by concerned stakeholders and authorities from concerned government
- 2. The remarks and supporting by the near by project and project affected people

## 4.1 Project Background

Gold AYA Motors International Group co., Ltd established in June 2017, is a joint venture between Shining Star International Holdings Ltd from Hong Kong, Mr. Qian Haifang from Peoples Republic of Chaina, and U Ye Htut Lin from the Republic of the Union of Myanmar by investing share of 60%, 20% & 20% respectively. The registered country of the company is the federal republic of Myanmar, with an authorized capital of 50,000,000 USD. The production base is located in block b-1-1 in zone 2C, Myotha Industrial Park, central Mandalay Division Region, Myanmar.

The Myanmar Investment Commission has approved the proposed project in the terms of project period as 50 years commencing from the date of issuance permit of 27<sup>th</sup> March, 2018. The terms of lease agreement for land and buildings shall be the same as MIC permitted period with 2 times of 10 years each for extension.

The Mandalay Myotha Industrial Park connects the Asian expressway, the Asian railway network, the Irrawaddy river, the international airport and so on.

Company production base covers an area of 81278.36 square meters (20.084 acres). The first phase of construction covers an area of 14537.89 square meters, including 3658.28 square meters of showroom buildings, 2728 square meters of dormitory buildings and 8151.61 square meters of factory buildings.

This project would be developed not on the new land but the existing land of total area of 10337 Acres for development of industrial zone including industrial warehouse and logistic development.

#### **Need for Project**

With the changes on politically and socially, Myanmar is potential country to be developed with its rich in natural and human resources. However, Myanmar is needed to be developed transport sectors to be in line with the development of social and economic by production of consumer's products and industrial based products even it is agricultural, natural and human resources based country.

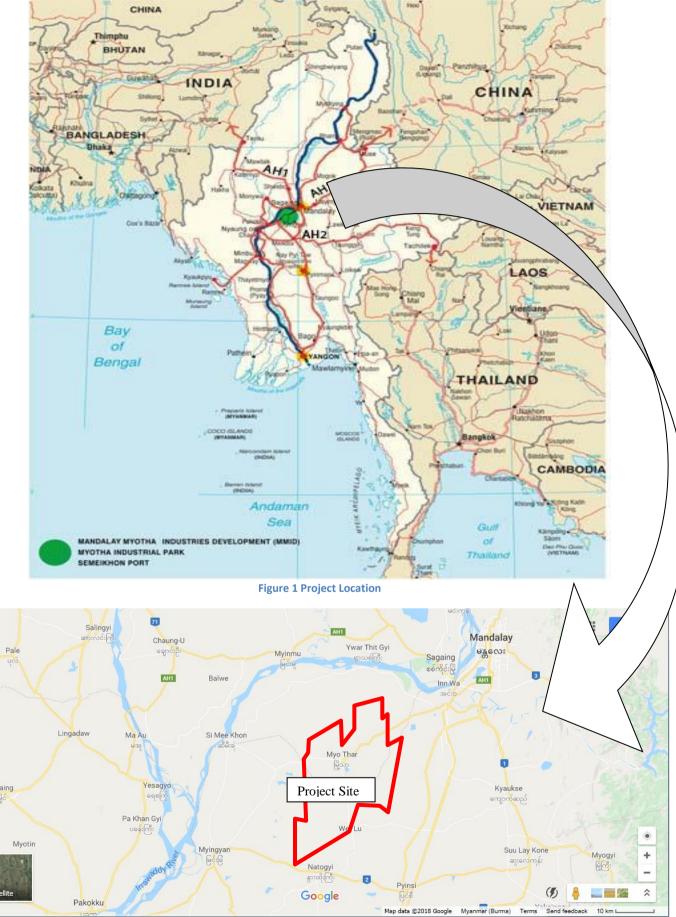
Regarding to this situation, it is needed motor vehicles not only for the region but also for the country as a supporting project to economic and social sector development.

#### 4.2 Project Location, Area Map of covering whole project, Work Lay out plan

The project located in the Ngazun township is positioned on the Global Polarize System of 21°43′52" N and 95°37′30"E. Myo Thar Industrial Park is near a town named as Myo Tha (Ngazun Township) in Mandalay Division Region which is 36 miles away from Mandalay and 45 miles away from Mandalay International Airport.

The company and production base is located in block b-1-1 in zone 2C, Myotha industrial park, Mandalay Division Region, Myanmar.

The industrial park connects the Asian expressway, the Asian railway network, the Irrawaddy river, the international airport and so on. It is positioned on the Global Polarize System of 21°43′52" N and 95°37′30"E. Ngazun is a town in Mandalay Division Region and 46miles from Mandalay International Airport.



**Figure 2 Project Location on Google Map** 

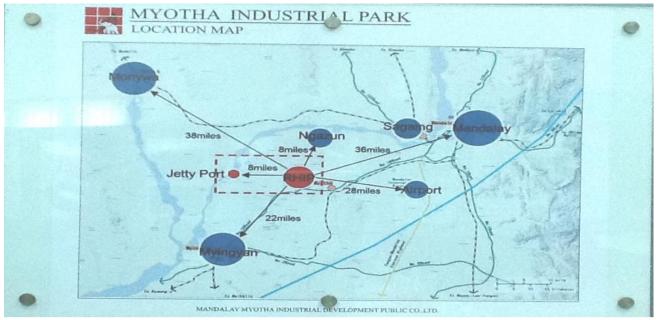


Figure 3 Myothar Industrial Park Layout

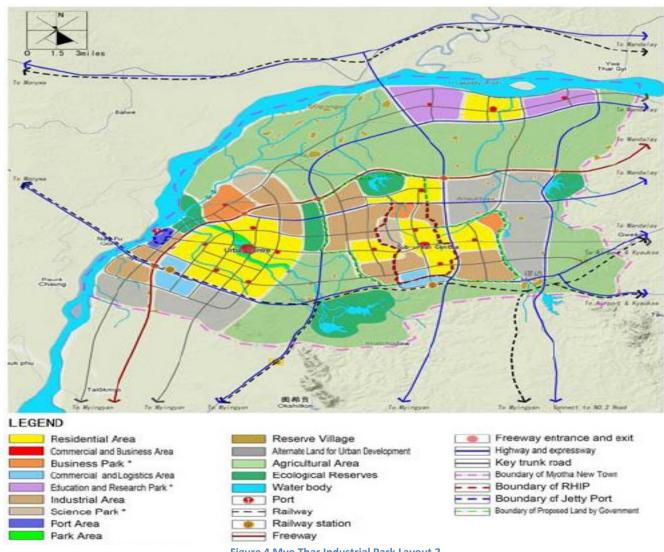


Figure 4 Myo Thar Industrial Park Layout 2



Figure 7 Project Location (Google Image Zoom 3)

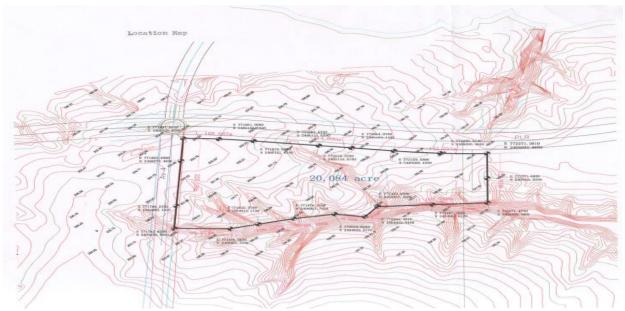


Figure 8 Fcatory Location (ACR Coordinates)1

# 4.3 Project Development and Implementation Schedule

This Motor Assembling Factory Project is to be implemented by Gold A Y A Motor International Group Co.,Ltd. It is engaged in BAIC DaoDa and BAIC ChangHe brand automobile product, sales, after-sales service and automobile finance.

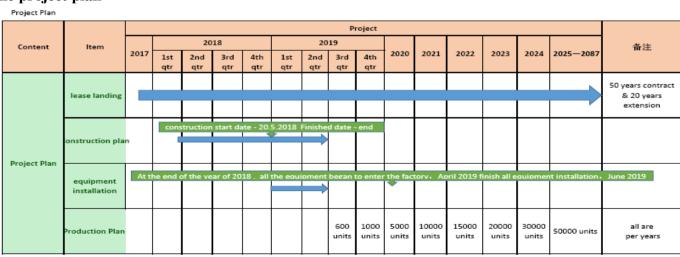
At present, the company plans to produce more than 7 models of 7 categories, including (1)household cars, (2)SUV,(3) MPV, (4)Commercial Vehicles, (5)Pickups, (6)Special vehicles and (7)New Energy Vehicles etc. Sales plan in Mandalay and Yangon have branch company offices. Main business covers sales, dealer network development, marketing, after-sales service, customer relationship management, new energy car business, public relations, human resources, finance, IT, purchasing, etc.

The company started its legal formation and construction in 2018 and planned to ready for the manufacturing of vehicles by the end of 2019. The production and manufacturing of vehicles is planned 50 years from 2000 until 2087 which is expected to get 20 years of extension.

The date of construction start: 25-6-2017 The date of installation start: 27-3-2018 The date of operation start: 25-6-2019

The project proponent has planned to continue the operation when the land least is expired by renewing the least contract and upgrating the plant and facilities & equipment etc.

#### The project plan



When the land lease expires, the company will continue to lease the land, upgrade the plant, upgrade the equipment and upgrade the products, and continue to operate

After completion of these factories, there would be developed industrial sector with employment opportunities and increasing of GDP personally and nationally.

The total of 26 workers are needed except foreign experts during construction period which is opportunities for local people.

It is expected to create about 80% of 100 jobs opening for local people at this factory when it is in the normal production stage. (Workforce of 110 locals and 15 foreign experts are described on MIC proposal)

# **Propose Schedule of Implementation,**

There will be 2 project phases to be implemented. Phase I,

- 1. Car show room and office 3storeys building (29618 sq.ft 174 ft 3inches x 99ft 5 inches)
- 2. Accomodation and Canteen (Domitory)4 storeys building (28644sq.ft 139ft 7 inches, 52ft 11inches)
- 3. Factory (Workshop) 1 storey building (78296 sq.ft 494ft 1inch, 158ft 6inches)

Phase II,

Factory (Workshop) 1 storey building 2 nos.

(The construction progress recorded on 24.4.18)







(The construction progress recorded on 1.5.21)



# 4.4 Size of Project, Layout, Applied Technology, Raw Materials, Finished Products, Utilities, Waste Development, Emission, Impacts, Employment List

# Conceptual Project Layout and Components,

The project will consist of 2 phases approach to build and operate a world class environmentally protected motor vehicles assembling in the industrial zone.

The first phase of the project is outlined in detail in this proposal and consists of a show room, dormitory and workshop.

**Table 12 Building Requirement** 

No.	Phase	Item	Qty	Size
		Car show room and office 3storeys building	1	(29618 sq.ft ) (174 ft 3inches x 99ft 5 inches)
1	Phase I	Accomodation and Canteen (Domitory)4 storeys building	1	(28644sq.ft ) (139ft 7 inches, 52ft 11inches)
		Factory (Workshop) 1 storey building	1	( 78296 sq.ft) (494ft 1inch, 158ft 6inches)
2	Phase II	Factory (Workshop) 1 storey building	2	( 78296 sq.ft) (494ft 1inch, 158ft 6inches)



The following is the actual effect drawing after the completion of the factory, which is divided into showroom, staff dormitory building, production workshop.



Figure 10 The Conceptual Project Layout

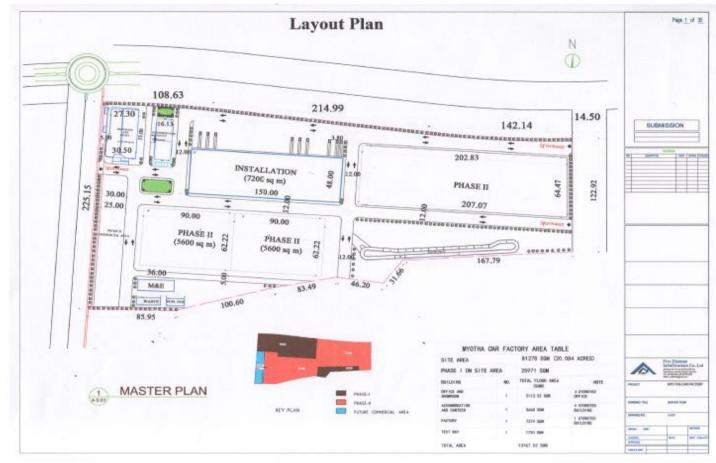


Figure 11 The Project Layout Master Plan

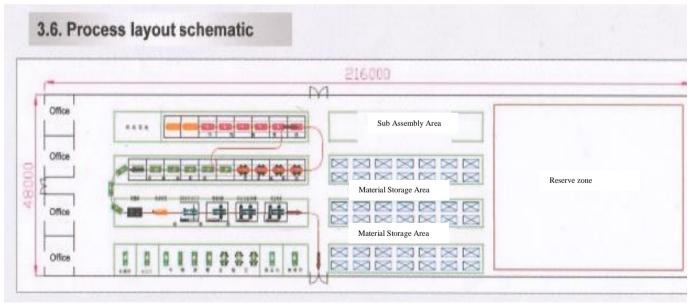


Figure 12 Schematic Layout Plan in the Factory

#### The Applied Technology

Due to the Trade Marks License Agreement between BAIC International Development and Gold A Y A Motors International Group Company Limited, the production technology would be provided by the mother company in Chaina which is complied by the international standard.

The general process of the motor assembling is as following.

- 1. Interior trim
- 2. Chassis Assembly
- 3. Integrated Assembly

#### 4. Offline Detection

The company intends to bring the available technology developed by BAIC Co.,Ltd and parts manufactured in China compatible with the local condition for higher safety and lower environmental impact. It is expected to produce 5,000 vehicles annually with all importing parts at the early stage and replace with locally available items of vehicle parts for later year to help the local production.

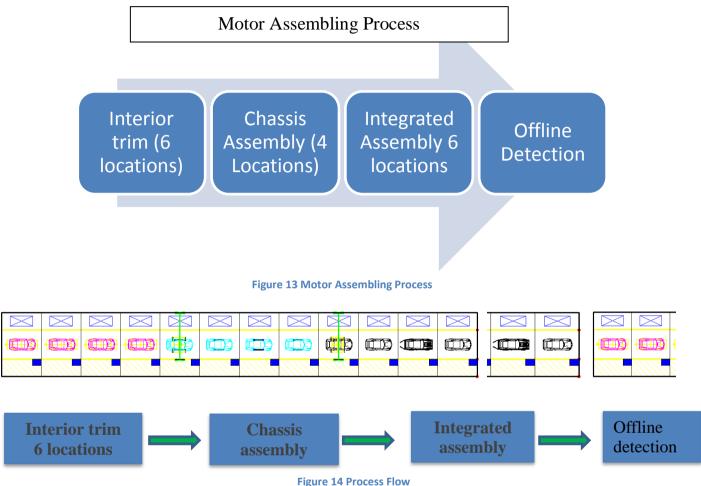


Figure 14 Process Flow

### The Detail of Assembling Plant

There are 6 locations in the interior trim section, 4 locations in the chassis assembly, 6 locations in integrated assembly and 7 locations in the offline detection section. The details of the locations are as following.

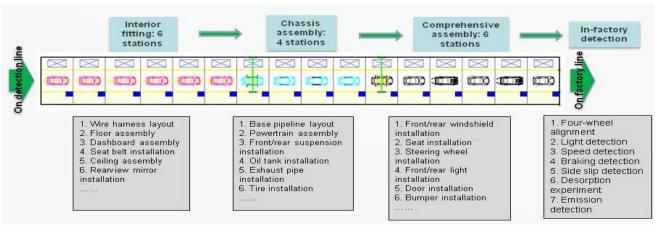


Figure 15 The Detailed Job Located in the Process Flow of Final Assembling

### The Illustration of Parts of SKD vehicle

No.	KD module	1 2 3 4
1	Module-based supply includes the painted body assembly	
2	Powertrain	10
3	Front suspension assembly	
4	Rear suspension assembly	
5	Steering system assembly	10
6	Exhaust pipe assembly	
7	Seat assembly	
8	Wheel assembly	9 8 7
9	Door assembly	
10	Other sub-assemblies	

- Standard parts: The standard parts shall be supplied in bulk with the purposes and quantity provided by the company;
- Main and auxiliary materials: The engine oil, gearbox oil, brake fluid, cooling liquid, air-conditioning liquid, bath of glass and process accessories are provided in bulk or locally purchased according to the company's technical standards and details.

Figure 16 The Illustration of Parts

### The Zoning of work and Production Equipment used

Name of program	Detailed contents	Conveying equipment	Picture sample
Zone for preassembly and detection	Set up two preassembly and detection stations, manually push to the stations and mainly check the visual quality of the body before put on the detection line.	Push manually	
Interior assembly line	Set up six assembly stations and adopt the mode of track limits + manual pushing of the process trolley; Mainly complete the assembly of the body wiring harnesses, footcloth, ceiling, dashboard and Interior panels, etc.	Wide strip chain	1000
Chassis assembly line	Set up four assembly stations and adopt the EMS mode to complete station conveyance; Mainly complete the base pipeline layout, powertrain final assembly, fuel tank fitting and wheel assembly, etc.	EMS	
Final assembly line	Set up six assembly stations and complete on-line conveyance by using unilateral narrow strip chains. Mainly complete assembling the front-end module, seats and other assemblies and complete oil filling and relevant other tasks.	Unilateral narrow strip chains	
Detection line	Provide four-wheel alignment, light detection, speed detection, brake detection, side slip detection, desorption experiment, emission detection and other detections for complete performance testing.	1	
Showeringroom	Rainfalltest	1	
Commercialization area	Commercialization test	1	行
Repair area	It shall be competent for repairing the interiors, chassis, electric appliances and paint, etc.	1	

Figure 17 The Zoning of Work and Production Equipment Used

### **The Planning Principles**

- ◆ Abide by such general principles as follows: The requirements of the production capacity can be satisfied with the process quality featuring high conformity and affordability;
- The technological level shall meet the product accuracy requirements and adapt to the corresponding production programs; moreover, the current design tries to use such a production mode featuring small amount of mechanization subject to no automation on the premise of ensuring the production capacity and quality;
- ◆ Try to consider the future needs for series production of various categories and organize necessary flexible production lines:
- Adhere to the principle of "less input, more output", narrow the scale of investment and try to select the domestic simplified
  equipment that can meet the requirements for accuracy and efficiency;
- ◆ The current investment budget mainly includes the investment in the process equipment and production tools, etc., not including that in civil engineering and plant construction;
- ♦ Establish a comprehensive quality assurance system, strengthen the quality control means during the production and set up necessary areas for after-sales services and adjustment:
- This workshop is designed for small batches of flow process, its plane layout should make the logistics as reasonable as
  possible and the logistics distribution can meet the demands of the production capacity.

### The Raw Materials

All major raw materials are imported from China as shown below and the local purchase are also shown as following.

Table 13 The Raw Materials to be imported for Vehicle Model Q35

No.	Item	HS Code	Yr.1	Yr.2	Yr.3	Yr.4	Yr. 5-10
1	Engine Assembly Transmission & Clutch System		480	1,200	2,400	3,600	18,000
2	Welding Painted Body with including Chassis Group (W/O installation of combination meters, interior, Trimming Parts, Lamps, wind shield and wireness)	8707	480	1,200	2,400	3,600	18,000
3	Front Axles/Front Independent Suspension/Rear Axles	8708	480	1,200	2,400	3,600	18,000
4	Suspension Component	8708	480	1,200	2,400	3,600	18,000
5	Steering Wheel and Related	8708	480	1,200	2,400	3,600	18,000
6	Exhaust System	8708	480	1,200	2,400	3,600	18,000
7	Wheels & Tyres	4011	480	1,200	2,400	3,600	18,000
8	Seat Assembly	9401	480	1,200	2,400	3,600	18,000
9	Trimming Parts, Dashboard, Instrument Panel, Windshield, Wire harness and other Assories	8708	480	1,200	2,400	3,600	18,000
10	Door Group (Front and Rear) without assessories	8708	480	1,200	2,400	3,600	18,000

Table 14 The Raw Material to ne imported for Vehicle Model M20S

No.	Item	HS Code	Yr.1	Yr.2	Yr.3	Yr.4	Yr. 5-10
1	Engine Assembly Transmission & Clutch System		200	500	1,000	1,500	4,500
2	Welding Painted Body with including Chassis Group (W/O installation of combination meters, interior, Trimming Parts, Lamps, wind shield and wireness)	8707	200	500	1,000	1,500	4,500
3	Front Axles/Front Independent Suspension/Rear Axles	8708	200	500	1,000	1,500	4,500
4	Suspension Component	8708	200	500	1,000	1,500	4,500
5	Steering Wheel and Related	8708	200	500	1,000	1,500	4,500
6	Exhaust System	8708	200	500	1,000	1,500	4,500
7	Wheels & Tyres	4011	200	500	1,000	1,500	4,500
8	Seat Assembly	9401	200	500	1,000	1,500	4,500
9	Trimming Parts, Dashboard, Instrument Panel, Windshield, Wire harness and other Assories	8708	200	500	1,000	1,500	4,500
10	Door Group (Front and Rear) without assessories	8708	200	500	1,000	1,500	4,500

Table 15 The Raw Material To be imported for Vehicle Model Q7

	<u> </u>						
No.	Item	HS Code	Yr.1	Yr.2	Yr.3	Yr.4	Yr. 5-10
1	Engine Assembly Transmission & Clutch System		0	400	800	1,000	3,000
2	Welding Painted Body with including Chassis Group (W/O installation of combination meters, interior, Trimming Parts, Lamps, wind shield and wireness)	8707	0	400	800	1,000	3,000
3	Front Axles/Front Independent Suspension/Rear Axles	8708	0	400	800	1,000	3,000
4	Suspension Component	8708	0	400	800	1,000	3,000
5	Steering Wheel and Related	8708	0	400	800	1,000	3,000
6	Exhaust System	8708	0	400	800	1,000	3,000
7	Wheels & Tyres	4011	0	400	800	1,000	3,000
8	Seat Assembly	9401	0	400	800	1,000	3,000
9	Trimming Parts, Dashboard, Instrument Panel, Windshield, Wire harness and other Assories	8708	0	400	800	1,000	3,000
10	Door Group (Front and Rear) without assessories	8708	0	400	800	1,000	3,000

Table 16 The Raw Materials to be imported for Vehicle Model M60

No.	Item	HS Code	Yr.1	Yr.2	Yr.3	Yr.4	Yr. 5-10
1	Engine Assembly Transmission & Clutch System	8407	160	400	800	1,200	6,000
2	Welding Painted Body with including Chassis Group (W/O installation of combination meters, interior, Trimming Parts, Lamps, wind shield and wireness)	8707	160	400	800	1,200	6,000
3	Front Axles/Front Independent Suspension/Rear Axles	8708	160	400	800	1,200	6,000
4	Suspension Component	8708	160	400	800	1,200	6,000
5	Steering Wheel and Related	8708	160	400	800	1,200	6,000
6	Exhaust System	8708	160	400	800	1,200	6,000
7	Wheels & Tyres	4011	160	400	800	1,200	6,000
8	Seat Assembly	9401	160	400	800	1,200	6,000
9	Trimming Parts, Dashboard, Instrument Panel, Windshield, Wire harness and other Assories	8708	160	400	800	1,200	6,000
10	Door Group (Front and Rear) without assessories	8708	160	400	800	1,200	6,000

**Table 17 The Raw Materials to be imported for Vehicle Model A6** 

No.	Item	HS Code	Yr.1	Yr.2	Yr.3	Yr.4	Yr. 5-10
1	Engine Assembly Transmission & Clutch System		80	200	400	600	3,000
2	Welding Painted Body with including Chassis Group (W/O installation of combination meters, interior, Trimming Parts, Lamps, wind shield and wireness)	8707	80	200	400	600	3,000
3	Front Axles/Front Independent Suspension/Rear Axles	8708	80	200	400	600	3,000
4	Suspension Component	8708	80	200	400	600	3,000
5	Steering Wheel and Related	8708	80	200	400	600	3,000
6	Exhaust System	8708	80	200	400	600	3,000
7	Wheels & Tyres	4011	80	200	400	600	3,000
8	Seat Assembly	9401	80	200	400	600	3,000
9	Trimming Parts, Dashboard, Instrument Panel, Windshield, Wire harness and other Assories	8708	80	200	400	600	3,000
10	Door Group (Front and Rear) without assessories	8708	80	200	400	600	3,000

Table 18 The Raw Materials to be imported for Vehicle Model V8

No.	Item	HS Code	Yr.1	Yr.2	Yr.3	Yr.4	Yr. 5-10
1	Engine Assembly Transmission & Clutch System		40	100	200	300	1,500
2	Welding Painted Body with including Chassis Group (W/O		40	100	200	300	1,500
3	Front Axles/Front Independent Suspension/Rear Axles	8708	40	100	200	300	1,500
4	Suspension Component	8708	40	100	200	300	1,500
5	Steering Wheel and Related	8708	40	100	200	300	1,500
6	Exhaust System	8708	40	100	200	300	1,500
7	Wheels & Tyres	4011	40	100	200	300	1,500
8	Seat Assembly	9401	40	100	200	300	1,500
9	Trimming Parts, Dashboard, Instrument Panel, Windshield, Wire harness and other Assories	8708	40	100	200	300	1,500
10	Door Group (Front and Rear) without assessories	8708	40	100	200	300	1,500

**Table 19 The Raw Materials to be imported for Vehicle Model K9** 

No.	Item	HS Code	Yr.1	Yr.2	Yr.3	Yr.4	Yr. 5-10
1	Engine Assembly Transmission & Clutch System		40	100	200	300	1,500
2	Welding Painted Body with including Chassis Group (W/O installation of combination meters, interior, Trimming Parts, Lamps, wind shield and wireness)	8707	40	100	200	300	1,500
3	Front Axles/Front Independent Suspension/Rear Axles	8708	40	100	200	300	1,500
4	Suspension Component	8708	40	100	200	300	1,500
5	Steering Wheel and Related	8708	40	100	200	300	1,500
6	Exhaust System	8708	40	100	200	300	1,500
7	Wheels & Tyres	4011	40	100	200	300	1,500
8	Seat Assembly	9401	40	100	200	300	1,500
9	Trimming Parts, Dashboard, Instrument Panel, Windshield, Wire harness and other Assories	8708	40	100	200	300	1,500
10	Door Group (Front and Rear) without assessories	8708	40	100	200	300	1,500

**Table 20 The Item to be purchased locally** 

No.	Model	Item	Yr.1	Yr.2	Yr.3	Yr.4	Yr. 5-7
1	Q35	(1)Wheel & Tyre Assembly (2)Battery	480	1,200	2,400	3,600	18,000
2	A6	(1)Wheel & Tyre Assembly (2)Battery	80	200	400	600	3,000
3	M60	(1)Wheel & Tyre Assembly (2)Battery	160	400	800	1,200	6,000
4	V8	(1)Wheel & Tyre Assembly (2)Battery	40	100	200	300	1,500
5	K9	(1)Wheel & Tyre Assembly (2)Battery	40	100	200	300	1,500
6	Q7	(1)Wheel & Tyre Assembly (2)Battery	-	400	800	1,000	3,000
7	M20S	(1)Wheel & Tyre Assembly (2)Battery	200	500	1,000	1,500	4,500

**Table 21 The Electrical Equipments (Local Purchase)** 

No.	Item	HS Code	Qty
1	Transformer	8404	2
2	Generator	8503	2
3	AC arc Welder	8538	3
4	Electric Hammer	8467	8
5	Power Reammer	8467	2

### **The Products (Models)**

BAIC Change He Q35 will be put into production this year. BAIC ChangeHe Q7 plans to produce Baic road K9 later.







Models	Overall dimensions L×W×H (mm)	Gearbox	Displacement	Wheelbase (mm)	Curb weight (kg)
Q35 Small SUV	4286×1815×1665	4AT	1.5L	2560	1270
M60 7-seat MPV	4800×1824×1718	CVT	1.5T	2760	1445
D50 Saloon car	4582×1794×1486	CVT	1.5L	2670	1240
V8 7-seat MPV	4900×1830×1890	5MT(AT/CVT)	2.0L(2.4L,2.0T)	2950	1800
K9 Pick up	5646×1880×1824	5MT(AT/CVT)	2.0T(2.4L,2.8L)	3406	1995
Q7, 7 Seats SUV	4655×1855×1720	6MT/CVT	1.5L/1.5T	2670	1400
M20S, 7 Seats MPV	4440×1770×1780	5MT -	1.5L	2790	1270

**Table 22 The Production Capacity** 

Annual Capacity	Annual Working Days	Shifts	Single Shift Working Hours (h)	Device Mobility	ЈРН
5,000	250	1	8	/	2.5

Remarks:

: All products (100%) would be sent to local market only.

### **Table 23 The Production Statement**

No.	Particulars	Specification	AU	Yr.1	Yr.2	Yr.3	Yr4	Yr5- Yr10
1	CHANGHE Q35SUV	1.5L Elite Version, AT, Smart Version	No.	480	1,200	2,400	3,600	18,000
2	CHANGHE M60MPV-1.5 T Standard	1.5T Standard	No.	160	400	800	1,200	6,000
3	CHANGHE A6 Sedan Car	CTV Elite Version	No.	80	200	400	600	3,000
4	DODA V-8-MPV	Business Type	No.	40	100	200	300	1,500
5	DODA K9-Pick-up	4 x 4, Diesel Version	No.	40	100	200	300	1,500
6	CHANGHE Q7-SUV	CTV , Luxury Version	No.	-	400	800	1,000	3,000
7	CHANGHE M20S MPV	5MT Standard	No.	200	500	1,000	1,500	4,500
	Total Production			1,000	2,900	5,800	8,500	37,500

Remarks: :Due to the market demand, BAIC Change He Q35 will be put into production this year (2019). BAIC ChangeHe Q7 plans to produce Baic road K9 later.

#### The Utilities

A. Fuel (Diesel & Petrol)

All required fuel would be purchased locally for initial test running of vehicles.

B. Lubricant

All required lubricant would be purchased locally for initial test running of vehicles.

C. Electricity

The electricity would be consumed from the grid system provided by Ministry of Electricity and Energy while own disel generating set is stand by for the black out period.

D. Water

Water is utilized from the tube well. (4"dia x 2 nos.)

**Table 24 The Estimate Fuel & Lubricant Requirement for Test Run (Initially)** 

	No.Car	ltr/car	Total	
Diesel	40	4	160	
Patrol	960	4	3840	
Lubricant	1000	2	2000	

Table 25 The Estimate of Utilities Requirement per year

		Utilities Requirement (per year)					
No.	Description	Fuel Requirement (Ltr.)		Electricity	Water		
		Diesel	Patrol	Lubricant	(KWh)	(Gals)	
1	Workshop	160	3840	2000		10,000	
2	Office	-	-	-	5,500,000	3,300	
3	Showrom	-	-	-	3,300,000	3,300	
4	Domitory	-	-	-		168,000	
5	Diesel Generator	36000	_	40	_	100	
	Total	360160	3840	2040	5,500,000	185,600	

### Waste Development,

The nature of project is just assembling of vehicles and there are some places or process which could be generated waste but could be minimal harmful to the environment.

### The solid Waste

The potential solid waste generation comes from the unpackaging of all imported vehicle parts, such as cardboards, empty cartoon boxes, plastic packaging materials, papers, workers' personal waste, organic and household wastes from the dormitory etc.

**Table 26 The solid Waste Generation** 

No.	Process	Content and Introduction	Type of Waste	Estimated Amount (Kg)
1	Preassemble inspection area	All required parts of the vehicle are collected, unpacked and checked at two pre-installed inspection stations set up which are manually traced to this station. Most of these packing materials will be left at the store room area.	Packing Paper, Plastic, Cartoon Box, Steel wire strip	100 Kg per day
2	Interior Line	There are six assembly stations at this interior line section to complete the content of the body. The waste generation at this section is less than preassembling section as the packing materials are removed such as body wire harness laying, carpet, item shed, instrument	Packing Paper, Plastic, Cartoon Box, Steel wire strip	10Kg per day

		panel and interior trim panel.		
3	Chassis Line	Four loading stations were set up, and the stations were transported by EMS.To complete the lower body of the pipeline teaching equipment, powertrain assembly, fuel tank.Wheel assembly drawing.	No solid waste at this station	-
4	Final Loading Line	Tilting position, the transmission of wire body adopts modules, seats, etc.ER sores plate chainWarping and oil injection tasks.	No solid waste at this station	-
5	Detection Line	Including four-wheel positioning, light detection, speed detection, braking test, side sliding test, desorption test and emission test 1 test, etc.	No solid waste at this station	-
6	Rain Room	At this stage only shower test is made. No solid waste at this station	The dust and sediment at the recycling system would be source of solid waste (wet) in some time of 3 to 6 months interval	1 Kg per batch (3~6 month)
7	Check Field	No solid waste at this station by commodity inspection	No solid waste at this station	-
8	Back Shop	No solid waste at this station for interior decoration, chassis, electrical appliances, paint repair ability	No solid waste at this station	-
9	Office	Office Domestic Solid Waste	Papers, Cans, Boxes, Plastic, Printer Ink Bottle Waste etc.	5 Kg per day
10	Showroom	Visitors	Papers, Cans, Boxes, Plastic	5 Kg per day
11	Domitory	Worker's personal & domestic waste, Kitchen Waste	Papers, Cans, Bottles, Plastic, Boxes, Food Waste etc.	20 Kg per day
			Total	130

# **The Waste Water**

The waste water generating from this project mainly from the domestic sewer that would comes from the shore room, office, factory and dormitory while there is no waste water from vehicle assembling process as the showering process water is recycled and reused.

**Table 27 The Estimate Waste Water** 

No.	Description	Item	Estimation (m <sup>3</sup> per day)	Remarks
1 337 1 1	Rain Test/ Shower Station	-	Recycling	
1	Workshop	Paint Shop	-	Recycling
		Toilet	0.15	40gals/dayx250=10,000gal/yr
2	Showroom	Toilet	0.05	
3	Office	Toilet	0.05	
1	Dormitory	Toilet	0.05	
4		Shower	1.5	

		Laundry	0.9	
		Kitchen	0.1	Grease Trap
Ī	Total		2.8	

#### The Rain Test, Car Wash

The complete assembled cars are check in the Rain Test for leaking of water during rain. This makes washing car action before painting process.

The water using for car wash in the rain test, car wash booth is recycle method as shown below. The water is filled in the ground tank under the car wash system. It is suck by the water pressure pump and spray on the car to wash. and It would not discharge. The washed water are returned to the ground tank by gravity and ready for next washing cycle. The detailed description about the system working is shown on the annex. It is clearly shown that the water is recycled to the washing process. There are 3 level of water tank to separate the sediment and installed with sediment suction pump to discharge only the sediment in the car wash system. No water is discharged from the rain test, car wash system.

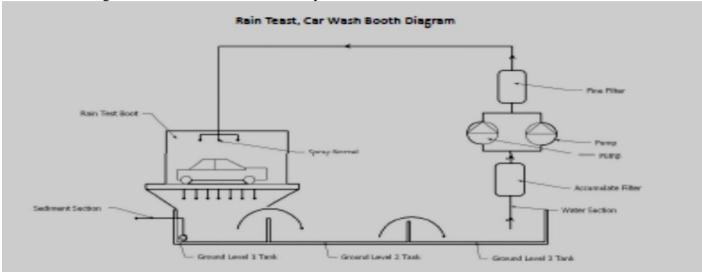


Figure 18 Rain Test, Car Wash System Diagram

#### The Paint Booth

The paint booth is attached the air circulation system which has the filter and water scrubber before releasing the exhaust air into atmosphere. The water using for water scrubber is recycling and not discharged from the system. The sediments are checked regularly and discharge to city development committee by on call basic when it is needed. The paint booth diagram is shown below.

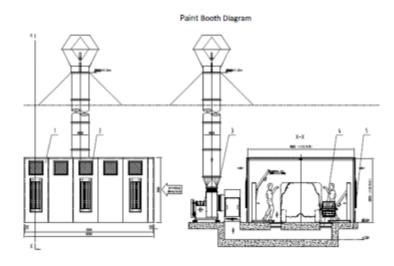


Figure 19 Paint Booth

### **Emission and Impacts,**

There are no emissions from the assembling process. However, the engine test and driving test could create the emission from the vehicle together with the visitor's vehicles and employee's personal cars and or ferry buses. The impacts from the vehicle testing would be more analysed in the next impact assessment chapter.

The emission from the cooking at the dormitory would also be considered.

The typical fuel combustion process in an automobile can be described by the general equation as follow, where a fuel air mixture reacts is burned towards the production of carbondioxide and water.

Fuel + Air →  $CO_2$  +  $H_2O$  + energy + others (CO,  $NO_xSO_2$ , PM, HC)

Fuel consumption	CO	CO <sub>2</sub>	NOx	HC	PM
9 l/100km (gasoline)	0.24g/km	214g/km	0.02g/km	0.01g/km	NA
6.5 l/100 km (gasoline)	0.1  g/km	153g/km	0.013 g/km	NA	0.0024 g/km
5 l/100km (diesel)	0.1  g/km	132 g/km	0.377 g/km	NA	0.03 g/km

CO= carbon monoxide, CO2 carbon dioxide, NOx= nitrogen oxides, HC= hydrocarbon, PM= particulate matter, NA=no data available

### **Traffic, Transportation & Logistics**

The main transportation & logistics would becomes as following;

- Trucks for inward transportation of assembly parts and Raw materials
- Truck for outward transporation of Finished Products (individual or logistic by car carrier)
- Vehicles and cars for transportation of employees, workers, visitors etc.
- Trucks for outward transportation of waste and scrap materials

# Table 28 The List of Employment

No	Item	Qty
	Foreigner	
1	General Manager	1
2	Senior Project Manager	1
3	Marketing Director	1
4	Manufaccturing Manager	1
5	Technical Manager	1
6	Finance Manager	2
7	Engineer	8
	Total	15
	Local Personal	
1	Technical Manager	2
2	HR Manager	1
3	Final Assembly Manager	1
4	Process Quality Controller	4
5	Repair Area Staff	4
6	Detection Line Staff	6
7	Showering Room Staff	4
8	Commercialization Staff	2
9	Sale Department & Show Room Staff	30
10	Assembly Worker	35
11	Logistics Distribution Staff	6
12	Security	5
13	Cleaner	5
14	Driver	5
	Total	110
	Grand Total	125

### 4.5 Alternatives for Pre construction, Construction, Operation, Closure and Clousure Stages

The alternative would be considered at Location of Project Site Selection, Construction Method, Technology, Material Use, Production Process and No Project etc. It would also be considered for Pre Construction, Construction, Operation, Factory Closure stages.

### The Project Site (Location) Alternatives

Even though it is widely believed that there are always alternatives, however it is not always right about this philophy at concerning the location of the project as it is also subjected to all incentives applicable to MIC & MMID. This project is based on the plot of the industrial zone which is no location alternatives to similar. The proposed project site is located in an area which is devoid of any biodiversity including forestry, wildlife, migratory birds, game reserves (flora and fauna) or protected species of fauna & flora. There is no culture and or any other heritage in the project area and industrial park. There is no environmental sensitivity in the project area.

The proposed project location is determined to be the best convenient location and the minimal environmental and social impacts due to the project implementation. It is;

The best geographic location and

The best strategic place for the Project

### The Construction Alternatives (Pre, During, Closure Stages)

This project is designed and analysed pre-feasibility at international standard including the selective from all alternatives in terms of both the project (design, technology, operation and closure plan etc.) and site location. The assessment of project alternatives and site selection includes environmental and social factors and "no project" secenarios.

As there is a not exposed to any natural hazard, the concrete construction would have been applied in the foundation. During the design stage, the project contractor had chosen the construction technology which is best met Myanmar and Chinese standard on project schedule, safety and quality as well as the economic benefit to the local community & labor sources addition to the Chinese esperts. As the project is planned for the vehicle manufacturing 50 years from the date of MIC approval with extanable 10 years of 2 times which is total 70 years, the alternative to the closure plan should also be adjusted with all applicable laws and legal procedures at that time.

### **Technology Alternatives**

During construction stage, the building & facility constructions would be used environmental friendly such as avoiding or minimizing of noises by the construction machineries, water spraying during earth work and foundation to minimize dust and air pollution, etc.

For manufacturing stage, the technology is not a new one. It is just duplication of existing automobile assembling plant in China under license agreement and best choice of manufacturing technic. Hense, it also has no alternatives on production technology.

### **Alternative of Material Use**

As an alternative of material used in the production, it is planned to use locally available parts of the vehicle such as battery and tyres and accessories such as fuel and lubricant in the early stage of the years of production (1<sup>st</sup> year to 3<sup>rd</sup> year) by the ratio of 99.71% to 0.29% of imported and local product respectively. It is planned to utilize 100% local products at the later years (approximately after 10 years). This would help to promote local brand car production in Myanmar.

The following table shows the plan of alternative use of local products.

**Table 29 The Planned Alternative Material Used** 

No.	Year of Production	Imported Part (%)	Local Product (%)	Remarks (Local Products)
1	1 <sup>st</sup> ~3 <sup>rd</sup> Year	99.71%	0.29%	Battery
2	4 <sup>th</sup> Year	96.64%	3.36%	Battery, Tyres
3	5 <sup>th</sup> Year	76.00%	24.00%	6 pieces of white body assembly incl; floor, roof, welding

				Assembly Jig, Painting Equipment w/o ED coating
4	6 <sup>th</sup> Year	65.00%	35.00%	Floor Welding Assembly
5	7 <sup>th</sup> Year	61.50%	38.50%	Roof Welding Assembly
6	8 <sup>th</sup> Year	51.00%	49.00%	Left and Right Side Wall Welding Assembly
7	9 <sup>th</sup> Year	38.00%	62.00%	Left and Right Side Wall Welding Assembly (Additional)
8	10 <sup>th</sup> Year	18.50%	81.50%	Electric static Coating, Complete Coating System
9	11 <sup>th</sup> Year on ward	0%	100%	Achieving 100% local production

#### **Alternatives of Production Process**

The alternative to the production process is considered to the Preassemble Inspection, Interior Line, Chassis Line, Final Loading Line, Detectio Line, Rain Room, Check Field, Back Shop etc. The detailed consideration is shown in the table of below for selection of alternative (I) and (II).

**Table 30 The Alternatives on Planned production Process Technology** 

Scheme's name	Planned Technology	Alternatives(I)	Alternatives(II)
Preassemble inspection area	The quality of the body appearance is mainly carried out before going on line check.	No inspection area	Two pre-installed inspection stations are set up, which are manually traced to this station.
Interior Line	+ manual pointing trolley technology to complete the content assembly of the body body wire harness laying, carpet, item shed, instrument panel and interior trim panel.	are set up, and the line	Six assembly stations are set up, and the line body transportation adopts the track limit
Chassis Line	To complete the lower body of the pipeline teaching equipment, powertrain assembly, fuel tank. Wheel assembly drawing.	Two loading stations were set up, and the stations were transported by EMS.	Four loading stations were set up, and the stations were transported by EMS.
Final Loading Line	Tilting position, the transmission of wire body adopts modules, seats, etc. ER sores plate chainWarping and oil injection tasks.	No Alternatives	Tilting position, the transmission of wire body adopts modules, seats, etc. ER sores plate chainWarping and oil injection tasks.
Detection Line	Including four-wheel positioning, light detection, speed detection, braking test, side sliding test, desorption test and emission test 1 test, etc.	No Alternatives	Including four-wheel positioning, light detection, speed detection, braking test, side sliding test, desorption test and emission test 1 test, etc.
Rain Room	Shower test	No Shower Test	With Shower Test
Check Field	Commodity inspection	No Inspection	With Inspection
Back Shop	Line vehicles have interior decoration, chassis, electrical appliances, paint repair ability.	No Paint Repair	With Paint Repair

### "No Project" or "Do Nothing" alternative,

If there is no such project or do nothins, all the land would be the same as usual such as not agriculturalable land. Myanmar will continue to import vehicles which are including used cars (trashed stage cars in Japan) in the developed contries such as Japan, USA and others for the future needs. It could be mostly dependent on world economy and exchange rate fluction. Furthermore, it could not improve Myanmar's trade deficit and remain susceptible to high automobile prices. The regional development could not be expected without this project. No employment opportunity would be occurs. No personal imcome generation, no GDP growth and no revenue to the budget. It is worse than project implementation as the environmental impacts are manageable or no impact. In addition, There will be "No" transfer of technology associated with installation, operation of the equipment and vehicles and saving the foreign exchange etc hence this no project alternative is chosen.

### **4.6 Conparism of Alternatives**

Table 31 The Comparism of Alternatives and Selected Technology

	Comparism of altertern	natives and its out comes				
Scheme's name	Alternatives(I)	Alternatives(II)	Selected Technology			
Preassemble inspection area	No inspection area (would be inaccurate for inspection of parts before assembling)	Two pre-installed inspection stations are set up, which are manually traced to this station. (more accurate on default parts an quality)	Two pre-installed inspection stations are set up, which are manually traced to this station. The quality of the body appearance is mainly carried out before going on line check.			
Interior Line	Four assembly stations are set up, and the line body transportation adopts the track limit (Weak assembling stations)	Six assembly stations are set up, and the line body transportation adopts the track limit (Better accurate and dynamic assembling stations)	Six assembly stations are set up, and the line body transportation adopts the track limit + manual pointing trolley technology to complete the content assembly of the body body wire harness laying, carpet, item shed, instrument panel and interior trim panel.			
Chassis Line	Two loading stations were set up, and the stations were transported by EMS. (Weak assembling stations)	Four loading stations were set up, and the stations were transported by EMS. (Better accurate and dynamic assembling stations)	Four loading stations were set up and the stations were transported by EMS. To complete the lower body of the pipeline teaching equipment, powertrain assembly, fuel tank. Wheel assembly drawing.			
Final Loading Line	No Alternatives	Tilting position, the transmission of wire body adopts modules, seats, etc. ER sores plate chainWarping and oil injection tasks.	Tilting position, the transmission of wire body adopts modules, seats, etc.ER sores plate chainWarping and oil injection tasks.			
Detection Line	No Alternatives	Including four-wheel positioning, light detection, speed detection, braking test, side sliding test, desorption test and emission test 1 test, etc.	Including four-wheel positioning, light detection, speed detection, braking test, side sliding test, desorption test and emission test 1 test, etc.			
Rain Room	No Shower Test (No shining vehicle for sale)	With Shower Test (More attractive to the buyers)	Shower test			
Check Field	No Inspection (possibly default items)	With Inspection (Perfect to sales w/o missing anythings)	Commodity inspection			
Back Shop	No Paint Repair (Possible customer complaint leading for refund)	With Paint Repair (Perfect product and get customer's trust)	Line vehicles have interior decoration, chassis, electrical appliances, paint repair ability.			

In summary, all alternatives are strictly considered from the design stage until the closure stage covering technology, safety, economically and all impacts on environmental and social. The proposed project plan and all applied technologies are among the best alternatives which could lead to the sustainability to the project implementation. However, it is opened to all advance technology at all times for further development.

### The Results of study and the comparism to the alternatives

There was no difculties to implementing the project on the proposed land which are lowgrade agriculturable land to make beneficial economics.

The brief on each and everyones which is potential significance environmental harmful due to the selection of these alternatives

The selected project is the best choice of among the alternatives and the reasons of why these are selected among the alternatives, are described as follow.

- The project proposed to be constructed in the Myothar Induatrial Zone is the best suitable location
- As it is the project supporting to the local development, the communities are enthusiastic to support
- It is more beneficial and economical as it is agriculturable land
- It is difficult to get the same size of land

Project Time & Work Schedule Pre-construction, Construction and Operation Stage

No	Description	Project Period								
		2017	2018	2019	2020~24	2025~87				
A	Pre-construction	<b></b>								
В	Construction Stage	<b>→</b>								
C	Operation Stage									
1	Production & Maintenance		_			<b>—</b>				
2	Environmental Management and Waste			_						
	Management									
3	Monitoring				-	<b></b>				

### 5. Description of Environment

Myanmar is one of the nations with huge potential to develop not only by its rich in natural resources but also with its changes on politically and economically. It is creating job opportunity and chances of income generation and revenue to the nation by its foreign direct investment based on natural and human resources.

In this section, all the following areas are to be specified to get the particular attention to be paid to the direct or indirect impacts. The base line or the background information on the local environment as well as on other environmental assessments, the environmental issues to be considered by covering Physical environment, Biological Conditions and Social-economic conditions etc.

The objectives of this study were:

- A) to know the current status of the biodiversity of the study sites, and
- B) to contribute the habitat mapping of each species.

The description of environment and the detailed assessment would be done under the topic of following.

- Administration
- Physical Component
- Biological Component
- Social component
- Economic Component
- Cultural Component

#### 5.1.Area Boundaries of Assessment

#### **Setting the Study Limits**

Due to the time and financial limitation, the study of the environmental and social impact assessment for this project is limited only for proposed area of the phase I & II of factory construction. It is mainly for the factory area and production stage. However, the study would be covered within 3 miles radius from the project site for social impact assessment.

The area covered for the assessement is shown which is in about 3 miles radius from the project site.

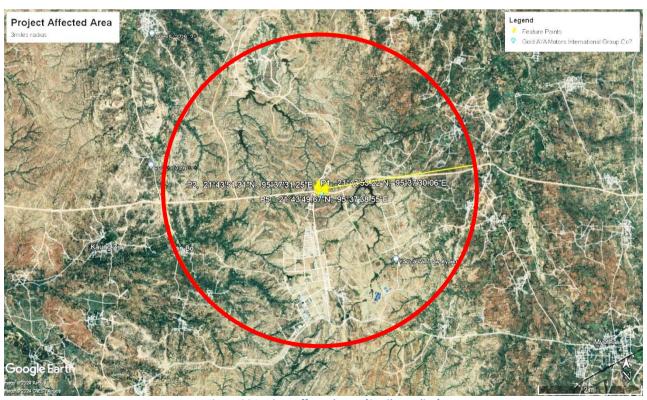


Figure 20 Project Affected Area (3 miles radius)

### 5.2.Methodology for Data Collection and Sampling Analysis

Taking field assessment data as primary data and collect data from other sources would be used as secondary data such as meteorological data and local data of General Administration Department.

Mapping Methodology for Data Collection and Analysis should be followed to the law, regulation and guide line which is enacted by the Ministry of Natural Resources and Environmental Conservation.

EMP is based on consideration of resource conservation and pollution abatement such as water/air pollution, solid/liquid/harzadous waste, noise/dust emission and social economic impact including occupational health and safty. All data collection and analysis should be followed by the Environmental law, Regulation and Guide lines enacted by Ministry of Natural Resources & Environmental Conservation. A Global Positioning System (GPS) is used for the navigation the location of the project site with counter check on Google map position with appreciation of internet access. In order to obtain the essential ecological and biological datas, the field surveys records and photos taken on ground are considered for the record. All species of flora and fauna encountered at any time during the field surveys have been added to the total list of species. The primary and secondary informations collected during assessment would be also used for the cumulative impacts calculation for the project.

The site survey and field survey and data collection during investigation and assessment were performed by the KKS's study team for all environmental and social issues as base line data from possible sources and reliable instrutements and devices. The necessary lab test was also made with laboratories for clarification and confirmation.

### 5.3.Data on Geogrophy, Hydrology, Climate, Forestry

It is in the Mandalay Division Region, Myin Chan District, Nganzun Township, Myo Thar Industrial Zone. The factory is organized in the Myothar Industrial Zone Administration.

### Location

Nganzun Township is located between 21°53′52″N ~21°54′44″N and 95°26′45″~ 95°45′04″N E. (*Ref; 2019 Ngazun township data book*) The total area is 355.991 square miles with the length of 21 miles from east to west and 20 miles long from the north to south. It is located Myin Mu Township about 10 miles at the north, Tadar Oo Township about 14 miles at east, Ngwa Tho Gyi Township about 19 miles at south and Myin Gyan Township abouth 21 miles at west respectively. The project is located at 21°43′52″N and 95°37′30″E. It is 640 ft above from the sea level. It is 28 mile from Mandalay International airport and 36miles from Mandalay. The total area is 81,341.254 square meters (20.084 Acres).



### **Project Function**

The project is just the manufacturing and assembly of motor vehicles and no other service will be planned to be conducted.

### Climate/Meteorology

It is in the tropical zone with tropical savana climate & low pricipitation. The highest day temperature is 42°C and coolest night temperature is 12°C respectively. (from Nganzun Township Regional Datas Book 2018 May-2)

**Table 32 The Weather Data Recorded** 

No	Year	Precip	itation	Tempera	ture (C°)
140	1 Cai	Days	Inch	Highest	Coolest
1	2014	49	27.73	42	12
2	2015	55	30.17	42	12
3	2016	51	40.40	44	11
4	2017	61	40.58	43	12
5	2018	58	38.0	48	12

(from Nganzun Township Regional Datas Book 2018 May-2)

**Precipitaion Record (inch)** 

		20	12	20	)13	20	14	20	15	20	16	20	17	20	18	20	)19	20	20	20	21
No	Month	Day	Rainfall(in)																		
1	Jan	1	0.43	1	0.04	-	-	4	1.02	1	-	1	-	3	1.57	2	2.6	-	0.04	-	
2	Feb	-	-	1	-	1	0.28	1	-	1	1	1	-	-	-	1	-	-	-	1	0.51
3	Mar	1	0.16	1	-	-	1	2	0.39	1	1	1	0.08	-	-	1	0.04	-	-	1	-
4	Apl	6	4.94	2	2.87	7	3.39	5	3.74	2	0.99	7	5.35	4	0.87	-	-	3	0.75	5	6.06
5	May	4	2.53	9	3.95	7	6.94	6	6.54	9	3.66	8	7.63	5	4.61	5	3.07	7	6.14	7	3.27
6	Jun	2	1.89	6	2.44	4	1.81	1	0.21	6	2.87	5	1.42	6	2.24	5	4.8	5	6.18	5	1.73
7	Jul	3	0.72	2	0.28	5	2.18	9	2.95	6	2.09	8	3.98	2	1.02	3	0.99	6	4.68	9	5.08
8	Aug	6	1.19	6	2.17	9	4.27	4	1.34	10	7.32	10	6.18	6	3.82	10	10.82	7	1.86	9	4.57
9	Sep	10	3.92	14	13.58	9	6.92	4	2.01	11	9.84	7	3.43	6	4.29	6	3.66	5	1.57	12	5.12
10	Oct	15	2.14	13	11.22	5	2.91	11	9.8	9	5.28	14	8.78	12	9.26	6	3.35	8	4.21	7	1.66
11	Nov	2	0.36	-	-	2	2.28	2	1.06	7	2.56	4	1.85	1	0.08	5	4.13	5	3.59	1	0.36
12	Dec	1	0.08	-	-	-	-	1	0.08	-	-	2	0.16	2	0.74	-	0.04	-	-	1	0.20

Temperature Record (C°)

	npera	tuit	Action (C)																		
	h		Temperature (C°)																		
No	Month	20	12	20	13	20	14	20	15	20	16	20	17	20	18	20	19	20	20	20	21
	Ž	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min
1	Jan	29.5	13.0	31.1	12.6	30.6	13.3	30.4	15.8	29.5	12.1	31.3	13.8	29.0	14.5	29.4	14.5	29.9	14.3	32.0	16.0
2	Feb	34.3	14.1	34.8	15.8	33.5	15.0	33.9	13.7	34.0	16.0	34.9	16.5	33.3	16.0	33.8	16.5	33.2	15.2	34.2	17.0
3	Mar	36.2	20.0	38.4	21.7	37.5	19.4	38.0	24.0	37.5	19.1	36.8	19.8	36.7	20.6	36.0	20.4	37.4	20.5	38.0	21.5
4	Apl	38.0	20.41	39.9	24.9	38.4	23.8	37.6	21.8	41.0	24.1	36.6	24.8	37.7	24.4	40.3	25.8	38.5	24.9	37.6	25.9
5	May	38.3	25.4	36.3	25.5	36.8	25.7	38.6	24.8	37.7	24.1	37.5	25.9	36.8	25.7	40.0	27.8	38.9	26.8	38.0	26.5
6	Jun	35.9	25.6	36.0	26.0	37.2	26.4	37.6	25.5	35.0	24.8	35.1	26.0	33.7	26.0	36.0	26.7	36.3	26.8	36.4	26.9
7	Jul	34.5	25.4	35.0	25.0	36.2	26.0	34.6	24.9	34.1	26.3	33.7	25.6	35.1	26.4	34.8	26.6	36.0	26.7	35.3	26.4
8	Aug	35.4	25.2	34.5	25.1	35.4	24.3	33.6	24.6	33.9	24.4	34.2	25.6	34.0	26.0	34.2	26.0	34.2	26.3	34.3	26.0
9	Sep	38.4	33.5	33.5	23.1	34.8	25.0	36.0	24.0	34.1	24.7	34.0	25.7	35.2	25.4	34.4	25.2	36.1	26.6	34.2	25.4
10	Oct	34.5	32.0	32.0	23.8	34.7	21.4	33.0	22.1	33.7	24.3	33.0	24.6	31.8	23.6	35.1	24.4	35.6	25.5	34.7	24.1
11	Nov	32.5	31.8	31.8	20.2	33.6	20.5	31.2	18.5	31.2	19.8	32.2	21.0	32.3	19.4	33.4	21.6	32.4	20.0	32.6	22.0
12	Dec	30.8	28.8	28.8	13.8	31.4	15.1	39.9	14.6	30.8	16.3	28.8	16.5	30.1	17.4	29.9	14.9	31.3	15.6	30.5	16.9

#### Rainfall Variability and Trend over Meiktila

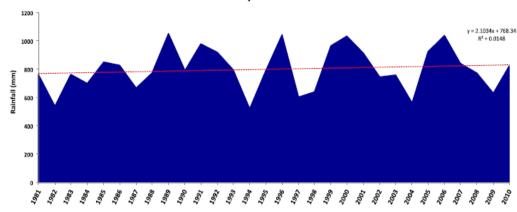


Figure 21 Ten Years Annual Rainfall in Meiltila (1981-2010)

(from Climate Profile Myanmar)

Annual rainfall over Meiktila from 1981-2010 is shown notable inter-annual variability. The driest year was in 1994 and the wettest year was in 1999. Average annual rainfall is about 800,,. The trend in annual rainfall is increasing.

It is recorded anomaly in 1989 (1053mm), 1996 (1043mm), 2006 (1037mm) and 2000 (1033mm).

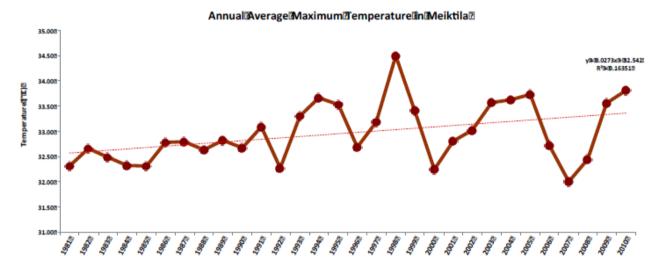


Figure 22 Annual average Maximum Temperature (Dry Region- Meikthila Station) (from Climate Profile Myanmar)

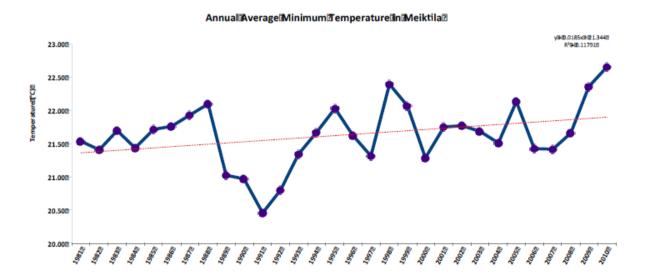


Figure 23 Annual Average Minimum Temperature (Dry Region – Meikthila Sttion)

(from Climate Profile Myanmar)

### **Atmosphere**

During construction period could be dispersed the particulate matter but it is minimal as the soil is muddy. During the operation period, there are no harmful activities except the electric generator but it is minimal and carbon neutral as the trees would be planted in the Project's premise.

The Ambient Temperature

According to the meteorological department's recorded precipitation for 2018 is found as following.

#### 6.3.1. Natural Hazards

Strong wind and bright sun light ray are the main causes the natural hazards to that area. As the proposed area has covered almost no big trees, wind could be blown very freely while the sun light is included UV rays and high risk.

There is erosion during monsoon high flood period and fire during the dry season as natural hazard. There is no record for damages by earthquake in this area and received as secondary data from the Nganzun township data book (2018) as shown below.

		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1		1
No	Category	No. of Occurance	Casuality	Damages	Cost of Damage (Million Kyats)
1	Storm Hit	-	-	-	-
2	Tsunami	-	-	-	-
3	Earthquake	-	-	-	-
4	Flood	-	-	1	-
5	Fire	-	-	1	-
	Total	-	-	-	-

#### 6.3.2. Hydrology

Not applicable to this project

### 6.3.3. Erosion and Sedimentation

Not applicable as it is far from river.

#### 5.4. Environmental Assessment

The consultant team had conducted the assessments during suevey and the assessment results are shown as following.

#### **Survey Method; Field Observation**

The survey assessment was conducted since the project is under land preparation stage, during construction and operation stage. During the field survey period, the whole area was observed. The actual data were recorded not only by the interviewing to the local people but also recorded by taking photos.

### **Survey Location (Points of Assessment)**

Eventhough the project affected area is within 3 miles radius theorectically, the assessment 5 points would be inside the factory territory as shown below where the impact would be occurred than the far distance area.



Figure 24 Loction of Assessment on graphic layout



Figure 25 Point of Assessment (Air)on Google Image (Dry Season)

There are 2 locations of assessment points (1) During Construction and (2) Operation Phase etc.

Period	Point	Point.1	Point.2	Point.3	Point.4	Point.5
Construction Stage	(GIS)Location	21°43'53.22"N,	21°43'51.31"N,	21°43'48.52"N,	21°43'52.52"N,	21°43'49.67"N,
(Dry Season)		95°37'30.06"E	95°37'31.25"E	95°37'30.47"E	95°37'38.28"E	95°37'38.58"E
Operation Stage	(GIS)Location	21°43'51.27"N,	21°43'51.37"N,	21°43'51.53"N,	21°43'50.59"N,	21°43'49.98"N,
(Raining Season)		95°37'37.93"E	95°37'36.47"E	95°37'34.37"E	95°37'35.33"E	95°37'31.38"E

Remarks: :The points of assessment are different as the previous points are during construction stage and the points of assessment are inside the factory during normal operation stage. This points of assessment would be taken as the measured points at the monitoring stage.

### 5.4.1. Air Quality

Methodology: The air quality was checked for PM2.5, PM10, HCHO, VOC, CO, NO2 etc. To get the air quality the assessment team had measured same as others (5 points). Eventhough 3 miles radius area is designed for project affected area, the 5 points assessment would be conducted inside the factory compound which is more chance of impacts. These assessment points are shown by GIS location as shown under. (Pls find detailed measurement result on annex.)

The parameters of air quality survey were determined as following referring to National Environmental Quality (Efluent) Guidelines (NEQEG).

**Table 33 Survey Parameters for Air Quality** 

No	Parameter	Averaging Period	NEQEG Guide line Value (µg/m³)
1	Particlate matter (pm <sub>2.5</sub> )	1hour	75 (Interim Target)
			50 (Interim target)
			37.5 (Interim target)
			25(guideline)
2	Particlate matter (pm <sub>10</sub> )	1hour	150 (Interim Target)
			100 (Interim target)
			75 (Interim target)
			50(guideline)
3	HCHL	1hour	
4	Volatile organic compounds (VOC)	1hour	

### 5.4.1.1 Air Quality (Dry Season)

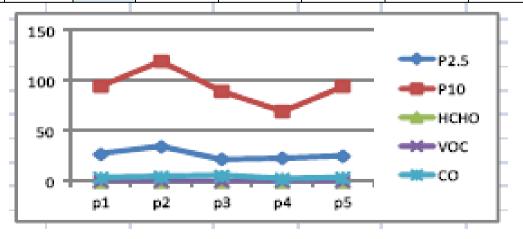
### **Survey Period**

Air Quality Surveys were conducted in raining season & dry season as shown below. (It is covered for 2 seasons.

Season	Period
Raining Season	Jun-July 2019
Dry Season 🗸	April,2018

**Air Quality Measurement (Dry Season)** 

	Quality Micust								
		Unit/		Pt.1	Pt.2	Pt.3	Pt.4	Pt.5	
No	Parameter	Lat/Long	NEQEG	21°43'53.22"N, 95°37'30.06"E	21°43'51.31"N, 95°37'31.25"E	21°43'48.52"N, 95°37'30.47"E	21°43'52.52"N, 95°37'38.28"E	21°43'39.67"N, 95°37'38.58"E	Remarks
1	PM <sub>2.5</sub>	$\mu$ g/Nm <sup>3</sup>	25	27.5	35.0	22.5	23.5	25.5	
2	$PM_{10}$ ,	$\mu$ g/Nm <sup>3</sup>	50	95	120	90	70	95	
3	НСНО	$\mu$ g/Nm <sup>3</sup>	-	0.02	0.02	0.02	0.02	0.02	
4	Volatile organic compounds (VOC)	$\mu$ g/Nm <sup>3</sup>	-	0.16	0.15	0.16	0.16	0.16	



### 5.4.1.2 **Air Quality (Raining Season)**

Air Quality Surveys were conducted in raining season & dry season as shown. This assessment in the raining season is conducted in response to the ECD comment.

Season		Period
Raining Season	~	Jun~July, 2019
Dry Season		May.24~27,2018

**Table 34 The Points of Measure Air Quality (Raining Season)** 

Survey Point	Coordinates (GIS)	rdinates (GIS) Description of Survey Point		
Pt1	21°43'51.27"N, 95°37'37.93"E	Pre Assembling Point	Moderate Pollution	
Pt2	21°43'51.37"N, 95°37'36.47"E	Interior Trim Area	Moderate Pollution	
Pt3	21°43′51.53″N, 95°37′34.37″E	Chassis Assembly	Moderate Pollution	
Pt4	21°43'50.59"N, 95°37'35.33"E	Integrated Assembly	Moderate Pollution	
Pt5	21°43'49.98"N, 95°37'31.38"E	Generator House	Most Pollution Point	

Remarks: :The points of assessment are different as the previous points are during construction stage and the points of assessment are inside the factory during normal operation stage. This points of assessment would be taken as the measured points at the monitoring stage.

Noise, Air quality, Soil quality are recorded during assessment. (Please find details on annex.)



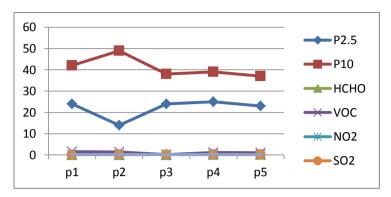
Figure 26 Point of Assessment (Air) on Google Map (Wet Season)

**Table 35 The Air Quality Measurement & Comparism with NEQEG (Rain Season)** 

		Unit/			Pt.1	Pt.2	Pt.3	Pt.4	Pt.5	
No	Parameter	Lat/Long	NEQEG	WHO	21°43'51.27"N, 95°37'37.93"E	21°43'51.37"N, 95°37'36.47"E	21°43'51.53"N, 95°37'34.37"E	21°43'50.59"N, 95°37'35.33"E	21°43'49.98"N, 95°37'31.38"E	Remarks
1	$PM_{2.5}$	mg/Nm <sup>3</sup>	25	25	24	14	24	25	23	
2	$PM_{10}$ ,	mg/Nm <sup>3</sup>	50	50	42	49	38	39	37	
3	НСНО	mg/Nm <sup>3</sup>	-	-	0.02	0.02	0.02	0.02	0.11	
4	Volatile organic compounds (VOC)	mg/Nm³	-	-	1.49	1.38	0.16	1.19	1.06	
5	$NO_2$	mg/Nm <sup>3</sup>	-	-	0.16	0.15	0.16	0.16	0.16	
6	$SO_2$	mg/Nm <sup>3</sup>	-	-	0016	0.15	016	0.16	021	
7	CO	mg/Nm <sup>3</sup>	-	-	0.2	0.2	0.2	0.2	0.2	

**Comparism with NEQEG** 

Unit	Receptor	NEQEG	Assessment Results (Maximum Value)				
	Receptor	NEQEO	Dry Season	Wet Season			
Dust	Pm2.5 (24 hr)	25	35	24			
$\mu g/m^3$	g/m <sup>3</sup> Pm10 (24hr)		120	49			



# 5.4.2. Noise Level Assessment (Dry Season)

Point of Assessments (Noise, Soil)



Figure 27 Point of Assessment (Noise) on Google Image

**Survey Location (Point of Assessment)** 

our vey bocation (1 of	int of Assessment)				
Survey Point	Coordinates	Description of Survey Point	Reason		
PN1	21°43'51.27"N, 95°37'37.93"E	Pre Assembling Point	Less Noisiest		
PN2	21°43'51.37"N, 95°37'36.47"E	Interior Trim Area	Moderate		
PN3	21°43'51.53"N, 95°37'34.37"E	Chassis Assembly	Moderate		
PN4	21°43'50.59"N, 95°37'35.33"E	Integrated Assembly	Moderate		
PN5	21°43'49.98"N, 95°37'31.38"E	Generator House	Most Noisiest Point		

Remarks: :The points of assessment are different as the previous points are during construction stage and the points of assessment are inside the factory during normal operation stage. This points of assessment would be taken as the measured points at the monitoring stage.

### **Survey Period**

Noise Level Surveys were conducted in raining season & dry season as shown.

Season	Period
Raining Season	Jun~July, 2019
Dry Season 🗸	May.24~27,2018

## **Survey Method**

### Methodology

Measurement of Environmental sound level was conducted by referring to the recommendation of International Organization for Standardization (ISO),ISO1996-1:2003 and ISO1996-2:2007.

By Instrumentation

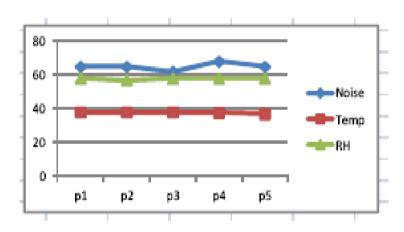
The instrumentation used for noise quality survey is shown in Table

Instrumentation	Description
Sound Level meter	Sound level meter, Model UT-351/352

### **Survey Result (Dry Season)**

Noise Measurement (db)Room Temp.(C) RH %

			` /			/									
	PN.1			PN.2			PN.3			PN.4	4 PN.5				
	21°43'53.22"N, 95°37'30.06"E			21°43'51.31"N, 95°37'31.25"E			21°43'48.52"N, 21°43'52.52"N, 21°43'39.67"N, 95°37'30.47"E 95°37'38.28"E 95°37'38.58"E			,			,	NEQEG	
Noise (db)	Temp (C°)	RH (%)	Noise (db)	Temp (C°)	RH (%)	Noise (db)	Temp (C°)	RH (%)	Noise (db)	Temp (C°)	RH (%)	Noise (db)	Temp (C°)	RH (%)	
65	38	58	65	38	57	62	38	58	68	37.5	58	65	37	58	70dB



### 5.4.2.1 Noise Level Assessment (Raining Season)

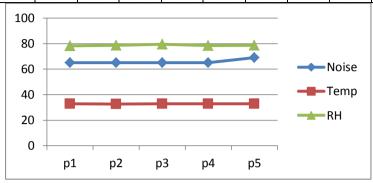
Noise Level Surveys were conducted in raining season as shown. This assessment in the raining season is conducted in response to the ECD comment.

Season		Period
Raining Season	~	Jun~July, 2019
Dry Season		May.24~27,2018

Methodology: The measurement was taken in the factory during working time. It found out just 55db in the day time. The detailed reading data (Air, Dust, Noise etc.) with the coordinates are shown. Pls seen on annex.

Table 36 The Noise Level Result an Comparism to EQEG (Raining Season)

	PN.1		PN.2		PN.3		PtN4		PN.5		EQ	)EG				
1	1°43'51.27" 5°37'37.93'	,		°43'51.37" 5°37'36.47	,	21°43'51.53"N, 21°43'50.59"N, 95°37'34.37"E 95°37'35.33"E		,	21°43'49.98"N, 95°37'31.38"E		(dB)					
Noise (db)	Temp (C°)	RH (%)	Noise (db)	Temp (C°)	RH (%)	Noise (db)	Temp (C°)	RH (%)	Noise (db)	Temp (C°)	RH (%)	Noise (db)	Temp (C°)	RH (%)	Day	Night
68	32.8	78.2	65	32.7	78 1	65	32.8	79.5	65	32.8	78.5	69	32.8	78.7	70	70



The comparison of noise measured with National Environmental Quality Guideline is as following.

**Table 37 The Comparism of Noise to NEQEG** 

Unit	Pagan	ton	NEOEC	Assessment		
Unit	Recep	tor	NEQEG	Dry Season	Wet Season	
Noise	Industrial,	Day Time 07:00~22:00	70	68	69	
One Hour L <sub>Aeq</sub> (dBA)	Commercial	Nigh time 22:00~07:00	70	-	-	

Remarks: :The average maximum noise level is under the NEQEG limit.

The detailed reading data (Air, Dust, Noise etc.) with the coordinates are shown. Pls seen on annex.

### 5.4.3. Soil Test

#### Soils

Soil of the project site is almost dry sandy soil covered and muddy in the dept. of more than 1 ft. As it is like in many other places in Myanmar, the soild is classified as yello alluvial soil as it is contained with large amount of silt.



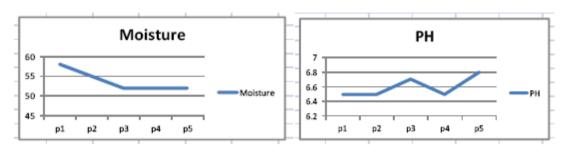
Figure 28 Soil Assessment

Soil quality

The soil quality is nature with pH 6.0. The access road construction, clearing vegetation, moving top soil would cause impact to the top soil and ground.

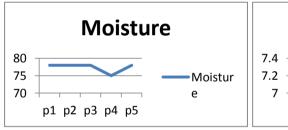
Table 38 The Soil Test (Dry Season)

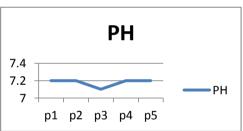
		S.1	S.2	S.3	S.4	S.5	FAO	
No	Parameter	21°43'53.34"N, 95°37'30.18"E	21°43'52.76"N, 95°37'38.24"E	21°43'49.34"N, 95°37'37.94"E	21°43'49.61"N, 95°37'32.28"E	21°43'47.81"N, 95°37'29.81"E	Standard	Remarks
1	Moisture (%)	58%	55%	52%	52%	52%	10	It is more than the minimum limit
2	PH	6.5	6.5	6.7	6.5	6.8	7~9	Within the acceptable Level



**Table 39 The Soil Test (Raining Season)** 

No	Parameter	<b>S.1</b> 21°43'53.34"N, 95°37'30.18"E	<b>S.2</b> 21°43'52.76"N, 95°37'38.24"E	<b>S.3</b> 21°43'49.34"N, 95°37'37.94"E	<b>S.4</b> 21°43'49.61"N, 95°37'32.28"E	<b>S.5</b> 21°43'47.81"N, 95°37'29.81"E	FAO Standard	Remarks
1	Moisture (%)	78%	78%	78%	75%	78%	10	It is more than the minimum limit
2	PH	7.1	7.1	7.2	7.1	7.1	7~9	Within the acceptable Level





### 5.4.4. Water Quality

**Survey Item** Tubewell Water (Parameters of water quality survey are determined by referring to the parameters of quality standards (draft) in Myanmar.)

**Survey Period** June ~ July, 2019

#### **Survey Location**

Category	Sampling Point Coordinates	Description of Sampling Point
Ground Water	TW1 20°08'45.66"N, 92°53'45.46"E	

**Surface Water** This project would not affect to the surface water.

### **Survey Method**

Water samples were taken by horizontal water sampler and collected in sterilized sample containers. All sampling was in strict accordance with recognized standard procedures. The parameters pH, temperature, dissolved oxygen (DO), electricity conductivity (EC) were measured at each site concurrently with sample collection. All samples were kept in iced boxes and were transported to laboratory and stored at 2-4°C refrigerators.

### Laboratory

Water Samples were sent to the Laboratory in Yangon.

Table 40 The Meter, Equipment and Appratus for Environmental Quality Test & Measurement

No	Measurement	The Equipment / Model
1	Air	(1) CEM Partical Counter (DT 9811
		(2) BRAMC Air Quality Test (BR Smart 126)
2	Noise	(1)Environment Meter CEM DT-8820
		(2)UNI-TSound Level Meter UT-352
3	Soil	Soil Survey Instrument (4in1)
4	Temperature	Compact InfraRed Thermometer (CEM-DT-8802)
5	Water	(1)Hydro Master HM-500, (2)Aquapro Water Tester AP-1

### **Survey Result**

The water quality survey was conducted as part of environmental monitoring program and it should have been done as environmental management plan.

The following table was used as a format for the water quality tests based on the following.

- 1. Result of Water Quality (Natural and Living Environmental Parameters)
- 2. Result of Water Quality (Health Impact Parameters)

### 5.5. Physical Components

### 5.5.1. Climate/Meteorology

It is in the tropical zone with tropical savana climate & low pricipitation. The highest day temperature is 42°C and coolest night temperature is 12°C respectively. (from Nganzun Township Regional Datas Book 2018 May-2)

**Table 41 The Weather Data Recorded** 

No	Year	Precip	itation	Temperature (C°)		
NO	1 eai	Days	Inch	Highest	Coolest	
1	2014	49	27.73	42	12	
2	2015	55	30.17	42	12	
3	2016	51	40.40	44	11	
4	2017	61	40.58	43	12	
5	2018	58	38.0	48	12	

(from Nganzun Township Regional Datas Book 2018 May-2)

### 5.5.2. Atmosphere

During construction period could be dispersed the particulate matter but it is minimal as the soil is muddy. During the operation period, there are no harmful activities except the electric generator but it is minimal and carbon neutral as the trees would be planted in the Project's premise.

The Ambient Temperature

According to the meteorological department's recorded precipitation for 2018 is found as following.

**Table 42 The Precipiation** 

Month	Temperature (C°)		Relative Humidity		Pricipitation (mm)
	Max	Min	Day (09:30)	Night (18:30)	
Jan	27.4	14.5	58	67	4
Feb	31.5	16.9	38	54	3
Mar	35.7	22.0	30	53	4
Apl	37.9	26.7	37	50	42
May	36.9	27.1	53	67	113
Jun	33.9	25.9	67	83	105
Jul	31.9	25.1	74	82	141

Aug	31.4	24.7	78	92	170
Sep	31.9	24.2	77	89	121
Oct	31.2	22.6	77	84	120
Nov	29.5	19.1	73	86	28
Dec	27.2	15.9	68	82	10

(from weather-atlas.com: Nganzun Township 2018)

### 5.5.3. Topography

It is flat land. Landscaping such as land leveling is the main activity of the Project Development. However, most of the Project structures would be laid out the minimum impact to the environment such as avoiding the destruction of original topography.



### **Surface and Groundwater Quality**

#### 5.5.4. Surface Water

The factory use ground water from its own tube well system.(4 inches dia tube well 2 nos.) There is no potential environmental impact to the surface water as there is no waste water discharge from the factory. (Pls find the mitigation measures in the EMP section.)

#### 5.5.5. Ground Water

Eventhoug the factory is extracting the ground water, approximately 185,600 gals per annum, the impact to the ground water is minimal. (Pls find the mitigation measures in the EMP section.)

#### 5.5.6. Mineral Resources

No official mineral resources are available

### 5.5.7. Mapping

As shown above

### **5.6.Biological Components**

### 5.6.1. Terrestrial Ecology/Wildlife

### **Ecological Resources**

### 5.6.2. Wildlife

As the area is farm land area, the wildlifes are easy to see these days. However, no records has been found the wild life such tiger, lion, elephant, crocodile, fox, dear and so on.

### 5.6.3. Forest/Vegetation Cover

No bounded and outside restricted forest is found in this area but the wild vegetation are covered seasonal. It is still recorded 3.99% of area covered by forest in Nganzun Township.

#### **Table 43 The List of Flora**

	No	Common Name	Scientific Name	No	Common Name	Scientific Name
Ī	1	Ma Gyee	Tamarindus Indica	12	Nga Be	Abrona Augusta
	2	Ta Mar	Azadirachta Indica A.Juss	13	Pyaut Sake	Holoptelea Integrifolia
	3	Ta Yote Ma Gyee	Pithecellobium dulce	14	Da Hat	Tectona hamiltoniana
Ī	4	Htan	Borassus Flabellifer	15	Shazaung	Euphobia nivubia

5	Nyaung	Banyan Tree	16	Hta Noun	Acacia Leucophloea
6	Sharr	Acacia Catechu	17	Okshit	Aegle Marmelos
7	Kokko	Albizia Lebbek		Tha Nat Kharr	Chloranthus
_ /		Aldizia Leddek	18		Officinalis
8	Gana-Sein Pin		19	Tha Buut	Uvaria Grandiflora
9	Subyu	Acacia nilotica	20	Zaung Gyan	Osyris-wightiana
10	Tae	Diospyros burmanica	21	Zibyu	Emblica officinalis
11	Than Bo	Terminalia	22	Tha Mon Pin	Boscia variabilis
11		nigrovenulosum	22		

### 5.6.4. Aquatic Biota and Habitats

No Fisheries & Aquatic biology are applicable as the project is far from river.

Study site: Myotha Township

Study methods: Current data in this report were analyzed by using the previously recorded data and recent studies by scientists as pers. comm as secondary data as well.

Table 44 The List of Wildlifes in the Project Zone

No.	Local Name	Common Name	Scientific Name	Family Name
1	Thamin	Deer	Antlered rusa	Antlered rusa
2	Yone	Hare	Lepus peguensis	Leporidae
3	Mway	Snake	Russells Viber	Colubridae
4	Phut	Monitor Lizard	Veranus Indicus	Varanidae

The primary data should be collected from study sites for habitat mapping of each marine biodiversity that can also be used for ecotourism purposes.

It is applicable directly as the area that project would be done on these area. The abandoned farm land would be becoming industrial and eco zone spot. However, the potential impact is very small due to the project area is on to be protected where the fishes and aquatic biology creatures are permanently lived in the river which is far from that project site area. However it could direct impact on fisheries and aquatic life it the sewage is drained directly to the river without treating to the acceptance level when full operation is done by different activities such as residential housing and other human activities. With the 3Rs (Reduce, Reuse and Recycle) program on the solid waste of the dormitory and office and septic tank waste water system installed in the project would be caused the impact minimal.

#### 5.6.5. Forest

There is no bounded and outside restricted forest in this area in this township. There is 45 acres of firewood plantation and it is planned and proposed by Shwe Taung Co.,Ltd for the development of "out restricted forest" for 2682.72 acres.

Rare of endangered Species

No endangered Species were recorded.

### 5.6.6. Protected Areas

It is out of the protected area designated by the Ministry of Natural Resources and Environmental Conservation.

# 5.6.7. Coastal Resources

Not applicable

### **5.7.Socio-Economic Components**

### **Interview and Literature Survey**

The survey data was collected by interviewing with local people and residents in addition to the field observation and assessment. The survey team visited around the survey area and interviewed the name of plants, animals that could be seen in and around the area. It is also asked the past and present situation of flora and fauna to them that they had noticed and on the changes on biodiversity and ecosystem in the designed area and nearby. However, there are no existing literatures related to Flora and Fauna around the area.

### 6.7.1. Administrative Organizations and Limits

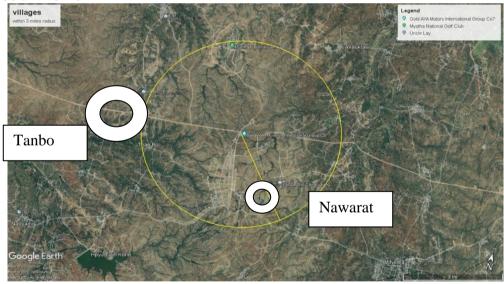
The area and the project would be under public company.

# 6.7.2. Land Use in township Table 45 The Land Use in Nganzun Township

No	Type of Land	Land Area (Acres)
1	Total Productive Agricultural Land	143168
2	Vacent Land	3482
3	Grazing Ground	2848
4	Industrial Land	11425
5	Urban	264
6	Rural (Villages)	4011
7	Marginal land	2827
8	Land not suitable for agriculture	59809
	Total	227834

According to the Myanmar Constitutional Law, the new land owner would be Myanmar Government and Regional Government of Mandalay Division Region, would have both rights of ownership and managed by MMID.

### 6.7.3. Social Profile



**Figure 29The Nearest Village Locations** 



Figure 30Villages

### 6.7.4. Demography

**Table 46 Demography** 

Population	Male	Female	Total	Houses	Households
Rural (Villages)	62576	70862	133438	26770	28744
Urban	3253	4003	7256	1596	1751
Total	65829	74865	140694	28366	30495

### 6.7.5. Community Structure (village of nearby project)

Nganzun Township is organized by 4 wards, 44 village group and 158 villages.

Myotha, Pauksein, Thanbo and Nawarat, Htan Chaung, Te Bin and Ai Thar Villages are nearest area to the project affected communities.

**Table 47 Community Structure of Villages of Nearby Project** 

No	Name of Village	Village Group	No. of Households	No. of Famiy	Population
1	Pauksein		320	450	1062
2	Thanbo		20	35	110
3	Nawarat	Kywe Zein V.G	150	280	667
4	Htan Chaung	Taung Pyin V.G	180	235	900
5	Te Bin	Let Pan Kyin V.G	150	210	800
6	Ai Thar	Ai Thar V.G	100	145	500

### 6.7.5.1 Social Economic Status (village of nearby project)

**Table 48 The Social Economic Data of Nearby Villages** 

No	Name of	Population	Rate of	Education	Health	Monastry
INO	Village	Fopulation	Unemployment	Facility	Facility	wionasti y
1	Pauksein	1062	50%	S.H.S	-	1
2	Thanbo	110	50%	S.P.S	-	1
3	Nawarat	667	50%	S.P.S	-	1
4	Htan Chaung	900	50%	S.M.S	-	1
5	Te Bin	800	50%	S.P.S	-	1
6	Ai Thar	500	50%	Mu-Lun	-	1

Remarks:

The employment status in these villages are critical to unployment due to unstability of law enforcement. The economy is very slow and survival stage due to weather and local unstability condition. These data should be checked with the data when the monitoring report is submitted.

### 6.7.6. Education

The education facilities in Nganzun Township are Baka School (10nos.), Pre KG (7) Primary School (77nos.), Mu Lun (21nos), Joint Middle School (10nos.), State Middle School (6 nos.), Joint State High School (6nos.), High School (6nos.) and Baka School (22) and there are no higher education facilities.

**Table 49 The Education Facilities** 

No	Education Escility	No. of	No. of	No. of
No	Education Facility	facility	Teachers	Students
1	Higher Education	-	-	1
2	State High School	6	217	6958
3	Joint State High School	6	217	6958
4	State Middle School	6	70	1706
5	Joint State Middle	10	92	2179
	School			
6	Mu Lun	21	144	3093
7	State Primary School	77	385	5371
8	(Mu cho) Kindergarden	7	9	88
9	Ba Ka School	10	55	896

### 6.7.7. Population and Communities

The population of Myothar Township is about 140,694 peoples with female about 53.21% live in this area Myanmar, Indian mix, Chinese mix and others minorities with different religions live peacefully as communities.

### **Table 50 The Population and Communities**

No	Des;	House Holds	Family	Quarter	Village Group	Village	Male	Female	Total	Remarks
1	Town	1596	1751	4	-	-	3253	4003	7256	
2	Village	26770	28744	-	44	158	62576	70862	133438	
Total	15000	28366	30495	4	44	158	65829	74865	140694	

### 6.7.8. Gender Situation

Among total population, female about 52.21% live in Ngazun Township.

### 6.7.9. Religion

Physical and Cultural Heritage (Social and Cultural Components)

In Ngazun township, there are religion places as shown below.

(Budhist, Christian, Hindis and Islam) (But it could be found some ones without religious believe.)

### **Table 51 Religious Buildings**

Chr	ristian	Isl	am	Hi	ndu	Chi	nese	Buc	dhist
Town	Village	Town	Village	Town	Village	Town	Village	Pagoda	Monestry
-	-	3	-	-	-	-	-	7	-

### 6.7.10. Economic Profile

#### **Table 52 Rate of Employment**

No	Total Work Force	Employed	Unemployment	Rate of Unemployment
1	98307	96162	2145	2.18%
Total	98307	96162	2145	2.18%

#### Table 53 Personal Income (Ks/vr)

No.	2015-16	2016-17	2017-18
1	811929	814945	-

#### 6.7.11. Industries

No industries are there until MMID development.

### 6.7.12. Mineral Development

Not applicable

### **6.7.13.** Tourism

It is at early stage.

### **6.7.14.** Health Infrastructure

All secondary data are collected from regional and township data book available from the office of general administration office of Nganzun township and primary data are collected by the assessment team during field survey period of 2018 and 2019 to cover yearly round data with the assistant of on line application.

#### **Health Facilities**

All these existing health infrastructures are referred to the township data book of Nganzun township. There is Ngazun General Hospital.

There are health facilities in Township such as private clinic and hospital.

### 6.7.14.1. Hospital, Medical Clinic

One General Township hospital and private clinic are available.

**Table 54 Hospitals** 

No	Name of Hospital	Gov/Private	Bed
1	Nganzun Hospital	Gov.	50
2	Myo Thar District Hospital	Gov.	16
3	Ngan Myar District Hospital	Gov.	16
Total	3		82

(Source: the township data book of Nganzun township 2019)

### **Table 55 Clinics**

No	No. of Clinics	Sub Clinics	Remarks
1	8	32	
Total	8	32	

(Source: the township data book of Nganzun township 2019)

**Table 56 Health profile** 

		Doctor's Health Care		Nurse's Health Care		Ass; Health Care	
No	Population		Doctor/Patient		Nurse/Patient	Assistant	Assistant
110	ropulation	Doctor	Ratio	Nurse	Ratio	Health	Health/Patient
			Katio		Katio	Health	Ratio
1	140694	8	1:17586	3	1:10822	7	1:20099
Total	140694	8	1:17586	3	1:10822	7	1:20099

(Source: the township data book of Nganzun township 2019)

### 6.7.14.2. Communicable diseases, Motality and Morbidity

The diarea, tuberculosis and liver infection are the most infected diseases in the township.

#### **Table 57 Communicable Diseases**

I do	C37 Commi	257 Communicable Discuses								
		Kinds of Disease								
No.	Mala	ria	Dia	ria	Tuberc	ulosis	Dysen	itery	Jorno	lise
	Contracted	Motality	Contracted	Motality	Contracted	Motality	Contracted	Motality	Contracted	Motality
1	-	-	562	-	26	-	167	-	8	-

(Source: the township data book of Nganzun township 2019)

### HIV/AIDS (Contracted and Casuality)

No.	2016-2	2017	2017-2	2018
110.	Contracted	Motality	Contracted	Motality
1	1	-	1	-

(Source: the township data book of Nganzun township 2019)

#### 6.7.14.3. Access to health services

The access to the health services are available as the area has some health facilities such as government owned and private sectors in the township.

Table 58 Social Team (INGO)

No	Name of INGO	Address	Field
1	-	-	1
Total	-	-	-

(Source: the township data book of Nganzun township 2019)

#### Table 59 Social Team (NGO)

D	ociai i caiii (1100)		
No	Name of INGO	Address	Field
1	Amarathuka	No.(3) Quarter	Health, Education, Social
2	Myint Say Ta Nar	Out Yoe Myo Thar	Health, Education, Social
3	Say Da Nar Shin	Myauk Kyin Taung Lel Taw	Health, Education, Social
4	Workers Pensioners Association	No. (4) Quarter	Health, Education, Social
5	Kayakan Ku Tho Association	No.(4) Quarter	Health, Education, Social
6	Myo Set Lu Nge Lin Let Kyel	Kaung Zin	Health, Education, Social
7	Dama Parla Mingalar Maungmel	Ither	Health, Education, Social
8	Future Light (Nganzun)	No.(1) Quarter	Health, Education, Social
9	Gayuna Thi Ta La	Thar Kyin	Health, Education, Social
10	Ar Yu Thu Kha	Thu Nat Sin	Health, Education, Social
11	Myint Myat Phyu Sin	No.(3) Quarter	Health, Education, Social
Total	11		

(Source: the township data book of Nganzun township 2019)

#### 6.7.14.4. Access to water supply

By tube well or traditional hand digged well

### 6.7.14.5. Nutrition levels

Not available

#### **6.7.15.** Infrastructure Facilities

There are no community infrastructure facilities such as water supply, electricity supply, but not sewage system. However, the proposed project has it all in MMID.

#### 6.7.16. Water Use and Water Supply

Surface water from the river and tube well are widely used in Nganzun Township. The proposed project utilized underground water by 4" tube well.

### **6.7.17. Navigation**

Not available

#### **6.7.18.** Airport

No airport is there. The nearest Mandalay International Airport is 26 miles away from the project.

### 6.7.19. Transmission Lines

Mandalay-Myothar transmission lines is located.

### 6.7.20. Electricity

National power grid is available. The project (MMID) is connected from Myothar Sub Station.

### 6.7.21. Agricultural Development,

The livelihoods of the people are farmers, traders, merchants etc.

### **5.8.Visual Components**

Visual Components (Socio-Economic Conditions)

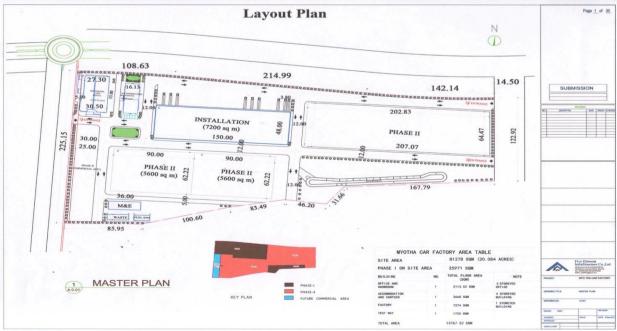
All sorts of employment and livelihoods are there but majority as a agriculture industry. In general, the proposed project would create an impact to the environment in the following phases.

The temporary or short term impact during the construction phase

Long Term effect by daily operation

However, this project is the industrial park project, it is also necessary to consider the impacts during construction period such as noise and temporary wastes.





### 5.9.Infrastructure, Transport

### **Road Transportation**

The road are connected as it is located Myin Mu Township about 10 miles at the north, Tadar Oo Township about 14 miles at east, Ngwa Tho Gyi Township about 19 miles at south and Myin Gyan Township abouth 21 miles at west respectively. There is no obstruction to the public access road by this project implementation. MMID has developed all necessary assess road to the nearby and the whole country shown on the map of following.

### 5.10. Economic, Livelihood, Land Use,

#### The Livelihood

The livelihood of the residents of Nganzun Township is variety from daily wages to the company owner and from skill labor to Director General and the resident of military personals and the oversea migrant workers and seamen etc.

**Table 60 Types of Livelihood** 

No	Gov. Staff	Service	Agri	Livestock	Trading	Technical	Fishery	General	Others	Total
1	1852	-	51815	14093	8097	1011	-	15017	4277	96162
Total	1852	_	51815	14093	8097	1011	-	15017	4277	96162

#### **Land Use**

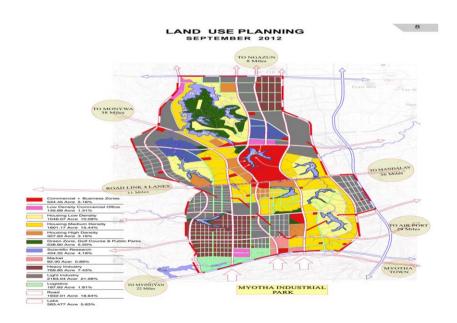


Figure 31 Land Use Plan

# 6. Environmental Impact Assessment & Mitigation Measures

This proposed project is located in the dry land that classified as low grade land for season crop and owned by the farmers. Based on the effective land use policy and regional development program, it is decided to transform this agricultural land to industrial park by organizing all land owners to form as MMID company limited. Gold A Y A Motors International group Co.,Ltd, had rented land for the project which would be implemented by Foreign investment law.

As an approach to all potential impacts, it could be considered that all project implementations could be generated either positive and or negative impacts that could bring changes to the local environment in terms of physical, biological and social economic aspects.

#### 6.1. Methodology

The impact assessment and mitigation measure would be on mapping, air quality, surface water quality, ground water quality, noise.,etc. The assessment would be obtained from various sources including consultation with local sources, individuals and organizations. It is also taken from literatures and researchs. The project team will use professional judgment, fieldwork and desktop analysis to identify potential impacts and their interactions to identify and assess potential impacts associated with or resulting from project activities. The project team will also evaluate unavoidable consequences effects to water quality, vegetation and biodiversity as in addition to evaluating specific sources areas. The significance of potential impacts that may result for the proposed project will be determined to assist in preparing recommendations for evaluation of the proposed project.

## Impact Assessment Methodology,

The impact assessment methodology used in this EIA report provides a basis to characterize the potential environmental and social impacts of the project. This methodology is based on models commonly employed in impact assessment and takes into account international best practices.

The following are the three phases to be analyzed for potential environmental and social impacts such as,

- 1. Identification
  Specification of the impacts associated with each phase of the period and the activities undertaken.
- 2. Prediction
  Forecasting the nature, magnitude, extend and duration of the main impacts and
- 3. Evaluation

  Determining the significance of the residual impacts after taking into account how mitigation will reduce the predicted impact.

#### The Project Affected Area

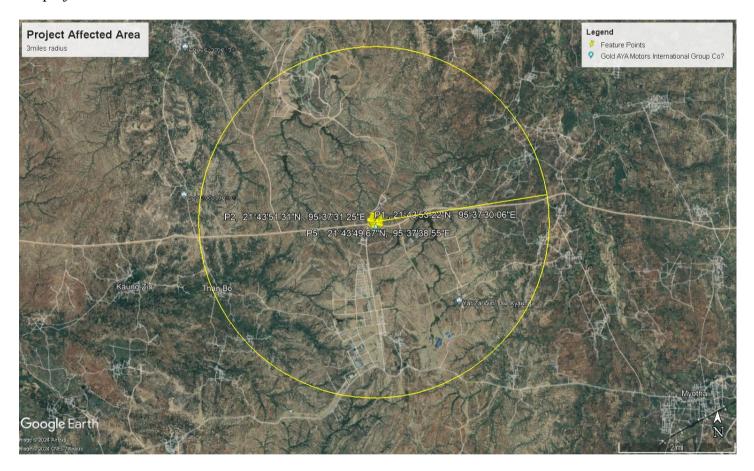
The prject affected area is considered as 3miles radious distant from the project site in general as it is just the assembling of auto vehicles. This area is considered enough for the physical and the environmental impact affected both for the construction period and the operation period. However, the employment opportunity is beneficial not only to that project affected are but also through the country based on the individual qualification and enthusiastic.

# 6.2. Geographical Boundary & Temporal Boundary

The geographical boundary for the environmental and social impacts assessment would be covered in about 3 miles radius from the project site as shown on the map. The temporal boundary would be during construction and post operation period (the closure stage).



The area for the social impact is covered Ngazun Township but also Nabu Aine village which is the nearest to the project.



# **Identification of Impacts**

The identification of impacts is essential an objective exercise to determine what could potentially happen to the environment as a consequence of the project and its associated activities.

Theidentification of impact and assessment starts with scoping which was conducted for the project report and continued through the reminder of the impact assessment process.

It is done with a logical and systematic approach. It is taken into account of all of the important environmental and social impacts and interactions which may be potentially significant impacts.

The impacts could be categorized into 2 parts as following.

- A. Temporary Impacts caused during preconstruction and construction phases. (Remarks: this project is entering in the operation stage since 2019 as construction are completed.)
- B. Impacts caused by normal operation period

The impacts would be identified under these categories with considering at before construction, during construction and operation stage.

#### 1. The Impacts by Pollution

(Air, Water, Waste, Soil, Noise & Vibration, Offensive Odor)

# 2. The Impacts on Natural Environment

(Protected Area, Topography & Geology, Hydrology, Bottom Sediment, Ground Subsidence, Flauna/Fauna, )

# 3. The Impacts on Social Environment

(Reseltement, Benefit & Damage, Local Conflict of Interest, Gender, Children's Right, Ethnic Minorities & Indigenous People, Poor, Living & Livelihood, Existing Social Infractures and Wervices, Water Usage, Cultural Heirtage, Landscape, Risks for Infectious Diesease, Working Condition)

# 4. The Impacts on Others

(Accident, Global Warming)

#### **Impact Assessment**

After identification of all the important impacts, their potential size and characteristics are predicted by using conventional rating matrix method.

The principal impact assessment steps are summarized and comprising of

- **Impact Identification**: to determine what could potential happen to resources/receptors as consequence of the project and its associated activities.
- **Impact Evaluation**: to evaluate the significance of the predicted impacts by considering their magnitude or likelihood of occurrence and the sensitivity value and or importance of the affected resource/receptor.
- **Mitigation and enhancement**: to identify appropriate and justified measures to mitigate negative impacts and enhance positive impacts.
- **Residual Impact evaluation**: to evaluate the significance of impacts assuming effective implementation of mitigation and enhancement measures.

# **6.3.Scope of Assessment**

The project is Joint Venture for manufacturing. The project consists of 4 main stages to assembling motors.

Scope of the Study on Environmentagl Impact Assessment

• The environmental impact assessment approach focused on potential environmental impacts in the project area in order to provide base line data and opportunities to stakeholders in proposing ideas/recommendations and exchanging important information to dissolve their experiences with environment.

The scope of assessment would be cover as following.

- (a) Identify stakeholders and inform them of the proposed project and EIA process
- (b) Providing stakeholders with opportunity to identify and issues and concerns associated with the proposed project
- (c) Identify areas of likely impact and environmental and social issues that may require further investigation in an EIA

- (d) Determine the TOR for specialist baseline and impact assessment studies in response to intial stakeholder imput
- (e) Release the scoping phase report including draft TOR for specialist studies for stakeholder review and comment

In this project the following impacts would be considered majorly.

- 1. Impact on Air environment (Pollution)
- 2. Impact on Natural Environment (Water Resources)
- 3. Impact on Noise and Vibration
- 4. Impact on Land Environment (Soil contamination, Ground Subsidence)
- 5. Impact on Biodiversity
- 6. Impact on Community Safety and Health
- 7. Impact on Job Opportunity
- 8. Impact on Occupational Safety and Health
- 9. Restriction of Access
- 10. Economic Displacement of local Agriculturists
- 11. General Economic Development
- 12. Better Transportation

# **6.4.Identification of Impacts**

# 6.4.1. Identification of Impacts Before and During Constrution Stage (BC/DC)

The temporary affect by the impacts during pre construction and during construction The following are the major factors to the dust pollution and noise pollution

- Supporting trucks and vehicles moving around these areas.
- Construction machineries and pile driving for the foundation excavation and concrete footings
- Eraction of building steel frames, roofing and cladding
- Wind blowing effect to the dust
- Loading and unloading process by bulldozer, excavator and dump trucks
- Installation of machineries and equipments
- Ancillary facilities erection
- Services and utilities connections
- Building fitting out

Both Pre Construction and During Construction stages, the vibration and noise impacts could caused by moving vehicles and construction machineries. The worst noise impact would come from diesel power generator and pile driving process and the loude communication between workers.

The construction of factory buildings are completed (by the time of this report) which could already overcome these noice impacts and vibration.

#### 6.4.2. Identification of Impacts during operation stage (OP)

The following are the causes of impacts during project implementation.

- (1) Air polution
- (2) Noise & Vibration
- (3) Solid waste
- (4) Waste water

- (5) Flora and Fauna
- (6) Impact to the livelihood
- (7) Employment Opportunities
- (8) Transportation
- (9) Natural Disaster and Machine Failures

#### (1)Air Polution

The potential air pollution would be expected both inside and outside of factory. The spraying paint process is one the potential impact sources in this factory. There would be some impacts to the surrounding air because of engine testing and diesel generator when it is electricity blackout. (B-)

#### (2) Noise & Vibration

There would be no vibration but some noises would be occurred from the air compressor, ventilation fans, electric generator and vehicle assembling activity. However, no Impact would be caused as silencer is installed to engine exhaust but could not avoid for small Impact when the generator run during electricity blackout. (B-)

# (3) Solid Waste

There are solid waste from the workshop, show room, office & domitory. It could be harmful to environment if could not manage properly. (D)

#### (4) Waste Water

There are bio waste from the dinning area and toilets. No waste water created from the vehicle assembling process as it has the water recycling process. No wastewater discharge from the factory. (D)

#### (5)Flaura and Fauna

There is no record for fauna in this factory area of 20.084 Acres as it is designated the industrial zone for the factory building, not for residential and business area, except sparrows, crows, pigeons, dogs, cats, mouses, cocroachs, mosquitoes, flys etc, which are close to human. (C)

#### (6) Impact to the livelihood

No negative impact potential by this project on loss of livelihood while positive impacts are potential. (A+)

#### (7) Employment Opportunity

There would be 80% of 110 jobs available by this project for locals. The positive Impact caused to the livelihood by this project as creating jobs not only to the local people but throughout the country.(A+)

#### (8) Transportation

The transportation would be considered more under the existing social infracture and services. It is expected both positive and negative impact due to development of road to the area and some road transport impact. It is considered positive impact than negative. (A+)

#### (9) Natural Disaster and Machine Failures

There are chances of negative impacts due to the natural disaster and machine failure at all times like other project. The construction machine and normal machines using in the production process are needed to be anticipated. (C)

#### **6.5.Steps of Impact Assessment**

Impact Assessment would take place as following;

- The baseline characteristic which is the existing conditions before the project is undertaken and any effects are generated
- Identify sources of impacts and the impacts themselves that are generated by any aspect of the project
- Rate impacts before any mitigation is implemented for both positive and negative impacts

- Suggestion at mitigation and enhancement measures
- Rate impacts after mitigation to produce a residual impact impact rating

# **6.6.Determining the Rating**

The overall rating of the impacts will be determined by using the following matrix but it should be noted that it should be guide and there may be situations where their rigid application is inappropriate and where stakeholder perceptions and feedback have significant role to plan. For specific impacts where this is the case, the rating is clearly explained in the evaluation of the impact.

The environmental and social impact assessment was conducted according to the scoping matrix below and examined.

Impact Significances (Qualitative)

r	. ( •		
Magnitude of Impact	Re	esource/Receptor Sensitivi	ty
Magnitude of Impact	Low	Medium	High
Negligible	Negligible	Negligible	Negligible
Small	Negligible	Minor	Moderate
Medium	Minor	Moderate	Major
Large	Moderate	Major	Major

Imapact Severity (Quantitative)

	<i></i>				
			Impact Li	kelihood	
Impact Severity	Extremely	Unlikely	Low	Medium	High Likelihood/
	Unlikely		Likelihood	Likelihood	Inevitable
Negligible	Negligible	Negligible	Negligible	Negligible	Negligible
Low	Negligible	Negligible	Negligible	Minor	Moderate
Medium	Negligible	Minor	Minor	Moderate	Major
High	Minor	Minor	Moderate	Major	Major

The Definition of Impacts for the impact identification and evaluation study

Significance	Definition
No Discernible	The interaction between the project and a particular receptor/resource is not
Impact	reasonably expected.
Nagligible Impact	The predicted impact to a particular receptor/resource is considered to be slight and
Negligible Impact	indistinguishable from natural background variations.
Minor Impact	A particular resource/receptor may experience a noticeable effect although the
Minor Impact	impact magnitude will be small and or the recptor of a low sensitivity.
Moerate Impact	The predited impact on a particular resource/recptor is assessed as significant but amenable to mitigation. Moderate impacts should be mitigated wherever
Wocrate Impact	practicable.
	The predited impact on a particular resource/receptor is assured to be of a high
Major Impact	magnitude and or the resource/receptor of a high sensitivity. Mitigation measures
	should be done until no residual impact as possible.

The rating of impacts of pollution, natural environment, social environment were classified as A to D in accordance with the following criteria.

Rating	Magnitude of Impact				
Criteria	Sensibility	Likelihood	Signigicant		
A	Major	Major	Major		
В	Minor	Minor	Minor		
С	Not clear	Need Further Study	No		
D	Negligible	No Need Further Study	No		

A-: Major Significant Negative Impact

B-:Minor Some Negative Impact

D 1 .

A+: Major Significant Positive Impact B+:Minor Some Positive Impact

C: Impacts are not clear, need more investigation

D:No impact or Impacts are negligible, no further study required

# **6.7.Scoping of Impacts**

The impacts of pollution, natural environment, social environment were classified as A to D in accordance with the following criteria.

A-: Significant Negative Impact
B-:Some Negative Impact
B+:Some Positive Impact
B+:Some Positive Impact

C: Impacts are not clear, need more investigation

D:No impact or Impacts are negligible, no further study required

The environmental and social impact assessment was conducted according to the scoping matrix below.

Table 61 Summary of Scoping of Environmental and Social Impact Assessment

		Evalua		tal and Social Impact Assessment
Category	Scoping Item	Before/During Construction (BC/DC)	Operation Stage(OS)	Reason for Evaluation
Pollution	Air Quality	B-	B-	BC/DC: Emissions from construction equipment, dust arising
				from construction activities.
				OS: Emissions from engine test run, diesel generator and the
				spraying paint are anticipated.
	Water Quality	D	D	BC/DC: Muddy water inflows to river from construction site
				may effect to water quality.
				OS: Water pollution to the surrounding water bodies by waste
	Solid Waste	D	D	water if it is not treated is anticipated.
	Solid Waste	D	ע	BC/DC: Generation of construction waste by each works and removal of structures are anticipated.
				OS: All solid waste from the production, personal including
				kitchen waste are anticipated.
	Waste Water	D	D	BC/DC: No waste water created from the construction site.
	, vasco vvacci			OS: In general there is no wastewater from the vehicle
				assembling process as it has water recycling process and no
				wastewater chischarge from the factory.
	Soil	D	D	BC/DC: This development area is not farmland and thus soil
	Contamination			pollution from construction are not anticipated.
				OS: Soil contamination in operation stage by vehicles, tenants
				are anticipated.
	Noise and	B-	B-	BC/DC:Noise and vibration from operation of construction
	Vibration			machinery and construction vehicles are anticipated.
				OS:Noise from the air compressor, ventilation fans, electric
	Cassad	Λ.	Α.	generator and vehicle assembling activity are anticipated.
	Ground Subsidence	A+	A+	BC/DC:Ground subsidence by construction activity is
	Subsidefice			anticipated. OS: Ground subsidence by operation stage is anticipated.
	Offensive Odor	D	D	BC/DC: Offensive odor during construction is anticipated.
	Silchistve Odol			OS: Offensive odor caused by generator is anticipated.
	Bottom	D	B-	BC/DC:Construction works is not anticipated.
	Sediment			OS: Inadequate wastewater treatment and disposal in
				operation stage may cause water pollution and impact on
				bottom sediment.
Natural	Protected Area	D	D	No natural preserve area and national parks exist in and
Environment				around the project site.
	Flaura/Fauna	C	C	There are no information on inhabiting situation of important

	and Ecosystem			animals and valuable plant species in the surrounding area.
	Hydrology	В-	B-	BC/DC:hydrology impact to the ground water during
	, 2,			construction is not anticipated.
				OS: Hydrology impact by using groundwater during operation
				stage is anticipated.
	Topography	D	D	The project area is flat land, thus impact of topography and
	and geology			geology is not be anticipated.
Social	In voluntary	D	D	No resettlement is needed as the project site is relocated.
Environment	Resettlement			The positive support by the neighbors received.
	Misdistribution	С	С	The assessment of impact of these items for the people, who
	of benefit and			live or earn their living near project site will be SPC and
	damage			relevant authorities.
	Local conflit of	D	D	
	interests			
	Gender	D	D	
	Children's	D	D	
	Right			
	Ethnic minorities	D	D	
	and indigenous			
	peoples Poor	A+	A+	The assessment of impact of those items for the people who
	1 001	11.	11	live or earn their living near the project site would be checked
				by SPC.
				On another hand, positive impact on the poor is anticipated
				because of the improvement of the job opportunities for them
				could be expected both BC/DC and OS.
	Living and	A+	A+	BC/DC: Assessment of impact of this item for the people
	livelihood			during construction are anticipated.
				OS: Positive impact on living and livelihood could be
				expected as the local economy and employment will be
				boosted by tenants.
	Existing social	B+	B+	BC/DC: the assessment of traffic to the nearby project site
	infrastructures			would be done by SPC.
	and services			OS: The positive impacts is assumed by the development of
				facilities related to the project service and many social
				infrastructures will be improved.
	Water Usage	D	D	BC/DC: Impact on local water usage may occur if surface
				water would be taken not only for the construction activities
				but also usage by the tenants after project accomplished.
				OS: Impact on existing water usage is not expect. The
				implementation of new sources for water supply to the project
				would be considered without causing negative impact on local
				existing water usage.
	Cultural	C	C	It is necessary to confirm information on distribution of
	heritage			cultural heritages in the surrounding area.
	Landscape	C	C	It is necessary to confirm information on important landscapes
			_	and viewpoints in the surrounding area.
	Risks for	D	D	Risks of infectious diseases with a fixed probability are
	infectious			anticipated.
	disease such as			
	AIDS/HIV			
	Working	B-	B-	BC/DC: Impact of working conditions during construction is
	conditions			anticipated.

	(including occupational safety)			OS: Impact on working conditions during operation stage are anticipated.
Other	Accident	В-	В-	BC/DC: Chances of accident especially in the construction stage should be closed watch. OS: Due to increase of traffic volume since construction, the assessments are anticipated.
	Natural Disaster and Machine Failures	B-	В-	BC/DC/OS: There are chances of negative impacts due to the natural disaster and machine Failure at all time like other projects. The construction machines and normal machines using in the production process, are needed to to be anticipated.
	Global Warming	B-	В-	BC/DC: Emission of Greenhouse gases (GHGs) by construction machineries are anticipated. OS: GHGs emission in operation stage by tenants and vehicles are anticipated.

Result: : All components of rating (B-) are the potential and scoping of impacts regarding to the rating matrix method mentioned above.

# 6.8. Terms of Reference for Investigation of Environmental Impact Assessment

# **Motor Assembling Plant**

As terms of reference (TOR) for investigation of Environmental Impact Assessment (EIA) the survey items and method of each negative impact evaluation item which was identified as A and B or C by scoping described in previous table. The baseline of air quality, water quality, noise soil flora/fauna and cultural heritage were confirmed by laboratory analysis and field survey.

Table 62 The Terms of Reference for the EIA Report for Gold A Y A Co., Ltd's Motor Assembling Plant

Category	Scoping Item	Survey Item	Survey Method	Quantity
Pollution	Air Quality	1)PM <sub>2.5</sub> ,PM <sub>10</sub> ,HCHL, VOC 2)Traffic Volume	1)Air quality measurement by instrument 2)Counting numbers of each type of vehicle	1)5 stations x 1 time each (dry and rainy season) 2) 2stations x 2 times (dry and rainy season)
	Water Quality	1)Natural and living environment parameters	Sampling and measurement by field equipment and laboratory analysis	2 stations x 1 time
	Solid Waste	1)Amount of construction waste (Construction Stage) 2)Amount of industrial waste (Operation Stage)	1)Prevention of waste as construction work 2)Referring of similar project	1 time each
	Soil Contamination	рН,	Measurement by field equipment	2stations x 1 time each (dry and rainy season)
	Noise and Vibration	1)Traffic volume 2) Noise Level	1)Counting number of each type of vehicle 2)Noise level measurement by instrument	2stations x 2 times (dry and rainy season)

Social Environment   Environment   Environment		C1	W7-4 1	Durantin of C 1	<u> </u>
Offensive Odor		Ground	Water demand	Prevention of General	-
Offensive Odor		Subsidence		2 0	
Offensive Odor   Distribution of residences and monastery around the project area				is assumed to cause	
Offensive Odor   Pistribution of residences and monastery around the project area   Pit.   Pit.   Pit.   Project which is assumed to cause impact on water use   Project area   Project which is assumed to cause impact on water use   Project area   Project which is assumed to cause impact on water use   Project area   P					
Odor   residences and   monastery around the   project area   1)Flora   Record Data, Observation   and interview survey   monastery around the   project area   1 time   (June)				subsidence	
Odor   residences and   monastery around the   project area   1)Flora   Record Data, Observation   and interview survey   monastery around the   project area   1 time   (June)		Offensive	Distribution of	Prevention of General	-
Bottom Sediment					
Bottom Sediment   PH,   Measurement by field   Sediment   Sediment   PH,   Measurement by field   Sediment   Sediment   Pluma   Project area   Project area x 2   P		0.001			
Bottom Sediment   PH, Sediment   PH, Sediment   Istation x 1 time (June)   Istation x 1 time (Istation x 1 time (June)   Istation x 1 time (Istation x 1 time (June)   Istation x 1 time (Istation x 1 time (Ista			•		
Natural Environment   Patura/Fauna and   2)Fauna   2)F		Dottom	1 0		1 station v 1 time
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Global Traffic volume Counting number of each					
				impact on accident	
		Global	Traffic volume	Counting number of each	
		Warming		type of vehicle	

#### 6.8.1. Flora and Fauna

Survey Item

Survey Item for flora and fauna are as follows;

- 1. Vegetation
- 2. Inhabitants
- 3. Important Species
- 4. Biodiversity and Ecosystem

#### **Survey Area**

The survey area is in and around the project site The existing land plot area nearby project site

#### **Survey Period**

Flora and fauna survey was conducted both dry and rainy season. The survey duration is as shown in table Survey periods for Flora and Fauna Survey

Season	Period
Dry Season	May10~12,2018
Raining Season	June~July 5,2019

# **Survey Method**

The survey assessment was conducted since the project is under land preparation stage, during construction stage and operation stage etc. During survey period, the whole area was observed. The actual data were recorded not only by the interviewing the local people, but also recorded all findouts and taken photos as shown in annex.

# **Interview and literature Survey**

The survey datas are recorded together with interviewing with local people and residents in additional to the field observation. The survey assessment team had visited around the survey area and interviewed the name of plants, animals that could be seen in and around the area. It is also asked the past and present situation of flora and fauna to them that they had noticed and on the changes on biodiversity and ecosystem in the designated area and nearby. However, there are no existing literatures related to Flora and Fauna around the area.

#### **Survey Result**

There are four major types of habitat were observed namely (1)patches of mixed vegetation with scattered trees (2)cultivated land and (3)aquatic habitat and (4)human habitation area. There is no threatened plant and animal species in the area and the overall habitat are assumed to be low.

#### **Butterfly**

During Survey Period, no butterfly is found.

#### Birds

No birds found in the day time as the project is cleared trees except the plannts are all in the nursery stage **Mammals** 

The dogs, cats and pigs are common mammals seen in the area as human raised them as pets or money making.

#### **Reptilian and Amphibian Species**

No reptilian and amphibian species found during assessment period.

#### **Aquatic Ecology**

It is not applicable as the project site is far from river and sea.

Table 63 The Summary of Key Terrestrial Habitat Features in the Survey Area

No	Criterion	Features	Remarks
1	Fauna and Flora	Threatened species	Nil
2	Threatened	Mixed vegetation and water body	Potential human disturbance and
	Communities	whited vegetation and water body	construction
3	Migratory Birds	Locally	Local migration will be continued
4	Wild Corridor	Low	No wild life recorded
5	Representativeness	Moderate	Mixed vegetation and water body
6	Natural Diversity	Low	Nil
7	Rarity and	Low	Mixed vegetation, water body
/	Distinctiveness	Low	support the biodiversity
8	Naturalness	Low	Mixed vegetation, water body
0	ivaturamess	Low	support the biodiversity
9	Pest Species	Insect pests and field rat	Seasonal
10	Long-Term	Moderate	Potential human pressure and
10	viability	Wioderate	construction development
11	Adjacent habitat	low	Disturbed land
11	values	10 W	
12	Degree of existing	Moderate	Human activities due to
12	modification	Wioderate	development
13	Sensitivity to	Moderate	Mixed vegetation and water body
13	disturbance	Moderate	·
14	Overall habitat	Moderate	Patches of mixed vegetation and
17	value	Moderate	water body

The summary of environmental survey program is as shown in following table and sampling points for environmental survey are shown in next level.

Table 64 Summary of Environmental and Social-Economic Survey Program

Table 64 S	summary of	Environmental and Social-Economic Survey Program
Water	Parameter	Natural and Living Environmental Parameters
Quality		(1)pH (2)color (3)Turbidity (4)electrical conductivity (5) total hardness (6)Calcium
		Hardness (7)Magnesium Hardness (8)Total Alkalinity (9)Phenolphthalein Alkalinity
		(10)Cabonate (CaCO3) (11)Bicarbonate (HCO3) (12)Iron (13)Chloride (as CL)
		(14)Sodium chloride(as NaCL) (15)Sulphate (as SO4) (16)Total Solids
		(17)Suspended Solids (18)Dissolved Solids (19) Manganese
	Period	Monthly sampling at 2 points for Natural and living and 1 point for Health impact
		parameters for 6 months duration
	Location	Points are water source, existing well,
Sediment	Parameter	(1)Mercury(Hg) (2)Arsenic (As) (3)Lead (Pb) (4)cadmium (Cd) (5)copper
and Soil		(cu)(6)zinc(Zn) (7)Chromium (Cr) (8)Nickel(Ni)
Quality	Period	Two times sampling at 2 points
	Location	- (Not applicable)
Air	Parameter	(1) PM <sub>2.5</sub> (2)PM <sub>10</sub> (3)HCHL (4)VOC
Quality	Period	5 points for 2 times
	Location	Factory area
Traffic	Parameter	Volume of traffic and travelling velocity of vehicles
Volume	Period	Daily survey (6:00-18:00) for 2 weekdays and 1 weekend at 2 points
	Location	the nearby residential area and along the road
Noise	Parameter	LAeq (A-weighted loudness equivalent)
Level	Period	2 times at 5 locations for 8 hours duration
	Location	Same as traffic volume survey
Flora and	Location Item	Same as traffic volume survey Interview, field observation and secondary data collection

	Period	Whole survey period
Cultural	Item	Interview, field observation and secondary data collection
	Area	-
	Period	Whole survey period

#### **Environmental Base line,**

There is no recorded environmental base line data as it is the remote area and no public transport access available.

#### Size and Details of Land Use.

The total land area for the proposed project is 20.084 Acreas. It is applied to transform land use from the agriculture land to industrial zone use.

Road and Traffic System

It is just 26 miles away by road from Mandalay International Airport and considered as Myo Thar is the one of the best location closet to Mandalay. It could be reached from either Mandalay and is a good road access.

Waste water system (Drainage System/Waste Water Piping/Waste Water Treatment System)

◆ No industrial water is used in the whole process of production and assembly. In terms of daily life, about 125 people (at full capacity as proposes at MIC) need water for daily use. No pollution damage to the atmosphere, soil and surrounding environment.

#### 6.8.2. Drainage System/Waste Water Piping/Waste Water Treatment System

The Drainage Pipes are installed systematically. The U shape concrete ditches shall be laid along two sides of roads. The storm water will be discharged to natural drainage system. Chlorination Septic Tank is installed and only the acceptance level of treated waste would be delivered.

#### 6.8.3. Solid Waste

There would be solid waste like the other project in general. It would be categorized as following. **Table 65 Solid Waste Generation** 

Project Stage	Potential							
	Solid Waste Generation	Impact to						
		Environment						
Pre-construction	Land clearing wastes, Construction material packaging wastes,	It is not only						
	worker's personal wastes	harmful to the						
During	Construction material & packaging wastes, worker's personal wastes	environment but						
Construction		also impact to						
Normal Operation	Raw material waste & packaging, container wastes, worker's personal	the human						
_	wastes	health if it could						
Factory Closure	Land clearing wastes, Demolished constructed material wastes,	not manage						
Stage	worker's personal wastes	propelly.						

In the normal operation period the potential solid waste generation comes from the unpackaging of all imported vehicle parts, such as cardboards, empty cartoon boxes, plastic packaging materials, papers, workers' personal waste, organic and household wastes from the dormitory etc. All these Solid Waste would be collected routinely and delivered to the designed place. All the solid waste would be applied to 3R code. The detailed solid wastement would be found in the EMP section.

#### 6.8.4. **Hazardous Waste**

There won't be hazardous waste from this project due to the process flow and as it is mentioned by project proponent. However, it would be checked all time regularly.

Among the impacts, health care to all visitors and guests are important during their visit the show room and service center. The most common impacts are sliping, tripping and falling at stairs and bathroom. To avoid or minimize these risks, it is necessary to keep clean everywhere in the plant and even outdoor greening and landscaping areas including show room area. Moreover, the emergency first aid kit should be kept and standby

car is needed to send patient nearby clinic or hospital within a few minutes in case of incident happen. As the front desk is operating during office hours it is always ready to assist any health care not only to the guests but also to all employees.

#### **Risk Identification and Assessment**

As it is just the vehicle assembling plant there are less-hazard risk area subject to no hazards and threats with employees and visitors to the show room due to the levels of exposure and vulnerability to these threads. The risk assessment and threat are checked with exposure and vulnerability to the following.

- Production and Marketing at the site
- Well being of nearby Local people and communities etc.,
- Thread from natural hazards
- Threads from human-induces hazards

#### **Table 66 The Summary of Risk**

	hreat/Hazard	How is	s this as a t	hread?	Frequency	Severity	Risk	Monitoring
ads	What natural/factors threaten the plant?	1.Building/site physical integrity	2.economi c activity	3.Well-being of localpeople/communities	How frequently does this occurs?	How severity does this threat affect?	Level of risk	Responsible agency
Natural Threads	Earthquake	✓	-	<b>√</b>	Low (50 years for 6.8M earthquake)	High	High	MIP
Vat	Flood	-	-	-	-	-	-	
	Heavy rain/flash flood	✓	✓	✓	High (annual)	Medium	Medium	MIP
	Drought	-	✓	✓	High (annual)	Low	Medium	MIP
	Fire	✓	✓	✓	High (5 times/year)	Medium	High	MIP, Gold AYA, Fire Dept.
8	General Pollution	✓	-	✓	Medium (continuous)	Low	Low	Gold AYA
Threads	Waste management	✓	✓	✓	Medium (continuous)	Medium	Medium	Gold AYA, MIP
Induced T	Slippely Floor	✓	✓	-	Medium (progressive)	Low	Low	Gold AYA
	Noise	-	-	✓	Medium (progressive)	High	High	Gold AYA
Human	Vibration	✓	-	-	High (continuous)	Low	Medium	Gold AYA
E	Accident	✓	-	-	High (continuous)	Low	Medium	Gold AYA
	Visitors	✓	✓	-	High (continuous)	High	High	Gold AYA

(MIP = Myotha Industrial Park)

Risk Level Definition by Frequency and Severity

yy iod)	High (Less than 2 years between events)	<b>Medium</b> Risk	<b>High</b> Risk	<b>High</b> Risk		
Frequency (Return period)	Medium (2 to 10years between events)	<b>Low</b> Risk	<b>Medium</b> Risk	<b>High</b> Risk		
F <sub>1</sub>	Low (10years or more between events)	<b>Low</b> Risk	<b>Medium</b> Risk	<b>High</b> Risk		
		<b>Low</b> Severity	Medium Severity	<b>High</b> Risk		
		Identified Severity				

## 6.8.5. **Electricity**

There is national grid for electricity and it would be self generating power for the blackout time. Full load power will be supply from the grid.

# **6.9.Social Impact Assessment**

The project impact assessment is derived from the observations in the field surveys, and from the questions posed to community leaders/source persons and personnel of the concerned authorities in the project area. The detailed can be summarized as following.

- 1. Objectives of the Study
  - To study the impact on the people residing community or society nearby project site from which the possible changes of socio-economics, culture and quality of life will be anticipated.
  - To prepare mitigation measures so that the project can be operated in harmony with the local community and society can be mostly reduced.

# 2. Scope of the Study

The social impact assessment approach focused on public participation (relations community) in the project area in order to provide opportunities to stakeholders in proposing ideas/recommendations and exchanging important information to dissolve misunderstanding and unawareness of different groups. Social Impact Assessment emphasizes seeking information and ideas of the people to know about crucial problematic issues (impacts) in the community.

# **6.9.1.** Demographic Impacts

About 125 jobs would be created from this project and the positions are priority to nearby residents. According to the estimation, about 110 jobs would be created from this project (after factories had built) and the positions are priority to nearby residents. With its recruitment, it would be some changes to the population increasement in this township temporary and some permanent.

# **Socio-economic Impacts**

The positive socio-economic impact will be great because once the consortium project accomplished, it will lead to increasing employment, providing career building at all level and higher income to the communities. Moreover, it will induce various kinds of activities that will provide further employment such as trade and services.

## **Institutional Impacts**

Not applicable

#### 6.9.2. Cultural Impact

#### **Survey Item**

The survey item of cultural survey was as bellow;

The existence of cultural heritage in the area of project site

# **Survey Location**

A cultural baseline data collection survey has been carried out in and around of the project site

#### **Survey Period**

During the period of May~July,2018, a cultural baseline data collection survey has been carried out.

#### **Survey Method**

The survey method to identify the cultural baseline data was as follow;

Documentary and Field Observation

#### **Survey Result**

Summary of Survey Results

There is no cultural heritage inside the boundary of the Area of project site. There are 427 pagodas in Nganzun Township with 7 famous shrine and pagodas as following.

No.	Stupa, Pagodas, Temple	Location
1	Shin Pin Moe Kaung	Nganzun
2	Shwe Maw Taw	Let Pan Kyin

3	Shew Gu Gyi	Thar Kyin
4	Shin Pin Sein Nyo Shin	Taung Pyin
5	Shin Pin Ku Ni	Nganzun
6	Shin Pin Thein Taw	Ngan Myar
7	Shin Pin Tant Kyaung	Ngan Myar

It is expected that the negative cultural impact to communities nearby project area are at moderate level although the people's way of life will be changed from national to be more international and urbanized as it is expected to get more international travelers and expatriates to stay short and long time in this premises. The workers from the agriculture and fishery sector will enter into industry sector and will affect their life style in positively.

#### 6.9.3. Gender Impacts

No Gender Impacts are expected by this project implementation. It is expected that the opportunities for socializing will be more than before. It is expected that the opportunities for socializing will be more than before.

# 6.9.4. Health Impact

As this project is just assembling the vehicle which material parts are produced in China, the impact including health impact was already eliminated for the production of vehicle parts. The health impact is more significant through the emission of carbon dioxide during the usage of vehicles than the vehicle production stage. However the emission rates by combustion of fuel from the utilization of vehicles also highly dependent on different parameters such as model of the car, the load, speed, and driving behaviours which is generally difficult to define. Moreover, this part would be the out of scope of this EIA study but should be inserted the government's road infrastructure network project.

The following table shows the contribution of the weight inventory results and the different impact categories considered to the final index obtained. (gasoline scenario)

.a\		Human	health		Ecos	ystem	Resou		
Measurements (emissions to air and resources)	Carcinogenic effects	Resp. Effects (organic)	Resp. Effects (inorganic)	Effect from climate change	Eco-toxic emissions	Acidification/ Eutrophication	Extraction of minerals	Extraction of fossil fuels	Total
(a) CO <sub>2</sub>	-	-	-	10%	-	-	-	-	10%
(a) CH <sub>4</sub>	1	0.00%	-	0.12%	-	1	-	1	0.12%
(a)VOC	1	0.024%	-	1	-	1	-	1	0.024%
(a) NOx	ı	-	4.8%	-	-	0.9%	-	ı	5.73%
(a) N <sub>2</sub> O	1	-	-	0.62%	-	1	-	1	0.62%
(a) SOx	-	1	4.4%	1	-	0.25%	-	1	4.65%
(a) HC	-	0.1%	-	-	-	-	-	-	0.1%
(a) Particles	-	-	6.6%	1	-	-	-	-	6.6%
(a) PAH	0.00%	-	-	1	0.0%	1	-	1	0.00%
(a) Lead	-	1	-	1	0.0%	-	-	1	0.00%
(r) Aluminium	ı	-	-	1	-	1	0.25%	ı	0.25%
(r) Iron	-	-	-	1	-	-	0.05%	-	0.05%
(r) Copper	1	-	1	1	-	1	0.01%	1	0.01%
(r) Lead ore	-	-	-	-	-	-	0.02%	-	0.02%
(r) Zinc ore	-	-	-	-	-	-	0.01%	-	0.01%
(r) Manganese	-	-	-	-	-	-	0.004%	-	0.004%
(r) Coal	-	-	-	-	-	-	-	0.5%	0.5%
(r) Oil	-	-	-	-	-	-	-	62%	62%
(r) Natural gas	-	-	-	1	-	-	-	9.4%	9.4%

The sum of the percentages presented in this table may not come to 100% due to approximations. The sign "-"means that the respective substance or resource does not affect that impact category.

(a) = emission to air, (r) = resource

 $CO_2$  =carbon dioxide,  $CH_4$ = methane, VOC= volatile organic compounds (non-methane), NOx= nitrogen oxides,  $N_2O$ = dinitrogen oxide, SOx= sulphur oxides, HC=hydrocarbons, PAH= polycyclic aromatic hydrocarbon

#### **Accident & Injuries**

It would be the same as other plant and work places that could happened accident & injuries at all time. However, it could be neglected for the production of vehicle parts as it all are produced in oversea country. The proposed project is just assembling of these parts to become vehicle. As it is mentioned in the description of project section, there are just the conveyor systems to handle the assembling parts in the factory. The accident would be occurred and injured at the moving parts of these conveyor systems. The electric shock would be the source of accident if it is handled improperly. (B-)

#### 6.9.5. Road & Conmunication

The project located in the Ngazun township is positioned on the Global Polarize System of 21°43′52" N and 95°37′30"E. Myo Thar Industrial Park is near a town named as Myo Tha (Ngazun Township) in Mandalay Division Region. The road assess and communication is very much suitable for logistic. It is 36 miles away from Mandalay and 45 miles away from Mandalay International Airport. The Mandalay Myotha Industrial Park connects the Asian expressway, the Asian railway network, the Irrawaddy river, the international airport and so on. The company and production base is located in block b-1-1 in zone 2C, Myotha industrial park, Mandalay Division Region, Myanmar.

#### **6.10.** The Evalution of Impacts

# **6.10.1.** Evaluation of Impacts Before and During Constrution Stage (BC/DC)

# The Evalution of Impacts on Pollution

(Air, Noise & Vibration, Solid Waste, Soil, etc)

#### Air

During construction phase, the certain amount of dust particles might be generated by construction activities such as land preparation, earth moving, vehicle passing.,etc. The generated air borne particles which is generated by not only these construction activities, but also natural wind blowing effect should be considered but possible to mitigate these impacts. The impact would be negative impact considered as (B-).

#### Noise

The construction machines operating, diesel power generation, stone grinding, concrete mixing, pile driving, excavator moving, transportation vehicles are sources of noise emission to the environment and should be anticipated to consider the noise impact. The impact would be negative impact considered as (B-).

#### **Solid Waste**

Waste generation at construction site, including personal should be anticipated. The impact would be negative impact considered as (B-).

#### Soil

Impact to Soil should not be anticipated during land preparation, land sacping and contamination of soil, any effect to get impact to soil such as oil spilling, hazardous waste, waste water etc. and land clearing by firing bushes if any. The impact would be considered as (D) as it has less chance to get impact happened.

# The Evaluation of Impacts on Natural Environment

(Protected Area, Flauna/Fauna, Hydrology, Topography & Geology)

There is no protected area near the proposed project site. It should be anticipated the impact to the flauna and fauna within the budget limit as much as possible. Hydrology, Topography and Geology impacts would not be anticipated as the project is relatively small to get impact on these factors. The impact would be considered as (D) as it is neglible.

#### The Evaluation of Impacts on Social Environment

(Reseltement, Benefit & Damage, Local Conflict of Interest, Gender, Children's Right, Ethnic Minorities & Indigenous People, Poor, Living & Livelihood, Existing Social Infractures and

Wervices, Water Usage, Cultural Heirtage, Landscape, Risks for Infectious Diesease, Working Condition)

During construction phase, these are the areas of consideration as social impact. However there would not be resettlement by this project.

Reseltement, The impact would be considered as (D). Benefit & Damage, The impact would be considered as (C).

Local Conflict of Interest, The impact would be considered as (A+).

Gender, The impact would be considered as (D). Children's Right, The impact would be considered as (D).

Ethnic Minorities & Indigenous People, The impact would be considered as (D). Poor, The impact would be possitive impact considered as (A+). Living & Livelihood, The impact would be positive impact considered as (A+).

Existing Social Infractures and Services, The impact would be positive impact considered as (B+).

Water Usage, The impact would be considered as (D).

Cultural Heirtage, The impact would be positive impact considered as (A+). Landscape, The impact would be positive impact considered as (A+).

Risks for Infectious Diesease, The impact would be positive impact considered as (B+).

Working Condition The impact would be positive impact considered as (B+).

# The Evaluation of Impacts on Others

(Accident, Global Warming)

In general for all construction phases, the accident prevention should be considered as major precaution as parts of Occupational Healthe and Safety. GHG emission should be anticipated.

# **6.10.2.** Evaluation of Impacts in Operation Stage (OS)

#### The Evaluation of Impacts on Pollution

(Air, Noise, Solid Waste, Water, Wastewater, Soil, Ground Subsidence, Offensive Odor, Bottom Sediment)

#### **Air Pollution**

Eventhough the project is in the operating stage, there are no base line data recorded and could not compared how much dust particles in the air and how much polluted in this area both inside factory and due to the vehicles passing. During operation phase, the certain amount of dust particles might be generated by vehicle passing., etc. The generated air borne particles by not only engine testrunning, loading and unloading which is significance and considered as temporary impact and possible to mitigate these impacts. Due to the result of assessment on air quality, it is found under the NEQEG limit. The painting boot function is potential for air pollution if the filter and exhaust system (with water scrubber and filter) not working properly. The impact would be negative impact considered as (B-).

#### Noise

In general the factory has noise & emission when the diesel generator is running during black out period. The vehicle assembling activities, engine and vehicle test running, loading, unloading are sources of noise impact. Due to the result of noise assessment result it is found under the NEQEG limit. The noise and vibration are also minimal. The impact would be negative impact considered as(B-).

#### **Solid Waste**

The solid wastes from the factory are one of the causes of impact if it is not properly managed. The bio waste from the dinning area and toilet could also cause the impact. There are solid waste estimated generating in the everage of 1~5Kg of solid waste from the office of the factory per day. The estimated total solid waste generated from the workshop could be calculated from the estimated data of following table.

#### Table 67 The Total Solid Waste Estimation (per day)

No	Description	Solid Waste (Kg)
1	Office	5
2	Workshop	100
3	Lobby (Showroom)	5
4	Kitchen (Domitory)	20
	Total	130

The impact by the waste generation would be negative impact considered as (B-).

#### **Waste Water**

According to the nature of process flow to this industry, there is no waste water from the vehicle assembling process as it has the water recycling process. The project is also included bioseptic tank system. No waste wate is discharged from the factory. (D)

#### Soil

Impact to Soil should not be anticipated at normal operation period. The factory is covered with concrete floor. It is eposy coated to all working floor area to prevent floor crack and to collect easily all oil or any liquid substances accidently spilled on the floor. The soil quality was checked during assessment and it would be kept as baseline value. Hence, it would be no negative impact considered as (D).

#### The Evaluation of Impacts on Natural Environment

#### Protected Area.

There is no protected area near the proposed project site. (D)

# Flora/Fauna,

There is no record for fauna and inhabated in the proposed area.

It shoul be anticipated the impact to the flora and fauna within the budget limit as much as possible. (C)

# Hydrology, Topography & Geology

Hydrology, Topography and Geology impacts would not be anticipated as the project is relatively small to get impact on these factors. (D)

#### The Evaluation of Impacts on Social Environment

Reseltlement, Benefit & Damage, Local conflit of interest, Gender, Children's Right, Ethnic Minorities & Indigeneous Peoples

As the project is planned in the industrial zone, there would be no reseltlement but affected positive impact to the neighbors. (D)

# Poor, Living & Livelihood,

The employment opportunities could be a chance for the poor to improve their livelihoods. (A+)

# Transport Existing Social Infractures and Services (Traffice Management)

As the project is located in the Myo Thar Township in Mandalay Division Region, there is no obstruction to the road infrastructure by this project implementation. The positive impacts is assumed by the development of facilities related to the project service and many social infrastures will be improved. The traffic sign would be helped to the traffic management. (B+)

#### Water Usage,

There would not be affected to the social environment by the water usage. (D)

#### Cultural Heirtage,

There is no cultural heritage within the study area. (D)

Regarding to the comment during RT meeting, it is rechecked about the wooden monastery building and wooden bridge. As there is no vibration action in the normal production process of the proposed project and long distance between the factory and the monestry in Semain village, the impact is negligible as mentioned (D)

#### Landscape,

There would not be affected to the social environment by the landscape. (D)

#### Risks for Infectious Diesease,

It could be controlled the risk of infectious disease to the social environment. (D)

#### **Working Condition**

It could be controlled the working condition. (D)

#### **Natural Disaster**

There are chances of negative impacts due to the natural disaster at all times like other project. The natural disasters such as earthquake, storm, landslide, and flood are needed to be consider as negative impact as (B-) and (D) which is no negative impact or negligible if it is prevention measure.

#### **Machine Failures**

There are chances of negative impacts due to the machine failure at all times like other project. The normal machines using in the production process are needed to be anticipated. (C)

# The Evaluation of Impacts on Others

(Accident, Global Warming)

In general for all times of operation phase, the accident prevention should be considered as major precaution as parts of Occupational Health and Safety. The situation should be studied always to prevent negative impact and further improvement. (C)

GHG emission should be anticipated. (C)

#### **Economics Assessment**

The economics assessment should consists of the following elements which should be integrated into the overall economic analysis of the project: (1) cost and benefits of environmental impacts; (2) cost, benefits and cost-effectiveness of mitigation measures and (3) discussion of impacts that have not been expressed in monetary values, in quantitative terms where possible. However, these costs also needed the standardization and cost of the environment impacts to be able to calculate for economics assessment. With minimal impacts and unavailability of these standards and cost structures, this economic assessment would be exempted at this stage.

#### 6.11. The Residual Impacts

The assessment for the residual impact caused by the proposed project implementation would be considered before the factory closure stage as it is planned and doing operation under the ECD approved environmental management plan. The most residual impact would be caused by the waste left after closure and mis management on it. It is needed more investigation before and after factory closure.

#### 6.12. The Summary of Impacts

The impacts of pollution, natural environment, social environment were classified as A to D in accordance with the following criteria.

A-: Significant Negative Impact
B-:Some Negative Impact
B+:Some Positive Impact

C: Impacts are not clear, need more investigation

D:No impact or Impacts are negligible, no further study required

The environmental and social impact assessment was conducted according to the scoping matrix and examined.

Table 68 The Summary of Environmental and Social Impacts

		Scop		Assessment		
			liig	_	Silicit	
Category	Assessment Item	Before/During Construction (BC/DC)	Operation Stage(OS)	Before/During Construction (BC/DC)	Operation Stage(OS)	Impacts
Pollution	Air Quality	В-	B-	В-	B-	BC/DC: Emissions from construction equipment, dust arising from construction activities. OS: Vehicle moving for loading and unloading, Emission from generator and engine test running are anticipated.  (Painting booth is omitted as it is installed with water scrubber and filter but keep closly watch for proper function as mitigation process.)
	Water Quality	D	D	D	D	BC/DC: Muddy water inflows to river from construction site may effect to water quality. But not effected to the water body OS: Water pollution to the surrounding water bodies by waste water if it is not treated is anticipated. But no discharge from the factory.
	Solid Waste	D	D	D	D	BC/DC: Generation of construction waste by each works and removal of structures are anticipated. OS: All solid wastes from the production, personal including kitchen wastes are potential impact sources.
	Waste Water	D	D	D	D	BC/DC: No waste water from construction activities inflows to river and to water body OS: In general there is no waste water from the vehicle assembling process as it has the water recycling process. The project is also included bioseptic tank system. No waste wate is discharged from the factory.
	Soil Contamination	D	D	D	D	BC/DC: It could be affected to the soil only at the construction site during construction but not impact to the soil contamination.  OS: Oil spillage to the ground could cause contamination in operation stage but no chance of reaching to the grund as it is covered by concrete floor and covered with epoxy paint.
	Noise and Vibration	B-	В-	В-	В-	BC/DC:Noise and vibration from operation of construction machinery and construction vehicles are anticipated.  OS:Noise and vibration from operation generator, vehicle assembling activities, engine and vehicle test running, loading, unloading are anticipated.
	Ground Subsidence	A+	A +	A+	A+	BC/DC:Ground subsidence by construction activity is anticipated. OS: Ground subsidence by operation stage is anticipated.
	Offensive	D	D	B-	B-	BC/DC: Offensive odor during construction is

	Odor					anticipated.
						OS: Offensive odor caused by generator is anticipated.
	Bottom	D	B-	D	D	BC/DC:Construction works is not anticipated. OS: No wastewater and disposal in operation stage and
	Sediment	ט	Б-	ן ט		no bottom sediment would cause.
Natural	5		_			No natural preserve area and national parks exist in and
Environ	Protected Area	D	D	D	D	around the project site.
ment	Flaura/Fauna					There are no information on inhabiting situation of
	and	C	C	C	C	important animals and valuable plant species in the
	Ecosystem					surrounding area.
						BC/DC:hydrology impact to the ground water during
	Hydrology	B-	B-	D	D	construction is not anticipated. OS: Hydrology impact by using groundwater during
						operation stage is anticipated.
	Topography	-	_	Б	-	The project area is flat land, thus impact of topography
	and geology	D	D	D	D	and geology is not be anticipated.
Social	In voluntary	D	D	D	D	
Environ	Resettlement	<i>D</i>		D	D	
ment	Misdistributio					
	n of benefit and damage	С	C	С	С	
	Local conflit					No resettlement is needed as the project site is relocated.
	of interests	D	D	D	D	The positive support by the neighbors received.
	Gender	D	D	D	D	The assessment of impact of these items for the people,
	Children's	D	D	D	D	who live or earn their living near project site will be SPC and relevant authorities.
	Right	D	D	D	D	SFC and relevant authornies.
	Ethnic					
	minorities and	D	D	D	D	
	indigenous peoples					
	peoples					The povity elimination could be expected at BC, DC
	Poor	A+	A	A+	A+	and OS by development of job opprotunities to the local
			+			residents
	Living and		Α			BC/DC: OS: Positive impact on living and livelihood
	livelihood	A+	+	A+	A+	could be expected as the local economy & employment
						will be boosted.  BC/DC: the assessment of traffic to the nearby project
	Existing social					site would be done.
	infrastructures	_	В	_	_	OS: The positive impact is assumed by the development
	and services	B+	+	B+	B+	of facilities related to the project service and many
	(Trafic Management)					social infrastructures will be improved. The traffic sign
	Management)					would be helped to the traffic management.
						BC/DC: Impact on local water usage may occur if
						surface water would be taken not only for the
						construction activities but also usage by the tenants after project accomplished.
	Water Usage	D	D	D	D	OS: Impact on existing water usage is not expected. The
						implementation of new sources for water supply to the
						project would be considered without causing negative
						impact on local existing water usage.
	Cultural					There is no cultural heritage at the project site and the
	heritage	С	C	С	С	surrounding area and cause no impact. It would be
						sources to develop the cultural heritage by the allotment

						of CSR fund.
	Landscape	С	С	С	С	It would be positive impact to the landscapes and viewpoints in the surrounding area due to the project layout.
	Risks for infectious disease such as AIDS/HIV	D	D	D	D	Risks of infectious diseases with a fixed probability are anticipated.
	Working conditions (including occupational safety)	B-	B-	В-	С	BC/DC: Impact of working conditions during construction is anticipated. OS: Impact on working conditions during operation stage are anticipated.
Other	Accident	B-	B-	С	С	BC/DC: There are chances of accident especially in the construction stage. OS: Due to increase of traffic volume since construction, the assessments are anticipated.
	Natural Disaster	B-	B-	В-	D	BC/DC: The natural disaster is unpredictable at all time like other project. OS:Disaster preparedness designed in the EMP could prepare to avoid the potential impact.
	Machine Failures	B-	B-	В-	С	BC/DC: There would be some negative impact by failure of construction machines.  OS: It is needed to check each and every machine failure and it is marked the level of impact as "C" which is not clear and needed more investigation.
	Global Warming	B-	B-	B-	B-	BC/DC: Emission of Greenhouse gases (GHGs) by construction machineries are anticipated. OS: GHGs emission in operation stage by tenants and vehicles are anticipated.
	Residual Impact	В-	B-	С	С	CS: Need to clean all waste systematically to avoid causing the residual impact.

Impact Significance

impact Significance	C
Impact	Significance
Air Quality	
Noise	
Waste Water	
Soil Contamination	
Ground Water	

**Table 69The Summary of Impacts & Ratings** 

Impact	Significance Rating
Impact on Air environment (Pollution)	Low
Impact on Natural Environment (Water Resources)	Low
Impact on Noise and Vibration	Low-Medium (w/o Generator Running)
	High (with Generator Running)
Impact on Land Environment (Soil contamination, Ground Subsidence)	Low (Construction Period)
Impact on Biodiversity	Low
Impact on Community Safety and Health	Low but A+
Impact on Job Opportunity	High A+
Impact on Occupational Safety and Health	Low but A+
Restriction of Access	-
Economic Displacement of local Agriculturists	-
General Economic Development	High A+
Better Transportation	High A+

# 7. The Mitigation

The priority in mitigation is to apply mitigation measures to the source of impact and then to address the resultant effect to the resource/receptor via abatement or compensatory measures or offsets.

# 7.1 Methodology

The Environmental and social consideration measures taken in the course of project implementation were examined based on the findings obtained through the environmental and social impact assessment.

It is to evaluate what mitigation and enhancement measures are suitable and warranteed. The following mitigation hierarchy has been adopted.

- Avoid at Source; (e.g., avoiding by sitting or re-routing activity away from sensitive areas or reducing by restricting the working area or changing the time of the activity.)
- Abate on Site; (eg., installing the pollution control equipment)
- Abate on Receptor; (e.g., fencing to prevent animals straying onto the site.)
- Repair or Remedy; some impacts involve unavoidable damage to a resource and those impacts can be addressed through repair, restoration or reinstatement measures. (e.g., agricultural land and forestry due to creating access work camps or materials storage areas)
- Compensate in Kind or through other means; (e.g., planting to replace damaged vegetation, financial compensation for damaged crops or providing community facilities for loss of fisheries access, recreation and amenity space.)

# 7.2 The mitigation of impacts Table 70 The Mitigation of Impacts

Air Pollution	The painting room with air filteration abatement system is used to mitigate
	the impact.
	The vehicle test running is unavoidable for the safety of vehicles and
	accident and risk of human lives.
Noise and	BC/DC:Noise and vibration from operation of construction machinery and
Vibration	construction vehicles are specific and temporary events.
	OS:Noise and vibration from operation and test running of vehicles are
	expected.
Solid Waste	Applied 3R (Reduce, Reuse, Recycle) always at all stages of project
	implementation to mitigate the impact to the environment and health
	impact.
Hazardous	Strictly control and storage of all hazardous substances on site to prevent
Waste	environmental impact & health impact including spillage to the ground and
	disposal of empty drums and packaging of fuel and chemicals etc.

Mitigation of noise impact during construction period is to control the sound and arrange all works to be done in the normal working hours. (The working hour is to be recommended between 7am to 7pm.) During operation, ear plug would be provided to workers who are working in the noise harzadeous area.

Allowing only obstructed trees and try to avoid the big trees as much as possible in the project site.

Waste management and implement 3R system while discharge only treated waste water with acceptance level to the sewage system.

#### 7.3 Mitigating Adverse Effects

The following are to be done for preventing existing eco system
Saving water and electricity by energy efficiency program
Utilization of Natural Light

Not only using natural light as much as possible but also try to use energy saving equipments such as LED lights.

# 7.4 The Summary of Mitigation Measures

The mitigations are summarized as all phase such as pre-construction, during construction and operation phase etc.

# 7.4.1. Mitigation and Consideration Measures (Pre-Construction Phase)

**Table 71 The Mitigation Measures (Pre-Construction Phase)** 

Category		Mitigation and Consideration Measures in Pre-construction Phase	Responsible Organization
Pollution	Air Quality	None	Developer
Tonution	Water Quality	None	Developer
	Waste	Each work plan of the project will be designed to minimize waste	Developer
	Noise &	To study the sources sound making for both acceptable and	Developer
	Vibration	unacceptable and to find the buffer zone or sound prove	De (elopei
Natural	Flora, Fauna	Design concept on Greening Plan	Developer
Environment	and	To avoid unnecessary of cutting trees	•
	Biodiversity		
	Hydrological	There is no underground water usage at this project	Developer
	Situation		
Social	Living and	To collect the base line	Developer
Environment	Livelihood		
	Water Usage	None	
	Existing	Securing Plan	Developer
	social	Community accessibility will be secured by improvement of	
	infrastructures	existing roads	
	and services		
	Risk and	Measures of infectious disease will be plan as following	Developer
	infectious	Prevention of spreading out	
	disease such	Training of workers	
	as AIDS/HIV		D 1
	Working Conditions	Considering to follow OHS working condition and guideline such	Developer
		as EHS by IFC	
	(including occupational		
	safety)		
Others	Accident	Accident prevention measures would be planned	Developer
	Natural	BC/DC/OS: To check the possible negative impacts	Developer
	Disaster	due to the natural disaster and machine failure it is	1
	and	needed to check the weather condition and follow the	
	Machine	maintenance procedure of the construction machines	
	Failures	and normal machines.	
	Global	To control or minimize the mitigation measures of GHGs	Developer
	Warming		

# 7.4.2. Mitigation and Consideration Measures (During Construction Phase)

**Table 72 The Mitigation Measures (During Construction)** 

Cotogomi	Item	Mitigation and Consideration Measures in	Responsible
Category		Pre-construction Phase	Organization
Pollution	Air Quality	As the intensive operating of the construction machinery will be	Developer
		avoided	
	Water Quality	To monitor water quality	Developer
		Setting pond for simple turbid water treatment	
	Waste	To provide dumping site	Developer
		To implement 3R for all wastes	

	Warming	Control of intergeton incusates of Offos	Developer
	Global	Control of mitigation measures of GHGs	Developer
	1 4114105	and normal machines.	
	Failures	maintenance procedure of the construction machines	1
	Machine	BC/DC: It is needed to check and follow the	Developer
		It is needed to check the weather condition	
	Disaster	the EMP to mitigate the impact.	
	Natural	BC/DC: The natural disaster preparedness is planned in	Developer
Others	Accident	Accident prevention measures	Developer
		*Safe access across the construction site	
		barriers and making of hazardous areas	
		collection system and disposal facilities of nearby communities  *Adequate protection to the general public, including safety	
		integration of waste collection from work sites into existing waste	
		*Where feasible the contractor will arrange the temporary	
		outbreak of disease	
		which will be regularly cleared by the contractor to prevent	
		*Septic tank and garbage bins will be set up in construction site	
		vectors such as stagnant water bodies and puddles do not form	
		*Adequate drainage throughout the camp ensure that disease	
		*Clean drinking water for all workers	
		specific hazards of their work	
		healthcare issues, general health and safety matters and on the	
		construction site  *Training of all construction workers in basic sanitation and	
	safety)	*Provision of adequate healthcare facilities (first aid) within	
	occupational	protection **President of advances health and facilities (first aid) within	
	(including	helmets, booths, gloves, protecting cloths, spectacles and ear	
	Conditions	*Personal protection equipment for workers such as safety	
	Working	Follow OHS working condition and guideline such as EHS by IFC	Developer
	as AIDS/HIV		
	disease such		
	infectious	Training of workers	Beveloper
	Risk and	Prevention of spreading out	Developer
	and services		
	infrastructures		
	Existing social	Securing Plan	Developer
	Water Usage	Monitoring of consumption of ground water	D 1
Environment	Livelihood		
Social	Living and	Same as mitigation measure	Developer
	Situation		
	Hydrological	underground water usage	Developer
	Biodiversity		
Environment	and	To avoid unnecessary of cutting trees	1
Natural	Flora, Fauna	Implementing of Greening Plan	Developer
	Violation	Avoid construction at night time	
	Vibration	Installation of Sound Proof	Developei
	Noise &	Monitoring Noise & Vibration	Developer

# **7.4.3.** Mitigation and Consideration Measures (Operation Phase)

Table 73 The Mitigation Measures (Operation Phase)

Category	Item	Mitigation and Consideration Measures	Responsible Organization
Pollution	Air	To monitor air quality. To keep vehicle movement slow.	Developer
		To installed and used of ventilation with filters,	
		To check the painting boots enclosure and exhaust system	
	Water	To monitor water quality	Developer/SPC
		To check any contamination of water table such as restricting the	
		discharge of drain and sewer onto the ground	

	Solid Waste	To provide temporary storage site before collector come	Developer/SPC
		To implement 3R for all wastes	
	Wastewater	Eventhough there is no wastewater generation from the vehicle	Developer/SPC
		assembling and no discharge by using septic tank system, it is	
		needed to check these statements are fulfil or not to avoid or	
		mitigate the impact by the wastewater.	
	Noise & Vibration	Monitoring Noise & Vibration	Developer/SPC
		Installation of Sound Proof, silencer to the diesel generator and	
		provide ear plug to all workers especially to the operator of diesel	
		generator	
Natural	Flora, Fauna and	Implementing of Greening Plan	Developer/
Environment	Biodiversity	To avoid unnecessary of cutting trees	Tenants/SPC
	Hydrological Situation	underground water usage	Developer
Social	Living and Livelihood	Same as mitigation measure	Developer/SPC
Environment	Water Usage	Monitoring of consumption of ground water by strictly controlling	Developer/SPC
		and minimizing the consumption of water used in factory,	
		dormitory and kitchen	
	Existing social	Securing Plan	Developer
	infrastructures and		1
	services		
	Risk and infectious	Prevention of spreading out	Tenants
	disease such as	Training of workers	
	AIDS/HIV		
	Working Conditions	Follow OHS working condition and guidline such as EHS by IFC	Tenants
	(including occupational		
	safety)		
Others	Accident	Accident prevention measures	Tenants
	Natural Disaster	To check the possible negative impacts due to the	Developer
		natural disaster and needed to check the weather	
		condition and follow procedure of the prevention	
		measures	
	Machine Failures	To check and follow the maintenance procedure of the	Developer
		normal machines.	
	Global Warming	Control of mitigation measures of GHGs	Tenants
		1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	

# Justification to the impacts and economically analysis to the environmental management plan

It is not applicable to this project.

#### 7.5 Conclusion and Recommendation about the impact

It is found out the project is more beneficial than getting impact as it is well planned to implement with technical and standard for the better land use to the existing dry land by avoiding impact.

The project would be implemented by the following objectives.

- A. To get poverty reduction and urban development by enhancing social development
- B. To get skilled labor and industrial development.
- C. To attract international investment in the industrial sector
- D. To enhance socil life style by getting employment opportunities due to the industrial zone development
- E. To increase national revenue

In general, it is the project which would help to reduce the national import on vehicle especially the used car importing. With this project implementation, it is found out that could create more beneficial by reducing impact at good management and increasing personal income and nation's GDP by creating employment opportunities and increasing revenue by local sales.

# 8. Cumulative Impact Assessment

#### **Cumulative Impact Assessment**

Methodology and Approach
Determination of Valued Ecosystem Components
Determination of a Spatial and Temporal Framework
Development of a Management Framework

#### 8.1 Methodology

The cumulative impact assessment would be based on mapping, air quality, surface water quality, ground water quality, noise.,etc. The assessment would be obtained from various sources including consultation with local sources, individuals, organizations and industrial park management. It is also taken from literatures and researchs. The cumulative impact assessment shall take in account the impact of the other factories and facilities, including traffic in the Myotha Industrial Park. It is needed the exact information about the factory and its production process through the industrial park management for the desktop analysis to identify potential impacts and their interactions to identify and assess potential impacts associated with or resulting from project activities. It will also evaluate unavoidable consequences effects to water quality, vegetation and biodiversity as in addition to evaluating specific sources areas. The significance of potential cumulative impacts that may result for the whole area will be determined to assist in preparing recommendations for evaluation of all projects.

The following are the three phases to be analyzed for potential cumulative impacts such as,

1. Identification

Specification of the cumulative impacts would be associated with each phase of the period and the activities undertaken.

2. Prediction

Forecasting the nature, magnitude, extend and duration of the main impacts and

Evaluation

Determining the significance of the cumulative impacts after taking into account how mitigation will reduce the predicted impact.

#### 8.2 Scope of Assessment

Area Limitation : Myothar Industrial Park and the area within 3 miles radius distance

Period : Any time between the 50% to fully occupancy of Myothar Industrial Park or as

necessary

#### 8.3 Brief Description on Existing and Future Development Program

The cumulative assessment should be considered about the future development in the Myotha Industrial Park based on the following.

# (AA) The brief description of private, government and other developments in the Myothat Industrial Park and near the proposed project site

Myo Thar industrial Park is developed for the regional economic development and it is welcomed to all industrial and manufacturing sectors. At present, the industrial park is occupied by the following entriprises of manufacturing sectors from the private sector.

- (1) Feedmill
- (2) Auto Vehicle Assembling

#### (BB) Cumulative sources of nearby and proposed project's involvement

Feedmilling factory has potential of air pollution cummulation to the proposed project which is located in the industrial park.

# (CC) The excess potential by the proposed project and cumulative impact and relation

Due to the need of operation practice, the vehicle movement is the excess potential from all factories located in the industrial park.

# (DD) Description about constraint to the cumulative

The region wide assessment is needed to get the actual cumulative impact. The most important is who will bare the cost of assessment.

# 8.4 Identification of Cumulative Impacts & Determination of Valued Ecosystem Components

The identification of cumulative impacts is important. By this identification of cumulative impacts, the mitigation should be considered.

The values ecosystem components would be air, water and soil etc.

There are no cumulative impacts found out during the assessment and surveys period as the other land plot are still vacant and not developing.

The feedmills are needed to check their environmental management plan and their mitigation program.

# 8.5 Determination of a Spatial and Temporal Framework

The Spatial and Temporal Framework is need for the cumulative impacts as it is located in the Industrial Park.

#### 8.6 Development of a Management Framework

Eventhough it is in the Myotha Industrial Park, the management framework would be needed leaded by the ECD (the management team from the department or regional office) following by the management team of Myothar Industrial Park, The responsible representative of all factories located in the Myothar Industrial Park or the factories located within 3miles radius distance from the park.

# 9. Environmental Management Plan

The environmental management plan aims to provide an integrated plan for the control of impacts and the comprehensive monitoring. It is a management tool for company to evaluate report and improve its environmental performance. To get fulfillment of this aim, the management plan included what has to be managed, mitigate and monitor, how and why, when and where, by who and whom to report for all circumstances. The EMP will facilitate proponent to address the adverb impact of the project and enhance project benefits and introduce standards of good environmental practices.

# 9.1 Methodology

The EMP referring to the Environmental Management Plan would be managed based on the Environmental and social impacts accompanied in the course of project implementation and mitigation measures. As the project is in the operation stage, the EMP for pre-construction and during construction stages would be omitted.

Even though, there are temporary impact and long term impacts caused by this project and its normal operation, there are some mitigation to these impacts but not eliminated. The following are the EMP to all causes and prevention of impacts by this project together with mitigation measures by categorizing as following.

The Environmental Management Plan

- (1) Air Quality Management
- (2) Noise Management
- (3) Water & Energy Consumption Management
- (4) Waste Water Management
- (5) Transportation and Traffic Management
- (6) Solid Waste Management
- (7) Flora & Fauna Management
- (8) Management on Greening

# Social Management Plan

- (9) The livelihood
- (10) Occupational Health & Safety Management
- (11) Hazardous Management
- (12) Emergency & Evacuation Management

# 9.2 Management on Environment & Social policy, commitment and organization structure

As the project is long term, the environment and social policy are as following.

- 1. To develop the international standard production of automibiles by preventing or eliminating the environmental impacts caused by waste and waste water
- 2. To follow all procedures, methods and systems which are preventing environmental and health impact to near by local residents caused by variety of wastes
- 3. To follow all environmental laws, rules and policies which were enacted by nation

This policy is supported by the commitments that project proponent has made as shown in chapter 3.

Table 74 The Organization for the Implementation of EMP

No	Organization	Pre- Construction	During Construction	Operation	Remarks
1	Proponent	✓	<b>✓</b>	<b>✓</b>	Appointing own EMP team
2	Sub Project Contractor (SPC)	✓	<b>√</b>	✓	Based on the contract with project proponent
3	Consultant	<b>✓</b>	<b>✓</b>	✓	Based on the contract with project proponent
4	ECD	✓	✓	✓	By monitoring

# 9.3 Brief Description on Mitigation of Impacts

**Table 75 The Summary of Impacts and Mitigation (Operation Stage)** 

Category	Item	Mitigation and Consideration Measures in	Responsible
Category		Operation Stage	Organization
Pollution	Air Quality	To monitor air quality	Tenants
	Water Quality	To monitor water quality	Tenants/SPC
		Setting pond for simple turbid water treatment	
	Waste	To provide dumping site	Tenants/SPC
		To implement 3R for all wastes	
	Noise &	Monitoring Noise & Vibration	SPC
	Vibration	Installation of Sound Proof	
		Avoid construction at night time	
Natural	Flora, Fauna	Implementing of Greening Plan	Developer/
Environment	and	To avoid unnecessary of cutting trees	Tenants/SPC
	Biodiversity		
	Hydrological	underground water usage	Developer
	Situation		
Social	Living and	Same as mitigation measure	SPC
Environment	Livelihood		
	Water Usage	Monitoring of consumption of ground water	SPC
	Existing	Securing Plan	Developer
	social		
	infrastructures		
	and services		
	Risk and	Prevention of spreading out	Tenants
	infectious	Training of workers	
	disease such		
	as AIDS/HIV		
	Working	Follow OHS working condition and guidline such as EHS by IFC	Tenants
	Conditions		
	(including		
	occupational		
	safety)		
Others	Accident	Accident prevention measures	Tenants
	Global	Control of mitigation measures of GHGs	Tenants
	Warming		

# 9.4 Environmental Management & Monitoring Plan

The detailed environmental management and monitoring plan is described in this section with the organization structure who would implement the management and monitoring.

Here is the detailed management plan of impacts identified during operation phase is as below.

#### 9.4.1 Air Quality Management Plan

There are no environmental base line datas caused by traffic or vehicle movement. The following are the potential sources of impacts.

#### **Objectives:**

To manage all significant sources of air pollutants along the production process (cutting, welding, engine testing etc.) including diesel power generation during black out time.

- Construction and Supporting Vehicle movement to this area during construction period
- Operating of construction machineries and pile driving (during construction stage)
- Wind blowing effect on the dust but covering fencing
- Loading and unoading of soil to the truck and transporting
- Operating of diesel generator for electrification and extensive cooking.

These impacts could be mitigated by speed control on these vehicles and installing sound proof wall at these loading and unloading areas. Spraying water to the road is one of the mitigation action to dust control by vehicle moving.

#### Policy/Guideline

**Table (4.4)Air Emissions** (WHO Ambient Air Quality guide line)

Parameter	Unit	Guideline Value
Sulfur dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	500
Nitrogen dioxides (NO <sub>2</sub> )	mg/Nm <sup>3</sup>	600
Particulate matter PM <sub>10</sub>	mg/Nm <sup>3</sup>	100
Particulate matter PM <sub>2.5</sub>	mg/Nm <sup>3</sup>	30
Ozone	mg/Nm <sup>3</sup>	160

<sup>&</sup>lt;sup>a</sup>Total metals are Arsenic, Lead, Cobalt, Chromium, Copper, Manganese, Nickel, Vanadium and Antimony

Table (4.2) Air Emissions (EQEG) (Environmental Quality Effluent Guide line)

Parameter	Average Period	Guideline
		<b>Value</b> mg/Nm <sup>3</sup>
Nitrogen dioxides (NO <sub>2</sub> )	1 Year	40
	1-hour	200
Ozone	8 hour daily	160
	maximum	
Particulate matter PM <sub>10</sub>	1 year	20
	24 hour	50
Particulate matter PM <sub>2.5</sub>	1 year	10
	24 hour	25
Sulfur dioxide (SO <sub>2</sub> )	24 hours	20
	10 minute	500

<sup>&</sup>lt;sup>a</sup>Particulate metter 10 micro meters or less diameter

#### Management

Even though the project is in the operating stage, there are no base line data recorded to compare the air quality how much dust particles in the air and how much polluted in this area both inside factory and due to the vehicles passing.

To mitigate these impacts, it is installed good ventilation system (power fan, hood & wall mounted) inside factory especially the cutting, welding, painting section and controls the speed of vehicles and partition to the loading and unloading area. Provide mask to all workers.

#### **Implementation**

Action Plan for the Construction Stage

The following are the major factors to the dust pollution

- Supporting trucks and vehicles moving around these areas.
- Construction machineries and pile driving (construction stage; would be omitted)

Action Plan for the Operation Stage

• Dust emission as airborne particles during cutting, welding, spraying body paint, engine testing and wind blowing effect to the dust

The implementation would be more emphasized for during operation period. The speed limit of vehicle would be affected to reduce the dust and emission inside the factory compound. No engine running at parking while waiting. Engine testing time would be as much as needed. Painting Boot should be check with closing door and

<sup>&</sup>lt;sup>b</sup>Particulate metter 10 micro meters or less diameter

exhaust system working properly, of the paint booth. The status and condition would be inserted in the regular monitoring report.

The air quality assessment were conducted in dry and wet season and compared with the guideline value of

NEQEG as following.

Parameter	Receptor	NEQEG Assessment		essment
		NEQEO	Dry Season	Wet Season
Particulate Matter (µg/m <sup>3</sup> )	PM2.5 (24 hr)	25	21.88	21.88
	PM10 (24hr)	50	22.8	22.8
Nitrogen Oxide (µg/m <sup>3</sup> )	(1 year)	40	-	-
	(1hr)	200	7.3	7.3
Sulfur Dioxide (µg/m <sup>3</sup> )	(24 hr)	20	10	10
	(10 minute)	500	100	100

Monitoring Plan	Monitoring Report would be submitted twice a year. Detailed procedure is described	
	in the next chapter (9.4.15).	
Financial Allotment	1,000,000Ks (Annual)	
Responsible Group	EMP Team or SPC (Sub Project Contract)	

# 9.4.2 Noise & Vibration Management Plan

# **Objectives:**

To manage all significant sources of noises along the production process including engine testing, diesel power generation and air compressor running.

#### Policy/Guideline

The following table is shown the acceptance noise level guideline of NEQEG at day and night times at different location.

Noise Level Guidelines				
	One Hour LAeq (dBA)			
Receptor	Day time	Night time		
_	07:00 - 22:00	22:00 - 07:00		
Residential; Institutional;	55	45		
Educational				
Industrial: Commercial	70	70		

#### Management

Noise & vibration are definitely increase to the surrounding of the proposed project compared to the situation that before construction and operation of this project. The noise and vibration by engine testing and running of diesel generator are the worst noise impact sources usually complained by neighbors. The worst noise impact would come from vehicle moving, diesel power generator and pile driving process and the loud communication between workers during construction phase.

To mitigate these impacts, it could be managed the working schedule, (not operating in the night time) or rerouthing the traffic or installing sound proof wall to the loading, unloading area.

All construction activities are controlled to avoid impact by concerned parties. Furthermore, it should work in day time as much as possible and be avoided to work not over 8 pm in the night except special order. Usually the noise comes from air conditioners and ventilation fans which are under the acceptance standard level and no others noise and vibration would come from the compressor and generator that could be impact to the neighbors during operation phase.

It is planned to get the required electricity from the national grid but owned diesel power generation is stand by for power cut or black out time. It would be noisy and over the acceptance level to the neighboring from this power generation. This project has planned to reserve the diesel generator for emergency only, especially for the black out time. This would make noise and other sources of noise from water pump and compressor which should be installed properly to prevent noise and vibration impact.

It is managed to reduce these impacts during normal operation phase, by limiting speed of vehicles and making partition action at engine testing area or near guest rooms by planting trees and manage the working hours or vehicle rerouting.

The following are the major factors and to mitigate these noise pollution by the following management,

- Supporting trucks and vehicles moving around these areas: To control the speed
- Loading and unloading process: To control of not making noise
- Engine Testing, Diesel Power Generation and Air Compressor running: installing silencer and engines and/or keep inside the sound proof building

# **Implementing**

The implementation would be more emphasized for during operation period. During operation period, there will be noise coming from vehicles moving, air compressor running engine test running and others accessory in the factory. Vehicle speed controlling, sound proof building and installing the silencer to the engine are provided to mitigate the noise impact.

Even though, the electricity supply would be taken from the grid, the diesel generator would be running for black out time and could noise which is unavoidable. To mitigate the noise from the generator set, it could be installed in sound proof housing and install exhaust silencer which could be very much useful to avoid noise impact. It should also be prioritize to work in day time just as much as possible and try to avoid working not later than 8pm.

In addition, the ear plug that prevent the noise impact should also be provided to all workers who are assigned to work nearby these generator set for long period.

Monitoring Plan	Monitoring Report would be submitted twice a year. Detailed procedure is described	
	in the next chapter (9.4.15).	
Financial Allotment	500,000Ks (yearly)	
Responsible Group	EMP Team or SPC (Sub Project Contract)	

# 9.4.3 Water and Energy Management Plan

#### **Objectives:**

To manage all water and energy utilization with efficiently and to avoid loss or impact throughout production process including the operating sequence of washing machines

#### Policy/Guideline

There is no standard for the quality of tube well and it is in the drafting stage for energy efficiency.

#### Management

During regular operation stage, the domestic water supply should be made from tube well. The water sypply would be consisting of mainly to supply workshop, show room office and dormitory for shower and toilet and to supply for laundry, house keeping, cooking and general use etc. The water demand would be related directly to guests, number of vehicles produced and personal consumption. The rain harvesting system mainly for the greening program could mitigate of impact by eliminating of extraction of water from tube well and to prevent loss of water. It is needed to install smart water control system and water saving equipment such as using ultra low flush toilets & urinals, efficient spray nozzles, faucet aerators, low flow shower heads, infrared and ultrasonic sensors, water spigot and pressure control valves etc. More efficiently, water efficient or saving laundry equipments should be used for long terms opetation.

The following are the major factors to the water and energy consumption.

- The management on the operation of car washing machines and dormitory usage.
- The management on the Diesel Power Generation and Air Compressor

The most water usage in the factory is car washing process and dormitory usage.

To mitigate the impact to ground water, the recycling and reuse water is applied for the best solution. At all time, washing, toilet, kitchen and air cooled room temperature controller are the key areas that could be smart controlled on water usage pattern by using necessary of water volume and secure & turn of valve carefully to avoid leaking, so that it could developed on mitigation process by control the amount of water used.

It is well schedule to operate air conditioners only when it is needed. During lunch time, it is stop save both energy and emission.

#### **Implementing**

The implementation would be more emphasized for during operation period. It is needed to check any water leakage at both supply and drain site always. As the major cause of water and energy consumption, it could be controlled by good management by the work charge or the team leader.

Monitoring Plan	Monitoring Report would be submitted twice a year. Detailed procedure is described	
	in the next chapter (9.4.15).	
Financial Allotment	1,000,000Ks (yearly)	
Responsible Group	EMP Team + SPC (Special Purpose Contract)	

# 9.4.4 Solid Waste Management Plan

#### **Objectives:**

To manage all solid wastes to avoid impact to the environment and the ground water including the operating sequence and system

#### Policy/Guideline

There is polluter pay principal in the Myanmar Environmental Policy. The company has the policy to provide waste management without harming to the environment by using 3R (Reduce, Reuse and Recycle) policy.

#### **Management**

The nature of project is making car assembling process which could be harmful to the environment if the solid wastes are not properly managed. The following are the solid waste that would create from normal operation and process.

(a) Production Solid Waste from the Workshop

As the nature of business is just assembling every parts of auto vehicle, all parts are imported and assemble. Hence, it is less chance of production waste as the experts and fitters are taking care seriously at the assembling process to avoid the damage and waste. There will be waste some small metals, cutted irons, packaging materials, wedding sticks,

(b) Domestic Solid Waste from kitchen, Shower and Toilets

In this operation phase, major domestic solid wastes would be generated from main factory cleaning, kitchen, lobby and front desk and staff quarters etc. Different kinds of solid wastes such as tissue papers, packaging papers, food residues, glasses, tins, bottles, stationeries, demaged/ expired devices or appliances and other miscellaneous would be generating everyday.

Food waste could be generated from the kitchen at domitory. These food waste can generate offensive odor and unpleasant to people which could cause health impact to guests or employees. It is important to dispose these

food wastes day by day regularly and keep in a good container which keeps not only the odor or unpleasant smell but also keep out of cats and mouses. To minimize impact by these food wastes it could be sold out as (Animal) pig food to villagers. It makes not only money but also reducing the volume of waste to manage environmental friendly while supporting livestocks sector development.

The other solid wastes such as bins, bottles and cans are sperated and tried to apply recyclable process as much as possible. The solid and other waste such as paper, can, bottle including kitchen waste should all be collected and stored systematically with bag before selling to the service company to come and collect. By this management, it could be avoided the impact to the environment by these wastes. The general solid waste that could not sell is discharge to the service man by pay on amount of waste for his service.(the pay slip shown under)

For solid waste, it could be managed easily by appointing waste collector and keep properly before discharging to the MID's dumping site. This dumping site would be the land fill type with leache leak protect and possible to produce cooking gas. It could be avoided the impact by these wastes by keeping wastes systematically. Furthermore 3R (Reduce, Reuse and Recycle)system is applied as much as possible. That could definitely help the mitigation of impact to the environment. To get least impact to the environment, it is also needed the good waste management such as managing the collected solid waste, including daily waste from kitchen and dinning area, in a plastic bag or compactor bin or bin center.

# Collection Sale or Pay Sale or Pay Sale or Pay

The flow chart of the solid waste management

The amount of waste estimated as following.

(1) solid waste

20~100 Kg per day

(sold to recycle company by lot)

It would be managed for all solid wastes such as keeping carefully at a safe and separate with good bag or container if the waste is hazardous potential and is needed to educate workers to trash systematically that could be applied to 3R system before the cleaner collect. It would be contacted to MMID or city development committee for occasionally such as septic tank is full and when hazardous waste is present.

#### **Implementing**

The implementation of solid waste management would be more emphasized for during operation period. All solid wastes are collected daily and kept in the respective place of temporary storages. The solid and other waste such as paper, packaging wood, can, bottle including kitchen waste are collected and stored systematically with bag or place the designated store places before the service company come and collect or selling by lot. It is kept outdoor for the iron, wood and even packaging cartoon boxes as the volume is big enough. All bio and kitchen food waste are kept in the store house with cover and separate building to avoid smelling. It is collected by the waste collector from the pig farm of nearby village every evening.

The following table is shown the summary of waste management. There is no hazardous waste from the factory and have not discharge the sludge from the car wash and paint booth due to no enough waste.

Tab	Table 76 Solid Waste Management				
No	Type of Solid Waste	Estimation (kg)	Implementing	Illustration Photos	
1	Recyclable Waste (Paper, Plastic, Packaging Wood Can, Bottle, Steel, Iron etc,	20~100 Kg per day	Theses solid wastes are collected every day and kept in the stemporary store separately until it is sold to the recycle products collector by lot.	Temporary Solid Waste Store	
2	Un-recyclable Waste	Nil	There is no un-recyclable waste developed from this factory.	Nil	
3	Bio Waste (Kitchen waste, food waste, tree leaves etc.)	1~2 Kg per day	All bio wastes are trashed into bin. These bio waste are collected by the pig farm of nearby village at about 5 pm of everyday.	Biowaste collector for pig farm	
4	Hazadous Waste	1~10 Kg per year	No hazardous from the factory. The sludge from the rain test(water wash) and the paint boot are cleaned, collected and discharge to MMID or the waste collector or city development committee by on call basic.	Nil (Photos are not available yet for the disxharge of sludge)	

Monitoring Plan	Monitoring Report would be submitted twice a year. Detailed procedure is described	
	in the next chapter (9.4.15).	
Financial Allotment	12,000,000Ks (yearly)	
Responsible Group	EMP Team or SPC (Sub Project Contract)	

#### **Waste Water Management Plan** 9.4.5

# **Objectives:**

To manage waste water to avoid impact to the environment and the ground water by the waste water treatment process including the operating sequence and system

# Policy/Guideline

The guide line value for the effluent (vehicle assembling) would be as following.

Table (6) The Comparism of Assessment & guideline value of Effluent

Parameter	Unit	Guideline Value
5 day Biochemical oxygen demand	mg/l	30
Absorbable 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		7(436nm <sup>a</sup> ,yellow
	m <sup>-1</sup>	)
	1111	5(525nm, red)
		3(620nm,blue)
Copper	mg/l	0.5
Nickel	mg/l	0.5
Oil and grease	mg/l	10
Pesticides	mg/l	$0.05 - 0.10^{b}$
pН	S.U <sup>a</sup>	6-9
Phenol	mg/l	0.5
Sulfide	mg/l	1
Temperature increase	C°	<3 <sup>b</sup>
Total coliform baterial	100ml	400
Total nitrogen	mg/l	10
Total phosphorus	mg/l	2
Total suspended solids	mg/l	50
Zinc	mg/l	2

### Management

The nature of project is auto vehicle assembling and there is not harmful to the environment if it is properly managed. The following are the waste water that would comes from normal operation and process.

Waste water from Showers and Toilets

Waste water from the kitchen at domitory

It could be treated these waste as following,

Waste Water from Toilet Conventional Septic Tank with bleach dosing chamber
Waste Water from Kitchen Remove oil & grease through Grease Trap before drainage
Laundry Waste Natural soak pit according to WHO recommendation

Among of them, the bioseptic tank with chlorination system is installed to this project. No waste water would be discharged to the public area or sewer system. There is no waste water from the process except toilet use but the solid waste would come from every steps. There is waste water from toilet and dinning area, kitchen both construction phase and operating phase could be managed to avoid impact to the environment. Furthermore, all waste and waste water should be properly managed or apply 3 R system and treated (septic tank system) to avoid or mitigate the impacts.

To prevent impact to the surround and keep cleaning inside workshop, the following are provided in the workshop such as cleansing toilet always, providing enough water to clean, provide enough trash cans in each guest room and trash bins at any corners with color speration for designated wastes such as paper, bottle, can etc. It is also needed to clean sewage system always surrounding the factory.

It will always contact the special purpose company and organization for getting knowledge at managing ways and applying 3R method such as lowering usage to become less waste (Reduce), using again as much as possible (Reuse) & using again at any other places (Recycle) that could create less waste. The company will also follow all instructions given by the ministry of natural resources and environmental conservation.

### **Implementing**

The implementation of the waste water management would be more emphasized for during operation period. In this factory, three septic tanks and one waste water tank with grease trap system is installed under ground. No waste water would be discharged to surrounding or public sewage system.

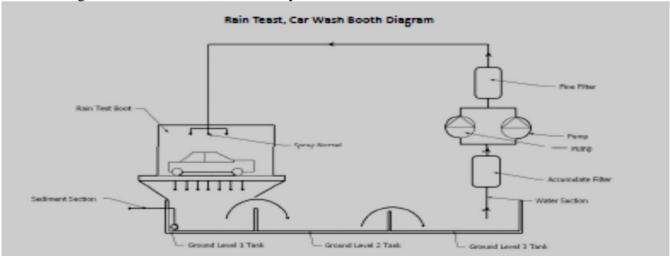
No	Description	Unit	Size
1	Septic Tank (Authentic HS-5, 4000Liters)	3	(L 3,570x W 1,660x H 1,580)
2	Waste Water Tank with grease trap	1	(L 4,380x W 2,510x H 1,810)



Figure 32 Bio septic tank illustration

The waste water will be treated in the bio septic tank and the special purpose company would be hired to collect for the final discharge solid waste (sediment) disposal.

The water using for car wash in the rain test, car wash booth is recycle method as shown below. The water is filled in the ground tank under the car wash system. It is suck by the water pressure pump and spray on the car to wash, and It would not discharge. The washed water are returned to the ground tank by gravity and ready for next washing cycle. The detailed description about the system working is shown on the annex. It is clearly shown that the water is recycled to the washing process. There are 3 level of water tank to separate the sediment and installed with sediment suction pump to discharge only the sediment in the car wash system. No water is discharged from the rain test, car wash system.



The oil and grease cleaned by washing water would be trap in the first ground level 1 tank which is performing as grease trap and sedimentation tank. This would be discharged as mentioned in the Hazardous Waste Management plan at chapter 9.4.11 on page 167.

The status and condition of the wastewater management would be check and insert in the regular monitoring report.

Monitoring Plan	Monitoring Report would be submitted twice a year. Detailed procedure is described	
	in the next chapter 9.4.15.	
Financial Allotment	12,000,000Ks (yearly)	
Responsible Group	EMP Team or SPC (Sub Project Contract)	

### 9.4.6 Transportation and Traffic Management Plan

### **Objectives:**

To manage transportation and traffic safety inside and around factory

### Policy/Guideline

The project has the policy to prevent traffic accident.

#### Management

There is good transportation route to and from the project site. The factory is located on Myothit Road. There is no impact to the transportation route of the nearby as the project is built in the designated plot of land. There is no ferry bus service but the factory has provided the parking area for all motor bikes and bicycles. There is no or additional impact to the transportation route of the nearby as the factory is built in the designated plot of land.

The following are the major factors to the traffic

- To reduce speed limit of all vehicles including motor bike, supporting trucks and vehicles moving around the project areas.
- Provide parking lot for cars, motor bikes and bicycles

#### **Implementation**

The implementation would be more emphasized for during operation period. During transportation of raw materials (vehicle parts) and finished car (new car) on the public road shoud follow the traffic accident prevention and motor vehicle management law and the traffic accident prevention and motor vehicle management rule accordingly. It is planned to reduce the vehicle speed and provide parking spaces for both cars and bikes. The traffic sign and the conducting assistant to the drivers by the security guards at least at the factory entrance/exist would be helped to the traffic management. The control of vehicle speed would be applied during operation stage especially in the day time of every working days.

Monitoring Plan	Monitoring Report would be submitted twice a year. Detailed procedure is described	
	in the next chapter 9.4.15.	
Financial Allotment	50,000Ks (yearly)	
Responsible Group	EMP Team or SPC (Sub Project Contract)	

### 9.4.7 Flora & Fauna Management Plan

### **Objectives**

The plantation of trees at all spaces left after construction had been managed to support the greening program. Here are some of the places of developed as greening areas.

### Management

The proposed land is in the urban area and commercial area and the workshop building would be built with full area of plot. There are some land areas left to plant trees in the whole area. All the trees and plants are planed to grow as much as they could as part of greening program. With its greening program described in EMP, the tree plantaion would be held all the spaces available like infront of the factory.

#### **Implementation**

There is good transportation route to and from the project site. The factory is located on Myothit Road. There is no impact to the transportation route of the nearby as the project is built in the designated plot of land. There is no ferry bus service but the factory has provided the parking area for all motor bikes and bicycles. There is no or additional impact to the transportation route of the nearby as the factory is built in the designated plot of land.

The plantation of trees at all spaces left after construction, has been managed to support the greening program. It has chance to manage for greening as the spaces left after buildings are occupied land space. The small plants are possible to keep in pot both inside and outside of the each show room of forming greening areas.

Monitoring Plan	Monitoring Report would be submitted twice a year. Detailed procedure is describe	
	in the next chapter (9.4.15).	
Financial Allotment	200,000Ks (yearly)	
Responsible Group	EMP Team or SPC (Sub Project Contract)	

# 9.4.8 Management Plan on Greening

#### **Objective**

All the big trees had been reserved in the project area.

The following trees are to be planted as under greening program.

- 1) All the spaces left after building construction, are constructed would be planted trees and grass.
- 2) Seasonal crops would be planted in any space left especially in front of factory.

### Management

It is planned to plant Star Flower Tree, Indian Medlar, Mimusop elengi, gold mohar tree Poinciana regia near the entrance. The other suitable trees such as Lagerstromia speciosa, the gum kino tree Pterocarpus macrocarpus, Banana, Mango Tree, conifer pine would also be planted where it is suitable.

### **Implementation**

The implementation would be more emphasized for during operation period.

All the big trees has been reserved in the project area.

The following trees are to be planted as under greening program.

All the space left after building are constructed would be planted trees and grass.

Seasonal crops would be planted in any space left especially infront of factory.

The other trees such as Lagerstromia speciosa, the gum kino tree Pterocarpus macrocarpus, Banana, Mango Tree, conifer pine would have been planted. All plants and trees are bought from nyrsary to be planted inside the factory territory as greening plan. Environmental Monitoring Team would check the nursery, plant and maintain the grass and trees as greening program to the environment. It is also appointed the gardener to keep clean campus, plant and maintain all trees and plants. The telephone communication or messenger service should be used to get affected and most reliable to communicate each other. It is well planned to get environment better by closely watch and supervise by group manager.

Monitoring Plan	Monitoring Report would be submitted twice a year. Detailed procedure is described	
	in the next chapter (9.4.15).	
Financial Allotment	300,000Ks (yearly)	
Responsible Group EMP Team or SPC (Sub Project Contract)		

# Social Management

# 9.4.9 Management Plan to Livelihood and Employment Opportunity

#### **Objectives:**

To enhence community social development and livelihood by creating the employment at the project

#### Policy/Guideline

To provide chances of priority to people living nearby for the employment vacancies at this project

#### Management

As the project is located in the industrial zone, the impact to the livelihood of the people nearby would be positive as it could create jobs and opportunities not only looking for the vacancy in factory operation but also

chances of getting into entrepreneurship such as setting up food out let, coffee shop auto bike repair shop, construction material outlet & grossary stores and traditional massage etc., nearby industrial park and local residents which is indirect supporting by this factory operating. The food vendors are also allowed to sell their food and snacks in front of factory to workers during their lunch time and before overtime work hours.

### **Employment Opportunity**

There will be 100 vacancies at this project when it is finished the construction including 20 foreign technicians. The local people will get the first priority to fill these positions. This project will be developed the job opportunity not only the local people but also to the whole country such as interpreter.

#### **Implementation**

The implementation would be more emphasized for during operation period. It is always announce when the vacancies are available. The local and nearby residents are in the priority list at the selection of workers to fill all vacancies. The seminar or training program would be provided to workers from time to time. All other mitigation of impacts would be learnt and keep contact with MONREC and follow all instructions. The following are the necessary training program needed regularly to provide for the capacity build up among the team members for prevention of natural environment, finding alternatives to the mitigation of impacts and environmental conservation.

- The greening program
- Mitigation of Impacts by 3R system
- The Environmental Monitoring Program
- Disaster Prepareness Program & Fire Exercise (Fire Drill)

The cooperation with Ministry of Natural Resources and Environmental Conservation for training program is needed or sending delegates to the related training program from time to time.

Monitoring Plan	Monitoring Report would be submitted twice a year. Detailed procedure is described		
	in the next chapter 9.4.15.		
Financial Allotment	600,000Ks (yearly)		
Responsible Group	EMP Team or SPC (Sub Project Contract)		

### 9.4.10 Occupational Health and Safety Management Plan

#### **Objectives:**

To manage all significant sources of impacts to health and safety along the production process including diesel power generation

#### Policy/Guideline

The occupational health and safety guideline would be applied at all times **Air Emissions** (IFC guide line)

Parameter	Unit	Guideline Value
VOCs	μg/Nm <sup>3</sup>	2/20/50/75/100/150
Chlorine	μg/Nm <sup>3</sup>	5
Formaldehyde	μg/Nm <sup>3</sup>	20
Ammonia	μg/Nm <sup>3</sup>	30
Particulates	μg/Nm <sup>3</sup>	50
$H_2S$	μg/Nm <sup>3</sup>	5
$CS_2$	μg/Nm <sup>3</sup>	150

Table (4.5) Effluent Levels (Manufacturing)

Parameter	Unit	Guideline Value
5 day Biochemical oxygen	mg/l	30
demand		
Absorbable organic halogens	mg/l	1
Ammonia	mg/l	10
Cadumm	mg/l	0.02
Chemical oxygen demand	mg/l	160
Cromium (hexavalent)	mg/l	0.1
Cromium (Total)	mg/l	0.5
Cobalt	mg/l m <sup>-1</sup>	0.5
Color	$\mathbf{m}^{-1}$	7(436nm <sup>a</sup> ,yellow)
		5(525nm, red)
		3(620nm,blue)
Copper	mg/l	0.5
Nickel	mg/l	0.5
Oil and grease	mg/l	10
Pesticides	mg/l	$0.05 - 0.10^{b}$
pH	S.U <sup>a</sup>	6-9
Phenol	mg/l	0.5
Sulfide	mg/l	1
Temperature increase	C°	<3 <sup>b</sup>
Total coliform baterial	100ml	400
Total nitrogen	mg/l	10
Total phosphorus	mg/l	2
Total suspended solids	mg/l	50
Zinc	mg/l	2

<sup>&</sup>lt;sup>a</sup> Nanometers

# Management

The following are the major factors to OHS.

- Emission to air (Dust & Noise)
- Water & Energy Consumption
- Waste & Waste water
- Hazardous material management

		Description of Health Impact to Workers							
No.	Phase	Dust:	Noise:	Vibration:	Accident:				
1	During Construction	Due to the land excavation, vehicle moving and construction activities	Noise from construction machines, diesel generator running	Pile Driving, Landscaping etc.	-Accident with construction machine, autho vehicle moving etc.				
2	Operation Phase	Emission from engine testrunning, Diesel Engine Operating, dust blooming, painting process	Noise from compressor, welding and cutting process, diesel operating etc.	No vibration action occurred during operation stage	Electric Shock, Accident with machines such as conveyor system and other moving parts etc.,				

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

<sup>&</sup>lt;sup>c</sup> Standard Unit

d 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

The occupational health & safety is needed at all parts of the production atmosphere especially at emission to air, water & energy consumption, waste & waste water management and hazardous material management. It could be controlled by good management by the work charge or the team leader. The OHS team should be organized to implement OHS plan regulary as mentioned below.

Table 77 OHS Team (Mamber, REsponsible and Schedule)

No	OHS Team	Responsible	Implementing Schedule
1	Team Leader Assistant Factory Manager	To oversee all OHS plan including implementing and reporting to the factory manager	Once a week, covering for (at all time of 24/7)
2	Member (1) Admin Manager	To follow all OHS practices and implementation procedures with other members of OHS team. Reporting to team leader daily basic or at the time of any emergency situations.	All working days, covering for (at all time of 24/7)
3	Member (2) Production Chief	To support all OHS practices and implementation procedures with other members of OHS team. Reporting to team leader daily basic or at the time of any emergency situations.	All working days, covering for (at all time of 24/7)
4	Member (3) Security Chief	To support all OHS practices and implementation procedures with other members of OHS team. Reporting to team leader daily basic or at the time of any emergency situations.	All working days, covering for (at all time of 24/7)

Remarks: :At all time of 24/7 (24hours and 7 days a week)

### **Implementation**

The implementation would be more emphasized for during operation period. Regarding to the air and noise assessment result, it is found out in the acceptance level. The following are the providing working environment for workers' health and safety.

### Air (Dust, Emission)

The regular bloomer is working inside the factory where the cut waste at the cutting and welding section. It is also provided the good ventilation system in the factory. The chimney height is provided 50 ft for painting boot. The exhaust emission from engine test running and the diesel generator are unavoidable but use only the black-out hour of electricity. Eventhough the air ventilation with filter and water scrubber is installed to the paint booth, musk are provided to workers assigned to the paint booth. It is also provided medical assistant at factory clinic and regular check up with doctor for their health condition.

#### **Noise**

It is provided ear plug to all workers to refuge noise impact which are generally created from welding, cutting tools, assembly line, dropping of parts, noise from compressor and diesel generator running etc. To mitigate the noise from the generator set, it could be installed in sound proof housing and install exhaust silencer which could be very much useful to avoid noise impact. It should be prioritize to work in day time just as much as possible and try to avoid working not later than 8pm. It is provided the diesel generator set with proper layout and silencer to reduce noise and health impact. In addition, the ear plug that prevent the noise impact should also be provided to all workers who are assigned to work nearby these generator set for long period.

#### Water & Energy Consumption

The good management on water usage by controlling water level could save not only water consumption but also saving electricity simultaneously.

#### Solid Waste & Waste Water

The solid and other waste such as paper, can, bottle including kitchen waste should all be collected and stored systematically with bag before selling to the service company to come and collect.

There is no Waste water from the production process.

The following are provided for occupational safety and accident prevention in the factory.

### Safety from machines and preventing accident:

For machine safety, PPE is provided to workers such as metal glove to the fabric cutter, musk at tearing section spraying section and ear plug at compressor.

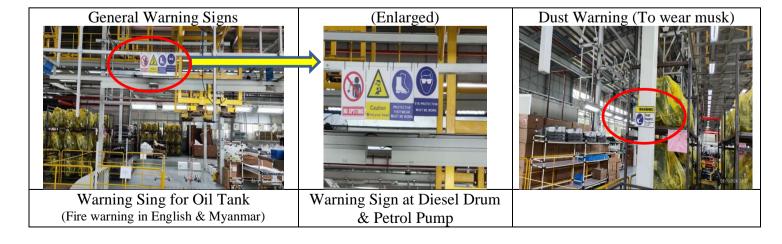
The necessary trainings are provided for all workers who are working with machines or equipments. The safety instructions are provided along with PPE for the potential risk of harmfulness as shown.



### **Working Environment:**

The temperature, ventilation, illumination, noise, dusts all are strictly controlled for the good working environment.







### **Electricity Shock**

All warning signs are put on the electric junction boxes. For the electrical safety, all installation of the electrical wiring was done by the qualified electrician. Only the skilled workers and responsible persons are appointed and allowed to take responsible at all restricted area.



#### **General Care**

PPE such as mask, hand glove, hear plug etc., are provided at all risk work places such as cutting section, iron section, power generation section etc. The financial allotment would be under the factory's regular operational expense. All these PPE are supplied enough and replace if it is wore out. Every year, workers ae checked their health by MO (medical officer) from Authorized Clinic. In general the most common accidents are sliping, tripping and falling at stairs and bathroom. To avoid or minimize these risks, it is necessary to keep clean everywhere in the plant and even outdoor greening and landscaping areas including show room area. Moreover, the emergency first aid kit should be kept and standby car is needed to send patient nearby clinic or hospital within a few minutes in case of incident happen. As the front desk is operating during office hours it is always ready to assist any health care not only to the guests but also to all employees.

#### Hazardeous material management

All hazardous materials such chemicals are handled carefully and stored in a ventilated room. The empty containers, cans are kept well and return to the supplier. All notice and hazardous prevention warning signage are put on the wall including no smoking and high voltage signs.



The management for hazardous waste would be described more details in the next section of hazardous waste management plan.

#### **Health Care**

The following are provided health care for workers.

The purified drinking water is provided. The toilets are provided enough for both male and female workers with clean and septic tank system.

All workers are registered for the social ware fare program at the ministry of social ware fare, disaster relieve and rehabilitation.

There is a clinic in the factory provided for all workers and employees for their health care.

The emergency aid kids are also provided.

A doctor visit regular basic and a nurse is employed full time while the trainings for first aid are provided occasionally.

The following are incentives for pregnant workers.

- 1 The official leave of 6 weeks before and after 8 weeks for maternity.
- 2 The pregnant workers are allowed to transfer work place to avoid long time standing and lifting heavy products.
- 3 The back sore and soft foam are provided for pregnant workers for their comfort at work.
- 4 The pregnant workers are allowed to leave early 5 minutes ahead of work finishing time.
- 5 The pregnant workers from screen printing would be transferred to other suitable place.
- **6** The vehicle transportation is provided for pregnant worker once a month for medical checkup at the respective hospital or clinic.

No dormitory or hostel is provided to the local workers but the foreigners as the factory is closed to the workers' resident of village. The operation is running only in the day time except working overtime for big orders.

### The Emergency Clinic and Aids

Aids medicines are provided by the company not only for emergency but also regular medical care to all employees.

A nurse Aids boxes are installed work stations in the factory to get quick access. The necessary cares are provided to all sick, wounded and allow the maternity leaves.

#### PREVENTION MEASURES ON PANDEMIC CORVID 19

Due to the instruction by the ministry of sport and health, the factory management has provided all the necessary preventive measures on pandemic Corvid 19 as following.

- 1 The social distancing layout plans (Entrance & Exit gate, All hand wash areas, Time Card Machine, Workers Canteen Basin Area, Factory Clinic, Production Areas etc.)
- 2 The temperature check at the factory entrance
- 3 Providing Handwash Stations with food press water control and sterilizing liquid
- 4 Providing masks to all workers and PPE to temperature checker.

At factory gate, Social distancing, Temperature Check & Handwash are managed as instructed. The social distancing is applied at dining table and washing area. Handfree wash faucets are prvided

The fund for OHS is allocated as 3~5 lakhs MMKs and it is including emergency health care. If the fund is not enough, the additional funding would be authorized to use by the decision at the nearest BOD meeting.

Monitoring Plan	Monitoring Report would be submitted twice a year. Detailed procedure is descri					
	in the next chapter 9.4.15.					
Financial Allotment	500,000Ks (yearly)					
Responsible Group	EMP Team or SPC (Sub Project Contract)					

### 9.4.11 Hazardous Waste Management Plan

### **Objectives:**

To manage all significant sources of hazardous waste along the production process including chemical use, wastewater generation and painting process

### Policy/Guideline

The prevention of Hazardous from Chemical and Related Substances Law.

#### **Management**

The following are the management to the hazardous from Chemical and Related Substances (The factory use only Diesel/Petrol Oil, Engine oil, Vehicle Paints etc.)

- Transportation of Chemicals
- Loading and unloading of Chemicals
- Storage

As the major cause of hazardous waste that comes from chemical transport, loading, unloading and storage could be controlled by good management by the work charge or the team leader.

Among the impacts, health care to all visitors and guests are important during their visit the show room and service center.

#### **Risk Identification and Assessment**

As it is just the vehicle assembling plant there are less-hazard risk area subject to no hazards and threats with employees and visitors to the show room due to the levels of exposure and vulnerability to these threads. The risk assessment and threat are checked in the previous chapter.

#### **Hazard Management**

Eventhough Myothar has at risk to sectors such as geological, hydrological and meteorological conditions, the proposed projet would be more concerned the human induced hazard which is significantly threatened to this employees and visitor during normal operation.

#### **Implementing**

The implementation would be more emphasized for during operation period.

The management team could manage not only all environmental and social impacts caused by its normal operation, by mitigation effort or avoiding the impact such as controlling dust, noise, waste, waster water etc., but also the natural impact with cooperation with concerned parties.

It could be easily monitor and mitigate to all impacts by following management plan and mitigation program.

Category	Item	Hazard Management Plan (Mitigation and Consideration Measures) in Operation Phase			
Others	Disaster Relief	-Cooperate with the management committee of Myothat Industrial park and the regional government to follow the Disaster Risk Management Plan			
Hazard	Social	-Giving information about the possible accidents at factory and sites to all visitors especially the foreigners -Do's and Don'ts information should be provided to all visitors at easy access (labeling in the vicinity area or providing leaflets, booklet.) -Restrict the area zone that visitors are not allowed			
	Sludge from water wash and paint booth	The sludge from the water wash and paint booth are discharge to the city development committee by on call basic when it is needed.	Developer		

All chemicals required to use in the production are purchased locally and transport to factory just the required amount for 3 months at a time.

All empty containers are kept carefully and resell to the supplier. No hazardous waste is available.

Monitoring Plan	Monitoring Report would be submitted twice a year. Detailed procedure is describ				
	in the next chapter 9.4.15.				
Financial Allotment	100,000Ks (yearly)				
Responsible Group	EMP Team or SPC (Sub Project Contract)				

## 9.4.12 Emergency (Prepareness & Evacuation) Management Plan

### **Objectives:**

To prevent and manage all stages of emergency situation and evacuation plan and procedures

### Policy/Guideline

The disaster management law 2013

### Management

The emergency or evacuation plan should be drawn as following at pre construction, during construction and operation stages.

The followings are based on the emergency plan management with the organized management team.

Fire

Natural Diasters (Water, Land, Wind, Earthquake & Tsunami)

It has installed the emergency evacuation plan by installation the clear signs and designated areas.

The following are the major factors for the disaster stage (Fire, Earthquake, Weather etc.)

- Preparatory and preventive measures for natural disaster risk reduction in pre-disaster period
- Emergency response including search and rescue during natural disaster
- Rehabilitation and reconstruction activities for improving better living standard in post disaster period and conservation of the environment that has been affected by natural disaster

#### **Implementation**

The implementation would be more emphasized for during operation period. The emergency or evacuation plan should be drawn as following at pre construction, during construction and operation stages. (This report covers only operating stage as the construction is completed.) The emergency clinics and aids medicines are provided by the company not only for emergency situation but also regular medical care to all employees. A nurse Aids boxes are installed at work stations in the factory to get quick access. The emergency calls are acknowledged. The followings are based on the emergency management plan with the organized management team.

- 1) Fire
- 2) Natural Disaster (Water, Land, Wind & Earthquake)

The factory has installed the emergency evacuation plan by installation the clear signs, fire extinguisher fire hydrant and designated meeting areas as shown.

### The direction for fire evacuation in the factory & the Hydrant Layout

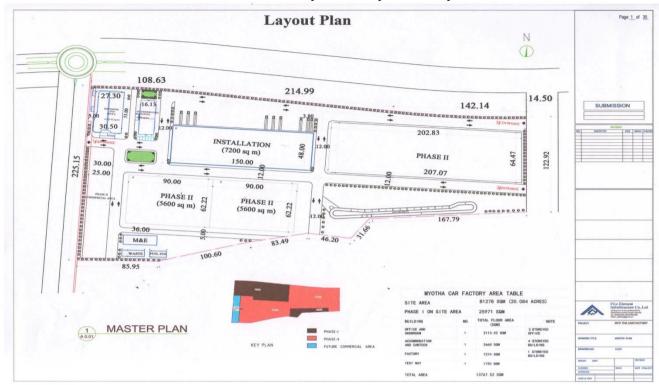


Figure 33 The Direction of Emergency Evacuation

Safety Management Team would be organized as following.

### Safety Management Team,

A. Operation Manager Team Leader

B. Manager (Admin) Deputy Team Leader

C. Security Member

D. Assistant Manager Secretary

### **Fire Prevention**

### Objective

To prevent lossess caused by un-nessary fire broke out and to be able to get control the fire immediately that any time could happen.

- The good management for fire prevention that could prevent in the factory
- The cleaning program that keeps always clean such as the management to the waste that could easily caught fire.
- To keep clean and store systematically all fuel such as storing, filling, utilizing and trashing etc.
- All electric wiring and using should be under the instruction and technics that lay down by the Myanma Electric Coporation.
- To install earthing and antenna (optional) at all buildings
- The water jug for fire fighting, Sand bag, Fire Extinguisher and emergency alarm should be installed. The building would be constructed by RC and steel structure which could prevent and not easily caught fire. Tree leaves, bushes and all bio waste should be cleaned near the factory.

#### Management

"No smoking" sign would be hanged on the wall near car park and in the factory that could be easily seen. The vehicle fueling, fuel storing and engine test running should be restricted at the parking lot.

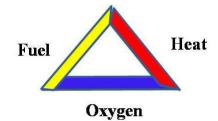


Prevention of Fire brokeout and fire fighting should be followed the instruction shown under.

- (1) Fire fighting water jugs, Fire Extinguishers, Fire Hosts should be provided in the factory compound where it is suitable.
- (2) Automatic fire alarm and Steel bar for signal are to be provided
- (3) Fire Alarm System should be installed
- (4) Priority Fire fighting spot should be designed
- (5) Appoint fire security every day and night
- (6) The emergency evacuation door and ladders should be provided in the factory

# Fire Prevention Program

- (1) Causes of fire brokeout and fire fighting program
- (2) Precaution Material and Equipments
- (3) Project Condition
- (4) Worker Forces
- (5) Security Forces
- (6) Water availability
- (7) Fire Prevention Method, Fire prevention team organizing and duties
- (8) Handling with electrical appliances
- (9) Fuel Usage
- (10) Fuel Oil Storage and Usage
- (11) Training and Inspection
- (12) Fire during Working Hours
- (13) Fire during Off Working Hou
- (14) Management and Logistics
- (15) Command and Communication





#### **Implementation**

The implementation would be more emphasized for during operation period.

The Fire Prevention and Fire Fighting Program are organized based on the mentioned above and needed education and fire exercises or fire drill is needed sometimes at any conveniences.

The detailed programs are as following.

- (1) Causes of fire brokeout and fire fighting program
  - (1.1) Improper storage of Vehicles and Fuel, extensive temperature could caused fire brokeout
  - (1.2) Duedeligence
  - (1.3) Fire to the bushes or solid waste
  - (1.4) Less attention during vehicle fueling
  - (1.5) The left fire at cooking place, gas leaks and electri wire short by extensive heat are the causes of fire

#### Fire fighting program

- (a)The company employees are most responsible to fight fire if the fire brokeout during working hours on weekdays. It is also needed to call fire center or nearest co fire bridgage simultaneously.
- (b)If fire brokeout on the off working hours or weekend, the security or duty officer has to lead the workers or workers family and fight as soon as noticed the fire broking out. It should also needed to call fire center or nearest co fire bridgage simultaneously.
  - (2) Precaution Material and Equipments

The precaution material and equipments are classified as following that could easily fire due to negliance of employees and workers during operation stage.

- I. Fuel and Lubricant
- II. Papers for office use
- III. All in the storage
- IV. Electric Appliances
- V. Solid Waste
- VI. Vehicles
- VII. Dried Grass and bushes
- (3) Project Condition

It is in the operation stage with full forces and overtime operation in the evening.

(4) Worker Forces

There will be 100 workers at normal operation. (At present 33 locals & 2 Foreign Experts are working.)

(5) Security Forces

It is expected to appoint one security officer and 20 securities. These securities should take not only security but also responsible to the fire prevention by doing regular check as round check and supprise check.

(6) Water Availability

The tube well is running well for all domestic use and reserve for fire fighting as designed.

(7) Fire Prevention Method, Fire prevention team organizing and duties

Fire prevention should be prioritized. It is necessary to all workers and employees about fire prevention, fire fighting by chart or seminar and workshop how to install the warrenty and green light to the environment.

It is to be organized the fire prevention team as following to prevent fire and monitoring.

#### Fire Prevention Team,

A. Operation Manager Team Leader

B. Manager (Admin) Deputy Team Leader

C. Security Member
D. Assistant Manager Secretary

It is obligation to all employees in principle, to fight together if the fire brokeout together with the following.

- (1) All company employee
- (2) All local residents and fire brigates
- (3) The authorites from township or division

The duties for the fire prevention team are as following.

(1) To follow the fire prevention program

- (2) All electrical wiring and electric appliances in company should be checked with technicians and make sure fire prevention
- (3) To make announcement and check each & every steps of the regulation and proper usage of electricity
- (4) To check and record the inspection on fire prevention and warning activities as 3 times daily for the building
- (5) Daily warning by the team for storage of fuels and checking remaining fire at kitchen if the charcoal stove use

### (8) Handling with electrical appliances

The handling with electrical appliances should be as following

- (1) It should be informed to the technicians for repairing of electricity system of appliance brokeout. It should not fix by itself.
- (2) It should not use the exceed power than allowed by officially.
- (3) It should be installed the auto sercuit breaker and or safty for all electrical appliances

### (9) Fuel Usage

The fuel usage should be done as following

- (1) Do not bring the matches or spark maker near to the fuel storages and chemical storage
- (2) Fire Warning Sign should be put on view that easily seen by public near fuel and chemical storages
- (3) No fuel, chemical or radio active materials should be kept in the individual's room or office

### (10) Fuel Oil Storage and Usage

Fuel Oil Storage and Usage should be done as following

- (1) "No Smoking" sign should be installed near and or around the fuel storage.
- (2) Keep always clean with dry bushes, grass and paper waste near fuel storage tank
- (3) No spark making units should be allowed near fuel storages
- (4) To stop fuel charging while unloading the fuel tank boxer

### (11) Training and Inspection

- (1) The training and demonstration for the usage of fire extinguisher and fire fighting
- (2) The fire prevention team should be done the following
  - Fire waning announcement should be done done in the dry and hot season
  - Check the fire system of office and building
  - Check wiring system whether adequate or not
  - Check fire prevention demonstration program in place or not
  - Check fire fighting demonstration program in place or not



#### Fire Extinguisher Storage

The fire extinguishers should be kept for fire fighting based on the following

- Store Place: The nearest and easy place that potentialy fire brokeout
- Easy Access Keep Clear way to get these extinguisher easily
- Sign The sign should be clearly marked due to the level of fire on these extinguisher and fire hydrant and pipe

- Hanging All extinguishers should be kept at accessable space. (10 feet distance away between extinguishers)
- Inspection Check the expired date of the extinguishers always

Table 78 The Types of Usage of Extinguisher

Extinguisher Type Fire Classes	Water	Dry Chemical Powder B(E)	Dry Chemical Powder AB(E)	Carbon Dioxide	Foam	WFT Chemical
Class B Flammable Liquid	X	✓	<b>√</b>	<b>√</b>	✓	X
Class C Flammable Gases	X	✓	<b>✓</b>	X	X	X
Class E Flammable Hazzards	X	✓	✓	✓	X	X



The boundary of fire fighting

The boundary of the fighting would be Near building or Factory, office, staff quarter, car parking and all direction from the factory.

Fire Extinguisher and water supply

The following should be arranged to get the fire extinguisher and water supply

- (1) Fire Hydrant 1 nos., Fire Extinguisher 34 nos, and Fire Fighting Jugs 20nos.
- (2) Water Tank (2500gal)
- (3) Water Drum (5,00 gal, 8Nos)

### (12) Fire during Working Hours

The following procedure should be taken if the fire broke out in working hour

- (1) It should make sound continuously and shout "Fire, Fire, Fire" by who notice or see the fire broking out first in the factory premis or wastes.
- (2) It should inform immediately to the nearest or concerned fire department by who heared the sound of fire alarm or the sound of "Fire, Fire, Fire,".
- (3) Move the fire priority immediately if the fire brokeout in the company premis and try to destruct the building if it is possible to stop fire spread out.
- (4) By carring the fire fighting jugs and hangers, manage to fight the fire immediately by leaving just one person for security at office or department.
- (5) Inform all nearest fire bridgates or fire station immediately about fire.
- (6) Direct or assist to all fire fighting cars coming from outside to the place that fire brokeout.
- (7) Assist Fire bridgade to be able to cut the electrical system of the area that fire brokeout

### (13) Fire during Off Working Hours

The following are the procedures for the fire brokeout during off working hours in the company's premises

- (1) The duty officer or someone else who notice or see the fire broking out first in the factory premis or wastes should make sound continuously and shout "Fire, Fire, Fire" continuously until someones reach to assist.
- (2) The duty officer should imeediately contact or call to inform about the fire if he himself see the fire or hear the sound of fire alarm or someones shout.
- (3) Ask for help for the fire engine and to get assistant from nearest fire station.
- (4) Manage at fire fighting, not to spread out fire and the evacuation and moving goods from the place to the safty area.
- (5) Direct or assist to all fire fighting cars coming from outside to the place that fire brokeout.
- (6) Assign enough security to the area after sealed fire and before official inspection.

### (14) Management and Logistics

- (1) Manage for the smooth and fast vehicle movement without any delay including fire engine and water boxer.
- (2) The security team or department should take the control such as not lost and robbering.
- (3) Try to assist and send who got hurt during fire brokeout immediately to the nearest clinic or hospital.
- (4) All report should be made to the authority and company's head office on timely basic.

#### (15) Command and Communication

All management level such as general manager, manager and assistant manager are responsible to be participated and close assistant in fire fighting and other necessary measures together with duty officer and security.

Any mode of communications such as telephone, messanger or even making sound as fire warning should be done.

Monitoring Plan	Monitoring Report would be submitted twice a year. Detailed procedure is describ					
	in the next chapter 9.4.15.					
Financial Allotment	100,000Ks (yearly)					
Responsible Group	EMP Team or SPC (Sub Project Contract)					

# 9.4.13 Preparness for the natural diasastes (Water, Land Slide, Storm, Earthquake etc.)

#### **Objective:**

It is to be prepared for all disaster resistant and relief even though it is not easy for all time. To inform any loss & damage to the authority about due to incident happened. During evacuation from fire or disaster situation, it is to be taken necessary measures such as immediately sending the people who got hurt to the nearby clinic or hospital and provide further assistance to them as necessary.

#### Management

The potential natural disasters in the are of proposed project would be expected such as Earthquake, Storm and Fire Brokeout to this area which could be accompanied the landslide and flood etc. To avoid and/or release from the damages from these disasters, the factory has managed as following.

The following are the emergency plan for this occasion to claim the loss and assistant.

- (1) To keep contact always with the management of MIP, regional government and take weather condition from Myanmar Television etc.
- (2) The environmental conservation team, the environmental monitoring team, the fire prevention team are needed to assist or solve together for all emergency situation at all time.
- (3) To find the exit or safe place is the most important evacuation procedures for all time.
- (4) Need to contact the township or regional level organizations for further arrangement based on the situation.

- (5) The concerned team must provide first aid or emergency treatment until nurses or rescue team come and send the wounds or seriously injured persons to the nearest clinic or hospital and provide the necessary treatment as soon as possible.
- (6) Need to inform authority about the losses and get advice or assistant

#### **Implementation**

The implementation would be more emphasized for during operation period.

The disaster prevention mostly fire training and exercise of preventing, fighting and evacuation are periodically conducted by the assistant from the township level fire department. The signage for emergency exit doors is installed both on floor and wall by lamp. It is designed the evacuation escape routes and the final meeting point. The emergency care unit and rest room are provided in the factory and it would be planned for further medical treatment at nearby hosipital.

To handle the incidents with smooth and effective for al disasters preparation and evacuation procedure the practical teams are also formed by names is mentioned as "Emergency Plan" by grouping as

- 1. Fire Fighting Group
- 2. Water Supply Group
- 3. Communication Group
- 4. Evacuation Group
- 5. Security Group etc.

The most important responsibility to these groups are following detailed instructions described in the "Emergency (Prepareness and Evacuation) Management Plan without panic and needed communication with orher groups.

The company has provided the following to help and overcome the disaster situations by arranging the necessary action plan such as The Emergency Clinic and Aids, acknowledged The Emergency Contact Phone Numbers etc.

### The Emergency Clinic and Aids

For emergency and regular medical assistant to all employees are provided by factory management. A nurse Aids boxes are installed at work stations in the factory and provided to get quick access for emergency care. An Aids medicines are provided by the company not only for emergency but also regular medical care to all employees. It is sent to nearby clinic or hospital if it is needed further assistant.

#### **The Emergency Contact Phone Numbers**

1.	Ngnzun Township General Administration Office	061-2043985, 60261
2.	Ngnzun Police Station	061-65199, 60503
3.	The Emergency Fire Station	191, Nganzun 60191
4.	Central Fire Station (Yangon)	01-252011, 01-252022

Monitoring Plan	Monitoring Report would be submitted twice a year. Detailed procedure is described				
	in the next chapter (9.4.15).				
Financial Allotment	600,000Ks (yearly)				
Responsible Group	EMP Team or SPC (Sub Project Contract)				

# **9.4.14** Summary of Environmental Management Plan (Operation Phase)

**Table 79 The Summary of Environmental Management Plan (Operation Phase)** 

Category	Item	Environmental Management	Responsible Group
Pollution	Air Quality	-Cleaning dust in the factory always -In case that a tenant live in the domitory which may cause exhaust gas pollution such as intensive cookingSpeed limiting to all vehicles and service machines	EMP team/SPC
	Water Quality	-Smart control such as water saving ultra low flush toilet, spray nozzles, urinals and low flow shower heads etc., for water system should be applied for water usageNo impacts to the surface and ground water as the septic tank is istalled	EMP team/SPC
	Noise	Install Sound Proof Generator and Compressor, Avoid construction and operation at night time, Speed limit for drivers, Provide ear plug for operator. Buffer zone for sound-proving to the diesel generator using at black out time. (The engine has installed the silencer) The silent split type air conditioners should be installed instead of window type	EMP team/SPC
	Water & Energy Consumption	Check tube wells, water usage and water quality, Reuse of water, stop airconditioner during lunch time to save electricity	EMP team/SPC
	Waste Water	-Install oil and grease trap should be installed -Ensure no waste water should be released from the project area to public area especially without treatmentInstall septic tank and frequent check	EMP team/SPC
	Traffic Management	Control speed limit to all vehicles, Provide parking lot for motor bikes and bicycles Conducting traffic assistant to the drivers at the factory entrance/exit.	Developer
	Solid Waste	Management on solid wastes to implement 3R for all wastes, keep all solid wastes systematically store before selling out to buyer or trash by contacting city development committee, -Waste collector bins should be placed enough both inside workshop, show room, office and domitoryFood waste and bio waste should be collected and dispose daily systematically	Developer
	Soil Contamination	-Ban on infiltrate liquid waste onto the ground.	EMP team/SPC
	Ground Subsidence	-Check consumption of ground water and monitoring of ground subsidence.	EMP team/SPC
	Offensive Odor	controlled.	EMP team/SPC
	Bottom Sediment	-Not applicable as no discharge to river or stream	EMP team/SPC
Natural Environment	Flora, Fauna Management	-Planting and Maintenance of trees, vegetation, lawn in the public space such as road, retention pond and other open spaces.	Developer
	Management on Greening	Monitor and maintain all plants to keep green, plant a new trees as much as possible	EMP team/SPC
Social Environment	Livelihood	Providing priority to all local and nearby residents for all vacancies at the project,  Continuous training programs are planned for capacity development	Developer
	Occupational Health and Safety Management	Follow OHS working condition and guideline such as EHS by IFC, Installed ventilation for temperature & dust control (power fan, hood & wall mounted),  Manage efficiently generator operation hours, Use soundproof gen set and compressor to reduce noise and provide ear plug to operator, Avoid night time operation, Manage water usage by controlling water level at dying/washing machine Chemicals are kept, handled and used well, The empty containers of chemicals are stored carefully and resell to the supplier,	Developer

	Risk and	Hazardous waning including no smoking and high voltage signages are put on the necessary place, A nurse Aids boxes are installed work stations in the factory to get quick access The purified drinking water is provided. The necessary health cares are provided to all sick, wounded and allow the maternity leaves.  -Measures of infectious disease will be implemented as follows;	EMP team/SPC
	Infectious disease such as AIDS/HIV	<ul> <li>Plan for prevention of infectious disease from spreading.</li> <li>Training plan for workers</li> </ul>	
Others	Accident	-Accident prevention measures inside and outside the project area will be planned.	EMP team/SPC
	Global Warming	-Energy Saving devices such as LED lamps, door lock and switch card to be used to reduce energy consumption -Minimization of GHGs emission by construction machines and vehicle will be planned	EMP team/SPC
	Hazardeous Waste Management	-The empty bottles and containers of paint, oil used in kitchen are kept separately before disposal at special purpose company or cleansing department of city development council.	Developer
	Emergency & Evacuation Management	Emergency Plan and Groups are formed Periodic training is provided, All emergency relief equipments such as fire extinguishers are placed as fire department standard, The evacuation maps and signs to way out are drawn on the floor, fire alarm are installed, The emergency contact numbers are informed	Developer
	Preparaness for natural disaster	Training and Exercise are conducted. The emergency preparedness groups are organized. The emergency clinics and aids medicines are provided by the company not only for emergency situation but also regular medical care to all employees. A nurse Aids boxes are installed at work stations in the factory to get quick access. The emergency calls are acknowledged.	Developer
Storage and Handling of Materials	Kitchen	-Store in different refrigerators for meats, vegetables and foods & beverages -Check daily for expire for all food -Provide all storages and shelves from flood water at any time -Check and prevent rottan and other insect from entering into the kitchen	EMP team/SPC
	Fuel	-All fuels lubricants should be store under fire prevention system including placing of fire extinctguishers -Extra care is needed to spill out fuels and lubricants to the ground	EMP team/SPC

### 9.4.15 Monitoring Program

### Methodology

It is needed to follow the best practices by preventing the harmful to the environment and mitigation if the project is to be built at NEQEG standard garment manufacturing factory.

It is instructed by the Ministry of Natural Resources and Environmental Conservation to be compiled with evidence and references for the environmental management plan, monitoring plan wich is committed by the project proponent.

The inspection would be followed as necessary for the NEQEG standards, the work safety and environmental friendly to this project.

It is also necessary to well organize and implement to close watch on all necessary measures to prevent and mitigate all impacts to the environment.

In this monitoring program, the following are needed to complete monitoring.

- The quality of air, noise, water & energy consumption, waste water effluent are included together with continuous study or capacity building.
- The waste management
- Safety, Operation and Administration Practice
- Storage and Handling of fuels and chemicals

### **Monitoring (Pre Construction)**

It is obmitted as construction was completed

### **Monitoring (During Construction)**

It is obmitted as construction was completed.

### **Monitoring (Operation Period)**

The environmental monitoring program during operation period after construction is responsible to the project proponent. The responsible team should be organized as following. The detailed monitoring program and parameters are described in the following table with the specific responsible. It would be reported regularly to the Ministry for the environmental management plan and monitoring plan as instructed. The report would be submitted to the concerned department and Cc to the project office with the data collected and finding.

### The committent about the monitoring report by the project proponent

The project proponent has committed that the monitoring report will be submitted to the ministry at least once in a 6 month or as instruct by the ministry regarding to the regulation para 108 of environmental assessment procedure.

### **Environmental Monitoring Team**,

The Environmental Monitoring Team would be organized as following.

(Environmental Monitoring Team)

A. Manager (Operation Dept.)

B. Asst; Manager (Operation Dept.)

C. Engineer (Engineering & Maintenance Dept.)

D. Security (Chief)

Group Leader

Member

Member

The telephone communication or messenger service should be used to get affected and most reliable to communicate each others. It is well planned to get environment better by closely watch and supervice by group manager. This monitoring team will be reporting to the environmental management team for all finding such as development and mitigation program for new impact findings with evidence and data collected and also the status of nursery, plant and maintain the grass and trees as greening program to the environment. It is also needed to support the environmental conservation team (EMP) for the report to be submitted to the ministry.

### Safety Management Team,

The Safety Management Team would be organized as following.

A. Security (Chief)

B. Manager (Admin)

C. Engineer

D. Manager (Operation Department)

Team Leader

Co-Leader

Member

Member

Environmental Monitoring Plan which is part of the Environmental Management Plan is needed to specify the parameter and the program to distinguish the anticipated changes. To get monitored, the projects also needed the base line data and standards and functioned properly.

### **Monitoring Program and Parameters**

The following table shows the detailed information on how the parameter, method and program for the point that is to be measured.

#### Air

1 111								
No	Point of Pollution	Cause	Affected	Parameter	Indication	Method	Person	Duration
	Monitoring							
	(Lat/Long)							
1	Inside Factory	Emission,	Air	Exhaust Air	(Temp;humidity	Lab	Person	Daily,
	and/or	Exhaust		(Temp/	$PM_{2.5}, PM_{10}, NO,$	Analysis	In	Weekly,
	Surrounding	(Machines		Pressure)	SO <sub>2</sub> ,CO)		charge	Monthly
		,Vehicle,etc.)			Ordor level			

### Noise

N	Point of Pollution	Cause	Affected	Parameter	Indication	Method	Person	Duration
	Monitoring(Lat/Long)							
1	Surrounding of	Traffic(Car	Noice	Sound	dB	Sound		Daily
	Project Area	Parking,		Level		Level		
		loading/Unloading)				Meter		

#### **Waste Water**

No	Point of Pollution	Cause	Affected	Parameter	Indication	Method	Person	Duration
	Monitoring(Lat/Long)							
1	Surrounding	Drain/Car Wash,etc.	Waste Water	Flow rate	BOD, COD	Lab Analysis	Person In charge	Monthly

### **Solid Waste**

No	Point of Pollution	Cause	Affected	Parameter	Indication	Method	Person	Duration
	Monitoring(Lat/Long)							
1	Surrounding	Tree leaves	Solid Waste	Volume/Weight	Volume	Visual, Weight	Person In	Daily, Weekly,
						Measurement	charge	Monthly

The data to be collected, locations, periods and the data collectors all should be managed pre construction, during construction and normal operation period respectively.

(Remarks, It could be omitted the pre-construction and during construction stage as the project is in the operation stage.)

# **9.4.16** The Monitoring Plan (Operation Phase)

**Table 80 The Monitoring Plan (Operation Phase)** 

Category	Item	Location (Lat/Long)	Frequency	Financial Allotment (ks)	Responsible Organization
Air Quality	PM <sub>2.5</sub> , PM <sub>10</sub> VOC, HCHL, NO <sub>2</sub> , SO <sub>2</sub>	(In factory and surrounding)*	Twice a year	2,000,000	Project Proponent/ EMP team
Noise and Vibration	Noise & Vibration level	(In factory and surrounding) **	Twice a year	500,000	Project Proponent/ EMP team
Solid Waste	Amount of solid waste Management of solid waste including domestic and industrial waste	(In factory and surrounding)	Twice a year	200,000	Project Proponent/ EMP team
Waste Water	pH, SS, DO, BOD, COD, oil & grease, chromium	(In factory and surrounding)	Twice a year	200,000	Project Proponent/ EMP team
Soil Contamination	Status of control of solid and liquid waste which causes soil contamination	(In factory and surrounding)  ***	Twice a year	200,000	Project Proponent/ EMP team
Ground Subsidence	Ground elevation	Preservation site	Twice a year	500,000	Project Proponent/ EMP team
Offensive Odor	Status of offensive odor control by tenants	(In factory and surrounding)	Twice a year	1,000,000	Project Proponent/ EMP team
Bottom Sediment	Combine with water quality	(In factory and surrounding)	Twice a year	500,000	Project Proponent/ EMP team
Hydrology	Consumption of ground water amount	Preservation site	Twice a year	500,000	Project Proponent/ EMP team
Water Usage	Combine with ground	(In factory and	Twice a year	500,000	Project

Hydrological Situation	subsidence monitoring	surrounding)			Proponent/ EMP team
Risk for infectious disease such as AIDS/HIV	Status of measures of infection disease	Each tenant/Worker	Twice a year	1,000,000	Project Proponent/ EMP team
Working conditions (including occupational safety)	Working condition with safety and health	Factory	Twice a year	1,000,000	Project Proponent/ EMP team
Accident	Existence of accident	Factory	Twice a year	1,000,000	Project Proponent/ EMP team

Remarks: \* P1,21°43'51.27"N, 95°37'37.93"E, P2, 21°43'51.37"N, 95°37'36.47"E P3, 21°43'51.53"N, 95°37'34.37"E P4,21°43'50.59"N, 95°37'35.33"E P5, 21°43'49.98"N, 95°37'31.38"E

The find out data should be checked with National Environmental Quality (Emission) Guidelines mentioned as following.

**Indicative Guideline for Treated Sanitary Sewage Discharge** (National Environmental Quality (Emission) Guidelines2015)

Table (4.5) **Effluent Levels (Manufacturing)** 

Parameter	Unit	Guideline Value
5 day Biochemical oxygen	mg/l	30
demand		
Absorbable organic halogens	mg/l	1
Ammonia	mg/l	10
Cadumm	mg/l	0.02
Chemical oxygen demand	mg/l	160
Cromium (hexavalent)	mg/l	0.1
Cromium (Total)	mg/l	0.5
Cobalt	mg/l	0.5
Color	m <sup>-1</sup>	7(436nm <sup>a</sup> ,yellow)
		5(525nm, red)
		3(620nm,blue)
Copper	mg/l	0.5
Nickel	mg/l	0.5
Oil and grease	mg/l	10
Pesticides	mg/l	$0.05 - 0.10^{b}$
рН	S.U <sup>a</sup>	6-9
Phenol	mg/l	0.5
Sulfide	mg/l	1
Temperature increase	C°	<3 <sup>b</sup>
Total coliform baterial	100ml	400
Total nitrogen	mg/l	10
Total phosphorus	mg/l	2
Total suspended solids	mg/l	50
Zinc	mg/l	2

<sup>&</sup>lt;sup>a</sup> Nanometers

<sup>\*\*</sup>PN121°43′51.27"N, 95°37′37.93"E, PN2, 21°43′51.37"N, 95°37′36.47"E PN3, 21°43′51.53"N, 95°37′34.37"E PN4, 21°43′50.59"N, 95°37′35.33"E PN5, 21°43′49.98"N, 95°37′31.38"E

<sup>\*\*\*</sup> **S.1,** 21°43′53.34″N, 95°37′30.18″E **S.2,** 21°43′52.76″N, 95°37′38.24″E **S.3,** 21°43′49.34″N, 95°37′37.94″E **S.4,** 21°43′49.61″N, 95°37′32.28″E **S.5,** 21°43′47.81″N, 95°37′29.81″E

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

<sup>&</sup>lt;sup>c</sup> Standard Unit

<sup>&</sup>lt;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

**Air Emissions** (EQEG) (Environmental Quality Effluent Guide line)

Parameter	Average Period	<b>Guideline Value</b> mg/Nm <sup>3</sup>
Nitrogen dioxides (NO <sub>2</sub> )	1 Year	40
	1-hour	200
Ozone	8 hour daily	160
	maximum	
Particulate matter PM <sub>10</sub>	1 year	20
	24 hour	50
Particulate matter PM <sub>2.5</sub>	1 year	10
	24 hour	25
Sulfur dioxide (SO <sub>2</sub> )	24 hours	20
	10 minute	500

<sup>&</sup>lt;sup>a</sup>Particulate metter 10 micro meters or less diameter

# 9.5 Responsible Authorities for Implementation of EMP and Monitoring,

The responsible authorities are organized as following to oversea environmental and social management.

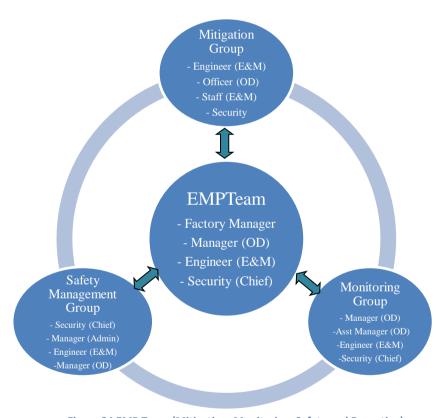


Figure 34 EMP Team (Mitigation, Monitoring, Safety and Reporting)

### **EMP Team – (Mitigation, Monitoring, Safety and Reporting)**

The Environmental Management Team would be consisting of Mitigation Group, Monitoring Group and Safety Management Group respectively. It is organized as following.

A. Factory Manager Chairman

B. Manager (Operation Dept.)

Member (Monitoring Group Leader)

C. Security (Chief) Member (Safety Management Group Leader)

D. Engineer (Engineering & Maintenance) Secretary (Mitigation Group Leader)

<sup>&</sup>lt;sup>b</sup>Particulate metter 10 micro meters or less diameter

This structured team with resource personals as shown above should be the most responsible to implement this Environmental Management Plan, Mitigation, Monitoring, Safety Management and Reporting.

### **Duty and Responsibility of EMP team**

The team is responsible to submit regular report to concerned parties such as ECD including MIC (Ayarwaddy) on Environmental Management Plan, Monitoring Program, the Implementation, New finding during implementation, the mitigation to those impacts and program with evidences and references. The team should be ready to disseminate all finding and monitoring reports to local communities if it is

necessary.

The team is the communication channel and coordinator between the factory and lead communities for

The team is the communication channel and coordinator between the factory and local communities for all environmental and social affairs including CSR program.

#### **Duty and Responsibility of EMP team members**

#### A. Factory Manager (Chairman)

He is the leader of the team and responsible to all environmental affairs from A to Z. He is the key person to get contact with other group of EMP team (Mitigation group, Monitoring Group and Safety Management group etc.) all the time. He needs to appoint the officials or sub contract to take care of all environmental affairs including regular reporting to all authorities and concerned parties.

### B. Manager (Operation Dept.) (Member)

He is the member of the team and responsible to take assignment of all environmental affairs assigned by the chairman. He also need to feed back all find out and completion of assignment to chairman or through the secretary.

### C. Security Chief (Member)

He is the member of the team and responsible to take assignment of all environmental affairs assigned by the chairman. He also needs to check & feed back all find out and completion of assignment to chairman or through the secretary.

### D. Engineer (Engineering & Maintainence Dept.) (Secretary)

He is the co-leader of this team and responsible to assist the groups' chairman all environmental affairs from A to Z. As he is also the group leader of Mitigation Group, he has always needed to check the real situation, the progress of assignment to the team members who are the leaders of the respective group and their feedback while closly contact to the chairman for updated information and situation. He is the key person to get contact with other group leaders & members of EMP team (Mitigation group, Monitoring Group and Safety Management group etc.) all the time. He needs to prepare for all regular reports as it is scheduled at reporting section.

### (1) Mitigation Group -

This structured mitigation team with resource personals as shown below should be the most responsible to implement all mitigation procedures mentioned in this Environmental Management Plan.

A. Engineer (Engineering & Maintenance Dept.)

B. Officer (Operation Dept.)

C. Staff (Engineering & Maintenance Dept.)

D. Security

Group Leader

Member

Member

#### **Duty and Responsibility of Mitigation Group**

The group is responsible to implement regularly for all mitigation procedures mentioned in this Environmental Management Plan. The regular implementation, new finding during implementation, the mitigation to those impacts and program would be regularly recorded with evidences and references.

The team will report all finding to EMP team regularly or imediately if it is needed.

The group also needed to support to EMP team for their regular reporting or whenever it is needed.

### **Duty and Responsibility of Mitigation Group members**

A. Engineer (Engineering & Maintenance Dept.) (Group Leader)

He is the leader of the team and responsible to all mitigation measures from A to Z. He is the key person to get cooperate with other group of EMP team (Monitoring Group and Safety Management group) all the time.

### B. Officer (Operation Dept.) (Member)

He is the member of the team and responsible to take assignment of all mitigation measures assigned by the group leader. He also need to feed back all find out and completion of assignment to the group leader.

## C. Staff (Engineering & Maintenance Dept.) (Member)

He is the member of the team and responsible to take assignment of all mitigation measures assigned by the group leader. He also needs to check & feed back all find out and completion of assignment to the group leader.

### D. Security (Member)

He is responsible to assist the group leader and members at all mitigation measures from A to Z. He is always needed to check the real situation, the progress of assignment to the team members and their feedback while closly contact to the members for updated information and situation.

#### (2) Monitoring Group -

This structured group with resource personals as shown below should be the most responsible to implement this Environmental Management Plan.

A. Manager (Operation Dept.)	Group Leader
B. Asst; Manager (Operation Dept.)	Member
C. Engineer (Engineering & Maintenance Dept.)	Member
D. Security (Chief)	Member

#### **Duty and Responsibility of Monitoring Group**

The group is responsible to monitor all points of environmental conservation and submit regular report as mentioned in this Environmental Management Plan.

The group also needed to support to EMP team for their regular reporting or whenever it is needed.

#### **Duty and Responsibility of Monitoring Group team members**

#### A. Manager (Operation Department) (Group Leader)

He is the leader of the team and responsibility to all environmental affairs from A to Z. He is the key person to get contact with other group of EMP team (Mitigation group, Reporting Group and Safety Management group etc.) all the time.

#### B. Asst; Manager (Operation Dept.) (Member)

He is the member of the team and responsible to take assignment of all environmental affairs assigned by the chairman. He also need to feed back all find out and completion of assignment to chairman or through the secretary.

#### C. Engineer (Engineering & Maintance) (Member)

He is the member of the team and responsible to take assignment of all environmental monitoring affairs assigned by the group leader. He also needs to check & feed back all find out and completion of assignment to chairman or through the secretary.

# D. Security (Chief) (Member)

He is responsible to assist the group leader for all environmental monitoring affairs from A to Z. He is always needed to check the real situation, the changes or irregularites while closly contact to the group leader for updated information.

### (3) The Safety Management Group-

The Safety Management Group would be organized as following.

A. Security Chief Group Leader
B. Manager (Admin) Co-Leader
C. Engineer Member
D. Manager (Operation Department) Member

#### **Duty and Responsibility of Safety Management Group**

The group is responsible to monitor all points of environmental conservation and submit regular report as mentioned in this Environmental Management Plan.

The group also needed to support to EMP team for their regular reporting or whenever it is needed.

This safety management group will be reporting to the environmental conservation team as mentioned with the program, development and new impact findings with evidence and data collected. It is also needed to support the environmental management team for the report to be submitted to the ministry.

### **Duty and Responsibility of Safety Management team members**

### A. Security Officer (Group Leader)

He is the leader of the team and responsibility to all safety management including prevention, evacuation from A to Z especially at the disaster situation. He is the key person to get contact with other group of EMP team (Mitigation group & Monitoring Group) all the time.

#### B. Manager (Admin) (Co-Leader)

He is the co-leader and responsible to cooperate with the leader for all safety preventation assigned by the chairman. He also need to feed back all find out and completion of assignment directly to the factory manager who would be the chairman of EMP team or through the secretary.

### C. Engineer (Engineering & Maintance) (Member)

He is the member of the team and responsible to take cooperation at safety procedures especially at disaster situation. He also needs to check & feed back all find out to the group.

### D. Manager (Operation Department) (Member)

He is the member of the team and responsible to take cooperation at safety procedures especially at disaster situation. He also needs to check & feed back all find out to the group.

#### **Instruction for EMP team**

The EMP team is responsible to submit regular report on Environmental Management Plan, Monitoring Program, The implementation, new impact finding during implementation and program with evidences and references.

The EMP team should be ready to disseminate at all findings and monitoring reports to local communities if it is needed.

The EMP team is the key coordinator to implement and feed back between all other groups of the EMP team for all environmental and social affairs including CSR program.

### 9.6 The Financial Allotment for EMP

The company has allocated 2% of net profits to use as the fund for the committee CSR and expense for the environmental management. The financial allotment for the EMP including monitoring should be described with agreement which is to be allowed the said allotment is not enough.

**Table 81 The Environmental Management Plan and Finance (Operation Stage)** 

		Management Pian and Finance (Operation St		Frequency/Fi
Category	Item	Environmental Management	Responsible	nancial
cutegory	10011	Zii vii viinientui 171unugement	Group	Allotment(Ks)
Pollution	Air Quality	-Cleaning dust in the factory always	EMP team/SPC	Check Daily/
	C	-In case that a tenant live in the domitory which may		(1,500,000/
		cause exhaust gas pollution such as intensive cooking.		3months)
		-Speed limiting to all vehicles and service machines		For air quality
		Speed mining to an vemeros and service machines		check
	Water Quality	-Smart control such as water saving ultra low flush	EMP team/SPC	Check Daily/
		toilet, spray nozzles, urinals and low flow shower heads		(500,000/
		etc., for water system should be applied for water usage.		3months)
		-No impacts to the surface and ground water as the		For water
		septic tank is istalled		quality check
	Noise	Install Sound Proof Generator and Compressor, Avoid	EMP team/SPC	Check Daily/
	110150	construction and operation at night time,	Zivii touiii Si C	(500,000/
		Speed limit for drivers, Provide ear plug for operator.		3months)
		Buffer zone for sound-proving to the diesel generator		For Noise
		using at black out time. (The engine has installed the		check
		silencer)		CHOCK
		The silent split type air conditioners should be installed		
		instead of window type		
	Water &	Check tube wells, water usage and water quality, Reuse	EMP team/SPC	Check Daily/
	Energy	of water, stop airconditioner during lunch time to save	Livii team si e	(1,500,000/
	Consumption	electricity		3months)
	Waste Water	-Install oil and grease trap should be installed	EMP team/SPC	Check Daily/
	vvaste vvater	-Ensure no waste water should be released from the	Livii team si e	(1,500,000/
		project area to public area especially without treatment.		3months)
		-Install septic tank and frequent check		For waste
		Instant septie taint and frequent eneck		water leak
				check
	Traffic	Control speed limit to all vehicles,	Developer	50,000/yr
	Management	Provide parking lot for motor bikes and bicycles		, <b>.</b>
	Solid Waste	Management on solid wastes to implement 3R for all	Developer	200,000/yr
		wastes, keep all solid wastes systematically store before		
		selling out to buyer or trash by contacting city		
		development committee, -Waste collector bins should		
		be placed enough both inside workshop, show room,		
		office and domitory.		
		-Food waste and bio waste should be collected and		
		dispose daily systematically		
	Soil	-Ban on infiltrate liquid waste onto the ground.	EMP team/SPC	200,000/yr
	Contamination			
	Ground	-Check consumption of ground water and monitoring of	EMP team/SPC	200,000/yr
	Subsidence	ground subsidence.		
	Offensive Odor	-Offensive odor which might be generated by the	EMP team/SPC	200,000/yr
		tenants would be strictly controlled.		, ,
	Bottom	-Not applicable as no discharge to river or stream	EMP team/SPC	-
	Sediment			
Natural	Flora, Fauna	-Planting and Maintenance of trees, vegetation, lawn in	Developer	200,000/yr
Environment	Management	the public space such as road and other open spaces.	1	, ,
	Management on	Monitor and maintain all plants to keep green, plant a	EMP team/SPC	300,000/yr
	Greening	new trees as much as possible		
Social	Livelihood	Providing priority to all local and nearby residents for	Developer	600,000/yr
Environment		all vacancies at the project,	r -	, <b>,</b>

		development		
	Occupational Health and	Follow OHS working condition and guideline such as EHS by IFC,	Developer	500,000/yr
	Safety	Installed ventilation for temperature & dust control		
	Management	(power fan, hood & wall mounted), Manage efficiently generator operation hours,		
		Use soundproof gen set and compressor to reduce noise		
		and provide ear plug to operator,		
		Avoid night time operation,		
		Manage water usage by controlling water level at		
		dying/washing machine		
		Chemicals are kept, handled and used well,		
		The empty containers of chemicals are stored carefully		
		and resell to the supplier,		
		Hazardous waning including no smoking and high voltage signages are put on the necessary place, A nurse		
		Aids boxes are installed work stations in the factory to		
		get quick access		
		The purified drinking water is provided.		
		The necessary health cares are provided to all sick,		
		wounded and allow the maternity leaves.		
	Risk and	-Measures of infectious disease will be implemented as	EMP team/SPC	200,000/yr
	Infectious disease such as	follows;		
	AIDS/HIV	<ul> <li>Plan for prevention of infectious disease from spreading.</li> </ul>		
	/ HDS/III V	<ul><li>Training plan for workers</li></ul>		
Others	Accident	-Accident prevention measures inside and outside the	EMP team/SPC	200,000/yr
Cultur		project area will be planned.	Zivii vomii si c	200,000,71
	Global	-Energy Saving devices such as LED lamps, door lock	EMP team/SPC	500,000/yr
	Warming	and switch card to be used to reduce energy		•
		consumption		
		-Minimization of GHGs emission by construction		
		machines and vehicle will be planned		
	Hazardeous	-The empty bottles and containers of Hygence and	Developer	1,000,000/yr
	Waste Management	bleach used in laundry, Kitchen and spa are kept separately before disposal at special purpose company		
	Management	or cleansing department of city development council.		
	Emergency &	Emergency Plan and Groups are formed	Developer	1,000,000/yr
	Evacuation	Periodic training is provided, All emergency relief	r	, , <b>.</b>
	Management	equipments such as fire extinguishers are placed as fire		
		department standard, The evacuation maps and signs to		
		way out are drawn on the floor, fire alarm are installed,		
	-	The emergency contact numbers are informed		<b>7</b> 00 000/
	Preparaness for	An Aids medicines are provided by the company not	Developer	500,000/yr
	natural disaster	only for emergency but also regular medical care to all employees.		
		A nurse Aids boxes are installed at work stations in the		
		factory to get quick access.		
Storage and	Kitchen	-Store in different refrigerators for meats, vegetables	EMP team/SPC	100,000/yr
Handling of		and foods & beverages		•
Materials		-Check daily for expire for all food		
		-Provide all storages and shelves from flood water at		
		any time		
		-Check and prevent rottan and other insect from		
	Fuel	entering into the kitchen	EMD toom/CDC	100 000/
	Fuel	-All fuels lubricants should be store under fire prevention system including placing of fire	EMP team/SPC	100,000/yr
	i	prevention system including placing of the	1	
		extinctguishers -Extra care is needed to spill out fuels and lubricants to		

**Table 82 The Financial Allotment Cost Estimate for EMP (yearly)** 

No.	Des	Budget Allotments (Ks)/year	
1	The Environmental	Air Quality Management	1,000,000
	Management Plan	Noise Management	500,000
		Water & Energy Management	1,000,000
		Plan	
		Waste Water Treatment	12,000,000
		Traffic Management	50,000
		Solid Waste Management	200,000
		Flora and Fauna Management	200,000
		Management on Greening	300,000
2	The Social Management Plan	The Livlihood	600,000
		Occupational Health & Safety	500,000
		Management	
		Hazardous Management	100,000
		Emergency & Evacuation	1,000,000
		Management	
		Preparness for the natural	500,000
		disasters	
3	The Monitoring (for twice a year	r)	300,000
4	Reporting (for twice a year)		200,000
		Total	17,100,000

### Remarks

If the allotted fund is not enough, the project proponent would be use additional fund by getting approval from the nearest board of director meeting.

### Cost Estimate for monitoring

There should be expected 2 types of monitoring cost such as (1) for measuring air, noise, dust, waste water etc. (2) miscellaneous such as sampling cost, logistic etc.

**Table 83 The Financial Allotment Cost Estimate for Monitoring (twice a year)** 

Category	Item	Location (Lat/Long)	Frequency	Financial Allotment (ks)	Responsible Organization
Air Quality	VOC, HCHL, PM <sub>2.5</sub> , PM <sub>10</sub>	Construction Site (In factory and surrounding)	Twice a year	2,000,000	Sub Project Contractor
Water Quality	pH, SS, DO, BOD, COD, oil & grease, chromium	Construction Site(In factory and surrounding)	Once a year	200,000	SPC
Waste	Amount of solid waste Management of solid waste including domestic and industrial waste	Each tenant (In factory and surrounding)	Once/6month	200,000	EMP team
Soil Contamination	Status of control of solid and liquid waste which causes soil contamination	Each tenant (In factory and surrounding)	Once a year	200,000	EMP team
Noise and Vibration	Noise & Vibration level	Each tenant (In factory and surrounding)	Once (peak period)	500,000	SPC
Ground Subsidence	Ground elevation	Preservation site	Once a year	500,000	SPC
Offensive Odor	Status of offensive odor control by tenants	Each tenant (In factory and surrounding)	Twice per year	1,000,000	EMP team
Bottom Sediment	Combine with water quality	Preservation site	Once a year	500,000	SPC

Hydrology	Consumption of ground water amount	Preservation site	Once a year	500,000	SPC
Water Usage Hydrological Situation	Combine with ground subsidence monitoring	Preservation site (In factory and surrounding)	Once a year	500,000	SPC
Risk for infectious disease such as AIDS/HIV	Status of measures of infection disease	Each tenant/Worker	Once/month	1,000,000	SPC/Tenants
Working conditions (including occupational safety)	Working condition with safety and health	Work site	Once /month	1,000,000	SPC
Accident	Existence of accident	Work Site	As occasion arises	1,000,000	Tenants

Table 84 The Miscellaneous item such as planning cost, Logistic etc,

No.	Description	Budget Allotments (Ks)/one package	Budget Allotments (Ks)/twice a year
1	Sampling Cost including containers	10,000	20,000
2	Logistics	40,000	80,000
	Total	150,000	300,000

The allotted funds as shown above should be revised if it is not enough to implement by the decision made at board of directors meeting.

### 9.7 Reporting Requirement

The reporting is needed about the progress of the environmental management plan, the environmental monitoring plan with the test or assessment data recorded and necessary document to be sent to the ministry as instructed.

#### **Responsible Organization to The Report**

This environmental management plan (EMP) team as mentioned above will be reporting to the environmental management team with the program, development and mitigation program for new impact find out with evidence and data collected. It is also needed to communicate & support to all groups organized in the environmental management team for the report which is to be submitted to the ministry.

The reporting would be consisting of following.

- Monitoring in operation stage and inspection.
- Reporting to the small things to all accident and emergency matters.
- All activities should be recorded with guide line values and needed to take action due to these guide line value.
- Capacity Building

The report should be submitted following guide line frequency.

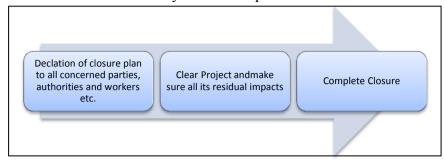
**Table 85 Types of Reports** 

No	Types of Report	Frequency	Remarks	
1	Monitoring and Inspection	Twice a Year		
2	Reporting on any small things, accidents and emergency	At the time of	(*)	
	Reporting on any sman things, accidents and emergency	occurances		
3	Report with reference at every environmental conservation time	Each time		
4	Capacity Building or Training Reports	Each time		

Remarks, (\*) ECC Holder should report to the authority as soon as possible if accident or emergency matter occurs as mentioned on the ECC Certificate.

### 9.8 Factory Clousure Plan

Even though the factory is planned for the long term operation, it should be planned and followed the factory closure plan if it is to be closed due to any reasons. It should be informed to the related authorities and the closure plan would be done based on the country's laws and policies.



**Figure 35 Factory Clousure Plan** 

- (1) It is the most important to declare the closure plan to all concerned parties, authorities and workers as soon as the management has decided to do so with the reasonable preparation time ahead for each parties.
- (2) Preparation on clearing wastes and impacts should be done before the complete stop of operation and should be continued to make it sure all its residual impacts.

#### Remarks:

It should be informed the closure plan to the authorities including township general administration and MONREC at least one month ahead.

### 9.9 Capacity Development and Training

The following are the necessary training program needed regularly to provide for the capacity build up among the team members for prevention of natural environment, finding alternaatives to the mitigation of impacts and environmental conservation.

- The greening program
- Mitigation of Impacts by 3R system
- The Environmental Monitoring Program
- Diasaster Preparness Program & Fire Excersise (Fire Drill)

The cooperation with Ministry of Natural Resources and Environmental Conservation for training program is needed or sending delegates to the related training program from time to time.

#### 9.10 The CSR program & environmental management financial allocation

Environmental Management Plan is one of the key factors to be in line with Myanma Environmental Policy and it is mandatory to get Environmental Compliance Certificate (ECC) from ECD that all projects and activities are needed to hold as legal certificate.

Hence, it is recommended to have a good Environmental Management Plan and follow as mentioned and committed such as Organizing, Monitoring and Reporting with continuously.

In general, it is less environmental and social impact or negligible to the surrounding and nature. However the copany has committed to use 2% of annual profit to expense for the environmental conservation with well organized team as mentioned in Environmental Management Plan.

The detailed organization structure and program are mentioned in the Environmental Management Plan report as shown below.

#### **CSR Fund**

The company will be organized the CSR team and will cooperate with others for monitoring. This sub committee would be reporting for all implementations from time to time.

The funding is allocated to use 2% of the annual net profit by spending as following.

1. Environmental Conservation Works (50%)

- 2. Social Development (10%)
- 3. Education (15%)
- 4. For elderly people(10%)
- 5. For orphanage and religious affairs (15%)

#### The Environmental Conservation Fund

In general, it is found out less or no impacts to the environment by this project implementation if it is managed properly but there will be positive impacts to social sector by creating the employments.

The environmental conservation team would be organized as mentioned in the chapter 7 while the funding is allocated to use 2% of the annual net profit by spending as following.

- Environmental Conservation Works (50%)
   (Mitigation Measures, Implementing, Safeguard, Training and etc.,)
- 2. Environmental Monitoring Works (50%) (Monitoring Consultant, Supervision and Laboratory test etc.,)

These funds would be managed with the guidance of regional government.

Cost for Monitoring (Lab test estimate)

Table 86 Cost Estimate (Lab Test) for Monitoring

Phase	Item	Frequency &	Expected Cost	Responsible	Remarks
		Location		Organization	
Construction	Air, Noise,	See table in	US\$1,5000 /Yr	Contractor	(1)For measurement and lab tests
Phase	Waste Water	Chapter 6			only
					(2) The allotment should be
					readjusted with actual situation such
					as price changes etc.
Operation	Air, Noise,	See table in	US\$1,5000 /Yr	Special	(1)For measurement and lab tests
Phase	Waste Water	Chapter 6		Purpose	only
				Contractor	(2) The allotment should be
				(SPC)	readjusted with actual situation such
					as price changes etc.

#### **Financial Account**

The financial bank account for the Environmental Management, Mitigation and Monitoring is opened at UAB Bank and the status is as following.

No	Description	Status
1	Bank Name	UAB Bank
2	Bank Account	UAB-MMK-MDL
3	Bank Account Number	043010100003493

# 10. Public Consultation Meeting & Disclosure

As it is changing politically, economically and socially in Myanmar due to present political multiple party system since 2010, citizens of Myanmar are enjoying the freedom of expression and more interest to participate at all developing process in Myanmar especially in their region.

Public are more getting acquainted to the public meeting and stakeholders meeting which would be organized and held with the guide line and regulation of Myanmar Environmental Law. Most of them are not only participating the meeting but also willing to involve all the process of Environmental and Social Impact Assessment, Mitigation , Monitoring etc.

It is seen that the people living nearby project are willingly to attend the public consultation meeting and ready to help project that they believed this project could create better environment to their livelihood.

### 10.1 The Objectives and Aims of the Public Consultation

It is to ensure that the views and interests and concerns by the stakeholders are to be taken into account during the potential impact assessment and design of mitigation measures. In addition, the public consultation aims to get and improvement of communication between the project proponent and vulnerable and impact affected people and interested people and groups to this project implementation.

The following are the main focus.

- Stakeholders identification and analysis on all impacts;
- Type of consutation activities to be undertaken with each category of stakeholders
- Principles and ground rules guiding consultation with local communities
- The program for consultation to ensure timely notification of consultation activities and to tie in with key stages in the EIA process.
- Information disclosure, specifically the provision of timely and meaningful information that is accessible to all stakeholders

# The review, publication and disclosure of the EIA will include;

- Public meetings to clarify the project and present the assessed impacts, mitigation measures and management
- To receive public comments and recommendation on the impacts and mitigation measures
- Distribution of EIA report to ECD-MONREC, MIC and other interested groups

The report would be attached all discussions in the stakeholder meetings, impact assessments, mitigation measures and management plan of including monitoring and reporting program with photos and test results at all stages if it is available.

**Table 87 Summary of Consultation Plans and Activities** 

No	Phase/Date	<b>Consultation Plan</b>	Location/Venue
1	Scoping Phase	Initial Meeting with Project Proponent with construction designers and contractors	Project Office (done)
2	Impact Assessment Phase	<ul> <li>Face to face with authorities of township and district levels</li> <li>Face to face at all levels of stakeholders and vulnerable and project affected people</li> </ul>	<ul><li>Project Office (done)</li><li>Monestry of Villages (done)</li></ul>
3	Construction Phase (I)	Face to face at all levels of stakeholders and vulnerable and project affected people	• Project Affected Areas* (done)
4	Construction Phase (II)	Face to face at all levels of stakeholders and vulnerable and project affected people	• Project Affected Area*
5	Disclousure Phase	Solicit final comments from public comments and stakeholders	• Project Affected Area*

<sup>\* 3</sup> miles radius measures from the center of project

#### 10.2 The Methodology and Approach

#### a) Methodology and Approach

The following were proceeded accordingly which is also to be inline with any guidance for the public consultations procedures.

- 1. Preparation of consultation meeting (choose tentative date, time and vanue are and confirmed after getting the green light from all parties and authorities etc.)
- 2. Invitation to the meeting (Hard and soft copies of invitations were sent to all stakeholders and the venyle poster was installed infront of the project site, on 10 days advance of meeting date.)
- 3. Registration for the attendance All attendees are reguested to sign on the list of attendance at the entrance of meeting room.
- 4. Explanation about the project (During the meeting the detailed information about the project, the project proponent, the nature of project, the implementation schedule, potential impacts and mitigation procedures etc. were clearly informed by the help of power point, graphs and pictures by responsibled persons.)
- 5. Open to all for Questions and Answers and recording (After comprehensive explanation about the project by respective parties, it was opened to floor for their questions for clearification and advices without any restriction and time limimit.)
- 6. Cencus during meeting and vote recording
  (After the explanation and Q&A secion, the attendees were requested for the census and their personal idea/request/advice and free to submit the votes.)
- 7. Conclution and further announcement if it is needed

#### b) Brief about discussion and Implementation

At all meetings, the brief about project, implementation and potential impacts should be clearly explain before discussion and enough time would be provided for Q&A.

c) Meeting Outcomes

The meeting outcomes would be recorded.

d) Information disclousure

During consultation, the outcome from the stakeholders and discussions would be publized to be acknowledged by all levels.

#### 10.3 The summary of public consultation meeting

The public consultation was coorganized with KKS Engineering Co.,Ltd and Gold AYA Motors International Group Co.,Ltd at the meeting hall of MMID zone office on July 5,2018. The invitations were sent one week in advance and the announcement written on venyle was installed at the project site for all who are concerned to this project. At the meeting all are welcomed and registered. The introduction, description of project, the potential impact and its mitigation were presented at the meeting with concerned personals such as third party, project proponent, the local administerator and project developer of MMID. All detailed discussions are attached on the annex.

#### **Preparation of Stakeholders Meeting**

Public consultation or stakeholders meeting is a key aspect of the EIA process that could make cruicial to make decision by the authority. It also provides stakeholders to get opportunities to comment on the proposed project(s) as well as on the reports that are produced during each phase of the EIA. It is enables the affected communities to actually be a part of the solutions when it comes to mitigating impacts or implementing management measures.

After getting agreement on the date, time and the vanue to be performed the public consultation meeting, among the project proponent and the consultant, firstly it was informed to the authorities. Then the printing invitation and distribution started after getting the acknowledgement and the approvement from the concerned departments such as township/village general administration office and the management of MMID. The public transportationa were also provided to the vanue for those needed to attend the meeting.

The invitation, the public announcement vinyle, the meeting backdrop, the attendance list and the stakeholders input forms are attached to the annex.

#### The public consultation and declaration

The assessment trip was made to Myotha project side with concerned authorities from project proponent side and the assessments weres taken placed on May.4,2018 and July.5,2018 including public consultation with stakeholders and local villagers.

During assessment study, it could get the base line environmental data, the potential impacts which could be affected by the project implementation and interviewed with government authorities of Nganzun township level and local villagers.

**Table 88 Summary of Consultation Activities Undertaken** 

No	Date	Description	Venue
1	May.4,2018 Government Officials of Ngazun township and all people who concerned the project		Ngazun township general administration office
2	July.5,2018	Public Consultation with Local resident, CSO, NGO, Government Officials of Ngazun township and all people who concerned the project	MMID meeting room

#### **Attendance at Stakeholders Meeting**

The meeting was open to all and not limited to the ones who had attended the meeting from far and nearby. Furthermore, it was also announced to participate not only in the scheduled consultation meetings, but also provided the access to project office, third party office and the general administration office or ECD offices.

The project affected people and the focal of invitation to the stakeholders meeting while local and traditional leaders, representatives of the community potential vulnerable groups such as women and youth were consulted to understand their specific issues and concerns. The government officials, NGOs and political parties were among the invitation list. Pls find the list of attendees on the attachments.

#### **Stakeholders Meeting**

There were numbers of times of stakeholders meetings if it is possible to get remarks to this project with official official scheduled meetings and individual.







Eventhough the meeting place or venues are differ from each other among conference style or individual office, the meeting agenda are always based on the methodology of explaining about the meeting, the nature of project and what impacts would be expected and how to mitigate or find alternatives.



Meeting at
General
Administration
Department,
Nganzun
Township,
Myinchan
District,
Mandalay
Division Region

Deliverable that will be presented in public meetings shall include power point presentations in traditional language(s) with key messages including,

- The detailed explanation of project
- The explanation about potential impacts and detailed management plan to avoid or mitigate
- Expectations management around capacity building (employment, purchasing, contracting)
- Corporate Social Responsibility and emergency evacuation

Then it always provided Q&A sections and comments or suggestions from their points of view. In conclusion, the sensus is taken by the assessment team by answering the formatted questions at IFC performance standard guideline and recorded officially.

#### **Remarks and Comments at Stakeholders Meeting**

All discussions, comments, questions, suggestion, remarks and agreements are recorded officially and compiled with the Scoping and EIA report as part of the contents. A combination of various types of consultation techniques will be used such as face to face individual meeting, focus group discussions (women, youth and indigenous people.,etc), public meetings and sample household socioeconomic surveys. For this project, overall public consultations were designed by deviding project affected people of 3 miles radius of the project site including land owners and township & district level of authorites in Myingyan Township and District level in Mandalay Division Region.

#### 10.4 Meeting Outcomes, (the discussion points and the company's commitments)

All detailed discussions and answers are recorded and attached to this report on annex. Among the discussion in summary, the employment or job creation by this project is widely concerned. This project would affect neighbors both positive and negative. The mitigation of impacts is possible. There won't affect negative social impact. It could create more job opening, positive impact to the economic development by increasing GDP and export earning by this project. From the proponent site, all discussions are accepted and committed. It is committed to announce the job vacancies and employ priority to the nearby residents. It is also announced and committed to allocate the CSR fund and environmental fund.

#### **Meeting Outcomes**

During consultation, the most outcome is no rejection by the stakeholders and also support the project as they all realized this project is beneficial to all not only the project proponent but also local and national levels.

Table 89 The Discussion Points or Requests and the Company's Commitments & Progress

No.	Discussion points or request	Agreement or Commitment by Project Proponent	Progress
1	To acknowledge the vacancies at	Agreed to announce the vacancies well ahead and	Done
	the factory reserve the priority	give priority to the local residents	
	right to the local residents		
2	To provide regular capacity	Agreed as it is allocated the CSR fund	Coordination with
	training for local residents		MONREC & local
			authority
3	To sell vehicles to local residents	Agreed to sell vehicles with bank loan	Discussion with banks
	with bank loan program		

In addition, the development program to the people affected by this project implementation. The following are the commitment for the community development and project affected people by the implementation of this project.

- (1) To give priority of appointing to the people for geeting employment if there are vacencies.
- (2) To use prevention measures on mitigation of impacts as much as possible and to promote community development.
- (3) To promote CSR activities always.

If the allotted fund is not enough, the project proponent would be use additional fund by getting approval from the nearest board of director meeting.

#### 10.5 The Information Disclousure

The EIA report with the information about the project plan, implementation, the potential impact, mitigation, monitoring, environmental management plan including the public consultation meeting would be publized (when the report is approved and received ECC) on the web site of both project proponent and environmental consultant's website accordingly to be acknowledged by all levels enthusiatics & concerned.

The Bublic Information Disclosure

	No	To Type Description		otion
	1	Hard Copy Announcement	At Factory	Myo Tha Industrial Zone
2		Soft Copy Announcement	The Website reference: www.kaungkyawsay.com	Solar PV Home System  What is started to the starte
			The Website reference:  www.goldayamotors.com	Under Construction

Furthermore, the hard copy would be available at project office when it is approved by MONREC.

#### **Future Plan on Public Consultation During Operation Phase**

The project proponent is always taking public opinions and taking CSR activities not only in the construction stage but also throughout the operation stage. The company set the Advice/Suggestion box and open to all for their public interest and concerns. The company office is open to all for their advice and complaint by sending directly to the project office or through township administration office including industrial zone management committee's office etc. The company will follow the monitoring program and it would be submitted twice a year. There would be probably the personal or virtual public consultation meeting if it is needed during any of these monitoring periods.

**Table 90 Future Plan on Public Consultation During Operation Phase** 

No	Future Plan	Description/Schedule
1	Checking Suggestion Box	Each and Every Month
2	Reporting Monitoring Report	Will submit the Monitoring Report twice a year to ECD
3	Public Consultation Meeting	In case of emergency situation or accident occurred and/or as it is needed under ECD guidance.
4	General Meeting	Participation with regional government or zone committee activities related with environmental social affair

#### 11.Conclusion

This project is the type of aiming for the industrial development and incresement of nation's income generation development.

To be inlined with environmental law, it was conducted and submitted this EIA report for all findings and plans on environmental and social economy for this project. The aim of the study and this report are intended to identify the potential impacts at during construction & operation stages and to inform about committements and the plans on mitigation and environmental management.

Due to the changes in politic and social which is practicing transparency to projects effected impacts to environment and social by project implementation, Gold A Y A Mtors Iternational Group Co.,Ltd is following the environmental law for the impact assessment with the legal support from Kaung Kyaw Say Engineering Co.,Ltd.

Kaung Kyaw Say Engineering Co.,Ltd is providing this report not only for profit but also obligation after taking assessment and public consultation with local residents, stakeholders, CSO and non government organization done by systematically at international standard.

Based on the nature of business it is found out that it would be both positives and neglecgible negative impacts. With the workforce to this project is needed there are employment opportunities and it could definitely creates the positive impacts in social. It is also found out the potential impacts during the assessment but there are many ways on mitigation of impacts to develop no impacts or least impacts by exercising the good practices such as noise controlling, the waste collection and management and fire & diasaster prevention (as shown in EMP report details).

This report has provided a full picture of all potential environmental and social impacts which could be associated by this project and could be managed mitigation measures during construction and operation stages. At these stages, most of the impact findings are minors and controllable such as dust, air pollution, noise, waste generation, water pollution, occupational health and safety etc.

Not only plan on the mitigation of negative impacts is developed there will be positive impacts by this proposed project which will generate local employment opportunities and also to enhance their capabilities and work skill that would be resultant to the improvement of their social economic condition. It is not an issue that the government will be benefitted to increase a certain amount of revenue by this project.

This report has provided comprehensive good practices to the environmental and social management including emergency response and disaster relief program with the instruction of reporting schedule.

The following recommendations would be taken into account for further development and sustainability of this projet.

- 1. Should always abide the environmental policy, law and other related laws as mentioned in chapter 5.
- 2. Should implement and always check on waste water treatment and 3Rs program.
- 3. Should always do the implementation of EMP report such as monitoring, reporting and capacity building at all levels especially with the new employees.
- 4. Occupational Health and Safty is also needed while fully implementing of CSR is an obligation so as to be regarded as good investor to the neighborhood and to get sustainable support.

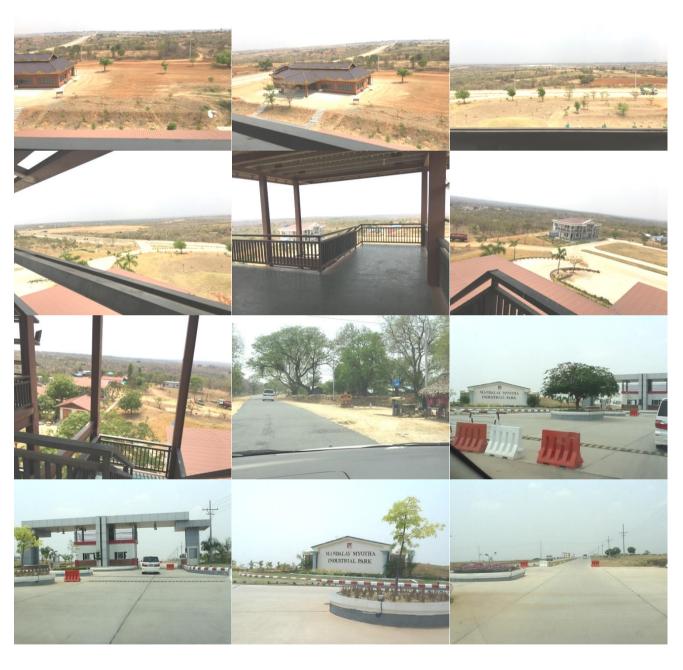
The capacity building to the employees would be arranged together ECD of MONREC by trainings and courses when it is necessary.

There were public participation and support during assessment and consultation meeting as they all realized this project would provide positive impact to them due to the nature of job. By creation of jobs, it is the positive impact to their social and livelihood and expected to get employed.

It could be verified this project as no significant negative or adverse impacts. It is the project that could help GDP, the SME sector development and productivity in the region as well as generate direct and indirect employment in the area. It is already allocated funds for environmental and social conservation which is 2% of the annual profit. It is environmentally and socially sustainable if it complies with this environmental management and monitoring program in due course of the time.

In conclusion, Gold A Y A Motors International Group Co., Ltd's the proposed project has prospective for the regional development and poverty reduction while increasing income generation and national revenue. This project could be sustainable to the development by increasing employment opportunity and in come generation. This project aims to develop Motor Assembling Plant (Gold A Y A Motors International Group Co.,Ltd) located at Plot No.B-1-1 of Block Factory Area Zone 2C, Myotha Industrial Park Between Myotha and Nabu Ain village, total land area (20.084)Acres in Ngazun Township, Myingyan District of Mandalay Division Region with foreigner investment law is planned to develop not only for the region but also to increase of GDP. It would be definitely benefitted to all sorts of corners. Hence, it is needed not only for the region but also for the country as a supporting project to economic sector development.







Recorded Photos.Construction Site (5<sup>th</sup> Jul.2018)



Stakeholders Meeting (5th Jul.2018)

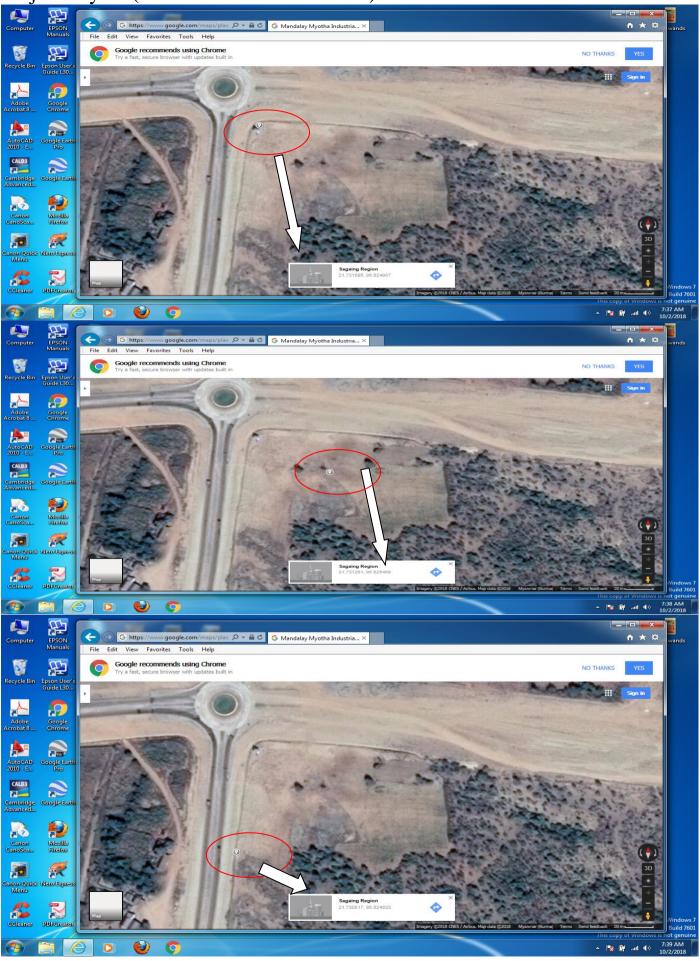


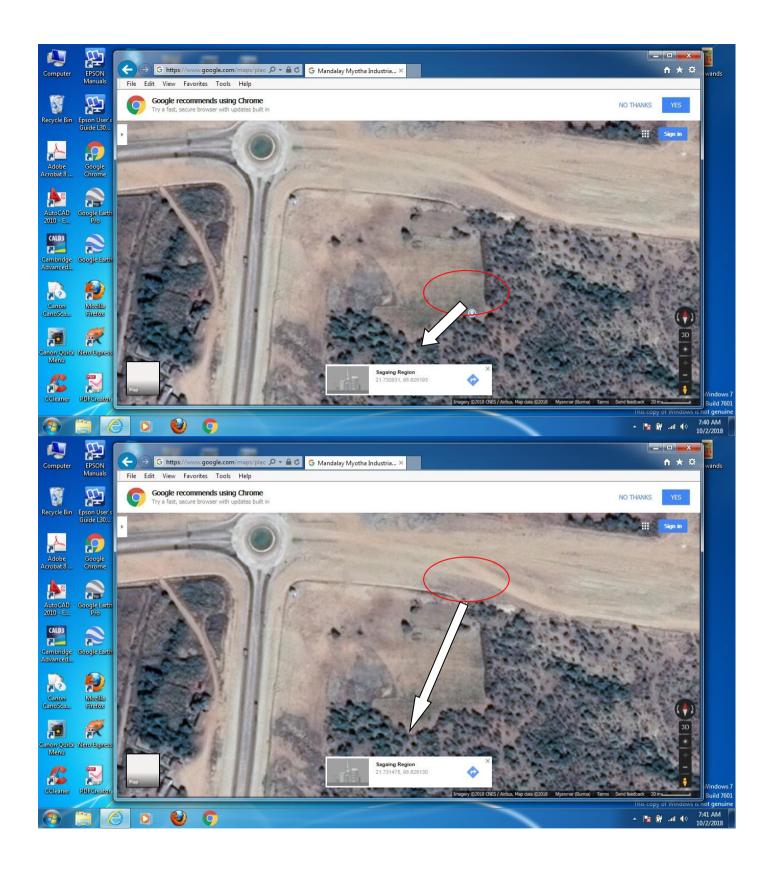


# Project Layout



Project Layout (Reference with Coordinate)





### **Appendix**

- 1 Company Registration
  - 1.1 Certificate of Incorporation
  - 1.2 Company Extract
- 2 MIC Permit
- 3 Consultant Registration Certificate (Organization),(Individual) for Transit Period & Working Experiences, New Licenses (Person)
- 4 The information of project
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  - 4.4 List of machineries and equipment to be purchased of rented locally
  - 4.5 List of raw materials to be imported
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    - 4.8.1. SKD State
    - 4.8.2. Planning Principles
    - 4.8.3. Rain Test, Car Wash System
    - 4.8.4. Final Assembly Process
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  - 4.12 Process Flow Chart
  - 4.13 Trade Marks License Agreement
  - 4.14 Licenses
  - 4.15 CSR Plan
  - 4.16 Welfare Program for Employees
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  - 5.2 The Agenda of the Meeting
  - 5.3 The Meeting Minute
  - 5.4 The List of Attendees
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  - 6.1 The Environmental Survey Result
  - 6.2 The Water Test Result



## ကုမ္ပဏီမှတ်ပုံတင်လက်မှတ် Certificate of Incorporation

ဂိုးလ်အေဝိုင်အေမော်တော်(စ်) အင်တာနေရှင်နယ် ဂရု(ပ်) ကုမ္ပဏီ လီမိတက် GOLD AYA MOTORS INTERNATIONAL GROUP COMPANY LIMITED Company Registration No. 100642476

မြန်မာနိုင်ငံကုမ္ပဏီများအက်ဥပဒေ ၁၉၁၄ ခုနှစ် အရ ဂိုးလ်အေစိုင်အေမော်တော်(စ်) အင်တာနေရှင်နယ် ဂရု(ပ်) ကုမ္ပဏီ လီမိတက် အား ၂ဝ၁၇ ခုနှစ် ဇွန်လ ၂၈ ရက်နေ့တွင် အစုရှယ်ယာအားဖြင့် တာဝန်ကန့်သတ်ထား သည့် အများနှင့်မသက်ဆိုင်သောကုမ္ပဏီ အဖြစ် ဖွဲ့စည်းမှတ်ပုံတင်ခွင့် ပြုလိုက်သည်။

This is to certify that

GOLD AYA MOTORS INTERNATIONAL GROUP COMPANY LIMITED

was incorporated under the Myanmar Companies Act 1914 on 28 June

2017 as a Private Company Limited by Shares.

maternature

ကုမ္ပဏီမှတ်ပုံတင်အ<mark>ရ</mark>ာရှိ

Registrar of Companies

ရင်းနှီးမြှုပ်နှံမှုနှင့်ကုမ္ပဏီများညွှန်ကြားမှုဦးစီးဌာန

Directorate of Investment and Company Administration





#### **Myanmar Companies Online Registry - Company Extract**

#### **Company Name (English)**

GOLD AYA MOTORS INTERNATIONAL GROUP COMPANY LIMITED

#### **Company Name (Myanmar)**

ဂိုးလ်အေဝိုင်အေမော်တော်(စ်) အင်တာနေရှင်နယ် ဂရု(ပ်) ကုမ္ပဏီ လီမိတ က်

#### **Company Information**

Registration NumberRegistration DateStatus10064247628/06/2017Registered

Company Type Foreign Company Small Company

Private Company Limited by Shares Yes No.

Principal Activity Date of Last Annual Return Previous Registration Number

29 - Manufacture of motor vehicles, trailers and 28/06/2023 268FC/2017-2018(YGN)

semitrailers

#### **Addresses**

Principal Place Of Business In Union PLOT NO.B-1-1,BLOCK-FACTORY AREA,ZONE-2C, MYOTHA INDUSTRIAL PARK,

BETWEEN MYOTHA AND NABU-AING VILLAGE,

NGAZUN TOWNSHIP, MYINGYAN DISTRICT, , MANDALAY REGION, MYANMAR

Registered Office In Union PLOT NO.B-1-1, BLOCK FACTORY AREA, ZONE - 2C, MYOTHA INDUSTRIAL PARK,

BETWEEN MYOTHA AND NABU-AING VILLAGE,

NGAZUN TOWNSHIP, MYINGYAN DISTRICT, , MANDALAY REGION, MYANMAR

Email Address: goldaya.hradmin@sinyaoo.com

Telephone Number: 09784195281

#### Officers

Name: SAI LAY THU Type: DIRECTOR
Date of Appointment: 01/04/2024 Date of Birth: 24/11/1981

Nationality: MYANMAR N.R.C./Passport: 13/TAKANA(N)142614
Gender: MALE Business Occupation: COMPANY DIRECTOR

Name:YANG GUOENType:DIRECTORDate of Appointment:08/07/2024Date of Birth:08/12/1979Nationality:CHINAN.R.C./Passport:EM6504679

Gender: MALE Business Occupation: COMPANY DIRECTOR

#### **Ultimate Holding Company**

Name of Ultimate Holding Company Jurisdiction of Incorporation Registration Number

HONG KONG XINGHAN INTERNATIONAL Hong Kong 2866386

**INVESTMENT CO., LIMITED** 

#### **Share Capital Structure**



### **Myanmar Companies Online Registry - Company Extract**

#### **Company Name (English)**

GOLD AYA MOTORS INTERNATIONAL GROUP COMPANY LIMITED

#### **Company Name (Myanmar)**

ဂိုးလ်အေဝိုင်အေမော်တော် $(\hat{\mathbf{o}})$  အင်တာနေရှင်နယ် ဂရု $(\hat{\mathbf{o}})$  ကုမ္ပဏီ လီမိတ

**Total Shares Issued by Company** 

**Currency of Share Capital** 

150,000

USD

#### Members

#### **Share Bundle 1**

Quantity 150,000

Amount Paid 15,000,000.00

Amount Unpaid 0.00
Share Class ORD

**Share Title** 

#### **Members**

Name of Company: HONG KONG XINGHAN INTERNATIONAL INVESTMENT CO.,LIMITED

Registration Number: 2866386 Jurisdiction of Incorporation: Hong Kong

#### **Mortgages and Charges**

Form / Filing Type	Effective Date
H-9   Payment or satisfaction of mortgage or charge	17/08/2023
H-1   Registration of mortgage or charge 23/01/2021	

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

#### **Filing History**

Form / Filing Type	Effective Date
C-4   Notice of change of registered office or principal place of business	17/07/2024
D-1   Particulars of directors and secretary	16/07/2024
D-1   Particulars of directors and secretary	13/05/2024
H-9   Payment or satisfaction of mortgage or charge	17/08/2023



### **Myanmar Companies Online Registry - Company Extract**

#### **Company Name (English)**

## GOLD AYA MOTORS INTERNATIONAL GROUP COMPANY LIMITED

#### **Company Name (Myanmar)**

AR   Annual Return	28/06/2023
AR   Annual Return	27/06/2022
C-3   Change to share capital or register of members	13/05/2022
C-3   Change to share capital or register of members	09/05/2022
D-1   Particulars of directors and secretary	10/11/2021
D-1   Particulars of directors and secretary	03/11/2021
AR   Annual Return	15/06/2021
C-3   Change to share capital or register of members	28/04/2021
D-1   Particulars of directors and secretary	28/04/2021
H-1   Registration of mortgage or charge	23/01/2021
I-2C   Notice from the Registrar of requested rectification	26/08/2020
D-1   Particulars of directors and secretary	05/08/2020
I-2A   Notice from Registrar of proposed rectification of register	28/07/2020
I-1A   Application for rectification of register	28/07/2020
C-3   Change to share capital or register of members	22/07/2020
AR   Annual Return	08/07/2020
I-2C   Notice from the Registrar of requested rectification	11/09/2019
I-2A   Notice from Registrar of proposed rectification of register	13/08/2019
I-1A   Application for rectification of register	13/08/2019
B-1   Application for re-registration of a private company limited by shares	16/08/2018



## THE REPUBLIC OF THE UNION OF MYANMAR **Myanmar Investment Commission PERMIT**



Permit No. 067/2018

Date 27"March 2018

This Permit is issued by the Myanmar Investment Commission according to the section
25, sub-section (c) of the Myanmar Investment Law-

(1)	Name of Investor MR. LI JIFENG
(2)	Citizenship CHINESE
(3)	Residence Address ROOM-2654, NO.6, QINQIXI ROAD,
	LITONG DISTRICT, WUZHONG CITY, MINGXIA PROVINCE, CHINA
(4)	Name and Address of Principle Organization SHINING STAR
	INTERNATIONAL HOLDINGS LIMITED , ROOM 1806, 18/F, PARK-IN
	COMMERCIAL CENTRE 56 DUNDAS STREET MONGKOK, KOWLOON,
	HONG KONG
(5)	Place of Incorporation HONG KONG
(6)	Type of Business MANUFACTURING AND ASSEMBLY OF
	MOTOR VEHICLES
(7)	Place(s) at which investment is permitted PLOT NO.B-1-1, BLOCK-
	FACTORY AREA, ZONE-2C, MYOTHA INDUSTRIAL PARK, BETWEEN
	MYOTHA AND NABU-AING VILLAGE, NGAZUN TOWNSHIP, MYINGYAN
	DISTRICT, MANDALAY REGION
(8)	Amount of Foreign Capital US\$ 12.19 MILLION
(9)	Period for Foreign Capital to be brought in WITHIN ONE YEAR
	FROM THE DATE OF ISSUANCE OF MIC PERMIT
(10)	Total amount of capital (Kyat) EQUIVALENT IN KYAT OF US\$ 15.32
	MILLION (INCLUDING US\$ 12.19 MILLION)
(11)	Construction Period 1 YEAR
(12)	Validity of investment permit 50 YEARS
(13)	Form of investment JOINT VENTURE
(14)	Name of Company incorporated in Myanmar
	GOLD AYA MOTORS INTERNATIONAL GROUP COMPANY LIMITED

Chairman **Myanmar Investment Commission** 

## ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော် မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုကော်မရှင် ခွင့်ပြုမိန့်

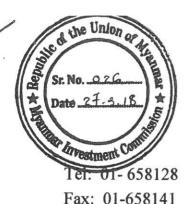


ခွင့်ပြုမိန့်ဒ	<b>မှတ်</b> ဝ၆၇/၂၀၁၈	၂၀၁၈ ခုနှစ်၊ မတ်လ 🛂 🗘 ရက်
မြန်	မာနိုင်ငံနိုင်ငံရင်းနှီးမြှုပ်နှံမှုကော်မရှင်သည် မြ	န်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုဥပဒေ ဥပဒေပုဒ်မ ၂၅ ပုဒ်မခွဲ
(ဂ) အရ ဥ	<del>၅</del> ်ခွင့်ပြုမိန့်ကို ထုတ်ပေးလိုက်သည် -	
(c)	) ရင်းနှီးမြှုပ်နှံသူ/ ကမကထပြုသူအမည်	MR. LI JIFENG
<b>(</b> J)	နိုင်ငံသား CHINE	SE
(5)	နေရပ်လိပ်စာ ROOM	-2654, NO.6, QINQIXI ROAD, LITONG
	DISTRICT, WUZHONG CITY, M	INGXIA PROVINCE, CHINA
(9)	ပင်မအဖွဲ့အစည်းအမည်နှင့်လိပ်စာ	SHINING STAR INTERNATIONAL
	HOLDINGS LIMITED, ROOM	1806, 18/F, PARK-IN COMMERCIAL
		MONGKOK, KOWLOON, HONG KONG
<b>(</b> 9)	ဖွဲ့စည်းရာအရပ် HON	IG KONG
<b>(</b> G)	ရင်းနှီးမြှုပ်နှံသည့်လုပ်ငန်းအမျိုးအစား	မော်တော်ယာဉ်တပ်ဆင်ထုတ်လုပ်ခြင်းလုပ်ငန်း
( <sub>1</sub> )	ရင်းနှီးမြှုပ်နှံသည့်အရပ်ဒေသ(များ) မေ	မြကွက်အမှတ်-ဘီ-၁-၁၊ မြေတိုင်းရပ်ကွက်အမှတ်-
	စက်မှုနယ်မြေ၊ ဇုန်-၂-စီ၊ မြို့သာစက်မှု	ဥယျာဉ်မြို့တော်၊ ငါန်းဇွန်မြို့နယ်၊ မြင်းခြံခရိုင်၊
	မန္တလေးတိုင်းဒေသကြီး	
(o)	<b>နိုင်ငံခြားမတည်ငွေရင်းပမာဏ</b> အဓ	မရိကန်ဒေါ်လာ ၁၂.၁၉ သန်း
<b>(((((((((((((</b>	နိုင်ငံခြားမတည်ငွေရင်းယူဆောင်လာရမည်	<b>ြုကာလ</b> ခွင့်ပြုမိန့်ရရှိပြီးနေ့မှ ၁နှစ်အတွင်း
(၁၀	o) စုစုပေါင်း မတည်ငွေရင်းပမာဏ(ကျပ်)	အမေရိကန်ဒေါ်လာ ၁၅.၃၂ သန်းနှင့် ညီမျှသော
	မြန်မာကျပ်ငွေ (အမေရိကန်ဒေါ် လာ ၁၂.၁	၉ သန်းအပါအဝင်)
(၁၁	o) တည်ဆောက်မှုကာလ	၁နှစ်
(၁၂	) ရင်းနှီးမြှုပ်နှံမှုခွင့်ပြုသည့်သက်တမ်း	၅၀ နှစ်
(၁၃	<b>ှ) ရင်းနှီးမြှုပ်နှံမှုပုံစံ</b> ဖက်စပ်နို	င်ငံခြားရင်းနှီးမြှုပ်နှံမှု
(၁၄	;) မြန်မာနိုင်ငံတွင်ဖွဲ့စည်းမည့်ကုမ္ပဏီအမည်	GOLD AYA MOTORS
	INTERNATIONAL GROUP CO	

July 3.18

ဥက္ကဋ္ဌ မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုကော်မရှင် မန္

#### Confidential



## THE REPUBLIC OF THE UNION OF MYANMAR MYANMAR INVESTMENT COMMISSION

No.1, Thitsar Road, Yankin Township, Yangon

Our ref :MIC-3/P-009/2018( 026 )
Date :97 March 2018

Subject:

Decision of the Myanmar Investment Commission on the proposal for manufacturing and assembly of motor vehicles under the name of Gold AYA Motors International Group Company Limited

Reference:

Gold AYA Motors International Group Company Limited 's letter dated on 16th February 2018

- The Myanmar Investment Commission, at its meeting (4/2018) held on 16<sup>th</sup> March 1. 2018, approved the permit for investment in Manufacturing and Assembly of Motor Vehicles under the name of Gold AYA Motors International Group Company Limited submitted as a joint venture between by Shining Star International Holdings Ltd. (60%) from Hong Kong, Mr. Qian Haifang (20%) from People's Republic of China and U Ye Htut Lin (20%) from the Republic of the Union of Myanmar in accordance with the Myanmar Investment Law and Rules.
- 2. The terms and conditions of the Permit are stated in the following paragraphs:
  - The term of the Permitted project shall be fifty (50) years commencing (a) from the date of the issuance of the permit by the Myanmar Investment Commission.
  - (b) The term of the Lease Agreement for land and buildings shall be initial fifty (50) years commencing from the date of signing of the Land and Buildings Lease Agreement between Mandalay Myotha Industrial Development Public Company Limited (Lessor) and Gold AYA Motors International Group Company Limited (Lessee) and extendable for two times for ten(10) years by mutual agreement between the Lessor and the Lessee subject to the approval of Myanmar Investment Commission.
  - The total rent for land and buildings shall be US\$ 2,765,602.33 (c) (United States Dollar two million, seven and sixty-five thousand, six hundred and two and thirty-three cent)the total area measuring 81,341.245 square metres (20.1 acres) for 70 years.
  - Gold AYA Motors International Group Company Limited, which has (d) obtained this permit to receive benefits relating to the right to use

- exemptions and reliefs under sections 75, 77 and 78 of the Chapter XVIII of Myanmar Investment Law, may submit the application form.
- (e) Gold AYA Motors International Group Company Limited shall use its best efforts to achieve a timely realization of the work stated in the permit application.
- (f) Gold AYA Motors International Group Company Limited shall obey and respect the responsibilities of investors under section 65 of Myanmar Investment Law and Chapter XX of Myanmar Investment Rules.
- (g) Gold AYA Motors International Group Company Limited shall carry out prevention, mitigation and monitoring of significant environmental impacts according to the type of investment activities in accordance with the relevant laws, rules, regulations and procedures.
- (h) Gold AYA Motors International Group Company Limited shall submit to the Commission of any transfer of shares or transfer of the business to any person during the investment period in accordance with section 72 of Myanmar Investment Law and rule 191 of Myanmar Investment Rules.
- (i) If Gold AYA Motors International Group Company Limited which has benefitted from the permit or exemptions and reliefs shall submit an annual report in the prescribed form to the Commission within three (3) months of the end of the financial year in accordance with rule 196 of Myanmar Investment Rules and shall publish a summary of report on its website or the Commission's website.
- (j) Gold AYA Motors International Group Company Limited must, during the operation period under the permit of the Commission, submit its operating report quarterly in the prescribed form in accordance with rule 197 of Myanmar Investment Rules.
- 3. Gold AYA Motors International Group Company Limited shall submit five (5) copies of all approvals, licences, permits and similar authorizations relevant to the initial implementation of the investment and Lease Agreement to the Commission.

(Kyaw Win) Chairman

2/37

Gold AYA Motors International Group Company Limited

cc: 1. Ministry of Home Affairs



#### THE REPUBLIC OF THE UNION OF MYANMAR

#### Ministry of Natural Resources and Environmental Conservation



#### **Environmental Conservation Department**

CERTIFICATE FOR TRANSITIONAL CONSULTANT REGISTRATION (ကြားကာလအကြံပေးလုပ်ကိုင်သူမှတ်ပုံတင်ခြင်းအထောက်အထားလက်မှတ်)

No.	00038	Date	2 4 MAY 2019	
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The Ministry of Natural Resources and Environmental Conservation, hereby, issues this certificate to the organization under Environmental Impact Assessment Procedure, Notification No. 616/2015.

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

- (a) Name of Organization (အဖွဲ့ အစည်းအမည်)
- (b) Name of the representative in the organization (အဖွဲ့ အစည်းကိုယ်စားလှယ်၏အမည်)
- (c) Citizenship of the representative in the organization (အဖွဲ့ အစည်းကိုယ်စားလှယ်၏နိုင်ငံသား)
- (d) Identity Card /Passport Number of the representative person in the organization (အဖွဲ့ အစည်းကိုယ်စားလှယ်၏ မှတ်ပုံတင်/ နိုင်ငံကူးလက်မှတ် အမှတ်)
- (e) Address of organization (ဆက်သွယ်ရန်လိပ်စာ)
- (f) Type of Consultancy (အကြံပေးလုပ်ကိုင်မှုအမျိုးအစား)
- (g) Duration of validity (သက်တမ်းကုန်ဆုံးရက်)

Kaung Kyaw Say Engineering Co., Ltd.

**U Htun Naing Aung** 

Myanmar

12/Bahana(N)097445



No.31 Pinlone Yeikmon, Thingungyun Tsp, Yangon.

Telephone (office): +95-1-571284

Fax (office): +95-1-571284 Mobile phone: 095183517

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Organization

31 December 2019

ပတ်ဝန်းကျင်ထိန်းသိမ်းရေး ဦးစီးဌာန

**Director General** 

Environmental Conservation Department

Ministry of Natural Resources and Environmental Conservation

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

- 1. Air Pollution Control,
- Facilitation of meeting,
- Fauna,
- Flora,
- Forestry,
- Health,
- Marine creatures,
- 8. Renewable Energies,
- Waste Management,
- 10. Water Pollution Control



### EXTENSION

သက်တမ်းတိုးမြင့်ခြင်း The VALIDITY of this certificate is extended for one year from (1.1.2020) to (31.12.2020) 

(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။

or Director General (Soe Naing, Director)

Environmental Conservation Department

#### **EXTENSION**

ညာ ENSION 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။

or 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**–၂၀၂**၂) ရက်နေ့အထိ တစ်နှစ်သက်တမ်းတိုးမြှင့်သည်။

(Soe Naing, Director)

**Environmental Conservation Department** 

EXTENSION (သက်တမ်းတိုးမြှင့်ခြင်း) The VALIDITY of this certificate is extended for six months from (1.1.2023) to (30.6.2023) ဤလက်မှတ်အား(၁–၁–၂၀၂၃) ရက်နေ့မှ (၃၀–၆–၂၀၂၃) ရက်နေ့အထိ (၆)လသက်တမ်းတိုးမြှင့်သည်။

For Director General (Sa Aung Thu, Director) **Environmental Conservation Department** 

#### **EXTENSION**

သက်တမ်းတိုးမြှင့်ခြင်း The VALIDITY of this certificate is extended for two months from (1.7.2023) to (31.8.2023) ဤလက်မှတ်အား(၁-ဂု-၂၁၂၃) ရက်နေ့မှ (၃၁---၂၀၂၃) ရက်နေ့အထိ (၂)လ သက်တမ်းတုံးမြှင့်သည်။ For Director General

(Sa Aung Thu, Director) **Environmental Conservation Department** 

## (၁.၁.၂၀၂၃) မှ (၃၀.၆.၂၀၂၃) အထိ သက်တမ်းတိုးရာ၌ Kaung kyaw Say Engineering Company Limited အဖွဲ့တွင် ပါဝင်သည့် အဖွဲ့ဝင်စာရင်း

သက်တမ်းတိုးထုတ်ပေးသည့် ရက်စွဲ။ ၃–၂–၂၀၂၃

No.	Members	Remarks
1.	U Htun Naing Aung	အထောက်အထားတင်ပြနိုင်
2.	Daw Mya Mya Aye	အထောက်အထားတင်ပြနိုင်
3.	U Mya Cho	အထောက်အထားတင်ပြနိုင်
4.	Daw Ni Ni Aung	အထောက်အထားတင်ပြနိုင်
5.	Daw Khin Sint Yi	အထောက်အထားတင်ပြနိုင်
6.	U Tint Swe	အထောက်အထားတင်ပြနိုင်
7.	Daw Myint Myint Thein	အထောက်အထားတင်ပြနိုင်
8.	Mr. Salil Dutt	အထောက်အထားတင်ပြနိုင်
9.	Daw Khin Mar Mar	ကုမ္ပဏီမှ နှုတ်ထွက်ထား

## <u>ဝန်ခံကတိပြုချက်</u>

ျားကာလအကြံပေးလုပ်ကိုင်သူမှတ်ပုံတင်ခြင်းအထောက်အထားလက်မှတ်ရရှိသူသည်-

(က) ဤအထောက်အထားလက်မှတ်ကို ဖျက်ဆီးခြင်း၊ ပြင်ဆင်ခြင်း၊ မသက်ဆိုင်သူတစ်ဦးဦးသို့ ငှားရမ်းခြင်း၊ အမည်ခံ အသုံးပြုစေခြင်းနှင့် တစ်ဆင့်လွှဲပြောင်းကိုင်ဆောင်စေခြင်းမပြုရ၊

- (ခ)´ ဤအထောက်အထားလက်မှတ်ကို သတ်မှတ်သည့် စည်းကမ်းဘောင်အတွင်း လုပ်ငန်းလုပ်ကိုင်ခွင့် အငြင်းပွားမှုများ၊ စောဒကတက်မှုများနှင့်စပ်လျဉ်း၍ တာဝန်ယူဖြေရှင်းရမည်။ ယင်းသို့ ဖြေရှင်းနိုင်ခြင်း မရှိပါက အထောက်အထားလက်မှတ် ရပ်ဆိုင်းခြင်း သို့မဟုတ် ပယ်ဖျက်ခြင်း ခံရမည်၊
- (ဂ) ဤအထောက်အထားလက်မှတ်တွင် ခွင့်ပြုထားသည့် ကျွမ်းကျင်မှုနယ်ပယ်များအတွက်သာ တာဝန်ယူ လေ့လာဆန်းစစ်ရေးဆွဲခွင့်ရှိသည်၊
- (ဃ) မိမိအဖွဲ့ အစည်းတွင် ပါဝင်သည့် အကြံပေးပုဂ္ဂိုလ်များ ပြောင်းလဲမှု တစ်စုံတစ်ရာရှိပါက ကြားကာလ အကြံပေးလုပ်ကိုင်သူမှတ်ပုံတင်ခြင်း အထောက်အထားလက်မှတ် ရရှိထားသူဖြင့်သာ အစားထိုး ပြောင်းလဲရမည်၊
- (င) အဖွဲ့ အစည်းဖြစ်ပါက အဖွဲ့ အစည်းတွင် ဒါရိုက်တာဘုတ်အဖွဲ့ (Board of Director)၊ အကြံပေးပုဂ္ဂိုလ် (Consultant) များ ပြောင်းလဲလိုလျှင် တည်ဆဲဥပဒေများနှင့်အညီ ဆောင်ရွက်ပြီး ရက်ပေါင်း ၃၀ အတွင်း ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာနသို့ မပျက်မကွက် အကြောင်းကြားရမည်၊
- (စ) ဝန်ကြီးဌာနက အခါအားလျော်စွာ သတ်မှတ်သည့် စည်းကမ်းချက်များကိုလိုက်နာရမည်၊
- (ဆ) ဖော်ပြပါ စည်းကမ်းချက်တစ်ရပ်ရပ်ကို ဖောက်ဖျက်ခြင်း၊ လိုက်နာရန်ပျက်ကွက်ခြင်း တစ်စုံတစ်ရာ ပေါ်ပေါက်ပါက အထောက်အထားလက်မှတ် ရပ်ဆိုင်းခြင်း သို့မဟုတ် ပယ်ဖျက်ခြင်း ခံရမည်၊
- ၂။ အထောက်အထားလက်မှတ်ရရှိသူသည် ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာနက ခွင့်ပြုထားသော ပတ်ဝန်းကျင် ဆန်းစစ်ခြင်းအမျိုးအစားကိုသာ ဆောင်ရွက်ရမည်။
- ၁။ အထောက်အထားလက်မှတ်ရရှိသူသည် မြန်မာနိုင်ငံ၏ တည်ဆဲဥပဒေတစ်ရပ်ရပ်ကို ဖောက်ဖျက်ကြောင်း သို့မဟုတ် ဆန်းစစ်ခြင်းလုပ်ငန်းများ ဆောင်ရွက်ရာတွင် သိသာထင်ရှားသော မှားယွင်းမှုများ ပါရှိနေပြီး သတ်မှတ် စံချိန်စံညွှန်း သို့မဟုတ် ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဥပဒေ၊ နည်းဥပဒေများ၊ ပတ်ဝန်းကျင်ထိခိုက်မှု ဆန်းစစ်ခြင်း ဆိုင်ရာ လုပ်ထုံးလုပ်နည်းတို့အရ စိစစ်သုံးသပ်ပြီး ကနဦးသဘောထားမှတ်ချက်နှင့်အညီ ပြန်လည်ပြင်ဆင်ခြင်း မရှိကြောင်း ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန၏ သတ်မှတ်ဆုံးဖြတ်ခြင်းခံရလျှင် အထောက်အထားလက်မှတ် ရပ်ဆိုင်းခြင်း သို့မဟုတ် ပယ်ဖျက်ခြင်း ခံရမည်၊
- ၄။ အထောက်အထားလက်မှတ်ရရှိသော အဖွဲ့အစည်းသည် သက်ဆိုင်ရာစီမံကိန်းအတွက် လေ့လာဆန်းစစ်ရေးဆွဲ <sup>ဆောင်</sup>ရွက်ရန် တတိယအဖွဲ့အစည်းအတည်ပြုချက်ရယူရာ၌ မိမိအဖွဲ့အစည်းတွင် မှတ်ပုံတင်ထားသည့် အကြံပေး ပုဂ္ဂိုလ်များကိုသာ တင်ပြရမည်။
- ၅။ အထောက်အထားလက်မှတ်ရရှိသော အဖွဲ့အစည်းသည် မိမိအဖွဲ့အစည်းက လက်လှမ်းမမီသော ကျွမ်းကျင်မှု နယ်ပယ်များအတွက် လေ့လာဆန်းစစ်ရေးဆွဲ ဆောင်ရွက်နိုင်ရန် ကြားကာလအကြံပေးလုပ်ကိုင်သူ မှတ်ပုံတင်ခြင်း အထောက်အထားလက်မှတ် ရရှိပြီးဖြစ်သည့် တစ်သီးပုဂ္ဂလလုပ်ကိုင်သူ (Freelancer) ကို သက်ဆိုင်ရာစီမံကိန်း အတွက်သက္ကြားရမ်းဆောင်ရွက်ရမှည်။

ကျွန်တော်/တျွန်မေးမှာ ကို လိုက်နာဆောင်ရွက်မည်ဖြစ်ကြောင်းနှင့် အဖွဲ့ဝင်များ၏ ကိစ္စအဝဝကို တာဝန်ယူပါမည်ဟု ဝန်ခံကတိပြု လက်မှတ်ရေးထိုးအပ်ပါသည်။



လက်မှတ် ၂



No.

#### THE REPUBLIC OF THE UNION OF MYANMAR

#### Ministry of Natural Resources and Environmental Conservation



#### **Environmental Conservation Department**

CERTIFICATE FOR TRANSITIONAL CONSULTANT REGISTRATION

(ကြားကာလအကြံပေးလုပ်ကိုင်သူမှတ်ပုံတင်ခြင်းအထောက်အထားလက်မှတ်)

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

(ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာလုပ်ထုံးလုပ်နည်း၊ အမိန့်ကြော်ငြာစာအမှတ်၊ ၆၁၆/၂၀၁၅ အရ သယံဇာတနှင့် သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာနသည် ဤအထောက်အထားလက်မှတ်ကို ထုတ်ပေးလိုက်သည်။)

- Name of Consultant (a) (အကြံပေးပုဂ္ဂိုလ်အမည်)
- (b) Citizenship (နိုင်ငံသား)
- Identity Card / Passport Number (c) (မှတ်ပုံတင်/ နိုင်ငံကူးလက်မှတ် အမှတ်)
- (d) Address (ဆက်သွယ်ရန်လိပ်စာ)
- Organization (e) (အဖွဲ့ အစည်း)
- (f) Type of Consultancy (အကြံပေးလုပ်ကိုင်မှုအမျိုးအစား)
- **Duration of validity** (g) (သက်တမ်းကုန်ဆုံးရက်)

**U Htun Naing Aung** 

Myanmar

12/Bahana(N)097445

No.31 Pinlone Yeikmon, Thingungyun Tsp, Yangon

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Kaung Kyaw Say Group of Companies

Person

31 December 2019

**Director General** 

**Environmental Conservation Department** Ministry of Natural Resources and Environmental Conservation

for one year from (1.1.2020) to (31.12.2020)

(Soe Naing, Director)

Environmental Conservation Department

## Areas of Expertise Permitted (ခွင့်ပြုသည့် ကျွမ်းကျင်မှုနယ်ပယ်များ)

- Air Pollution Control,
- 2. Noise and Vibration,
- 3. Waste Management,
- Renewable Energies 4.



### **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)** ရက်နေ့အတ <del>(၆</del>)လ သက်တမ်းတိုးမြှင့်သည်။

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)

(See 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(၁-၅-၂၀၂၁) ရက်နေ့မှ (၃၁-၁၂-၂၀၂၁) ရက်နေ့အထိ (၆)လသက်တမ်းတိုးမြှင့်သည်။

(Soe Naing, Director) **Environmental Conservation Department** 

EXTENSION (သက်တမ်းတိုးမြှင့်ခြင်း)
The VALIDITY of this certificate is extended for six months from (1.1.2023) to (30.6.2023) ဤလက်မှတ်အား(၁-၁-၂၀၂၃) ရက်နေ့မှ (၃၀-၆-၂၀၂၃) ရက်နေ့အထိ (၆)လသက်တမ်းတိုးမြှင့်သည်။

For Director General (Sa Aung Thu, Director) **Environmental Conservation Department** 

**EXTENSION** 

သက်တမ်းတိုးမြှင့်ခြင်း
The VALIDITY of this certificate is extended for two months from (1.7.2023) to (31.8.2023) ဤလက်မှတ်အား(၁-၇-၂၀၂၃) ရက်နေ့မှ (၃၁-၈-၂၀၂၃) ရက်နေ့အထိ (၂)လသက်တမ်းတိုးမြှန်သည်။

For Director General

For Director General (Sa Aung Thu, Director) **Environmental Conservation Department** 



#### THE REPUBLIC OF THE UNION OF MYANMAR

### Ministry of Natural Resources and Environmental Conservation



### **Environmental Conservation Department**

CERTIFICATE FOR TRANSITIONAL CONSULTANT REGISTRATION (ကြားကာလအကြံပေးလုပ်ကိုင်သူမှတ်ပုံတင်ခြင်းအထောက်အထားလက်မှတ်)

	(ကြားကာလအကြံပေးလုပ်ကိုင်း	သူမှတ်ပုံတင်ခြင်းအထောက်အဝ	တးလက်မှတ်)
No.		Date	2 4 MAY 2019
The	Ministry of Natural Resources and	Environmental Conserv	ation, hereby, issues this
certif	ficate to the person under Environme	ental Impact Assessment	Procedure, Notification No.
616/2			
	ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာလုပ်င	ဝုံးလုပ်နည်း၊ အမိန့်ကြော်ငြ	၁၈၁အမတ်၊ ၆၁၆/၂၀၁၅ အရ
ລາດຳ	eာတနှင့် သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်	းရေးဝန်ကြီးဌာနသည် ဤ၁	အကောက်အကားလက်မက်ကိ
	ပေးလိုက်သည်။)		32000 5117 G 5717
φον	80.cq()332011)		
(a)	Name of Consultant	Daw Mya Mya Aye	
	(အကြံပေးပုဂ္ဂိုလ်အမည်)		
(b)	Citizenship	Myanmar	A A
	(နိုင်ငံသား)		
(c)	Identity Card / Passport Number	12/Yakana(N)069840	TA
	(မှတ်ပုံတင်/ နိုင်ငံကူးလက်မှတ် အမှတ်)		A
(d)	Address	No.31 Pinlone Yeikmon, T	hingungyun Tsp, Yangon.
	(ဆက်သွယ်ရန်လိပ်စာ)	Telephone: 571284	
		Fax: 571284	
		Mobile phone: 092500733	12
		E mail: kaungkyawsaymd	office@gmail.com
(e)	Organization	Kaung Kyaw Say Engineer	ring Co., Ltd.
	(အဖွဲ့အစည်း)		
(f)	Type of Consultancy	Person	maken es
	(အကြံပေးလုပ်ကိုင်မှုအမျိုးအစား)		& Son By By Stock Con I
(g)	Duration of validity	31 December 2019	The state of the s
	(သက်တမ်းကုန်ဆုံးရက်)		

EXTENSION သက်တမ်းတိုးမြင့်ခြင်

The VALIDITY of this certificate is extended for one year from (1.1.2020) to (31.12.2020) ညြလက်မှတ်အား(၁-၁-၂၀၂၀) ရက်နေ့မှ (၃၁-၁၂-၂၀၂၀) ရက်နေ့အထိတစ်နှစ်သက်တမ်း တုံးမြှင့်သည်။

(Soe Naing, Director)
Environmental Conservation Department



**Director General** 

Environmental Conservation Department

Ministry of Natural Resources and Environmental Conservation

## Areas of Expertise Permitted (ခွင့်ပြုသည့် ကျွမ်းကျင်မှုနယ်ပယ်များ)

- Facilitation of meeting,
- 2. Socio-Economy



#### **EXTENSION**

**သက်တ**မ်းတိုးမြှင့်ခြင်း

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။

or 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, Director) **Environmental Conservation Department**  EXTENSION

**သက်တမ်း**တိုးမြှင့်ခြင်း The VALIDITY of this certificate is extended for six months from (1.7.2021) to (31.12.2021)

ဤလက်မှ**တ်အား(၁-၅-**၂၀၂၁) ရက်နေ့မှ (၃၁-၁၂-၂၀**၂၁)** ရ**က်နေ့အထိ (၆)လ**ညက်တမ်းတိုးမြှင့်သည်။

(Soe Naing, Director)

Environmental Conservation Department

EXTENSION (သက်တမ်းတိုးမြှင့်ခြင်း) The VALIDITY of this certificate is extended

for six months from (1.1.2023) to (30.6.2023) တြီလက်မှတ်အား(၁-၁-၂၀၂၃) ရက်နေ့မှ (၃၀-၆-၂၀၂၃) ရက်နေ့အထိ (၆)လသက်တမ်းတိုးမြင့်သည်။

For Director General (Sa Aung Thu, Director) **Environmental Conservation Department** 

EXTENSION သက်တမ်းတိုးမြှင့်ခြင်း The VALIDITY of this certificate is extended for two months from (1.7.2023) to (31.8.2023) ဤလက်မှတ်အား(၁-၇-၂၀၂၃) ရက်နေ့မှ (၃၁-၈-၂၀၂၃) ရက်နေ့အထိ (၂)လသွက်တမ်းတိုး<u>မြင့်သည်</u>။

For Director General (Sa Aung Thu, Director) **Environmental Conservation Department** 



## ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်အစိုးရ

The Government of the Republic of the Union of Myanmar သယံဧ၁တနှင့် သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာန Ministry of Natural Resources and Environmental Conservation



ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန

**Environmental Conservation Department** 

ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာလုပ်ငန်းလိုင်စင် (ပုဂ္ဂိုလ်)

## **Environmental Impact Assessment License (Individual)**

ဦးထွန်းနိုင်အောင်၊ ၁၂/ဗဟန(နိုင်)၀၉၇၄၄၅ အား အကြံပေးပုဂ္ဂိုလ် အဖြစ် လုပ်ကိုင်ဆောင်ရွက်ရန် ပတ်ဝန်းကျင် ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ငန်းလိုင်စင်ကို ကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းနှင့် ပတ်ဝန်းကျင်ထိခိုက်မှု ဆန်းစစ်ခြင်း ပြုလုပ်သည့် တတိယပုဂ္ဂိုလ် သို့မဟုတ် အဖွဲ့အစည်း လုပ်ငန်းလိုင်စင်ဆိုင်ရာ လုပ်ထုံးလုပ်နည်းနှင့် အညီ ဤဝန်ကြီးဌာန၏ အတည်ပြုချက်ဖြင့် ထုတ်ပေးလိုက်သည်။

It is hereby issued that **U Htun Naing Aung, 12/BaHaNa(N)097445** has fulfilled the requirements for obtaining an Environmental Impact Assessment License to conduct as an **Consultant** under the Licensing Procedure for the Third Persons or Organizations Undertaking Initial Environmental Examination and Environmental Impact Assessment, approved by the Ministry of Natural Resources and Environmental Conservation.

လေ့လာဆန်းစစ်ခွင့်ရှိသည့် ကျွမ်းကျင်မှုနယ်ပယ်များမှာ အောက်ပါအတိုင်းဖြစ်သည်– The areas of expertise, eligible to be conducted, are as follows:

- 1. လေထုညစ်ညမ်းမှုစောင့်ကြပ်ကြည့်ရှုခြင်း ((Air Pollution Monitoring)
- 2. ရေထုညစ်ညမ်းမှုကြိုတင်ကာကွယ်ခြင်း၊ ထိန်းချုပ်ခြင်း၊ စောင့်ကြပ်ကြည့်ရှုခြင်းနှင့်ထိခိုက်မှု ကြိုတင် ခန့်မှန်းခြင်း(Water Pollution Prevention, Control, Monitoring and Prediction of Impacts)

3.

4.

5.

လိုင်စင်နံပါတ် License Number ထုတ်ပေးသည့် ရက်စွဲ Date of Issue ကုန်ဆုံးသည့် ရက်စွဲ Date of Expiry

: EIA-C 042/2023

: 1-12-2023

: 30-11-2026



(သိန်းတိုး)

ညွှန်ကြားရေးမှူးချုပ်



## ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်အစိုးရ

## The Government of the Republic of the Union of Myanmar သယံဧ၁တနှင့် သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာန Ministry of Natural Resources and Environmental Conservation



ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန

**Environmental Conservation Department** 

ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာလုပ်ငန်းလိုင်စင် (ပုဂ္ဂိုလ်)

**Environmental Impact Assessment License (Individual)** 

ခေါ်မြမြအေး(ခ)ခေါ်သက်သက်စန်း၊ ၁၂/ရကန(နိုင်)ဝ၆၉၈၄ဝ အား အကြံပေးပုဂ္ဂိုလ် အဖြစ် လုပ်ကိုင်ဆောင်ရွက်ရန် ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ငန်းလိုင်စင်ကို ကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းနှင့် ပတ်ဝန်းကျင် ထိခိုက်မှုဆန်းစစ်ခြင်း ပြုလုပ်သည့် တတိယပုဂ္ဂိုလ် သို့မဟုတ် အဖွဲ့အစည်း လုပ်ငန်းလိုင်စင်ဆိုင်ရာ လုပ်ထုံး လုပ်နည်းနှင့်အညီ ဤဝန်ကြီးဌာန၏ အတည်ပြုချက်ဖြင့် ထုတ်ပေးလိုက်သည်။

It is hereby issued that **Daw Mya Mya Aye,also called Daw Thet Thet San, 12/YaKaNa(N)069840**\_has fulfilled the requirements for obtaining an Environmental Impact Assessment License to conduct as an **Consultant** under the Licensing Procedure for the Third Persons or Organizations Undertaking Initial Environmental Examination and Environmental Impact Assessment, approved by the Ministry of Natural Resources and Environmental Conservation.

လေ့လာဆန်းစစ်ခွင့်ရှိသည့် ကျွမ်းကျင်မှုနယ်ပယ်များမှာ အောက်ပါအတိုင်းဖြစ်သည်– The areas of expertise, eligible to be conducted, are as follows:

- 1. လူမှုရေးဆိုင်ရာလေ့လာခြင်းနှင့် သရုပ်ခွဲဆန်းစစ်ခြင်း (Social Study and Analysis)
- 2.
- 3.
- 4.
- 5.

လိုင်စင်နံပါတ် License Number ထုတ်ပေးသည့် ရက်စွဲ Date of Issue ကုန်ဆုံးသည့် ရက်စွဲ Date of Expiry

: EIA-C 043/2023

: 1-12-2023

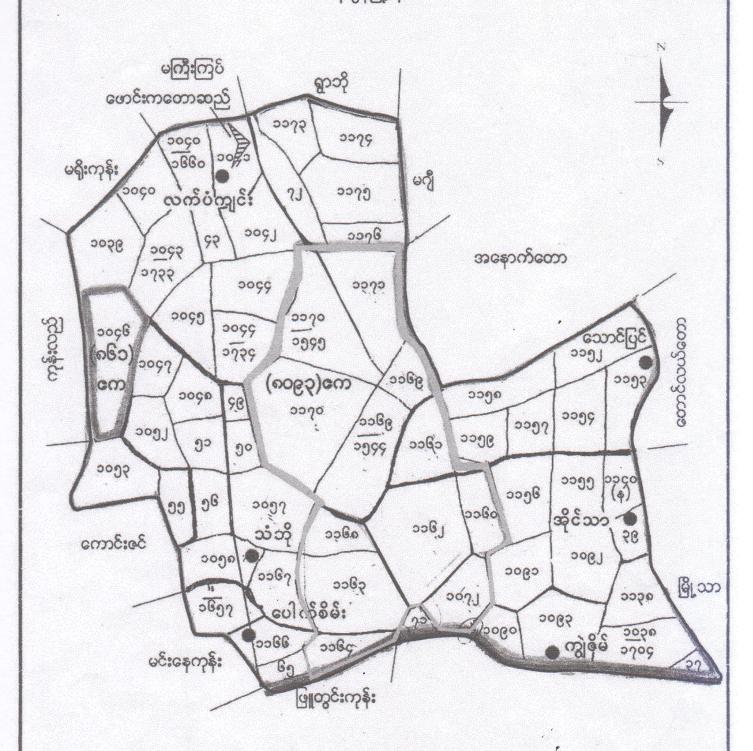
: 30-11-2026



(သိန်းတိုး)

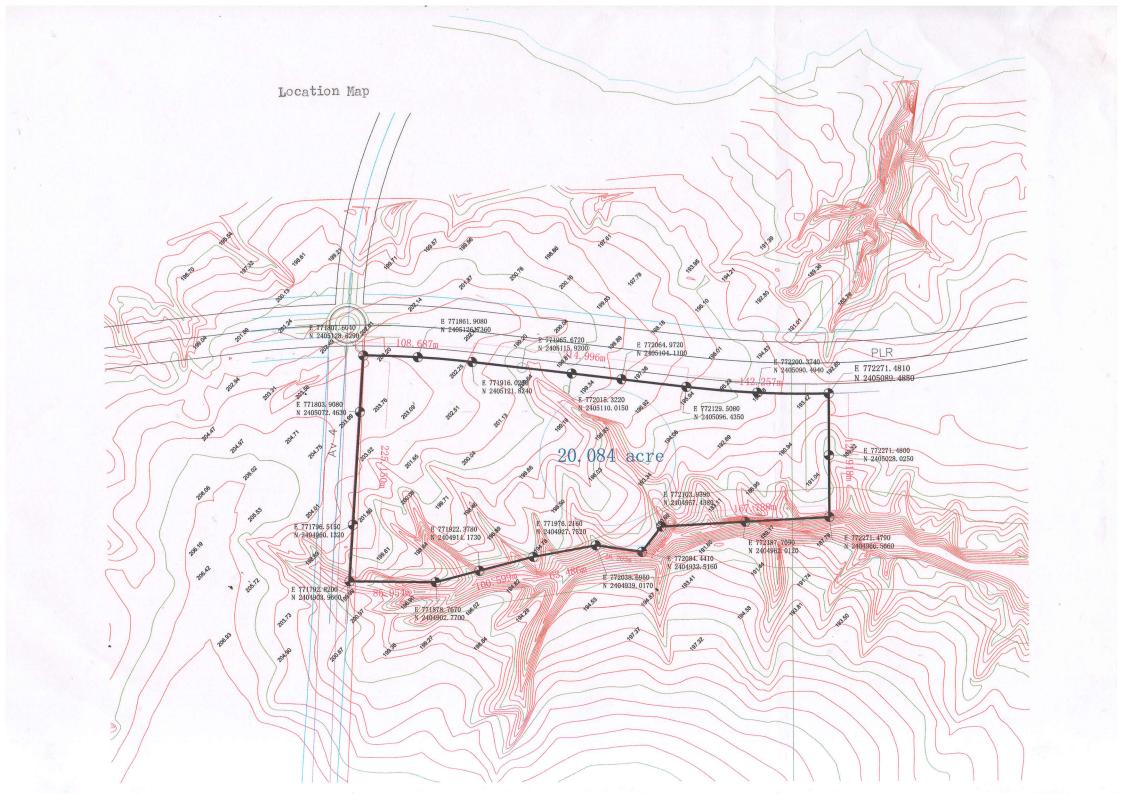
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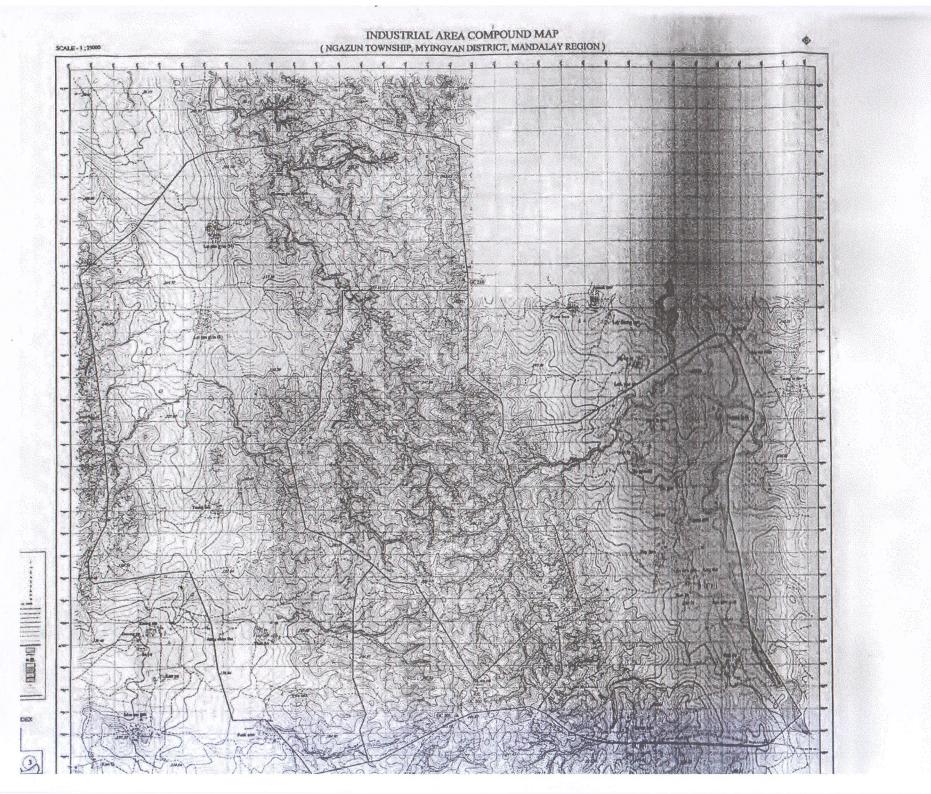
္ ေ ေ ေ ေ ေ Co.,Ltd မှ ဆောက်ရွက်မည် ့စက်မှုဇုံ မြေနေရာကွင်းအလိုက် အညွှန်းပြမြေပုံ ငါန်းဇွန်မြို့ နယ်





အဆိုပြုစရိယာ – ၁၁၄၉ေ့ကေ





Site	Area			874869 so	ft (81278 :	iqm)			
1			CAR SHOW	WROOM A	AND OFFIC	E			Remark
TOTAL FLO	OOR AREA			29618 sc	ft (2752 sc	ım)			
BUILDING LEN	GTH & WIDTH		174'	3" x 99' 5	5" (53.1 m	x 30.3m)			
TOTAL BUILD	ING HEIGHT		40' 6" (12.35 m)						
	Total	Total	Service	Service	Net	Net	Car	High	
Floor	sqft	sqm	sqft	sqrn	sqft	sqm	no	ft	
Fround Floor	15881.07	1475.40	1534.93	142.60	14346.14	1332.80	0.00	11' 10"	Showroon
Floor	6868.67	638.12	1020.53	94.81	5848.14	543.31	7.00	11' 10"	Office
2 Floor	6868.67	638.12	1020.53	94.81	5848.14	543.31	7.00	13' 5"	Office
otal	29618.41	2751.64	3575.99	332.22	26042.42	2419.42	14.00	37'1"	
2		Α	ссоммо	DATION A	IND CANTE	EN	J.		Remark
TOTAL FLO	OOR AREA		28644 sqft (2660 sqm)						
BUILDING LEN	GTH & WIDTH		139' 7"	x 52' 11"	(42.553 m	x 16.129m	)		
TOTAL BUILD	ING HEIGHT	. 56' 0" (17.074 m)							
Total		Total	Service	Service	Net	Net	Car	High	*
Floor	sqft	sqm	sqft	sqm	sqft	sqm	по	ft	
Fround Floor	7161.00	665.00	4080.00	379.00	3081.00	286.00	12.00	14.00	Residentia
l Floor	7161.00	665.00	2801.00	260.00	4360.00	405.00	12.00	12.00	Residentia
? Floor	7161.00	665.00	2801.00	260.00	4360.00	405.00	12.00	12.00	Residentia
Floor	7161.00	665.00	2801.00	260.00	4360.00	405.00	12.00	12.00	Residentia
otal	28644.00	2660.00	12483.00	1159.00	16161.00	1501,00	48.00	50.00	
3				FACTOR'	<b>y</b>	•	<u>,                                    </u>		Remark
TOTAL FLO	OR AREA				ft (7274 sc	m)			
BUILDING LEN	GTH & WIDTH		494' 1	" x 158' 6	" (150.6 m	x 48.3m)	<b>*</b>		
TOTAL BUILD	ING HEIGHT			54' 11	" (16.75 m				
Floor	Total	Total	Service	Service	Net	Net	Car	High	
11001	sqft	sqm	sqft	sqrn	sqft	sqm	no	ft	
round Floor	78296.47	7273.98	0.00	0.00	78296.47	7273.98	0.00	51.67	Factory
Touria Floor	78296.47	7273.98	0.00	0.00	78296.47	7273.98	0.00	51.67	

SUBMISSION Five Element
InfraStructure Co.,Ltd
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19. (2004) George Byenner
19. (2004) George George George
5464: jazzin-jägenikun

MYO THA CAR FACTORY

AREA DATA

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DRAWING NO.

CADIFILE XREE

Page 2 of 2





SUBMISSION

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**PERSPECTIVE** 

Accommodation & Canteen

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Five Element
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Hein/Texper Leanings, Hymnes
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2-84E, 1600/SER0002
2-84E, 1600/SER0002

PROJECT MYO TAL CAP FACTORY
ACCOMMODATION & CAMTEEN

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DRAWING TITLE PERSPECTIVE

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A6.01

# PERSPECTIVE

Car Showroom and Office

SUBMISSION

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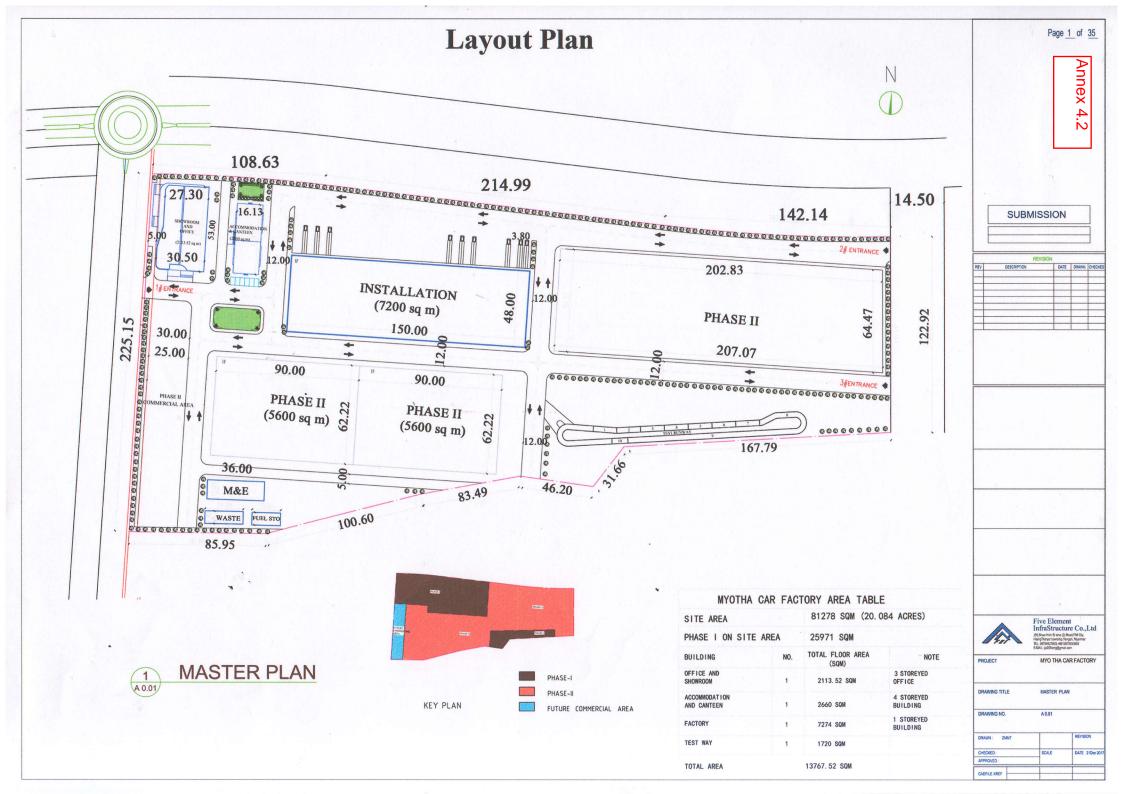
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Five Blement
InfraStructure Co.,Li

55,8 no Hein Silere (2) Road HACOs.
Heing Trayer lamstel, Yangon, Myumen
TE. 1070427985 4 4570279904000

PROJECT	MYO THA CI FACTORY	AR FACTORY
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CADELE VIDEE		





## Annex 4.3

# GOLD AYA MOTORS INTERNATIONAL GROUP CO., LTD. AUTOMOBILE ASSEMBLY PLANT

### **EMPLOYMENT LIST**

Employment (Year-1)	No.
Foreign Personnel	
General Manager	1
Senior Project Manager	1
Marketing Director	1
Manufacturing Manager	1
Technical Manager	1
Finance Manager	2
Engineer	8
Foreign Total -	15
Local Personnel	
Technical Manager	2
HR Manager	1
Final Assembly Manager	1
Process Quality Controller	4
Repair Area Staff	4
Detection Line Staff	6
Showering Room Staff	4
Commerciallization Staff	2
Sales Dept.& Showroom Staff	30
Assembly Worker	35
Logistics Distribution Staff	6
Security	5
Cleaner	5
Driver	5
Total	110
Grand Total -	125 .

US\$ & Kyat in Million

Sr	Particulars	Foreign(80%)	Loca	l(20%)	<b>Total Investment</b>	
No		USD	KYAT	Equi.USD	USD	
1	Investment Type					
	Machinery & Equipments (Import)	1.35			1.3451	
	Factory Equipment & Fixture (Importl)	2.23			2.2271	
	Factory Equipment & Fixture (Local)	0.32			0.3212	
	Construction Material (Import)	6.42			6.4178	
	Construction Material (Local)	1.16			1.1635	
	Eletricity Equipment (Local)	0.57			0.5653	
	Office furniture, fixtures (Local)		14.00	0.0104	0.0104	
	Office Equipment (Local)		9.60	0.0071	0.0071	
	Lease of Land			2.7656	2.7656	
	Vehicles		40.00	0.0296	0.0296	
	Building Cost		432.00	0.3200	0.3200	
	Cash	0.15			0.1500	
	TOTAL INVESTMENT -	12.19	495.60	3.1327	15,3227	

### Exchange rate

USD 1 = kyat 1350/-

# Summary for Building Cost

	Detail of Building Cost	K	yat (Mil)
		4	
1	Civil Work		200.00
2	M & E Installation		95.00
3	Infrastructure	198	58.50
4	Exterior Works		58.50
5	Interior Decoration		20.00
	Total -		432.00

**MACHINERY & EQUIPMENTS** 

(Import)

(Brand New)

-	nport)	(Brand New)				Schedule - 1 Source	
Sr	List of Items	HS Code Unit		Qty	US\$	Local Import	
NO	Interior Assembly Line					KYAT	US\$
1		8479	U	1	138,500	KIAI	138,50
1	Wide strip chain + process support  Electric hoist for interior line feeding	8479	U	1	15,400		15,40
2		04/9		1	13,400		13,40
2	Chassis Assembly	8479	U	1	276,900		276,90
3	Chassis Assembly Line	04/9	0	1	270,900		270,90
4	Final Assembly Line	0470	U	1	126 200		126,20
4	Final Assembly Line	8479		1	126,200		120,20
_	Front/Rear Axle Assembly	0.470	TT	1	15 400		15 4/
5	Electric Lifting Trolley for Front Axle	8479	U	1	15,400		15,40
6	Electric Lifting Trolley for Rear Axle	8479	U	1	12,300		12,30
7	Electric hoist	8479	U	1	23,100		23,10
	Tools	0004	**	26	760		20.0
8	Pneumatic Wrench	8204	U	26	769		20,0
9.	Electric Wrench	8467	U	18	,383		6,9
10	Torque Wrench	8467	U	18	461		8,3
11	Other Manual Tools	8467	U	20	230		4,6
	Filling Equipment						2.1
12	Gasoline Filler	8467	U	1	3,100		3,1
13	Brake Fluid Vacuum Filler	8467	U	1	46,200		46,2
14	Coolant Vacuum Filler	8418	U	1	46,200		46,2
15	Antifreeze Vacuum Filler	8467	U	1	38,500		38,5
16	Power Steering Fluid Vacuum Filler	8467	U	1	38,500		38,5
17	Glass Bath Measuring Cup	8467	U	1			-
18	Engine Oil Measuring Filler	8467	U	1	4,600		4,6
19	Transmission Oil Measuring Filler	8467	U	1	4,600		4,6
	<b>Detection Line</b>						
20	Bumpy Road		U	1	1,200		1,2
21	Four Wheel Aligner	9031	U	1	53,800		53,8
22	Brake Hub Test Bench	9031	U	1	69,200		69,2
23	Speedometer Calbration Bench	9031	U	1	7,700		7,7
24	Light Detection	9031	U	1	9,200		9,2
25	Emissions Testing	9031	U	1	46,200		46,2
26	Side Slide Test Bench	9031	U	1	7,700		7,7
27	Electronic Immobilizer Detector	9031	U	1	76,900		76,9
28	Air Tighteness Detector	9031	U	1	27,700		27,7
29	Showering Room Equipment	9031	Set	1	55,400		55,4
30	VIN Marker	8462	U	1	23,100		23,1
	Curving Equipment		1				
31	Front Windscreen VIN Nameplate						
	Laser Engraver	8462	U	1	30,800		30,8

**MACHINERY & EQUIPMENTS** 

(Import)

(Brand New)

Sr	7.4	TIC C 1	WT .	04	TICO	Source	
No	List of Items	HS Code	Unit	Qty	US\$	Local	Import
	Maintenance Review Area					KYAT	US\$
32	Steel Structure, Lighting and Sling in	8425	U	1	18,500		18,500
	the Maintenance Area						
33	Paint Repair Chamber	8424	U	1	53,800		53,800
34	Inspection Room Equipment	9031	Set	1	12,300		12,300
	Sub-assembly Bench						
35	Dashboard Beam and Harness	8479	U	1	800		800
36	Door Interior Panels	8479	U	4	775	7	3,100
37.	Glazing Bench	8479	U.	2	1,250		2,500
	On-Line Tooling						
38	Rear Nameplate Attachment	8479	U	1	800		800
39	Tank Cover Installation	8479	U	1	800		800
40	Windscreen Glass Transfer	8479	U	1	1,200		1,20
41	Door Support	8479	U	6	,133		80
42	Line Side Equipment	8479	U	1	12,300		12,30
	Total -						1,345,10

### **FACTORY EQUIPMENTS & FIXTURE (To be Imported)**

(Brand New Items)

(Import)

Sr							ource
No	List of Items	HS Code	Unit	Qty	US\$	Local-USD	
1	Air Conditioning system	8414	Set	3	301,188		903,563
2	Fire -fighting equipment	8424	Set	3	71,682		215,046
3	Sewage treatment system (including	8421	Set	1	130,000		130,000
4	Water purifying equipment	8421	Set	1	90,000		90,000
5	Indoor elevator	8428	Set	2	36,567		73,134
6	IT system (weak current system)	8503	Set	3	80,317		240,950
7	Other material & Equipment		lot	1	10,000		10,000
8	Water supply & fire power pump	8413	Set	7	47,500		332,500
9	Ventilation System (including equipments)	8414		3	42,980		128,940
10	3D four-wheel aligner	9031	Set	3	6,007		18,022
11	Standard stoving varnish Equipment	8419	Set	3	7,854		23,563
12	Autorobot IV	8479	Set	3	6,007		18,022
13	Tyre separate-installed machine	8479	Set	4	1,459		5,836
14	Accurate tyre balancing machine	9031	Set	4	772		3,090
15	Combined drum	8714	Pcs	7	326		2,283
16	Gasholder	7311	Set	3	515		1,545
17	Air Dryer	8418	Set	3	687		2,060
18	Air-con leak detector	8508	Set	1	25,746		25,746
19	Glue gun	8205	Pcs	3	858		2,575
20	QPS filter	8421	Pcs	3	86		257
	Total -						2,227,131

## FACTORY EQUIPMENTS & FIXTURE (LOCAL PURCHASE)

(Brand New Items)

(Local)

Sr	List of Items	HS Code	Unit	04:	US\$	So	urce
No	List of Items	ns Code	Umi	Qty	USS	Local-USD	Import-USD
1	Fire pipe	8424	m	7228	40	289,120	
2	Drencher head	8481	Pcs	4200	1	4,200	
3	Mixer	8474	Set	3	6,300	18,900	
4	Oxygen Cutting Equipment	8456	Set	3	475	1,425	
5	Handrail of staircase	8302	m	100	10	1,000	
6	Cutting equipment	8456	Set	10	95	950	
7	Electric Drill	8467	Set	10	79	790	
8	Edge grinding M/C	8207	Set	5	55	275	
9	Electric Saw	8467	Set	3	32	96	
10	Sewage pump	8413	Set	10	315	3,150	
- 11	Air Compressor	8414	Set	4	317	1,268	
	Total -					321,174	

## **CONSTRUCTION MATERIAL (To be Imported)**

(Brand New Items)

Import)

mpc	1						1 continued
Sr	List of Items	HS Code	Unit	Qty	US\$		ource
No	List of Items	IIS Code	Omi	Qij	COO	Local-USD	Import-USD
1	Distribution electric box(floor)	8536	Pcs	30	300.00		9,000
2	Distribution electric box(household)	8536	Pcs	50	79.00		3,950
3	Electric closet	8474	Pcs	200	7900.00	¥	1,580,000
4	H Steel 6 to 25 mm Assorted	9406	Tons	690	1450		1,000,500
5	Color steel sheet (0.6mm, 0.5mm)	7210	Tons	75	1272		95,400
6	Galvanized C wearing strip	7326	Tons	67	835		55,945
7	Glass wool insulating layer for roof 75mm	6806	m²	9800	3.05		29,890
8	Galvanized support plate	9403	m²	4250	788		3,349,000
9	Ultrathin fire proof coating	3403	Tons	2	2280		4,560
10	Alluminium plate	7606	m²	600	53.5		32,100
11	Epoxy floor paint	3208	m²	8800	2.28		20,064
12	stalinite for alluminium alloy window	9403	m²	1160	68.5		79,460
13	Electric security door	8479	Set	6	535		3,210
14	Glass (12mm)	3925	m²	2450	45.5		111,475
15	LED lighting	9405	Pcs	274	75.75		20,756
16	Light pole	9405	Pcs	74	303.5		22,459
-	Total -						6,417,769

# CONSTRUCTION MATERIAL (Local Purchase)

(Brand New Items)

(Local) Schedule 1 continued

Lucai						Schedule	1 continued
Sr	List of Items	HS Code	Unit	Qty	US\$	So	urce
No	List of Items	115 Coue	Omit	Qiy	033	Local-USD	Import-USD
1	Galvanized	9406	m	100	230.00	23,000	
2	UPVC Waterpipe	8479	m	350	10.00	3,500	
3	PVC Line Pipe	3917	m	500	8.00	4,000	
4	Alluminium alloy	7606	m2	800	55.00	44,000	
5	Wire (2.5mm2)	8536	m	9900	0.50	4,950	
6	Wire (4.0mm2)	8536	m	41596	0.85	35,357	
7	Cable (16-150mm2)	8535	m	6600	40.00	264,000	
8	Tray for strong and weak	7326	m	900	30.00	27,000	
9	Stay Ø12	9021	m	4500	0.91	4,095	
10	Deformed steel bar825	9506	Tons	335	798	267,330	
11	Emultion paint	3209	kg	3000	3.02	9,060	
12	Polyestar Paint	3208	L	2000	1.65	3,300	
13	Electric rolling door	8501	Set	8	1636	13,088	
14	Switch panel	8708	Pcs	600	12.5	7,500	
15	Ceramic tile	6908	m²	4000	37.8	151,200	
16	Plaster board	6809	Pcs	1680	22.55	37,884	
17	Sanitary ware	6910	Set	45	228	10,260	
18	Construction Lift	8431	Nos	1	59,000	59,000	
19	Electric gantry crane (4 Tons)	8426	Set	7	1,339	9,372	
20	small scissor lift	8431	Set	3	1,974	5,922	
21	Excavator	8429	Set	1	87,000	87,000	
22	Loader	8429	Set	1	79,300	79,300	
23	Big master ground lift (3.5 To	8431	Set	3	4,463	13,388	
	Total -					1,163,505	

### **ELECTRICAL EQUIPMENTS (LOCAL PURCHASE)**

(Brand New Items)

(Local)

Sr	T. CT.	HC C-1-	TI24	04-	TICC	So	urce
No	List of Items	HS Code	Unit	Qty	US\$	Local-USD	Import
1	Transformer	8504	Set	2	180,000	360,000	3
2	Generator	8503	Set	2	100,000	200,000	
3	AC arc Welder	8538	Set	3	556	1,668	
4	Electric Hammer	8467	Set	8	300	2,400	
5	Power Rammer	8467	Set	2	635	1,270	
	Total -					565,338	

# GOLD AYA MOTORS INTERNATIONAL GROUP CO., LTD. AUTOMOBILE ASSEMBLY PLANT OFFICE FURNITURE & EQUIPMENT

C. M.	Dantianlana	Otro	Unit Price	Value
Sr.No.	Particulars	Qty.	Kyat	Kyat
	Furniture & Fixture			
1	Table	30	200000	6000000
2	Chair	30	150000	450000
3	Meeting Table	2	500000	100000
4	Computer Table	10	100000	100000
5	Steel Cabinet	10	150000	150000
	Total -		. 5	1400000
	Office Equipment			
1	Computer (Desktop)	6	300000	180000
2	Computer (Laptop)	4	1000000	400000
3	Printer	4	200000	80000
4	Copier	2	1500000	300000
	Total -			960000
	Vehicles	2		
	Truck (3 Tons)	1	20,000,000	2000000
	Saloon	1	20,000,000	2000000
	Total -			40,000,000

Q 35 Model

Q 5.	Niodei																	Schedule-2
		HS												IMPORT	•			
	LIST OF ITEM	CODE		UNIT	Τ.	OCAL	1.0	CAI					A	NNUAL NE	EEDS			
NO	SKD-2	(WITH	UNIT	PRICE	L	OCAL	LO	CAL	Y	ear 1	Y	ear 2	Y	ear 3	Y	ear 4		Year 5-10
	SKD-2	FOUR		(USD)		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		
		DIGIT)			QTY	VALUE (USD)	QTY	VALUE (USD)	QTY	VALUE (USD)	QTY	VALUE (USD)	QTY	VALUE (USD)	QTY	VALUE (USD)	QTY	TOTAL VALUE (USD)
1		8407	Set	3,434		(CSD)		(OSD)	480	1.6484	1,200	4.1209	2,400	8.2418	3,600	12.3628	18,000	61.8138
	Enginine Assembly,			,							-,	,	_,	0.1	-,		,	021020
	Transmission & Clutch System																	
2	Welded/Painted Body with	8707	Set	1,858					480	0.8916	1,200	2.2291	2,400	4.4582	3,600	6.6874	18,000	33.4368
	including Chassis Group										,		,		,		ŕ	
	(Without installation of																	
	Conbination Meters, Interior																	
	Trimming Parts, Lamps, Wind																	
	Shield and Wire harness)																	
3	Front Axles/ Front	8708	Set	401					480	0.1925	1,200	0.4813	2,400	0.9626	3,600	1.4440	18,000	7.2198
	Independent Suspension/Rear										,		,		- ,		-,	
	Axles																	
4	Suspension Component	8708	Set	333					480	0.1596	1,200	0.3991	2,400	0.7982	3,600	1.1974	18,000	5.9868
	Steering Wheel and Related	8708	Set	113					480	0.0540	1,200	0.1351	2,400	0.2702	3,600	0.4054	18,000	2.0268
	Exhaust System	8708	Set	96					480	0.0461	1,200	0.1152	2,400	0.2304	3,600	0.3456	18,000	1.7280
	Wheel and Tyres	4011	Set	382	3600	1.3745	18000	6.8724	480	0.1833	1,200	0.4582	2,400	0.9163	_	-	18,000	6.8724
8	Seat Assembly	9401	Set	369					480	0.1773	1,200	0.4433	2,400	0.8866	3,600	1.3298	18,000	6.6492
9	Trimming Parts, Dashboard,	8708	Set	3991					480	1.9154	1,200	4.7886	2,400	9.5772	3,600	14.3658	18,000	71.8290
	Instrument Panel, Windshield,																	
	Wire harness and other																	
	Accessories																	
10	Door Group (Front and Rear)	8708	Set	424					480	0.2036	1,200	0.5090	2,400	1.0181	3,600	1.5271	18,000	7.6356
	Without Accessories																	
			1			1.3745	•	6.8724		5.4720		13.6799		27.3598		39.6652		205.1982

### M 20 S Model

													IMPO	ORT				2411	
		HS CODE		UNIT	100	T 77.4	1.00	Y X 7 10				AN		NEEDS					
NO	LIST OF ITEM	(WITH	UNIT	PRICE	LOCA	AL-Yr4	LOCA	L-Yr5-10	Ye	ar 1	1	Year 2		ear 3	Ŋ	Year 4	Ye	ar 5-10	OTHE
110	SKD-2	FOUR	01111	(USD)		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL	
		DIGIT)		(CSD)	QTY	VALUE (USD)	QTY	VALUE (USD)	QTY	VALUE (USD)	QTY	VALUE (USD)	QTY	VALUE (USD)	QTY	VALUE (USD)	QTY	VALUE (USD)	
1	Enginine Assembly, Transmission &	8407	Set	1958		(CSD)		(CSD)	200	0.3916	500	0.979	1000	` /	1500	2.937	4500	8.811	
	Clutch System																		
2	Welded/Painted Body with including	8707	Set	1059.2					200	0.21184	500	0.5296	1000	1.0592	1500	1.5888	4500	4.7664	
	Chassis Group (Without installation of																		
	Conbination Meters, Interior																		
	Trimming Parts, Lamps, Wind Shield																		
	and Wire harness)																		
3	Front Axles/ Front Independent	8708	Set	228.7					200	0.04574	500	0.11435	1000	0.2287	1500	0.34305	4500	1.02915	
	Suspension/Rear Axles																		
4	Suspension Component	8708	Set	189.7					200	0.03794	500	0.09485	1000	0.1897	1500	0.28455	4500	0.85365	
5	Steering Wheel and Related Parts	8708	Set	64.2					200	0.01284	500	0.0321	1000	0.0642	1500	0.0963	4500	0.2889	
6	Exhaust System	8708	Set	54.7					200	0.01094	500	0.02735	1000	0.0547	1500	0.08205	4500	0.24615	
7	Wheel and Tyres	4011	Set	217.7	1500	0.32655	4500	0.97965	200	0.04354	500	0.10885	1000	0.2177	0	0	0	0	
8	Seat Assembly	9401	Set	210.6					200	0.04212	500	0.1053	1000	0.2106	1500	0.3159	4500	0.9477	
9	Trimming Parts, Dashboard,	8708	Set	2275.3					200	0.45506	500	1.13765	1000	2.2753	1500	3.41295	4500	10.2389	
	Instrument Panel, Windshield, Wire																		
	harness and other Accessories																		
10	Door Group (Front and Rear) Without	8708	Set	241.9					200	0.04838	500	0.12095	1000	0.2419	1500	0.36285	4500	1.08855	
	Accessories														]				
	Total -					0.3266		0.9797		1.3000		3.2500		6.5000		9.4235		28.2704	

Q 7 Model Schedule-2

<u> </u>	Touci									School	- tare =								
		*** ***												MPORT					
		HS CODE		UNIT	L	OCAL	LO	OCAL					ANNU	JAL NEEDS	S				
NO	LIST OF ITEM	(WITH	UNIT	PRICE					Y	ear 1	Ŋ	Year 2	,	Year 3	Y	ear 4	Yea	ar 5-10	OTHER
	SKD-2	FOUR		(USD)		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL	
		DIGIT)			QTY	VALUE (USD)	QTY	VALUE (USD)	QTY	VALUE (USD)	QTY	VALUE (USD)	QTY	VALUE (USD)	QTY	VALUE (USD)	QTY	VALUE (USD)	
1	Enginine Assembly, Transmission	8407	Set	4,217.30		(03D)		(03D)	0	(03D)	400	1.69	800	3.37	1,000	4.22	3,000	12.65	
l l	& Clutch System	0-107	Set	1,217.30							400	1.07	000	3.37	1,000	7,22	3,000	12.03	
	Welded/Painted Body with	8707	Set	2,281.30					0	_	400	0.91	800	1.83	1,000	2.28	3,000	6.84	
	including Chassis Group (Without	0707	Set	2,201.50							400	0.71	000	1.03	1,000	2.20	3,000	0.04	
	installation of Conbination Meters,																		
	Interior Trimming Parts, Lamps,																		
	Wind Shield and Wire harness)																		
	Front Axles/ Front Independent	8708	Set	492.60					0	_	400	0.20	800	0.39	1,000	0.49	3,000	1.48	
	Suspension/Rear Axles	0700	Sci	472.00					· ·	_	400	0.20	800	0.37	1,000	0.47	3,000	1.40	
l l	Suspension Component	8708	Set	408.50					0	_	400	0.16	800	0.33	1,000	0.41	3,000	1.23	
	Steering Wheel and Related Parts	8708	Set	138.30					0		400	0.16	800	0.33	1,000	0.41	3,000	0.41	
	Exhaust System	8708 8708	Set	117.90					0	-	400	0.06	800	0.11	1,000	0.14	3,000	0.41	
	- 1	4011	Set	468.80	1000	0.4688	3000	1.4064	0	-	400	0.03	800	0.09	1,000		3,000	0.55	
	Wheel and Tyres	9401	Set	453.70	1000	0.4000	3000	1.4004	0	-	400		800	0.36	1 000	0.45	2 000	1.36	
l l	Seat Assembly Trimming Ports, Doobboard	9401 8708	Set						0	-	400	0.18 1.96	800	3.92	1,000	4.90	3,000	1.30	
l l	Trimming Parts, Dashboard, Instrument Panel, Windshield,	8708	Set	4,900.60					O	-	400	1.90	800	3.92	1,000	4.90	3,000	14.70	
	Wire harness and other																		
	Accessories	0700	G .	500.00					0		100	0.21	000	0.42	1.000	0.53	2.000	1.50	
l l	Door Group (Front and Rear)	8708	Set	520.90					0	-	400	0.21	800	0.42	1,000	0.52	3,000	1.56	
	Without Accessories					0.4600		1 10 5 1				# #000 f		11.10000		10.5011		40.7022	_
	Total -					0.4688		1.4064	0	0		5.59996		11.19992		13.5311		40.5933	

### M 60 Model

		110 0005												IMPORT					
	LIGHT OF THE M	HS CODE		UNIT	LOC	CAL-Yr4	LOCA	L-Yr5-10			ı			NUAL NEE					OTHER
NO	LIST OF ITEM	(WITH	UNIT	PRICE	Loc		DOC/1		`	Year 1	Y	ear 2	`	Year 3	Y	ear 4	Ye	ear 5-10	OTHER
	SKD-2	FOUR		(USD)		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL	
		DIGIT)		, ,	QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE	
1	Enginine Assembly, Transmission	8407	Set	6,024.80		(USD)		(USD)	160	(USD) 0.9640	400	(USD) 2.4099	800	(USD) 4.8198	1,200	(USD) 7.2298	6,000	(USD) 36.1488	
	·	8407	Set	0,024.60					100	0.9040	400	2.4099	800	4.0190	1,200	1.2290	0,000	30.1400	
	& Clutch System  Wolded / Dointed Dody with	8707	Set	3,259.00					160	0.5214	400	1 2026	800	2 6072	1 200	2.0100	6,000	19.5540	
	Welded/Painted Body with	8707	Set	3,239.00					100	0.5214	400	1.3036	800	2.6072	1,200	3.9108	6,000	19.3340	
	including Chassis Group (Without																		
	installation of Conbination Meters,	0700	<b>G</b> .	502.50					160	0.110	400	0.2015	000	0.7.00	1.200	0.0444		4 2222	
	Front Axles/ Front Independent	8708	Set	703.70					160	0.1126	400	0.2815	800	0.5630	1,200	0.8444	6,000	4.2222	
	Suspension/Rear Axles	0=00	~							0.0004									
	Suspension Component	8708	Set	583.60					160	0.0934	400	0.2334	800	0.4669	1,200	0.7003	6,000	3.5016	
	Steering Wheel and Related Parts	8708	Set	197.60					160	0.0316	400	0.0790	800	0.1581	1,200	0.2371	6,000	1.1856	
	Exhaust System	8708	Set	168.40					160	0.0269	400	0.0674	800	0.1347	1,200	0.2021	6,000	1.0104	
	Wheel and Tyres	4011	Set	669.70	1200	0.8036	6000	4.0182	160	0.1072	400	0.2679	800	0.5358	-	-	-	-	
	Seat Assembly	9401	Set	648.10					160	0.1037	400	0.2592	800	0.5185	1,200	0.7777	6,000	3.8886	
9	Trimming Parts, Dashboard,	8708	Set	7,000.90					160	1.1201	400	2.8004	800	5.6007	1,200	8.4011	6,000	42.0054	
	Instrument Panel, Windshield,																		
	Wire harness and other Accessories																		
10	Door Group (Front and Rear)	8708	Set	744.20					160	0.1191	400	0.2977	800	0.5954	1,200	0.8930	6,000	4.4652	
	Without Accessories	0700	500	744.20						0.1171	400	0.2711	000	0.5754	1,200	0.0730	0,000	7.7032	
	THE THOUSE PROCESSORIES					0.8036		4.0182	<del> </del>	3.2000		8.0000		16.0000		23.1964	-	115.9818	1

### A6 Model

													IN	/IPORT					
		HS CODE		UNIT	1.00	CAL-Yr4	IOCA	L-Yr5-10					ANNU	AL NEED	S				
NO	LIST OF ITEM	(WITH	UNIT	PRICE	LOC		LOCF		Ŋ	ear 1	Y	ear 2	Y	ear 3	Y	ear 4	Ye	ar 5-10	OTHER
	SKD-2	FOUR		(USD)	0.000	TOTAL	0.777.7	TOTAL	O PPY Y	TOTAL	0.777.7	TOTAL	0.777.7	TOTAL	0.557.7	TOTAL	O PPV I	TOTAL	
		DIGIT)			QTY	VALUE (USD)	QTY	VALUE (USD)	QTY	VALUE (USD)	QTY	VALUE (USD)	QTY	VALUE (USD)	QTY	VALUE (USD)	QTY	VALUE (USD)	
1	Enginine Assembly, Transmission &	8407	Set	3,795.60		(03D)		(USD)	80	0.3036	200	0.7591	400	1.5182	600	2.2774	3,000	11.3868	
	Clutch System			,													- ,		
2	Welded/Painted Body with	8707	Set	2,053.20					80	0.1643	200	0.4106	400	0.8213	600	1.2319	3,000	6.1596	
	including Chassis Group (Without																ŕ		
	installation of Conbination Meters,																		
	Interior Trimming Parts, Lamps,																		
	Wind Shield and Wire harness)																		
3	Front Axles/ Front Independent	8708	Set	443.30					80	0.0355	200	0.0887	400	0.1773	600	0.2660	3,000	1.3299	
	Suspension/Rear Axles																		
4	Suspension Component	8708	Set	367.60					80	0.0294	200	0.0735	400	0.1470	600	0.2206	3,000	1.1028	
5	Steering Wheel and Related Parts	8708	Set	124.50					80	0.0100	200	0.0249	400	0.0498	600	0.0747	3,000	0.3735	
6	Exhaust System	8708	Set	106.10					80	0.0085	200	0.0212	400	0.0424	600	0.0637	3,000	0.3183	
7	Wheel and Tyres	4011	Set	421.90	600	0.2531	3000	1.2657	80	0.0338	200	0.0844	400	0.1688	-	-	-	-	
	Seat Assembly	9401	Set	408.30					80	0.0327	200	0.0817	400	0.1633	600	0.2450	3,000	1.2249	
9	Trimming Parts, Dashboard,	8708	Set	4,410.60					80	0.3528	200	0.8821	400	1.7642	600	2.6464	3,000	13.2318	
	Instrument Panel, Windshield, Wire																		
	harness and other Accessories																		
10	Door Group (Front and Rear)	8708	Set	468.80					80	0.0375	200	0.0938	400	0.1875	600	0.2813	3,000	1.4064	
	Without Accessories																		
						0.2531		1.2657		1.0080		2.5200		5.0400		7.3068		36.5340	

### V 8 Model

	1,200001																	Benedate 2	
		HS												IMPOR'	Γ				
		CODE		UNIT	LOC	CAL-Yr 4	LOCA	L-Yr5-10					Al	NUAL N	EEDS				
NO	LIST OF ITEM	(WITH	UNIT	PRICE					,	Year 1	Y	ear 2	Y	ear 3	Y	Year 4		Year 5-10	OTHER
	SKD-2	FOUR		(USD)		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL			
		DIGIT)		(2.2.)	QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY		QTY	TOTAL VALUE	
1	English Associati	0.407	G . 4	3,259.00		(USD)		(USD)	40	(USD)	100	(USD)	200	(USD)	200	(USD)	1.500	(USD)	
'	Enginine Assembly,	8407	Set	3,239.00					40	0.1304	100	0.3259	200	0.6518	300	0.9777	1,500	4.8885	
2	Transmission & Clutch System		~	7 000 00					40		400	0 = 001	•		200			10 7011	
	Welded/Painted Body with	8707	Set	7,000.90					40	0.2800	100	0.7001	200	1.4002	300	2.1003	1,500	10.5014	
	including Chassis Group																		
	(Without installation of																		
	Conbination Meters, Interior																		
	Trimming Parts, Lamps, Wind																		
	Shield and Wire harness)																		
3	Front Axles/ Front Indepen-dent	8708	Set	6,024.80					40	0.2410	100	0.6025	200	1.2050	300	1.8074	1,500	9.0372	
	Suspension/Rear Axles																		
4	Suspension Component	8708	Set	703.70					40	0.0281	100	0.0704	200	0.1407	300	0.2111	1,500	1.0556	
5	Steering Wheel and Related	8708	Set	583.60					40	0.0233	100	0.0584	200	0.1167	300	0.1751	1,500	0.8754	
	Exhaust System	8708	Set	197.60					40	0.0079	100	0.0198	200	0.0395	300	0.0593	1,500	0.2964	
	Wheel and Tyres	4011	Set	168.40	300	0.0505	1500	0.2526	40	0.0067	100	0.0168	200	0.0337	-	-	-	-	
	Seat Assembly	9401	Set	648.10					40	0.0259	100	0.0648	200	0.1296	300	0.1944	1,500	0.9722	
9	Trimming Parts, Dashboard,	8708	Set	669.70						0.0268	100	0.0670	200	0.1339	300	0.2009	1,500	1.0046	
	Instrument Panel, Windshield,								40										
	Wire harness and other								'										
	Accessories																		
10	Door Group (Front and Rear)	8708	Set	744.20					40	0.0298	100	0.0744	200	0.1488	300	0.2233	1,500	1.1163	
	Without Accessories								40										
						0.0505		0.2526		0.8000		2.0000		4.0000		5.9495		29.7474	

# K 9 Model Schedule-2

	viouci																	Schedul	C 2
		TIC												MPORT					
		HS		LINITE	LOC	CAL-Yr4	LOCA	AL-Yr5-10					ANNU	JAL NEEDS					
NO	LIST OF ITEM	CODE	UNIT	UNIT PRICE						Year 1		Year 2		Year 3		Year 4	Ye	ear 5-10	OTHER
NO	SKD-2	(WITH FOUR DIGIT)	UNII	(USD)	QTY	TOTAL VALUE (USD)	QTY	TOTAL VALUE (USD)	QTY	TOTAL VALUE (USD)	QTY	TOTAL VALUE (USD)	QTY	TOTAL VALUE (USD)	QTY	TOTAL VALUE (USD)	QTY	TOTAL VALUE (USD)	
	K 9 Model					· · ·		` ,		, ,		, ,		, ,		, ,			
1	Enginine Assembly,	8407	Set	5,572.90					40	0.2229	100	0.5573	200	1.1146	300	1.6719	1,500	8.3594	
	Transmission & Clutch System																		
2	Welded/Painted Body with	8707	Set	3,014.60					40	0.1206	100	0.3015	200	0.6029	300	0.9044	1,500	4.5219	
	including Chassis Group																		
	(Without installation of																		
	Conbination Meters, Interior																		
	Trimming Parts, Lamps, Wind																		
	Shield and Wire harness)																		
	Front Axles/ Front Independent Suspension/Rear Axles	8708	Set	650.90					40	0.0260	100	0.0651	200	0.1302	300	0.1953	1,500	0.9764	
4	Suspension Component	8708	Set	539.80					40	0.0216	100	0.0540	200	0.1080	300	0.1619	1,500	0.8097	
5	Steering Wheel and Related	8708	Set	182.80					40	0.0073	100	0.0183	200	0.0366	300	0.0548	1,500	0.2742	
	Exhaust System	8708	Set	155.80					40	0.0062	100	0.0156	200	0.0312	300	0.0467	1,500	0.2337	
	Wheel and Tyres	4011	Set	619.50	300	0.1859	1500	0.9293	40	0.0248	100	0.0620	200	0.1239	-	-	-	-	
	Seat Assembly	9401	Set	599.50					40	0.0240	100	0.0600	200	0.1199	300	0.1799	1,500	0.8993	
	Trimming Parts, Dashboard,	8708	Set	6,475.80					40	0.2590	100	0.6476	200	1.2952	300	1.9427	1,500	9.7137	
	Instrument Panel, Windshield,																		
	Wire harness and other																		
	Accessories																		
10	Door Group (Front and Rear)	8708	Set	688.40					40	0.0275	100	0.0688	200	0.1377	300	0.2065	1,500	1.0326	
	Without Accessories																<u>_</u>		_
						0.1859		0.9293		0.7400		1.8500		3.7000		5.3642		26.8208	

# Annex 4.6

# GOLD AYA MOTORS INTERNATIONAL GROUP CO., LTD. AUTOMOBILE ASSEMBLY PLANT RAW MATERIAL REQUIREMENT (LOCAL PURCHASE)

		Unit Price	Yea	r -1	Yea	ır-2	Yea	ar-3	Y	ear -4	Year 5-7	
Sr.No.	Particulars	USD	Qty	Value USD in Mil.	Qty	Value USD in Mil.	Qty	Value USD in Mil.	Qty	Value USD in Mil.	Qty	Value USD in Mil.
	Model Q 35											
1	Wheel & Tyre Assy.	381.80							3600	1.3745	18000	6.872
2	Battery Model A6	36.80	480	0.0177	1200	0.0442	2400	0.0883	3600	0.1325	18000	0.662
1	Wheel & Tyre Assy.	421.90							600	0.2531	3000	1.266
2	Battery Model M 60	40.70	80	0.0033	200	0.0081	400	0.0163	600	0.0244	3000	0.122
1	Wheel & Tyre Assy.	421.90							1200	0.5063	6000	2.531
	Battery Model V 8	40.70	160	0.0065	400	0.0163	800	0.0326	1200	0.0488	6000	0.244
1	Wheel & Tyre Assy.	669.70							300	0.2009	1500	1.005
	Battery Model K 9	64.60	40	0.0026	100	0.0065	200	0.0129	300	0.0194	1500	0.097
1	Wheel & Tyre Assy.	619.50							300	0.1859	1600	0.991
	Battery Model Q 7	59.80	40	0.0024	100	0.0060	. 200	0.0120	300	0.0179	1500	0.090
1	Wheel & Tyre Assy.	468.80							1000	0.4688	3000	1.406
	Battery Model M 20S	45.20	-		400	0.0181	800	0.0362	1000	0.0452	3000	0.136
1	Wheel & Tyre Assy.	217.70							1500	0.3266	4500	0.980
	Battery	21.00	200	0.0042	500	0.0105	1000	0.0210	1500	0.0315	4500	0.095
	Total -			0.0366		0.1096		0.2192		3.6358		16.497

# **Spain** Sart 3 | Process planning (SKD)

# 3.1 SKD state

<u>=</u>	ly includes sembly	10	ssembly	semply	sembly 10	yldr				
KD module	Module-based supply includes the painted body assembly	Powertrain	Front suspension assembly	Rear suspension assembly	Steering system assembly	Exhaust pipe assembly	Seat assembly	Wheel assembly	Door assembly	0,14 cm 0,000 di 10 x 0,45 O
No.	_	2	က	4	5	9	7	8	6	10



Standard parts: The standard parts shall be supplied in bulk with the purposes and quantity provided by the company;

Main and auxiliary materials: The engine oil, gearbox oil, brake fluid, cooling liquid, air-conditioning liquid, bath of glass and process accessories are provided in bulk or locally purchased according to the company's technical standards and details.

# Sample Photo of Raw Material



# 3.1 SKD components pictures

No.	KD module
1	Module-based supply includes the painted body assembly
2	Interior Trimming Parts,Lamps, Wind Shield and Wire harness and other components
3	Power train system
4	Front suspension assembly
5	Rear suspension assembly















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### Sample Photo of Raw Material



# 3.1 SKD components pictures

No.	KD module					
6	Steering system					
7	7 Exhaust pipe assembly					
8	Seat assembly					
9	Wheel assembly					
10	Door assembly					





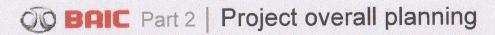






- Standard parts: The standard parts shall be supplied in bulk with the purposes and quantity provided by the company;
- Main and auxiliary materials: The engine oil, gearbox oil, brake fluid, cooling liquid, air-conditioning liquid, bath of glass and process accessories are provided in bulk or locally purchased according to the company's technical standards and details.

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# 2.3 Factory main production equipment and pictures

### 2.3.1 Final assembly workshop

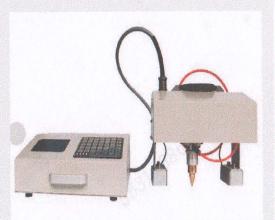
Interior components assembly line system



Conveyor of Interior components assembly line



Assemble electric hoist

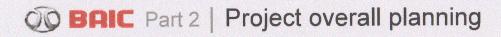


VIN Marking machine



VIN No plate laser marking machine

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# 2.3.1 Final assembly workshop

Chassis components assemble line system









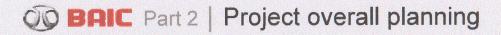
Conveyor of chassis assemble line

Front suspension assemble lifter

Rear suspension assemble lifter

Power train system assemble electric hoist

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# 2.3.1 Final assembly workshop

Final assemble line system-part-1



Conveyor of final assemble line



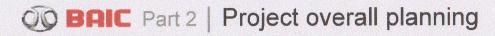
Electrical test machine



Antifreeze liquid vacuum filling machine



Brake fluid vacuum filling machine.



### 2.3.1 Final assembly workshop

Final assemble line system-part-2



Refrigerant liquid vacuum filling machine



Steering liquid vacuum filling machine



Fuel filling machine

# OO BAIC Part 3 | Process planning (SKD)

# 3.2. Planning principles

Abide by such general principles as follows: The requirements of the production capacity can be satisfied with the process quality featuring high conformity and affordability;

The technological level shall meet the product accuracy requirements and adapt to the corresponding production programs; moreover, the current design tries to use such a production mode featuring small amount of mechanization subject to no automation on the premise of ensuring the production capacity and quality;

Try to consider the future needs for series production of various categories and organize necessary flexible production

Adhere to the principle of "less input, more output", narrow the scale of investment and try to select the domestic simplified equipment that can meet the requirements for accuracy and efficiency;

The current investment budget mainly includes the investment in the process equipment and production tools, etc., not including that in civil engineering and plant construction;

Establish a comprehensive quality assurance system, strengthen the quality control means during the production and set up necessary areas for after-sales services and adjustment;

This workshop is designed for small batches of flow process, its plane layout should make the logistics as reasonable as possible and the logistics distribution can meet the demands of the production capacity.

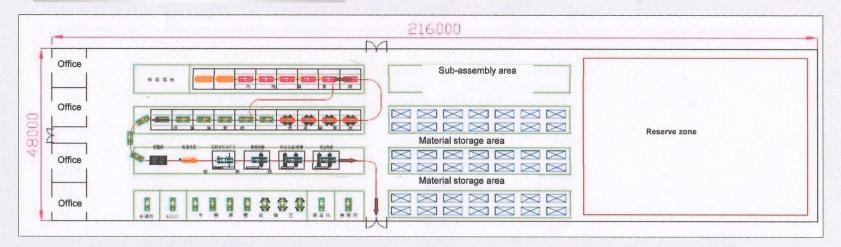
# 3.3 Production program

JPH	2.5
Device mobility	/
Single shift working hours (h)	8
Shifts	_
Annual working days	250
Annual capacity	2000

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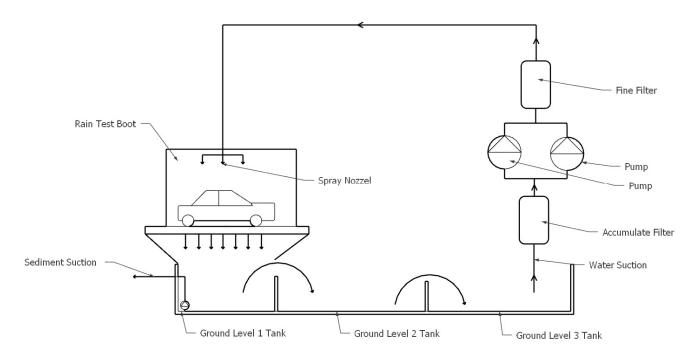
# **BAIC** Part 3 | Process planning (SKD)

# 3.6. Process layout schematic



Area	line	Detection line/showerin g room/commer cialization line	and rework area	LOGISTICS	KD parts warehouse		Paint repair chamber	AUDIT review room	Sub- assembly area	Total Area
Area/m²	864	384	400	2154	2150	450	80	80	350	6912

### Rain Teast, Car Wash Booth Diagram

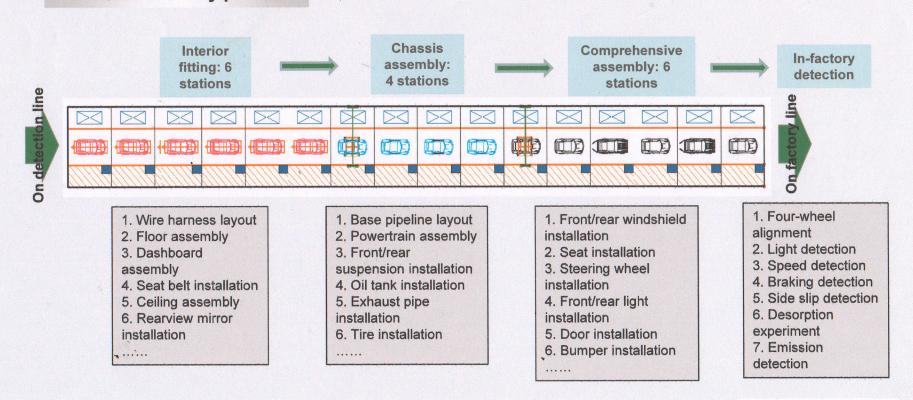


# ရေပြန်လည်အသုံးပြုခြင်းအဆင့်များ

- ရေပြန်လည်စုဆောင်းခြင်း
  - $\circ$  သုံးပြီးသည့်ရေကို Rain Test Boot အောက်ရှိ Level 1 ကန်ထဲသို့ တိုက်ရိုက်စီးဝင်စေပါသည်။
  - ၀ ကားအသစ်များကို ဆေးသည့်ရေဖြစ်သည့်အတွက် ဆီအညစ်အကြေးများ ပါဝင်မှုမရှိပါ။
- ရေစစ်ထုတ်ခြင်း
  - o ပါရှိနိုင်သည့်အနည်များအား မြေအောက်ကန် Level 1, Level 2 နှင့် Level 3 ဟု အဆင့်သုံးဆင့်စစ်ထုတ်ပါသည်။
  - o Level 3 ကန်မှ ရေအား ပြန်လည်အသုံးပြုရန်အတွက် Accumulate Filter ( ပထမအဆင့်စစ်ထုတ်မှုဇကာ) ကိုအသုံးပြုပြီးမှ Water Pump အတွင်းသို့ဖြတ်ဝင်စေပါသည်။
  - o Water Pump အထွက်မှ ရေအား Fine Filter ( အချောစစ်ထုတ်မှုဧကာ) မှတဆင့် ရေပန်းနော်ဇယ်များအားပက်ဖြန်းစေပါသည်။
- အနည်အနှစ်များအားစွန့်ပစ်ခြင်း
  - o လစဉ် Ground Level 1 Tank အား သန့်ရှင်းစေခြင်းကိစ္စများ ပြုလုပ်ပါမည်။
  - o မြို့နယ်စည်ပင်အဖွဲ့အစည်းနှင့်ချိတ်ဆက်ပြီး Sediment Pump မှတဆင့် အနည်အနှစ်များကို စွန့်ပစ်စေခြင်းလုပ်ဆောင်စေပါမည်။

# **BAIC** Part 3 | Process planning (SKD)

### 3.4. Final assembly process



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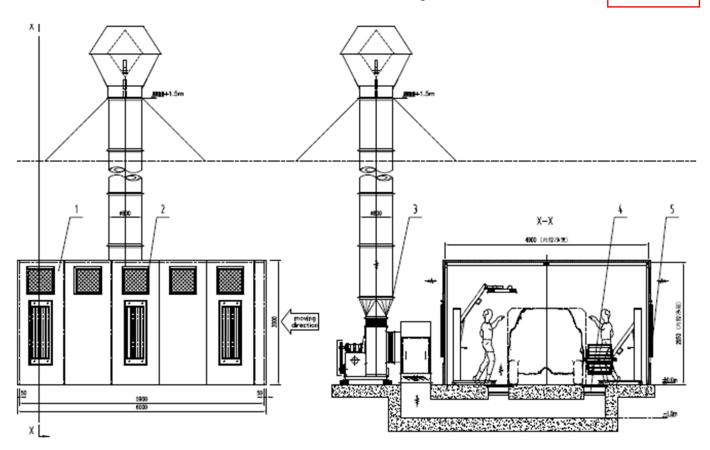
# BAIC Part 3 | Process planning (SKD)

# 3.5. Process program for final assembly

Name of program	Detailed contents	Conveying equipment	Picture sample
Zone for preassembly and detection	Set up two preassembly and detection stations, manually push to the stations and mainly check the visual quality of the body before put on the detection line.	Push manually	
Interior assembly line	Set up six assembly stations and adopt the mode of track limits + manual pushing of the process trolley; Mainly complete the assembly of the body wiring harnesses, footcloth, ceiling, dashboard and interior panels, etc.	Wide strip chain	
Chassis assembly line	Set up four assembly stations and adopt the EMS mode to complete station conveyance; Mainly complete the base pipeline layout, powertrain final assembly, fuel tank fitting and wheel assembly, etc.	EMS	
Final assembly line	Set up six assembly stations and complete on-line conveyance by using unilateral narrow strip chains.  Mainly complete assembling the front-end module, seats and other assemblies and complete oil filling and relevant other tasks.	Unilateral narrow strip chains	
Detection line	Provide four-wheel alignment, light detection, speed detection, brake detection, side slip detection, desorption experiment, emission detection and other detections for complete performance testing.	1	
Showering room	Rainfall test	1	
Commercialization area	Commercialization test	1	
Repair area	It shall be competent for repairing the interiors, chassis, electric appliances and paint, etc.	1	

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### Paint Booth Diagram



# ဆေးမှုတ်ခြင်းအဆင့်များ

### - Preparation

- o ကားဆေးမှုတ်ရန်အတွက်မျက်နှာပြင်သန့်ရှင်းခြင်း၊ ကားအသစ်များအားသန့်ရှင်းခြင်းပြုလုပ်ရာတွင် အညစ်အကြေးများပါဝင်မှုမရှိပါ။
- o ရေဆေးရန်လိုအပ်သည့်အခါတွင်လည်း ဖော်ပြထားသည့် Car Wash Booth အတွင်းရှိ ရေပြန်လည်လည်ပတ်အသုံးပြုခြင်းအဆင့်များကိုအသုံးပြုပါသည်။
- ၀ မလိုအပ်သည်ဧရိယာများအားအကာအကွယ်များပြုလုပ်ခြင်း

### - Primer Application

- ၀ သံံခြေးတက်ခြင်း နှင့် ဆေးသားဆွဲခိုင်မှုရှိစေရန် ခံဆေးအား အသုံးပြုပါသည်။
- o ခံဆေးအား အခြောက်ခံခြင်း အား Paint Booth အတွင်းတွင်အပူစနစ်ဖြင့်အခြောက်ခံပါသည်။

### - Base Coat Application

- o ဆေးမှုတ်ခြင်းအဆင့်များနှင့် အခြောက်ခံခြင်းအဆင်များအား Paint Booth အတွင်းတွင်ဆောင်ရွက်ပါသည်။
- ၀ လိုအပ်သော ဆေးရောင်အားကားသုတ်ဆေးအရောင်းဆိုင်များမှဝယ်ယူအသုံးပြုပါသည်။

#### - Clear Coat Application

- o Clear coat ဆေးမှုတ်ခြင်းအဆင့်များနှင့် အခြောက်ခံခြင်းအဆင့်များအား Paint Booth အတွင်းတွင်ဆောင်ရွက်ပါသည်။
- ၀ လိုအပ်သော ဆေးအားကားသုတ်ဆေးအရောင်းဆိုင်များမှဝယ်ယူအသုံးပြုပါသည်။

#### - Curing and Drying

- o Curing and Drying အဆင့်များကို Paint Booth အတွင်းတွင် ထိန်းညှိထားသောအပူချိန်တွင် အခြောက်ခံခြင်း ဆေးသားခိုင်ခန့်စွဲမြဲစေခြင်းအဆင့်များကို ပြုလုပ်ပါသည်။
- ၀ ထို့နောက် ပြင်ပအခန်းအပူချိန်ဖြင့် အအေးခံစေပါသည်။

#### - Finishing

့ ဆေးသားအဆင်ပြေမှု၊ ဆေးမှုတ်သေသပ်မှု စသည့်အချက်များအား စစ်ဆေးပြီး ဆေးမှုတ်သည့်အဆင့်များအားလုံး ပြီးစီးပါသည်။

# **OD BAIC** Part 3 | Process planning (SKD)

## 3.7 Required personnel

The staff includes production workers, auxiliary personnel, technical management personnel and quality control personnel, as listed below:

			The second of th	
No.	Category of employees	Number of people	Job qualifications	Remarks
~	Assembly workers	48	More than 1 year's related experience	12 people included in the sub- assembly area
2	Logistics distribution	9	2 years' experience, holding forklift license	
3	Technical personnel	3	More than 3 years' experience, college Interior, chassis and electrical: 1 degree	Interior, chassis and electrical: 1 person
4	Management personnel	-	More than 5 years' experience in final assembly management, bachelor degree	
5	Process quality control	4	More than 3 years' experience, senior high school education	Quality
9	Repair area	4	More than 2 years' experience, senior high school education	Paint repair included
7	Detection line	9	More than 3 years' experience, senior high school education	Quality
8	Showering room	1	More than 2 years' experience, senior high school education	Quality
6	Commercialization	2	More than 2 years' experience, senior high school education	Quality
	Total		75	

Better And Ingenious Choice

# **Solution** S | Process planning (SKD)

# 3.8. Estimation of process equipment investment

No.	Category	Equipment name	Quantity Unit/Set	Cost (10,000 vuan)	Remarks	No.	Category	Equipment name	Quantity Piece/Set	Cost (10,000	Remarks
-	Interior	Wide strip chain + process support	-	06	1.4 meters wide, 6 stations	22		Brake hub test bench	-	45	
2	assembly line	Electric hoist for interior line feeding	1	10	Steel structures and slings included	23		Speedometer calibration bench	-	5	
က	Chassis assembly line	Chassis assembly line	1	180	5 self-propelled trolleys, 4 stations	24		Light detection	-	9	
4	Final assembly line		1	82	Bilateral strip chains, 6 stations	25	Detection line	Emissions testing	-	30	
2	Frontfroor axlo	Electric lifting trolley for front axle assembly	1	10	Powertrain pallet clamps included	26		Side slide test bench	-	5	
9	assembly	Electric lifting trolley for rear axle assembly	1	æ	Rear axle pallet clamps included	27		Electronic immobilizer detector	-	50	
7		Electric hoist	1	15	500kg	28		Air tightness detector	-	18	
80		Pneumatic wrench	56	13		29		Showering room	-	36	
6		Electric wrench	18	4.5		30		VIN marker	-	15	Pneumatic
10	Tools	Torque wrench	18	5.4	One torque calibration trolley (two torque calibrators) included	31	Carving equipment	Front windscreen VIN nameplate laser engraver	-	20	
7		Other manual tools	20	3	Rubber hammer, clearance ruler, screw tap suite, sleeve suite, etc.	32	Maintenance	Steel structure, lighting and sling in the maintenance area	-	12	
12		Gasoline filler	-	2		33	review area	Paint repair chamber	-	35	Roasting lamp, polisher and exhaust etc. included
13		Brake fluid vacuum filler	-	30		34		AUDIT room	-	8	
14		Coolant vacuum filler	-	30		35	Cub googable	Dashboard beam and harness	1	0.5	
12	Filling	Antifreeze vacuum filler	-	25		36	Sub-assembly hench	Door interior panels	4	2	
16	equipment	Power steering fluid vacuum filler	-	25		37	College	Glazing bench	2	1.6	
17		Glass bath measuring cup	-	0.01		38	40	Rear nameplate attachment	-	0.5	
18		Engine oil measuring filler	1	3		39	Till and the Control	Tank cover installation	1	0.5	
19		Transmission oil measuring filler	1	3		40	Gui-line tooling	Windscreen glass transfer	-	9.0	
20		Bumpy road	-	0.8		41		Door support	9	0.5	
21	Detection line	Four-wheel aligner	-	35		42	Line side equipment	Line side equipment	-	8	
	Total					8.7411 million yuan	yuan ר				

### GOLD AYA MOTORS INTERNATIONAL GROUP CO., LTD. AUTOMOBILE ASSEMBLY PLANT နှစ်အလိုက် ထုတ်လုပ်မှုယေား

စဉ်	နှစ်အလိုက်	ပြည်ပမှတင်သွင်းမည့် အစိတ်အပိုင်း ရာခိုင်နှုန်း(%)	ပြည်တွင်းထုတ်လုပ်မည့် အစိတ်အပိုင်း ရာခိုင်နှုန်း(%)	မှတ်ချက်
э	ပထမနှစ်မှ တတိယနှစ်	၉၉∙	0-J၉%	Battery များကို ပြည်တွင်းမှ ဝယ်ယူသုံးပြီး ကျန်ပစ္စည်း များကို SKD-2 စနစ်ဖြင့် တင်သွင်းဆောင်ရွက်မည်ဖြစ်ပါမည်။
J	စတုတ္ထနှစ်	<sub>6</sub> 6.6 <sub>9</sub> %	<b>૨.</b> ૨၆ %	Battery နှင့် Tyre များကိုပြည်တွင်း၌ ဝယ်ယူသုံးစွဲပါမည်။ ကျန်ပစ္စည်းများကို SKD-2 စနစ်ဖြင့် တင်သွင်းပါမည်။
5	ပဉ္စမနှစ်	<b>γ6.00%</b>	Jç.00%	Local purchase-6 pieces of white body assembly: including floor, roof, left side, right side, left door, right door, Welding Assembly Jig, Painting Equipment without ED Coating
9	ဆဌမနှစ်	<b>წე.</b> 00%	29.00%	Local purchase-Floor Welding Assembly
၅	သတ္တနှစ်	ნ <b>ე.ე</b> 0%	၃၈.၅၀%	Local purchase-Roof Welding Assembly
G	အဌမနှစ်	ეე.00%	ç <sub>@</sub> .00%	Local purchase-Left and Right Side Wall Welding Assembly
?	နဝမနှစ်	20.00%	GJ.00%	Local purchase-Left and Right Side Wall Welding Assembly
6	ဒဿမနှစ်	၁၈.၅၀%	ൊ.၅0%	Local purchase-Electrostatic Coating Complete Painting System
9	၁၁–၁၅ နှစ်		* Will try to ac	hieve 100% local production

#### GOLD AYA MOTORS INTERNATIONAL GROUP CO., LTD. AUTOMOBILE ASSEMBLY PLANT

#### PRODUCTION STATEMENT

Sr No	Particulars	Specification	AU	Yr1	Yr2	Yr3	Yr4	Yr5 to Yr.10
1	<b>Local Sales (100%)</b> CHANGHE Q 35 SUV	1.5L Elite Version,AT, Smart Version	No.	480	1,200	2,400	3,600	18,000
2	CHANGHE M 60 MPV - 1.5T Standardt	1.5T Standard	No.	160	400	800	1,200	6,000
3	CHANGHE A6,Sedan Car	CTV Elite Version	No.	80	200	400	600	3,000
4	DODA V8 - MPV	Business Type	No.	40	100	200	300	1,500
5	DODA K9 - Pick-up	4 x 4, Disel Version	No.	40	100	200	300	1,500
6	CHANGHE Q7- SUV	CTV, Luxury Version	No.	-	400	800	1,000	3,000
7	CHANGHE M20S MPV	5MT, Standard	No.	200	. 500	1,000	1,500	4,500
	Total Production -			1,000	2,900	5,800	8,500	37,500

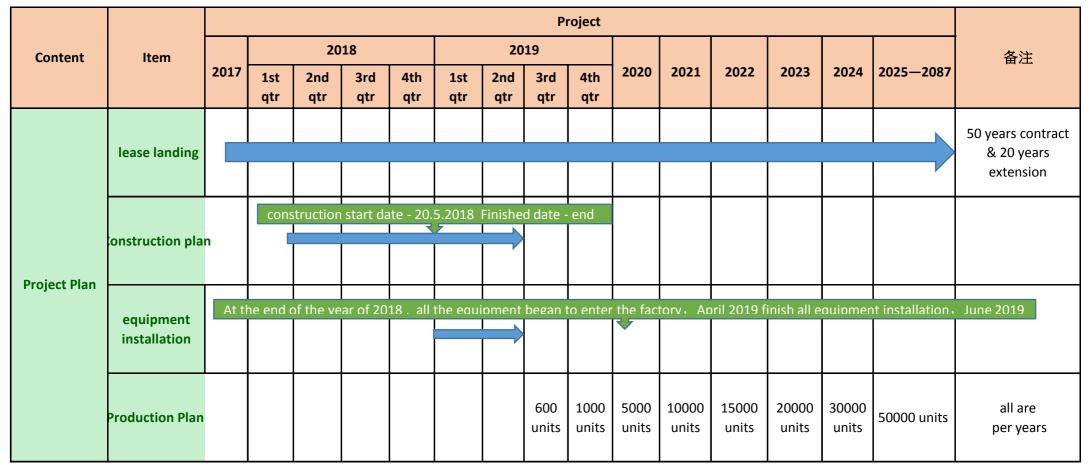
#### GOLD AYA MOTORS INTERNATIONAL GROUP CO., LTD. AUTOMOBILE ASSEMBLY PLANT

#### Sales Statement

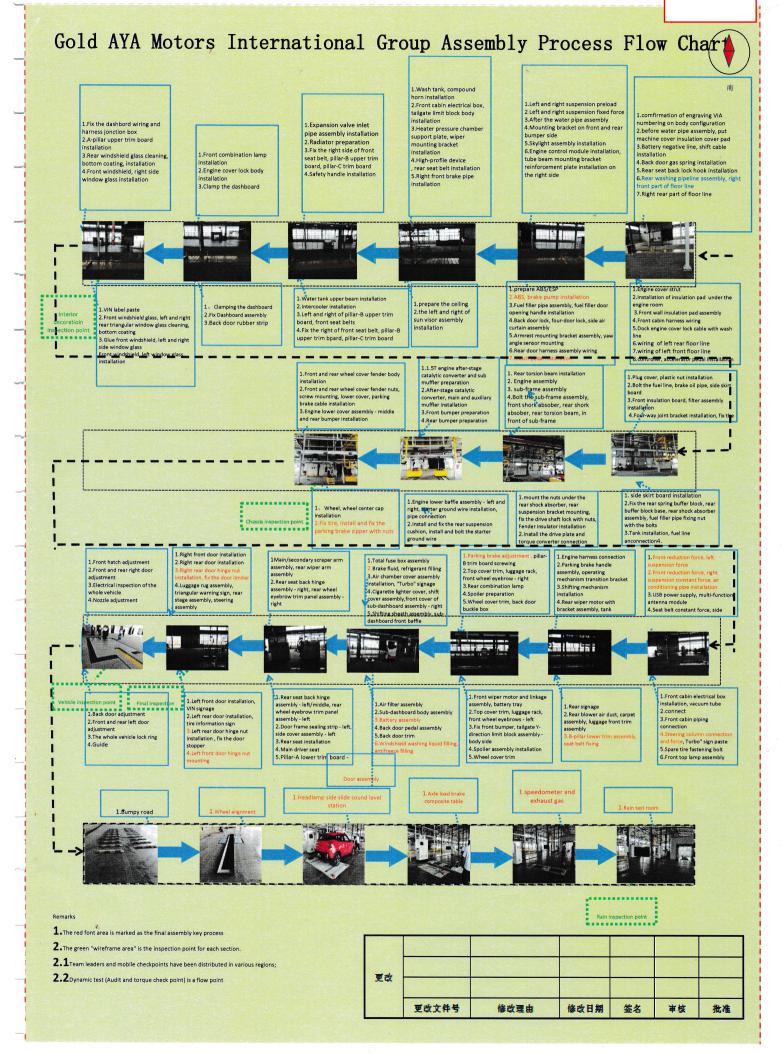
US\$ In Million

,					Year	CENTRE DE CONTRACTO DE LA CONTRACTOR DEL CONTRACTOR DEL CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DEL CONTRACTOR DEL CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DEL CONTRACTOR DEL CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DEL CONTRACTOR DEL CONTRACTOR DE LA CONTRACTOR DEL CONTRACTOR DE LA CONTRACTOR DEL CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DEL CONTRACTOR D	
Sr. No	Particulars	Unit	Yr1	Yr2	Yr3	Yr4	Yr5 to Yr10
	LOCALT SALES (100%)						TO BE CONTROL OF THE PROPERTY
	(a) Quantity						
1	CHANGHE Q35 SUV	No.	480	1200	2400	3600	1800
2	CHANGHE M 60 MPV - 1.5T Standardt	No.	160	400	800	1200	600
3	CHANGHE A6,Sedan Car	No.	80	200	400	600	300
4	DODA V8 - MPV	No.	40	100	200	300	150
5	DODA K9 - Pick-up	No.	40	100	200	300	150
	CHANGHE Q71- SUV	No.	-	400	800	1000	300
7	CHANGHE M20S MPV	No.	200	500	1000	1500	450
	Price						
1	CHANGHE Q35 SUV	USD	21700	21700	21700	22785	2278
2	CHANGHE M 60 MPV - 1.5T Standardt	USD	23990	23990	23990	25190	2519
3	CHANGHE A6, Sedan Car	USD	23990	23990	23990	25190	2519
	DODA V8 - MPV	USD	38000	38000	'38000	39900	3990
5	DODA K9 - Pick-up	USD	35200	35200	35200	36960	3696
6	CHANGHE Q71- SUV	USD	26600	26600	26600	27930	2793
7	CHANGHE M20S MPV	USD	12300	12300	12300	12915	1291
	Value (a x b)						
1	CHANGHE Q35 SUV	USD/Mil	10.42	26.04	52.08	82.03	410.1
2	CHANGHE M 60 MPV - 1.5T Standardt	USD/Mil	3.84	9.60	19.19	30.23	151.1
3	CHANGHE A6,Sedan Car	USD/Mil	1.92	4.80	9.60	15.11	75.5
4	DODA V8 - MPV	USD/Mil	1.52	3.80	7.60	11.97	59.8
5	DODA K9 - Pick-up	USD/Mil	1.41	3.52	7.04	11.09	55.4
6	CHANGHE Q71- SUV	USD/Mil	-	10.64	21.28	27.93	83.7
7	CHANGHE M20S MPV	USD/Mil	2.46	6.15	12.30	19.37	58.
	Local Sale Total -		21.51		100.05		
	Lucai Sale Tutai -		21.56	64.54	129.09	197.73	894.0

Project Plan



When the land lease expires, the company will continue to lease the land, upgrade the plant, upgrade the equipment and upgrade the products, and continue to operate.





#### TRADEMARKS LICENSE AGREEMENT

between

BAIC International Development Co., Ltd.

and

GOLD AYA MOTORS INTERNATIONAL GROUP
COMPANY LIMITED



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This TRADEMARKS LICENSE AGREEMENT (this "**Agreement**") is entered into as of [20<sup>th</sup>,July,2017] in [Beijing], by and between:

- A BAIC International Development Co., Ltd., a company duly incorporated and validly existing under the laws of the PRC, with its registered address at 3rd Floor, Building 10, Huaweili, Chaoyang District, Beijing, China ("Party A"); and
- B GOLD AYA MOTORS INTERNATIONAL GROUP COMPANY LIMITED, a company duly incorporated and validly existing under the laws of Myanmar] with its registered address at No.(49/B-2), Corner of Thiri Mying-2 Street and Paung Se Street, (13) Ward, Hlaing Township, Yangon. ("Party B").

In this Agreement, Licensor and Party B shall hereinafter be referred to individually as a "Party" and collectively as the "Parties".

#### Whereas:

- Party A is a subsidiary of Beijing Automotive Group Co., Ltd., which is one of the top five automotive groups in China, and mainly engages in overseas sales and assembly manufacture of vehicles and related components;
- Party B is <u>GOLD AYA MOTORS INTERNATIONAL GROUP COMPANY</u> <u>LIMITED</u>, and currently engages in [Automobile production, sales, after sale service, Automobile finance];
- The Parties have signed the Vehicle Assembly Cooperation Agreement on 20<sup>th</sup>, July, 2017, which specified that Party A authorized Party B to purchase the KD Parts from Party A or its designated party during the Term (as defined in Vehicle Assembly Cooperation Agreement), and manufacture the Vehicles through Party A's technical supports; and
- Party B desires, and Party A agrees to authorize Party B, to use the Licensed Trademarks during the assembly, manufacture, sales and after-sales service of the Vehicles in the Territory.

**THEREFORE,** after friendly consultations conducted in accordance with the principles of equality and mutual benefit, the Parties hereto agree to reach this Agreement in accordance with relevant laws and terms of this Agreement.

#### Article 1 - Definition

Unless otherwise stipulated in this Agreement, all the terms set out in this Agreement shall have the same meaning as defined in the Vehicle Assembly



#### Cooperation Agreement.

#### Article 2 -License of the Trademarks

- 2.1 Licensed Trademarks mean the trademarks that Party A permits Party B to use in accordance with the terms and conditions of this Agreement, details of which are specified in the *List of Licensed Trademarks* as attached hereto ("Licensed Trademarks").
- 2.2 Party A covenants and Party B acknowledges that Party A owns the proprietary right of or/and the right to use the Licensed Trademarks.
- 2.3 During the Term and provided that Party B complies with this Agreement, Party A hereby grants, Party B hereby accepts, the non-exclusive, untransferable, non-sublicensable and revocable license to use the Licensed Trademarks in the form and way confirmed by Party A in writing within the following scope:
  - (a) Use the Licensed Trademarks on the Vehicles and its components which are assembled and manufactured by Party B according to the Vehicle Assembly Cooperation Agreement and in conformity with the quality standard of Party A;
  - (b) Use the Licensed Trademarks for the purpose of the sales of and providing after-sales services to the Vehicles.
- 2.4 Term of the license is the same as the Term set forth in the Vehicle Assembly Cooperation Agreement.
- 2.5 Territory of the license is the same as the Territory set forth in the Vehicle Assembly Cooperation Agreement.
- 2.6 Any right which is not expressly authorized to Party B in this Agreement shall be particularly reserved by and for the interests of the Party A, its successor and assignee.

#### Article 3 –Payment of Royalty

- 3.1 Under the terms of this Agreement, the amount and payment method of the royalty to be paid by Party B to Party A, shall be: [ a ]
  - (a) Party B uses the Licensed Trademarks for free during the Term of the license;
  - (b) the royalty is USD[ ], Party B shall pay such royalty in a lump sum to Party A within thirty (30) days upon execution of this Agreement;
  - (c) the royalty shall be paid at 3% total FOB price of the KD Parts actually purchased by Party B. The Parties shall confirm the amount



by the end of each year, which shall be paid by Party B to Party A's designated account no later than the end of the following January. In case the remaining Term is less than one year, the royalty shall be confirmed by the parties and paid to Party A's designated account within 10 working days upon the expiration of the Term.

3.2 If Article 3.1(a) of this Agreement (i.e. use the Licensed Trademarks for free) is applied, during the Term of the license, Party A is entitled to decide to charge the royalty for the license of the Licensed Trademarks when appropriate as necessary. The specific standard of royalty shall be negotiated and determined by the Parties.

#### Article 4 -Use of the Licensed Trademarks

- 4.1 Party B covenants that:
  - (a) Party B will not use the Licensed Trademarks on Vehicles and its components which have not met the quality standard of Party A;
  - (b) Party B and its affiliates will not apply for the registration of the Licensed Trademarks within the Territory or any other countries or regions, no matter whether they are registered independently or jointly with other characters, images, symbols, designs or their combinations. Neither shall Party B attempt to obtain the aforesaid registration through any other ways;
  - (c) Unless otherwise expressly provided in this Agreement, Party B and its affiliates will not obtain ownership of or right to use any trademarks similar to the Licensed Trademarks in the Territory or any other countries or regions;
  - (d) Party B will not apply trademarks other than the Licensed Trademarks to the Vehicles nor use them in relation to the Vehicles:
  - (e) Party B will not use Licensed Trademarks in combination with Party B and/or any third party's marks or insert the Licensed Trademarks into Party B's own trademarks;
  - (f) Party B and its affiliates will not make any changes or modifications in any way to the Licensed Trademarks, nor will they use in any other ways which are similar and likely to be misunderstood as Licensed Trademarks, or which lead to dilution of Licensed Trademarks;
  - (g) Party B will not use the Licensed Trademarks in any company name or trade name without the prior written approval of Party A;



- (h) Party B and its affiliates will not use or display the Licensed Trademarks in the form which is likely to adversely affect Party A's goodwill
- (i) Any goodwill (if any) arising from the use of the Licensed
  Trademarks will belong to Party A; and in order to transfer the
  goodwill to Party A, Party B shall sign any documents reasonably
  requested by Party A.
- 4.2 If Party B finds that Licensed Trademarks or goodwill are infringed by other parties, Party B shall give Party A immediate notice in writing of such infringement so that Party A can take proper actions timely against such infringement. Where Party A takes aforesaid actions, Party B shall proactively provide assistance and cooperation.
- 4.3 If Party B is sued by a third part for any infringement claims arising from or in relation to the use of the Licensed Trademarks in the Territory in accordance with the terms of this Agreement, Party B shall give Party A immediate notice in writing and provide proactive assistance and cooperation in order to take proper action together with the Party A against such infringement claims.
- 4.4 The obligations born by Party B under this Article 4 shall be valid during the Term of this Agreement and continue to be valid for five (5) years after the expiration or termination of this Agreement.
- 4.5 Party A is entitled to inspect the use of Licensed Trademarks at any time, and Party B shall provide assistance.
- 4.6 Party B shall apply the Licensed Trademarks on the Vehicles and its components strictly at the place and in the way as specified by Party A.
- 4.7 When Party B uses the Licensed Trademarks for advertisements and on publicity materials (such as brochures, newspapers and magazine advertisements, TV, radio and internet advertisements, etc.), packing materials etc., the Party B shall make such materials strictly in accordance with the pattern of the Licensed Trademarks of the Party A and provide samples to Party A for record. At the same time, Party B shall guarantee the authenticity and legitimacy of its contents and sources.
- 4.8 If the Party B needs to sublicense the Licensed Trademarks to other business partners (including but not limited to dealers and after-sale service providers) according to the needs of business, it shall obtain the prior consent of the Party A, and shall execute a written agreement with the business partners to ensure such business partners are in compliance with this Agreement.



#### Article 5 -Valid Period and Warrants

- 5.1 This Agreement shall come into effect upon the date on which the Vehicle Assembly Cooperation Agreement becomes effective and remain in effect during the Term of the Vehicle Assembly Cooperation Agreement, after signed by the duly authorized representatives of both Parties.
- 5.2 This Agreement shall remain in effect until the earliest of the following to occur:
  - (a) the Parties agree in writing to terminate this Agreement;
  - (b) When the Vehicle Assembly Cooperation Agreement and/or any of its attachments are terminated for any reason, this Agreement shall be terminated simultaneously;
  - (c) Other circumstances as provided in this Agreement.
- 5.3 If this Agreement is terminated for whatever reasons, Party B shall not enjoy any rights under this Agreement immediately upon the termination of this Agreement, and shall immediately terminate to use the Licensed Trademarks, unless otherwise provided in the transitional period as stipulated in the Vehicle Assembly Cooperation Agreement.

#### Article 6 -Liabilities of Breach

If Party B breaches any provision of this Agreement, Party A shall be entitled to take one or several of the following measures, and request the Party B to correct his default within the period of thirty (30) days. Party B fails to correct his default within such thirty (30) days period, Party A is entitled to terminate this Agreement and the *Vehicle Assembly Cooperation Agreement* and its attachments unilaterally. Party A shall not undertake any loss of Party B arising thereof. However, if Party A is subjected to any loss therefrom, Party B shall indemnify Party A:

- i Suspension of technical support to Party B under the *Technology* License and *Technical Support Agreement*;
- ii Suspension of the performance of any obligation of Party A under Vehicle Assembly Cooperation Agreement;
- iii Suspension of the use of the Licensed Trademarks by the Party B;



Party B shall pay for the damages of CNY 50,000 upon each breach. If the damage of Party A exceeds such amount, Party A can request Party B to continue to compensate for the remainder.

#### Article 7 - Miscellaneous

- 7.1 Articles of Confidentiality, Governing Law and Disputes Resolution, Force Majeure, Termination, Notice and Miscellaneous in the *Vehicle Assembly Cooperation Agreement* also apply to this agreement.
- 7.2 Unless otherwise provided by other articles, any attachments to this Agreement constitute an integral part of this Agreement, and have the same legal effect as this Agreement.
- 7.3 According to the mandatory applicable law in Territory, if the license under this Agreement accepted by the Party B shall go through the formalities of registration and filling, such formality shall be handled by Party B and the corresponding costs shall be borne by the Party B. Party A will provide assistance.
- 7.4 Other matters not stipulated in this Agreement shall be implemented in accordance with the *Vehicle Assembly Cooperation Agreement*.
- 7.5 This Agreement is written in English and Chinese. Both Chinese and English versions are with the same legal effect. In case of any discrepancy, the English version shall prevail.
- 7.6 This Agreement may be executed in four (4) copies with each Party keeps two (2) copies.

The Parties have caused their duly authorized representatives to sign this Agreement as of the date first set forth above.

Party A. E	AIC IIILE	mation	iai Develop	ment Co., Ltd.		
By:						
Name: Title:				•		
Party B: LIMITED	GOLD	AYA	MOTORS	INTERNATIONAL	GROUP	COMPANY
Ву:						
Name:						
Title:						



双方正式授权的代表已于文首所载之日签署本协议,以昭信守。

The Parties have caused their duly authorized representatives to sign this Agreement as of the date first set forth above.

甲方: 北京汽车国际发展有限公司

Party A: BAIC International Development Co., Ltd

By: \_\_\_\_\_

姓名/Name:

职务/Title:

乙方: GOLD AYA MOTORS INTERNATIONAL GROUP COMPANY LIMITED

Memationa

Party B:

Ву:

姓名/Name:

职务/Title:

多物





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

#### CERTIFICATE OF EXPORTER/IMPORTER REGISTRATION

1. Enterprise Name (မြန်မာ/အင်္ဂလိပ်)	GROUP COMPANY LIMITED.		51556(17-08-18)
		3. Registration Term	: FIVE YEAR
		4. Start Date :	17-08-2018
		5. End Date :	16-08-2023
6. Address : (မြန်မာ/အင်္ဂလိပ်)	Between Myotha and Nabu-Aing Villa Zone-2C, Myotha Industrial Park, Nga	azun Tonwship, Myingya	n District,
	Mandalay Region, Myanmar		
7. Business Registration	on No : 100642476 (28-6-2017)		
8. Type of Business:	Sole Proprietorship(တစ်ဦးတည်းပိုင်)	Partnershin(2020)	
(မြန်မာ/အင်္ဂလိပ်)	🗹 Limited Company(രീട്ട്ഗെന്നുണ്ട്)(Mya	anmar/Foreign)	
-	Co-operative Society(သမဝါယမအသင်း)	10101611)	
	Others(Please specify) කලින: ( රෝල ရန်) න	25.20.000000000000000000000000000000000	2 02 2 2 2
P. Type of Service :	• New Extension	၀င်း မွဲ့မှတ်တမ်း ၀ါလုပ်ငန်း ( )မျိုး ဧ	တငရွကခွင့ရှသည။
0. Contact No:	Extension		
09-519595	58	Goldova	2019@:1
			2018@gmail.com
Telephone 1	No. Fax No.		e-mail
1. Remarks:			
MIC Permit No.06	57/2018 (27-3-2018)		
7 Towns and Car 1'4'			
2. Terms and Condition	DIS : စည်းကမ်းချက်များ		
and conditions:	e above mentioned enterprise as Expor	ter/Importer subject to the	ne following terms
(a) Line of goods r	ာက်ဖော်ပြပါစည်းကမ်းချက်များဖြင့် ပို့ကုန်သွင်းကုန် လုပ်ငန်း permitted – all items except prohibited a	:ရှင်အဖြစ် မှတ်တမ်းတင်ခွင့်ပြုသည်)	
ခင်ပြုသည်ကွန်ပစ္စည်းအ	effirmed - an nems except prombited a ခမျိုးအမည် - တားမြစ်ကန့်သတ်ထားဆော ကုန်ပစ္စည်းအမယ်	nd restricted items.	
(b) The enterprise	must abide by the Export/Import rules a	များမှလွ၍ ကျန်ကုန်ပစ္စည်းများအားလုံ and Domilations are confi-	: - J C ()
Exporters/Impo	prters.(လုပ်ငန်းရှင်သည် မှတ်ပုံတင် ပို့ကုန်သွင်းကုန်လုပ်င	sind Regulations prescribe	a for the registered
ွယ်ရေးဦး	βουρούς διάλους Αυγούς διάλους διάλους	နးလုပ်ကိုင်သူများ လူကနာရမည့်စည်းဂ	ာမႈချကများကို လိုက်နာရမဉ
(600	is.	/.	2018
1/04	100	Q .	8.2018
Comment 1.		DV 12.	0
14.09	Stamp	For Director General	
Joseph 1. 4 - 6 - 7	(25)	<b>ာရီသိန်း၊လက်</b> ထောက်ညွှ	cre-
3. [	/.00//	ميار ()د د د د د د د د د د د د د د د د د د د	နကြားရေးများ
3000 4 401		1	158.5018 g., elaniceine,



ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်အစိုးရ စက်မှုဝန်ကြီးဌာန စက်မှုကြီးကြပ်ရေးနှင့်စစ်ဆေးရေးဦးစီးဌာန ပုဂ္ဂလိကစက်မှုလုပ်ငန်းမှတ်ပုံတင်လက်မှတ်

	မှတ်ပုံတင်အ <b>မှတ်</b>		<u>ന്</u> ടു/ ၂၄၄၉		<u>ს. ი.</u>	4
လုပ်ငန်	န်းအရွယ်အစား_	အကြီးစား ပြည်ဝေ	တင်စုနယ်မြေ/	တိုင်းဒေသက်	ြီး/ပြည်နယ်	မန္တလေး
	အောက်ပါလုပ်	န်းသည် ပုဂ္ဂလိကစ	ာက်မှုလုပ်ငန်း ဉ	ပဒေ ပုဒ်မ ၇	ပုဒ်မခွဲ ( ဂ )အ	ရ မှတ်ပုံတင်ပြီး
ဖြစ်ပါ	သည်။	Gold AYA Motors 1	International Gr	oup Co.,Ltd. e	မော်တော်ယာဉ်တပ်	ာဆင်ထုတ်လုပ်ခြင်း
OII (	လုပ်ငန်းအမည် _	လုပ်ငန်း				¬ C
ال ا	လုပ်ငန်းအမျိုးအဖ	<u>ှည်</u>	မာ်တော်ယာဉ်နှ	င့်နောက်တွဲယ	ာဉ်များထုတ်လုပ်	ac:
<b>811</b>	အဓိကကုန်ချောပ	ာစ္စည်းအမျိုးအမည်		NGHE-Q-35,B 95,X70 PLUS	YD F3 Saloon (	Car, JETOUR
	The life all the case are del life the tip lim the cost of the life	, # 4 0 0 0 m m m m m m m m m m m m m m m m	" CHANGHI	E,BYD, JETO	UR" အမှတ်တံဆိ	88
911	တည်နေရာလိပ်စ	<b>ာ</b> မြေကွက်အမှင တံတားဦးခရိုင်	က်-ဘီ(၁-၁)၊ ဇုန်	-၂ (စီ)၊ မြို့သ	ာစက်မှုဥယျ <u>ာဉ</u> ်၊	ငါန်းဇွန်မြို့နယ်၊
<b>ე</b> ။	ပိုင်ဆိုင်မှုအမျိုးအ		O	ဥမ္ပဏီပိုင်		***
Gn	လုပ်ငန်းရှင်အမ	_	Mr.L	Jifeng (Direct	tor)	
2H	ကိုင်ဆောင်သည်	 မက်ပုံတင်အမတ်		No.E-733672		. who will the tip the spec and the tip time the tip the size of the tip time the tip time the tip time time time time time time time time
o II	ရင်းနှီးမြှုပ်နှံမှတ	<b>နိမ်း(ကျပ်)</b> <sup>၁၆၉ဝ.</sup>	၂၇၅ သန်း+USE	)၀. ၄၂၆ သန်း <sub>ဝ</sub>	ာည်ထောင်သည့်	ခုနှစ် ၂၀၁၉
6 <sub>II</sub>	အသုံးပြုသည့်အ	ားအမျိုးအစား $^{-\infty}$	ရန်စဖော်မာ/လ	ျှပ်ထုတ်စက်	မြင်းကောင်ရေ _	
001	အလုပ်သမားဦးဖ			၇၁ ဦး		ეციი KVA 
001	မှတ်ပုံတင်သက်	တမ်းကုန်ဆုံးသည့် <u>ဖ</u>	နေ့ရက်	გე. ი.	<u>jo jo</u>	



သိန်းဆွေ ညွှန်ကြားရေးမှူးချုပ်

#### လုပ်ငန်းရှင်များလိုက်နာရန်စည်းကမ်းချက်များ

- ၁။ ဤမှတ်ပုံတင်လက်မှတ်ကို အများမြင်သာသည့်နေရာတွင် ချိတ်ဆွဲထားရမည်။
- ၂။ ဤမှတ်ပုံတင်လက်မှတ်ကို မသက်ဆိုင်သူအား လွှဲအပ်ခြင်း သို့မဟုတ် လွှဲပြောင်းပေးခြင်းမပြုရ။
- ၃။ ဤမှတ်ပုံတင်လက်မှတ်ပါ အချက်အလက်များကို ပြင်ဆင်ခြင်း သို့မဟုတ် ဖြည့်စွက်ခြင်းမပြုရ။
- ၄။ ဤမှတ်ပုံတင်လက်မှတ် ပျောက်ဆုံးလျှင် မှတ်ပုံတင်လက်မှတ်မိတ္တူကို ထုတ်ပေးရန် ပြည်ထောင်စုနယ်မြေ သို့မဟုတ် တိုင်းဒေသကြီး သို့မဟုတ် ပြည်နယ်ဦးစီးဌာနမှူးထံ ခိုင်လုံသော အထောက်အထားနှင့်အတူ လျှောက်ထားရမည်။
- ၅။ မှတ်ပုံတင်လက်မှတ်ပျက်စီးလျှင် သို့မဟုတ် မထင်မရှားဖြစ်လျှင် သို့မဟုတ် မှတ်ပုံတင်လက်မှတ် ပါ အချက်အလက်များ ပြောင်းလဲရန်လိုအပ်လျှင် ပြည်ထောင်စုနယ်မြေ သို့မဟုတ် တိုင်းဒေသကြီး သို့မဟုတ် ပြည်နယ်ဦးစီးဌာနမှူးထံ မှတ်ပုံတင်လက်မှတ်နှင့် ပူးတွဲတင်ပြလျှောက်ထားရမည်။
- ၆။ ဤမှတ်ပုံတင်လက်မှတ်ကို စက်မှုလုပ်ငန်းနှင့်စပ်လျဉ်းသည့်ကိစ္စမှအပ မည်သည့်ကိစ္စတွင်မျှ အသုံးမပြုရ။
- ၇။ မှတ်ပုံတင်သက်တမ်းမကုန်ဆုံးမီ သက်တမ်းတိုးမြှင့်ပေးရန် လျှောက်ထားရာတွင် ဤမှတ်ပုံတင် လက်မှတ်ကို ပူးတွဲတင်ပြရမည်။
- ၈။ သက်တမ်းကုန်ဆုံးပြီး ရက်ပေါင်း (၆၀)အတွင်း သက်တမ်းတိုးမြှင့်လျှောက်ထားပါက သတ်မှတ်သည့် ဒဏ်ကြေးကို ပေးဆောင်ရမည်။
- ၉။ သက်တမ်းတိုးမြှင့်ရန် လျှောက်ထားခြင်းမရှိပါက မှတ်ပုံတင်ပျက်ပြယ်ပြီးဖြစ်သည်။

#### မှတ်ပုံတင်သက်တမ်းတိုးမြှင့်ခြင်း

စဉ်       ချလန်အမှတ်/ရက်စွဲ       မှတ်ပုံတင်သက်တမ်းကုန်ဆုံးမည့်နေ့ရက်       ခွင့်ပြုသူလက်မှတ်         ၃။       ၁၄/၁၈. ၈. ၂၀၂၂       ၃၁. ၈. ၂၀၂၃       တိုင်းဦးစီးဌာနမှူး         ၎။ ၎၈/Je. ၈. ၂၀၂၃       31 AUG 2024       ညွှန်ကြားရေးမှုး         ၂၈       31 AUG 2075       ညွန်ကြားရေးမှုး         ၂၈       31 AUG 2075       သွန်ကြားရေးမှုး         ၂၈       31 AUG 2075       သွန်ကြားရေးမှုး         ၂၈       31 AUG 2075       31 AUG 2075			-	
4 4 4 10 2024 31 AUG 2024			မှတ်ပုံတင်သက်တမ်းကုန်ဆုံးမည့်နေ့ရက်	ခွင့်ပြုသူလက်မှတ်
9" (@1 22.0.10) 31 AUG 2024			၃၁. ၈. ၂၀၂၃	တိုင်းဦးစီးဌာန မှူး
94 (61 20, 0, 10)			<b>31</b> AUG 2024	(6)
	gn	26124.0.1019	31 AUG 2025	
		ě	`	

#### မန္တလေးတိုင်းဒေသကြီးအစိုးရ စည်ပင်သာယာရေးဝန်ကြီးဌာန



ငါန်းဇွန်မြို့နယ်စည်ပင်သာယာရေးအဖွဲ့

ဂ္ဂလိကလုပ်ငန်းများ ပြုလုပ်ရောင်းချခြင်းလုပ်ငန်းလိုင်စင် ၂၀၂၄ - ၂၀၂၅ ခု ဘဏ္ဍာရေးနှစ်

လိုင်စင်နံပါတ် --- ၂၄ မန္တလေးတိုင်းဒေသကြီးစည်ပင်သာယာရေးအဖွဲ့များ ဥပဒေပုဒ်မ ( ၈၆ ) ( ခ ) ( ဂ )

လိုင်စင်ရရှိသူအမည် Oll

နိုင်ငံသားစိစစ်ရေးအမှတ် اال

အဘမည် 911

နေရပ်လိပ်စာ 911

ခွင့်ပြုသည့်လုပ်ငန်းအမျိုးအစား ၅။

လုပ်ကိုင်ခွင့်ပြုသည့်နေရာ GII

လုပ်ကိုင်ခွင့်ပြုသည့်ကာလ 211

လိုင်စင်ခ ၈။

လိုင်စင်ခငွေသွင်းချလံအမှတ်နှင့်ရက်စွဲ ၉။

လိုင်စင်ထုတ်ပေးသည့်ရက်စွဲ OOI

MR. Lijifeng

E. 73367264

MR. Li Yu Zhen

မြို့သာစက်မှုဇုန်

မော်တော်ယာဉ်တပ်ဆင်ခြင်းလုပ်ငန်း

မြို့သာစက်မှုဇုန်

( ၁. ၄. ၂၀၂၄ ) မှ ( ၃၁. ၃. ၂၀၂၅ ) ထိ ၁၂၀၀၀၀၀%/-

g )(B-G-JoJe)

(B-d-907d)

အမှုဆောင်အရာရှိ မြို့နယ်စည်ပင်သာယာရေးအဖွဲ့ ောငါန်းဇွန်မြို့

000001

#### ဤလိုင်စင်ရှိသူများ လိုက်နာရမည့်စည်းကမ်းချက်

- ၁။ ဤလိုင်စင်၏ သက်တမ်းသည် ၂၀၂၅ ခုနှစ် မတ် လ ( ၃၁ ) ရက်နေ့တွင် ကုန်ဆုံးသည်။ သက်တမ်း ကုန်ပါက သက်တမ်းတိုးခြင်းဆောင်ရွက်ရမည်။
- ၂။ ဤလိုင်စင်ကို အများပြည်သူများ မြင်သာသောနေရာ အသုံးပြုသည့် အဆောက်အအုံအတွင်း မှန်ဘောင် သွင်း၍ ချိတ်ဆွဲထားရမည်။
- ၃။ ဤလိုင်စင်ကို အခြားမည်သူတစ်ဦးတစ်ယောက်မျှ လွှဲပြောင်းပိုင်ခွင့်မရှိ။
- ၄။ စည်ပင်သာယာရေးအဖွဲ့က တာဝန်ပေးအပ်ခြင်း ခံထားရသူကဖြစ်စေ၊ စည်ပင်သာယာရေးအဖွဲ့ကဖြစ်စေ စစ်ဆေးသည့်အခါ ဤလိုင်စင်ကိုပြသရမည်။
- ၅။ စားသောက်ဖွယ်ရာများ သိုလှောင်ရန် ( သို့မဟုတ် ) ရောင်းချရန် ခင်းကျင်းထားလျှင် ကြွက်နှင့်ပိုးမွှားများ၊ ယင်ကောင်များနှင့် ဖုန်များ မဝင်နိုင်အောင် ဖုံးအုပ်ထားရမည်။ အိုးခွက်အဝတ်များကို သန့်ရှင်စင်ကြယ်စွာ ထားရမည်။ အသုံးပြုသောရေကိုလည်း သန့်ရှင်းစင်ကြယ်စွာထားရမည်။
- ၆။ အနာကြီးရောဂေါရှိသူနှင့် ကူးစက်ရောဂါပိုးရှိသူများအား စားသောက်ဖွယ်ရာများ ထုတ်လုပ်သည့် သို့မဟုတ် တည်ခင်းရောင်းချသည့် အဆောက်အအုံအတွင်း ဝင်ရောက်ခြင်းကိုသော်လည်းကောင်း၊ အလုပ်လုပ်ကိုင်ခြင်းကိုသော်လည်းကောင်း ခွင့်မပြုရ။
- ၇။ ထွေးကန်များ အမှိုက်သရိုက်ထည့်သည့်ပုံး၊ သေတ္တာစသည်များကို ဆေးကြော၍ သန့်ရှင်းစင်ကြယ်စွာထားရှိ ရမည်။
- ၈။ ဤစည်ကမ်းချက်ဖောက်ဖျက်ကျူးလွန်ပါက ဒဏ်ငွေတပ်ရိုက်ခြင်း၊ လုပ်ငန်းခေတ္တရပ်ဆဲခြင်းနှင့် လိုင်စင် ပြန်လည်ရုပ်သိမ်းခြင်းခံရမည်။

#### စက်မှုဝန်ကြီးဌာန မန္တလေးတိုင်းဒေသကြီးစက်မှုကြီးကြပ်ရေးနှင့်စစ်ဆေးရေးဦးစီးဌာန လျှပ်စစ် – စစ်ဆေးရေး

အမှတ် (၂၉)၊ အကွက် (၉၀၂)၊ ရန်ကုန် – မန္တလေးလမ်း၊ ချမ်းမြသာစည်မြို့နယ်၊ မန္တလေးမြို့ လျှပ်စစ်ဓာတ်အားအသုံးပြုခြင်းဆိုင်ရာအန္တရာယ်ကင်းရှင်းကြောင်းလက်မှတ်

လက်မှတ်အမှတ်စဉ် <b>El – MDY– NZ – 01</b>
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၂၀၁၄ ခုနှစ် လျှပ်စစ်ဥပဒေပုဒ်မ ၃၂ (ဃ) တွင် ပြဋ္ဌာန်းချက်အရ လျှပ်စစ်ဓာတ်အားအသုံးပြုခြင်း လုပ်ငန်းကို စစ်ဆေးရာတွင် လျှပ်စစ်ဥပဒေဆိုင်ရာလုပ်ထုံးလုပ်နည်းများနှင့် ကိုက်ညီကြောင်း စစ်ဆေး တွေ့ရှိရသဖြင့် အောက်ဖော်ပြပါ နေရာဒေသ၌ လျှပ်စစ်ဓာတ်အား အသုံးပြုခြင်းလုပ်ငန်းကို အန္တရာယ် ကင်းရှင်းကြောင်းလက်မှတ် ထုတ်ပေးလိုက်သည် –

OII	လျှပ်စစ်ဓာတ်အားအသုံးပြုခြင်း	000/100 9
	(က) သတ်မှတ်ဗို့အား	၄၀၀/၂၃၀ ဗို
	( ခ) ခွင့်ပြုဝန်အား	မြင်းကောင်ရေ ( 2145 ) Hp
اال	လုပ်ငန်းတည်နေရာ	
	(က) လုပ်ငန်းရှင်အမည်	MR. LI JIFENG
	( ခ) မှတ်ပုံတင်အမှတ်	E-73367264
	( ဂ) နေရာဒေသ	မြေကွက်အမှတ်–ဘီ ၁–၁ ၊ ဇုန်–၂ စီ၊
		မြို့သာစက်မှုဥယျာဉ် ၊ ငါန်းဇွန်မြို့နယ်
	(ဃ) လုပ်ငန်းအမျိုးအမည်	Gold AYA Motors International Group Co.,Ltd
		<u>မော်တော်ယာဉ်တပ်ဆင်ထုတ်လုပ်ခြင်းလုပ်ငန်း</u>
<b>911</b>	လက်မှတ်ထုတ်ပေးသည့်ရက်	၂၆ – ၃ – ၂၀၂၄
911	လက်မှတ်ကုန်ဆုံးသည့်ရက်	<u> 19 - 9 - 1019 -                        </u>
	(ကျောဘက်တွင် ဖော်ပြထားသောစည်း	းကမ်းချက်များကိုလိုက်နာရပါမည်။)
	မှတ်ချက်။	
	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	

မြင်သာသည့်နေရာတွင် ချိတ်ဆွဲထားရမည်။

စစ်ဆေးရေးမှူး

မန္တလေးတိုင်းဒေသကြီး လျှပ်စစ်စစ်ဆေး၉ရုး

1

#### လျှပ်စစ်အန္တရာယ် ကင်းရှင်းရေးအတွက် လိုက်နာဆောင်ရွက်ရမည့်စည်းကမ်းချက်များ

- ၁။ ဝါယာကြိုးပျော့များကို ရှည်လျားစွာ သွယ်တန်းအသုံးမပြုရ၊
- ၂။ လျှပ်စစ်သုံး ပစ္စည်းကိရိယာများကို စနစ်တကျ အသုံးပြုရန်၊
- ၃။ အဆောက်အဦပြင်ပ အလင်းရောင်နှင့် လုံခြုံရေးမီးများကို သီးခြားပတ်လမ်းဖြင့် ထိန်းချုပ် အသုံးပြုရန်၊
- ၄။ လျှပ်ထုတ်စက် ( Gen: Set ) များကို ပြည့်စုံသော ကာကွယ်မှုစနစ်နှင့် လိုင်းပြောင်း ခလုတ် ( Change Over Switch ) တပ်ဆင်အသုံးပြုရန်၊
- ၅။ အကာအကွယ်ပြု မြေဓာတ်ချစနစ် တပ်ဆင်၍ လျှပ်စစ်သုံးကိရိယာများ၏ ကိုယ်ထည် နှင့် ဆက်သွယ်ရန် အဆောက်အဦအတွက် မိုးကြိုးလွှဲစနစ်တပ်ဆင်ရန်၊
- ၆။ လုပ်ငန်းပြီးဆုံးသည့်အခါတိုင်း လျှပ်စစ်သုံးစက်ကိရိယာများအား ဓာတ်အားအဆင့်ဆင့် ဖြတ်တောက်ရန်နှင့် စစ်ဆေးရန်၊
- ၇။ လျှပ်စစ်အန္တရာယ် ကင်းရှင်းကြောင်း လက်မှတ်ပါ အမည်နှင့် လုပ်ငန်းများသည် ပိုင်ဆိုင်မှု ဆိုင်ရာ အထောက်အထားအဖြစ် အကျုံးမဝင်စေရ၊
- ၈။ လျှပ်စစ်အန္တရာယ်ကင်းရှင်းကြောင်း လက်မှတ်ကို မရိုးမဖြောင့်နည်းဖြင့် အသုံးပြုပါက ပြစ်မှုဆိုင်ရာ ဥပဒေအရ အရေးယူခြင်းခံရမည်၊
- ၉။ လျှပ်စစ်ဆက်သွယ် တပ်ဆင်မှုများနှင့် ပြုပြင်မှုများကို လျှပ်စစ်ကျွမ်းကျင်မှုဆိုင်ရာ လက်မှတ် ရရှိသူများဖြင့်သာ ဆောင်ရွက်ရန်၊
- ၁၀။ ခွင့်ပြုသက်တမ်းကုန်ဆုံးရက် မတိုင်မီတစ်လကြိုတင်၍ သက်တမ်းတိုးရန် လျှောက်ထား ရမည်။

တိုင်းဒေသကြီးဦးစီးဌာနမှူးရုံး မန္တလေးတိုင်းဒေသကြီးစက်မှုကြီးကြပ်ရေးနှင့် စစ်ဆေးရေးဦးစီးဌာန၊ (လျှပ်စစ်စစ်ဆေးရေး)၊ မန္တလေးမြို့ စာအမှတ်၊ ၁၅၁၅(၂၈)လစ–မတလ–၂၀၂၃( ၅၈၆၀) ရက်စွဲ၊ ၂၀၂၃ ခုနှစ်၊ ဇူလိုင် လ ၂၇ ရက်

အကြောင်းအရာ။

မန္တလေးတိုင်းဒေသကြီး ၊ တံတားဦးခရိုင် ၊ ငါန်းခွန်မြို့နယ်၊ မြို့သာစက်မှုဥယျာဉ် ၊ စက်မှုစုန်နယ်မြေ စုန်(၂)-စီ ၊ မြေကွက်အမှတ် ဘီ ၁-၁ ရှိ MR.LI JIFENG ၏ "Gold AYA Motors International Group Co.,Ltd" မော်တော်ယာဉ် တပ်ဆင် ထုတ်လုပ်ခြင်းလုပ်ငန်း အတွက် တပ်ဆင်ပြီးဖြစ်သော ၄၀၀ ဗို့ ၊ ဝ၀၀ ကေဗွီအေ ဒီစယ်အင်ဂျင် လျှပ်ထုတ်စက်(၂) လုံးဖြင့် လျှပ်စစ်ဓာတ်အား ထုတ်လုပ် ခြင်း နှင့် အသုံးပြုခြင်း ဆိုင်ရာမှတ်ပုံတင် လက်မှတ် ထုတ်ပေးခြင်း။ MR. LI JIFENG " Gold AYA Motors International Group Co.,Ltd" မော်တော်ယာဉ်တပ်ဆင်ထုတ်လုပ်ခြင်းလုပ်ငန်း ၏ (၁၉.၇.၂၀၂၃) ရက်စွဲပါ လျှောက်လွှာအရ

ရည်ညွှန်းချက်။

အထက်အကြောင်းအရာပါကိစ္စနှင့်စပ်လျဉ်း၍ မန္တလေးတိုင်းဒေသကြီး ၊ တံတားဦးခရိုင်၊ ငါန်းဇွန်မြို့နယ်၊ မြို့သာစက်မှုဥယျာဉ် မြို့တော် ၊ စက်မှုဇုန်နယ်မြေ ဇုန်(၂)–စီ ၊ မြေကွက်အမှတ် ဘီ၁–၁ ရှိ MR. Li Jifeng ၏ " Gold AYA Motors International Group Co.,Ltd " မော်တော်ယာဉ် တပ်ဆင်ထုတ်လုပ်ခြင်းလုပ်ငန်း အတွက် တပ်ဆင်ပြီးဖြစ်သော ၄ဝဝ ဗို့ ၊ ၈ဝဝ ကေဗွီအေ ဒီဧယ်အင်ဂျင် လျှပ်ထုတ်စက် (၂)လုံး ဖြင့် ၂ဝ၂၃ ခုနှစ်၊ ဇူလိုင်လ(၂၇)ရက်နေ့မှစတင်၍ လျှပ်စစ်ဓာတ်အားထုတ်လုပ် သုံးစွဲရန်အတွက် လျှပ်စစ်ဓာတ်အားထုတ်လုပ် တစ်စောင်ကိုထုတ်ပေးလိုက်သည်။

စစ်ဆေးရေးမှူး

မန္တလေးတိုင်းဒေသကြီး လျှပ်စစ်စစ်ဆေးရေး

MR. LI JIFENG

Gold AYA Motors International Group Co.,Ltd မြေကွက်အမှတ် ဘီ၁–၁ ၊ စက်မှုဇုန်နယ်မြေ ဇုန်(၂)–စီ မြို့သာစက်မှုဥယျာဉ် ငါန်းဇွန်မြို့နယ်

#### မိတ္တူကို

- ညွှန်ကြားရေးမှူး၊ လျှပ်စစ်စစ်ဆေးရေးဌာန၊ စက်မှုကြီးကြပ်ရေးနှင့်စစ်ဆေးရေးဦးစီးဌာန၊ နေပြည်တော်
  - ဦးစီးဌာနမှူး၊ မန္တလေးတိုင်းဒေသကြီး စက်မှုကြီးကြပ်ရေးနှင့်စစ်ဆေးရေးဦးစီးဌာန၊
- ရုံးလက်ခံ၊
- မျှောစာတွဲ

#### ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော် စက်မှုဝန်ကြီးဌာန စက်မှုကြီးကြပ်ရေးနှင့် စစ်ဆေးရေးဦးစီးဌာန (လျှပ်စစ်စစ်ဆေးရေး)

လျှပ်စစ်ဓာတ်အားထုတ်လုပ်ခြင်းနှင့်အသုံးပြုခြင်းဆိုင်ရာ မှတ်ပုံတင်လက်မှတ်

ခွင့်ပြုမိန့် အမှတ်စဉ်၊ ၀၇၇ /၂၀၁၉

၂၀၁၄ခုနှစ် လျှပ်စစ်ဥပဒေ ပုဒ်မ၃၂(င)နှင့် တည်ဆဲလျှပ်စစ်ဥပဒေဆိုင်ရာ လုပ်ထုံးလုပ်နည်း IIC များအရ MR. LI JIFENG ၏ "Gold AYA Motors International Group Co.,Ltd " အတွက် တပ်ဆင် ပြီးဖြစ်သော ဒီဇယ်အင်ဂျင်လျှပ်ထုတ်စက်အား အောက်ဖော်ပြပါနယ်မြေဒေသအတွင်း မှတ်ပုံတင် လျှပ်စစ်ဓာတ်အား ထုတ်လုပ်ခြင်းနှင့်အသုံးပြုခြင်းဆိုင်ရာမှတ်ပုံတင်လက်မှတ်ကို ထုတ်ပေးလိုက်သည်–

(က) ခွင့်ပြုသည့်နယ်မြေ

- မြေကွက်အမှတ် ဘီ၁–၁၊ဇုန်(၂)–စီ ၊ မြို့သာစက်မှုဥယျာဉ်

မြို့နယ်

– ငါန်းဇွန်မြို့နယ်၊

တိုင်း

– မန္တလေးတိုင်းဒေသကြီး။

(ခ) အများဆုံးထုတ်လုပ်သည့် – 800 KVA ဓာတ်အားပမာဏ

(ဂ) သတ်မှတ်ဗို့အား

- 400 V

(ဃ) လျှပ်ထုတ်စက်အမျိုးအစား – Model No; JHY–640CF(Jiangsu Jianghao –China)

(c) လျှပ်ထုတ်စက်နှံပါတ်

- Serial No; 1811099

(စ) အင်ဂျင်အမျိုးအစား

- Model No;YC6TD1000-D30(Guangxi Yuchai-China)

(ဆ) အင်ဂျင်မြင်းကောင်ရေ

- 735 KW

(ဧ) အင်ဂျင်နံပါတိ

- Serial No; TD820J90078

ဓာတ်အားထုတ်လုပ်ခြင်းနှင့် အသုံးပြုခြင်းတို့အတွက် အသုံးပြုသော လျှပ်စစ်ပစ္စည်း ကိရိယာ တည်ဆောက်မှု ဆိုင်ရာ နည်းစနစ်များသည် လျှပ်စစ်ဥပဒေဆိုင်ရာ လုပ်ထုံးလုပ်နည်း ပြဋ္ဌာန်းချက်များအရဖြစ်ရမည့်အပြင် စစ်ဆေးရေးမှူး၏ စမ်းသပ်စစ်ဆေးခြင်းကို ခံယူရပါမည်။

လျှပ်စစ်ဥပဒေဆိုင်ရာလုပ်ထုံးလုပ်နည်းပါပြဋ္ဌာန်းချက်များကိုတိကျစွာလိုက်နာဆောင်ရွက်ရမည်။ 211 လျှပ်စစ်ဥပဒေဆိုင်ရာ လုပ်ထုံးလုပ်နည်းများနှင့် ဤလက်မှတ်တွင် ပါရှိသော အကြောင်း အရာ များကို လိုက်နာခြင်းမရှိပါက ထုတ်ပေးထားသော လက်မှတ်ကို ပြန်လည်ရုတ်သိမ်းမည်။

ဤမှတ်ပုံတင်လက်မှတ်သက်တမ်းသည် ခွင့်ပြုသည့်နေ့ မှစတင်၍ (၄)နှစ်အချိန် ကာလအတွင်း ၅။

အကျိုး သက်ရောက် စေရမည်။

စတင်ခွင့်ပြုသည့်နေ့ – ၂၇ . ၇ . ၂၀၂၃

ကုန်ဆုံးသည့်နေ့

- \_16. 9. 1019

စစ်ဆေးရေးမှူး

မန္တလေးတိုင်းဒေသကြီး လျှပ်စစ်စစ်ဆေးရေး<sub>ဇာ</sub>

#### ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော် စက်မှုဝန်ကြီးဌာန

စက်မှုကြီးကြပ်ရေးနှင့် စစ်ဆေးရေးဦးစီးဌာန

(လျှပ်စစ်စစ်ဆေးရေး)

လျှပ်စစ်ဓာတ်အားထုတ်လုပ်ခြင်းနှင့်အသုံးပြုခြင်းဆိုင်ရာ မှတ်ပုံတင်လက်မှတ်

ခွင့်ပြုမိန့် အမှတ်စဉ်၊ ၀၇၆ /၂၀၁၉

၂၀၁၄ခုနှစ် လျှပ်စစ်ဥပဒေ ပုဒ်မ၃၂(င)နှင့် တည်ဆဲလျှပ်စစ်ဥပဒေဆိုင်ရာ လုပ်ထုံးလုပ်နည်း IIC များအရ MR. LI JIFENG ၏ "Gold AYA Motors International Group Co.,Ltd " အတွက် တပ်ဆင် ပြီးဖြစ်သော ဒီဇယ်အင်ဂျင်လျှပ်ထုတ်စက်အား အောက်ဖော်ပြပါနယ်မြေဒေသအတွင်း မှတ်ပုံတင် လျှပ်စစ်ဓာတ်အား ထုတ်လုပ်ခြင်းနှင့်အသုံးပြုခြင်းဆိုင်ရာမှတ်ပုံတင်လက်မှတ်ကို ထုတ်ပေး လိုက်သည်–

(က) ခွင့်ပြုသည့်နယ်မြေ

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မြို့နယ်

– ငါန်းဇွန်မြို့နယ်၊

တိင်း

– မန္တလေးတိုင်းဒေသကြီး။

(ခ) အများဆုံးထုတ်လုပ်သည့် – 800 KVA ဓာတ်အားပမာဏ

(ဂ) သတ်မှတ်ဗို့အား

- 400 V

(ဃ) လျှပ်ထုတ်စက်အမျိုးအစား – Model No; JHY-640CF(Jiangsu Jianghao -China)

(c) လျှပ်ထုတ်စက်နှံပါတ်

- Serial No: 1811100

(စ) အင်ဂျင်အမျိုးအစား

- Model No;YC6TD1000-D30(Guangxi Yuchai-China)

(ဆ) အင်ဂျင်မြင်းကောင်ရေ

- 735 KW

(e) အင်ဂျင်နှံပါတ်

- Serial No; TD820J90075

ဓာတ်အားထုတ်လုပ်ခြင်းနှင့် အသုံးပြုခြင်းတို့အတွက် အသုံးပြုသော လျှပ်စစ်ပစ္စည်း ကိရိယာ တည်ဆောက်မှု ဆိုင်ရာ နည်းစနစ်များသည် လျှပ်စစ်ဥပဒေဆိုင်ရာ လုပ်ထုံးလုပ်နည်း ပြဋ္ဌာန်းချက်များအရဖြစ်ရမည့်အပြင် စစ်ဆေးရေးမှူး၏ စမ်းသပ်စစ်ဆေးခြင်းကို ခံယူရပါမည်။

လျှပ်စစ်ဥပဒေဆိုင်ရာလုပ်ထုံးလုပ်နည်းပါပြဋ္ဌာန်းချက်များကိုတိကျစွာလိုက်နာဆောင်ရွက်ရမည်။ 119 လျှပ်စစ်ဥပဒေဆိုင်ရာ လုပ်ထုံးလုပ်နည်းများနှင့် ဤလက်မှတ်တွင် ပါရှိသော အကြောင်း အရာ

များကို လိုက်နာခြင်းမရှိပါက ထုတ်ပေးထားသော လက်မှတ်ကို ပြန်လည်ရတ်သိမ်းမည်။

ဤမှတ်ပုံတင်လက်မှတ်သက်တမ်းသည် ခွင့်ပြုသည့်နေ့ မှစတင်၍ (၄)နှစ်အချိန် ကာလအတွင်း ၅။ အကျိုး သက်ရောက် စေရမည်။

စတင်ခွင့်ပြုသည့်နေ့ – ၂၇ . ၇ . ၂၀၂၃

ကုန်ဆုံးသည့်နေ့

- [6. 7. 10]?

စစ်ဆေးရေးမျူး

မန္တလေးတိုင်းဒေသကြီး လျှပ်စစ်စစ်ဆေးရေး

#### CSR PLAN

### GOLD AYA MOTORS INTERNATIONAL GROUP COMPANY LIMITED

#### CSR Plan of Gold Aya Motors International Group Company Limited

Gold Aya Motors International Group Company Limited, situated at Plot No. B-1-1, Block- Factory Area, Zone: 2C, Myotha Industrial Park, Between Myotha and Nabu-Aing Village, Ngazun Township, Myingyan District, Mandalay Region, Myanmar. The factory contains () buildings and it is in the area of (81,341.245) square meter (Approximately 20.1 Acre). The business is Automobile Assembly Plant.

CSR plan of the company is laid out as follows:-

- (1) Training courses concerning business techniques will be held to improve Employee's skills;
- (2) Invite Foreign Technicians to teach business skills to Employees both in theory and practical;
- (3) Foreign Language training Course will be held at the Factory to improve speaking skills of employees;
- (4) Supply uniforms, borrow loans without interest to employees to develop employees' living standard;
- (5) Sport and recreation Centre will be available at factory compound for employees' welfare;
- (6) Annual religious ceremony, new year eve celebrations and other occasional festivals will be held for employees' welfare;
- (7) Support to education matters of employees' children; and
- (8) Support Health care to employees and their families.

#### **Basic Principle of CSR Management**

The management of company will always be performed fair and square to all employees. The employees are at the important role in implementing development of business, to fulfill the aim and objectives, to stand long lasting of business. The Management of the company will make the employees' norms of performance to develop.

#### Important facts to be followed

The Management Team make to know everything about the factory's situation and take responsibilities to find ways and means of any problems and solve it whenever it is occurred. Basic principle of CSR must be thoroughly known and will follow as mentioned below: -

Create the methods of producing new product, control the quality of product and try to fulfill the Customers' safety and satisfaction;

- (1) Fulfilling employees' social needs such as humanitarian assistance, health aide, welfare, special bonus/ pocket money for traditional festivals;
  - (2) To follow Environmental Rules and regulation continuously, try to develop Environmental Affairs, reduce the suffering of environmental problems and reduce producing CO<sub>2</sub>, avoid using bad effected chemical; and etc.
  - (3) Follow and practice existing rules and regulation and draw up a code of ethics which will be on equal terms globally;
  - (4) Dealing with public or employees should be based on trust and responsibilities (such as not to employ child labour, never violate Human Rights, and etc.)
  - (5) Implement good work environment (safety of employees, discrimination, by using clean drinking water for health care, have clean canteen, separate W/C for men and women and manage to be clean forever, etc.)

#### Create new product/ Quality Control/ obtaining customers' satisfaction

- 1. Will follow and practice existing law, rules & regulations prescribed by Government and respect Human Rights and workers' rights. Will try to attain customers' full satisfaction. Work schedule will be laid down to obtain long lasting of business based on Quality control, specify norms of products, checking & control the products' quality, finding & creating methods for producing new products.
- 2. Activities which is recognized by human society-
  - (a) Form labour organization

    Respect and give special consideration in forming of labour union with worker's own choice;
  - (b) Recoupment of worker

    Recruit workers without considering by citizen, religion, colour of skin, age,

    pregnancy and disability.
  - (c) Health care
    "Safety First" is the most priority at work site for reduce of causing accident.
    Doctor and nurse are made available at the factory to take care of workers.
    Arrangement will be made for casually unwell workers to see factory doctor and

send seriously sick workers to SSB immediately. Take care carefully to those patient and make them to enjoy full salary. Grant maternity leave to pregnant workers as prescribed by the Government leave rule.

- (d) Workers' welfare
  - (1) Grant weekly support;
  - (2) Grant for occasion of sorrow to workers' closed relatives;
  - (3) Free ferry transport; and
  - (4) Grant for days of special significant.
- 3. To reduce causing environmental damages:-

Will follow as follows: -

- (a) Protect forced labour;
- (b) Forbid recruiting child labour;
- (c) Forbid discrimination;
- (d) Respect for organizing labour union independently and the right of give & take collectively;
- (e) Forbid violation & non-humanitarian actions;
- (f) Give Priority to security and clean work site;
- (g) Give salary punctually;
- (h) Avoid to assign duty at out of office hour;
- (i) Appoint the workers officially;
- (j) Try to reach production standard;
- (k) Safety of Products must be the first priority for customers;
- (1) Educate Environment Affairs;
- (m) Control the safety of information;
- (n) Keep the norm of products;
- (o) Try to be transparent;
- (p) Respect rules & laws of Government;
- (q) Practice the development of good control and good follower; and
- (r) Behave ethically and ways of reporting complaints will have to be laid out.

#### The relationship based on trust and responsibilities

- (1) The factory will be performed to develop without facing losses based on trust and responsibilities.
- (2) Follow basic principle & production discipline;

- (3) Practice to nurture workers' accountability & responsibility spirit and make them to be confident;
- (4) There will not be occurred such disturbances caused by behavior, performance, torture, give strong punishment at work site.

#### Create perfect work site

- (1) Take responsibilities to enjoy fair & square in any cases such as Job offer, appointing job, promotion, wages & salary and bonus;
- (2) Be equal in allocation of work, give assignment, offer for increase wages, consideration of paying bonus and assessment of workers' skills;
- (3) The HR manager has to take into consideration for the advices given by workers and make fulfill as much as possible. Arrange training courses to be held and let the workers to be able to attend.

#### Conclusion

3% on Net Profit is reserved every year for CSR. The Funds will be allocated to the plans in watching of the task which will be the least of suffering from environment and social affairs. The factory, employees and other respective persons can obtain many benefits by supporting & practicing of the CSR programme.

To

Chairman,
Myanmar Investment Commission,
Yangon.

Dated:

February 2018

Subject

Submission of welfare programme for employees

We, Gold Aya Motors International Group Company Limited, incorporated in Myanmar has submitted an application to the Myanmar Investment Commission for issuance of a foreign investment permit to establish a Automobile Assembly Plant at Plot No. B-1-1, Block: Factory Area, Zone: 2C, Myotha Industrial Park, Between Myotha and Nabu-Aing Village, Ngazune Township, Myingyan District, Mandalay Region, Myanmar, measuring (81,341.245) square meter (Approximately 20.1 Acre).

We hereby submit that we have made all necessary arrangements of welfare programme for employees are as follows:-

- 1. Arrange accommodation at factory or free transport for employees;
- 2. Provide gratuity to punctual employees;
- 3. Arrangement will be made to be entitled overtime charges of double rate on their salary whenever employees need to work overtime. If overtime reaches until late in the night, necessary meal will also be provided;
- 4. Rest room and first-aid box will be reserved for sick workers. If any accident happens, arrangement will be made to send the people hurt in accident to the Social Security Clinic soon after the accident is happened.
- 5. Social Security contribution will be contributed for both employers' side and employees' side.

Yours faithfully,

Mr. Li Jifeng
Promoter
Gold Aya Motors International
Group Company Limited

Mr. Li Jifeng Director Gold Aya Motors International Group Co., Ltd.

Annex 5.1

Gold A Y A Motors International Group Co.,Ltd ကတည်ဆောက်ဆောင်ရွက်မည့် မော်တော်ယာဉ်တပ်ဆင်ထုတ်လုပ်ခြင်းလုပ်ငန်းစက်ရုံစီမံကိန်းကြောင့်ဖြစ်ပေါ်နိုင်သည့်

### သဘာဝပတ်ဝန်းကျင်နှင့်လူမှုစီးပွားရေးဆိုင်ရာ ထိခိုက်မှုများရှိ/မရှိ စစ်တမ်းများကောက်ယူသည့်အစည်းအဝေး

၅- ၇ -၁၈ (ကြာသပတေးနေ့)

တာဝန်ခံစစ်တမ်းများကောက်ယူသည့်အဖွဲ့ ။ ကောင်းကျော်စေအင်ဂျင်နီယာလုပ်ငန်းကုမ္ပဏီလီမိတက်။ အမှတ်(၃၁)ပင်လုံရိပ်မွန်၊သင်္ဃန်းကျွန်းမြို့ နယ်၊ရန်ကုန်မြို့ ။ ဖုံး ၅၇၁၂၈၄



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မန္တလေးတိုင်းဒေသကြီးမြင်းခြံခရိုင်၊ ငါန်းဇွန်မြိုနယ်၊ မြိုသာစက်မှုဇုန်၊မြိုသာနှင့်နဘူးအိုင်ကျေးရွာမြေကွက် အမှတ်ဘီ-၁-၁၊ မြေတိုင်းရပ်ကွက်အမှတ်-စက်မှုနယ်မြေ၊ဇုန်-၂-စီ၊ မြိုသာစက် မှုဥယျာဉ်မြိုတော်ရှိ မြေအကျယ်(၂၀. ၁၀)ဧကမြေပေါ် တွင်

Gold A Y A Motors International Group Co.,Ltd ကတည်ဆောက်ဆောင်ရွက်မည့် မော်တော်ယာဉ်တပ်ဆင်ထုတ်လုပ်ခြင်းလုပ်ငန်းစက်ရုံစီမံကိန်း<u>ကြောင့်</u> သဘာဝပတ်ဝန်းကျင်နှင့်လူမှုစီးပွားရေးထိခိုက်မှုများဖြစ်ပေါ်နိုင်ခြင်း ရှိ/မရှိ စစ်တမ်းများကောက်ယူသည့် <u>အစည်းအဝေးအစီအစဉ်။</u>

၅ ၊ ၇ ၊ ၂၀၁၇ (ကြာသပတေးနေ့)

#### မြုသာစက်မှုဇုန်စီမံကိန်း၊အစည်းအဝေးခန်းမ။

စဉ်	အချိန်	အကြောင်းအရာ
	၈'၃၀မှ ၉'၀၀	တက်ရောက်သူများအမည်စာရင်းပေးသွင်းခြင်း။
0	e'00	အခမ်းအနားအစီအစဉ်ဖတ်ကြားခြင်းနှင့်အခမ်းအနားစတင်ခြင်း။
J	e <b>ં</b> ગ	ငါန်းဇွန်မြို့ နယ်၊အထွေထွေအပ်ချုပ်ရေးမှုးမှ အဖွင့်အမှာစကားပြောကြားခြင်း။
9	၉'၁၅	ကောင်းကျော်စေအင်ဂျင်နီယာလုပ်ငန်းကုမ္ပဏီလီမိတက်၏ဥက္ကဌမှမိတ်ဆက် ရှင်းလင်းစကားပြောကြားခြင်း။
9	e <b>,</b> 50	Gold A Y A Motors International Group Co.,Ltd တာဝန်ရှိသူမှစီမံကိန်း တည်ဆောက်မှု လုပ်ငန်းစဉ်အကြောင်းသေးစိပ်ရင်းလင်းတင်ပြခြင်း။
ງ	ɔo'oo	သိရှိလိုသည့်မေးခွန်းများမေးမြန်းခြင်းနှင့်သက်ဆိုင်ရာမှဖြေဆိုပေးခြင်း။
હ	20,50	ကောင်းကျော်စေအင်ဂျင်နီယာလုပ်ငန်းကုမ္ပဏီလီမိတက်၏ဥက္ကဌမှစစ်တမ်း ကောက်ယူမှုအစီအစဉ်အသေးစိပ်ရှင်းလင်းတင်ပြခြင်း၊မေးခွန်းများဖြန့် ဝေခြင်း။
5	၁၁'00	တက်ရောက်လာသူများမှမေးခွန်းများကိုဖြေဆိုပြီးပြန်လည်ပေးအပ်ခြင်း။
0	၁၁'၁၅	ငါန်းဇွန်မြို့ နယ်အထွေထွေအုပ်ချုပ်ရေးမှုးမှ အပိတ်စကားပြောကြားခြင်း။
e	ാൃ'oo	အစည်းအဝေးပြီးမြောက်အောင်မြင်ခြင်း။
00	ാൃ'ാഠ	နေ့ လည်စာဖြင့်တည်ခင်းဧည့်ခံခြင်း။



### KAUNG KYAW SAY GROUP OF COMPANIES KAUNG KYAW SAY ENGINEERING CO., LTD



Your Most Reliable Service Company in Myanmar

စာအမှတ် EIA-SIA(GAMG)-၂/၁၈ ဇွန်လ ၁၆ရက်၂၀၁၈ ခုနှစ်

သို့

(၁) စီမံကိန်းအနီးတွင်နေထိုင်သက်ဆိုင်သူအားလုံး(ကိုယ်တိုင်(သို့ )ကိုယ်စားလှယ်)။

(၂) အစိုးရနှင့်အစိုးရမဟုတ်သောအဖွဲ့ များမှသက်ဆိုင်သူများ။

(၃) မြို့နယ်အထွေထွေအုပ်ချုပ်ရေးမှူး၊ ငါန်းဇွန်မြို့ နယ်။

(၄)မြိုသာစက်မှုဇုန်ကြီးကြပ်ရေးကော်မတီအဖွဲ့ဥက္ကဌနှင့်အဖွဲ့ဝင်များအားလုံး။

အကြောင်းအရာ။

Gold A Y A Motors International Group Co.,Ltd ကမန္တလေးတိုင်းဒေသကြီးမြင်းခြံ ခရိုင်၊ ငါနးဇန်မြိုနယ်၊ မြိုသာစက်မှုဇုန်းမြိုသာနှင့်နဘူးအိုင်ကျေးရွာမြေကွက် အမှတ်ဘီ-၁-၁၊ မြေတိုင်းရပ်ကွက်အမှတ်-စက်မှုနယ်မြေ၊ဇုန်-၂-စီ၊ မြိုသာစက် မှုဥယျာဉ်မြိုတော်ရှိ မြေ(၂၀. ၁၀)ဧကပေါ် တွင်မော်တော်ယာဉ်တပ်ဆင်ထုတ် လုပ်ခြင်းလုပ်ငန်းစီမံကိန်းဆောင်ရွက်မည့်အနီးပတ်ဝန်းကျင်နှင်တကွသက် ဆိုင်သူများနှင့်ဆွေးနွေးအကြံပြုချက်များပြုလုပ်နိုင်ရန်အစည်းအဝေးသို့ ဖိတ် ကြားခြင်း။

## လေးစားအပ်ပါသောလူကြီးမင်းများခင်ဗျား၊

- ၁. အထက်ပါကိစ္စနှင့်ပတ်သက်၍ Gold A Y A Motors International Group Co.,Ltd က မန္တလေးတိုင်း ဒေသကြီးမြင်းခြံ ခရိုင်၊ ငါန်းဇွန်မြိုနယ၊ မြိုသာစက်မှုဇုန်းမြိုသာနှင့်နဘူးအိုင်ကျေးရွာမြေကွက် အမှတ်ဘီ-၁-၁၊ မြေတိုင်းရပ်ကွက်အမှတ်-စက်မှုနယ်မြေ၊ဇုန်-၂-စီ၊ မြိုသာစက်မှုဥယျာဉ်မြို တော်ရှိ မြေ(၂ဝ. ၁ဝ)ဧကပေါ် တွင်မော်တော်ယာဉ်တပ်ဆင်ထုတ်လုပ်ခြင်းလုပ်ငန်းစီမံကိန်း ဆောင်ရွက်မည့်အပေါ် နိုင် ငံတော်၏ဘက်စုံစီးပွားရေးကဏ္ဍဖွံ ဖြိုးပြီးဝင်ငွေတိုးတက်ရရှိစေ ရေးအပါအဝင်အလုပ်အကိုင်များဖွံ့ ဖြိုးတိုးတက်လာရေးနှင့်တစ်ဦးချင်းနှင့်နိုင်ငံတော်၏စီးပွား ရေးပိုမိုမြင့်မားလာပြီးဝင်ငွေတိုးတက်လာစေရေးအတွက်ရည်ရွယ်အကောင်အထည်ဖေါ် ဆောင်ရွက်သွားရန်ရှိပါသည်။
- ၂. ယခုအခါအထက်ပါစီမံကိန်း၏လုပ်ငန်းစဉများကိုချပြနိုင်ရန်နှင့်လူကြီးမင်းတို့ ၏အကြံဉာဏ် များရယူပြီးအကောင်အထည်ဖေါ် ဆောင်သွားလိုပါသည်။ ယခုလုပ်ကိုင်မည့်စီမံကိန်းကြောင့် ပတ်ဝန်းကျင်နှင့်လူမှုစီးပွားရေးအပေါ် ထိခိုက်မှုများဖြစ်ပေါ်နိုင်ခြင်းရှိ/မရှိကိုကျွန်တော်များ ကောင်းကျော်စေအင်ဂျင်နီယာလုပ်ငန်းကုမ္ပဏီလီမိတက်မှဦးဆောင်၍ လူကြီးမင်းတို့ နှင့်အတူ တကွဆွေးနွေးလိုပါသဖြင့်အောက်ပါအစီအစဉ်အတိုင်းကြွရောက်ဆွေးနွေးပေးပါရန်လေးစား စွာဖိတ်ကြားအပ်ပါသည်။



# KAUNG KYAW SAY GROUP OF COMPANIES



။ မြုသာစက်မှုဇုန်စီမံကိန်းအစည်းအဝေးခန်းမ။ ။ ဇူလိုင်လ ၅ ရက်၊၂၀၁၈။ (စနေနေ့) ။ နံနက် ၉းဝဝ နာရီ။

သို့ ဖြစ်ပါ၍ စီမံကိန်းအကောင်အထည်ဖေါ် ဆောင်ရွက်နိုင်ရန်အတွကလိုအပ်သည့စစ်တမ်းကောက်ယူ ခြင်းကိုလူကြီးမင်းတို့ နှင့်အတူတကွဆွေးနွေးနိုင်ရန်အစည်းအဝေးသို့ တက်ရောက်ပေးပါရန်လေးစား စွာဖိတ်ကြားအပ်ပါသည်။

လေးစားစွာဖြင့်

ထွန်းနိုင်အောင် နိုင်ငံသားလက်မှတ်အမှတ် ၁၂/ဗဟန(နိုင်) ဝ၉၇၄၄၅ ကောင်းကျော်စေအင်ဂျင်နီယာလုပ်ငန်းကုမ္ပဏီလီမိတက်။ ဥတ္ကဌ၊ စွမ်းအင်နှင့်သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးအဖွဲ့ မြန်မာ ဉတ္တဌ၊ နိုင်ငံ စက်မှုကုန်ထုတ်လုပ်သူများအသင်း။(MIA-EEnG)

(CDM Cooperation Board-Myanmar)စုမ်းအင် အတွင်းရေးမူး၊

အကဲဖြတ်ဒိုင်၊ Board of Judges, ASEAN စွမ်းအင်ဆုရွေးချယ်ရေးအဖွဲ့ ၊

ASEAN Center for Energy (ACE)

။(၁)ရုံးလက္ခံ။ မိတ္ကူ။

လွှဲမှား မူမဖြစ်စေရန်မြန်မာဘာသာဖြင့်သာရေးသားတင်ပြအပ်ပါသည်။

ယခုအပိုင်းသည်သက်ဆိုင်သူများနှင့်ဆွေးနွေးမှုများဖြစ်သောကြောင့်ဆွေးနွေးချက်များ၏မှုရင်းဆိုလိုချက်များ

သက်ဆိုင်သူများနှင့်တွေ့ဆုံဆွေးနွေးခြင်း။

စဉ်	နေ့ စွဲ	အကြောင်းအရာ	ကျင်းပသည့်နေရာ
0	၂၀၁၈ ဇူလိုင်လ ၅ ရက်	ငါန်းဇွန်မြို့ နယ်ရှိ ဌာနဆိုင်ရာများ၊အစိုးရမဟုတ်သောအဖွဲ့ အစည်းများမှတာဝန်ရှိသူ များ၊ ရပ်မိရပ်ဖလူကြီးများနှင့်စိတ်ပါဝင်စားသူများနှင့်စီမံကိန်းအပေါ် သဘောထား ကောက်ယူခြင်း။	MMID ကုမ္ပဏီရုံးခန်းမ

သက်ဆိုင်သူများနှင့်လူထုတွေဆုံပွဲကို၂၀၁၈ ခုနှစ်ဇူလိုင်လ၅ ရက်နေ့ တွင်ငါန်းဇွန်မြိုနယ်မှသက်ဆိုင်ရာအစိုးရနှင့် အရပ်ဘက်အဖွဲ့အစည်းများပါဝင်သောအစည်းအဝေးကို MMID ကုမ္ပဏီရုံးခမ်းမ၌ပြုလုပ်ရာအခန်းအနားအစီအစဉ် အရမြိုသာအုပ်စုအုပ်ချုပ်ရေးမှုးကအဖွင့်အမှာစကားပြောကြားပေးပြီးနောက်၊ကောင်းကျော်စေအင်ဂျင်နီယာလုပ်ငန်း ကုမ္ပဏီ၏ဥက္ကဌမှနှုတ်ခွန်းဆက်စကားပြောကြားပြီး၊အစည်းအဝေးသို့ တက်ရောက်လာသူများအားယခုအစည်းအဝေး ခေါ် ယူရသည့်အကြောင်းကိုဦးစွာသဘောပေါက်နားလည်စေရန်ရှင်းလင်းတင်ပြပါသည်။



ဆက်လက်၍စီမံကိန်းအကြောင်းအသေးစိပ်တင်ပြပေးရန်ဖိတ်ခေါ် သည့်အခါ Gold A Y A Motors International Group Co., Ltd ၏တာဝန်ရှိသူမှစီမံကိန်းအကြောင်းအသေးစိပ်နှင့်တကွသဘာဝပတ်ဝန်းကျင်ထိခိုက်မှုမရှိစေရန်လုပ် ဆောင်မှုများ၊ လုပ်သားအင်အားခန့် အပ်ထားမှုများနှင့်လူမှုရေးပူးပေါင်းဆောင်ရွက်ထားရှိမှုများကိုအသေးစိပ်အချက် အလက်များ ကိုဆလိုက်ကားချပ်များနှင့်တကွရှင်းလင်းတင်ပြသွားပါသည်။







ထို့နောက်အစည်းအဝေးသို့ တက်ရောက်လာသူများမှမိမိတို့ သိရှိလိုသည်များ၊ မရှင်းလင်းသေးသည့်အချက်အ လက်များစသည်တို့ကို ပွင့်ပွင့်လင်းလင်းဆွေးနွေးနိုငရန်ဖိတ်ခေါ် သည့်အခါအနီးအနားတွင်နေထိုင်သူများမှစီမံကိန်း ကြောင့်ဖြစ်ပေါ် လာနိုင်သည့် သဘာဝပတ်ဝန်းကျင်ထိခိုက်နိုင်မှုများ၊လူမှုစီးပွါးဆိုင်ရာထိခိုက်နိုင်မှုများကိုမေးခွန်း များကိုကိုယ်တိုင်မေးမြန်းပြီးအကြံပြုတင်ပြဆွေးနွေးသွားပါသည်။

ဆက်လက်၍စီမံကိန်းအကြောင်းအသေးစိပ်ဆွေးနွေးကြရာတာဝန်ရှိသူများကလည်းပုံစံကားချပ်များနှင့်တကွရှင်း လင်းတင်ပြသွားပါသည်။ အဆိုပါမေးမြန်းမှုများနှင့်ပတ်သက်သည့်အကြောင်းအရာများကို Gold A Y A Motors International Group Co.,Ltd ၏တာဝန်ရှိသူမှနားလည်ကြေနပ်သည့်အထိပြန်လည်ဖြေကြားသွားပါသည်။ ရှေးဦးစွာမြိုသာကျေးရွာမှဦးသောင်းတင်ကမြိုသာသသည်တနှစ်ပတ်လုံးမိုးရေချိန်အားဖြင့်လက်မ ၂ဝအောက်သာရှိသ ည့်မိုးနဲသောကြောင့်စီးပွါးရေးကျပ်တည်းပြီးဆင်းရဲသည့်ဒေသတစ်ခုဖြစ်ပါကြောင်းယခုစီမံကိန်းကိုသိရှိသည့်အချိန်မှစ၍ ဒေသခံများကကြိုဆိုခဲ့ကြပါကြောင်းပြောကြားပါသည်။

CSRနှင့်ပတ်သက်သည်များမည်သို့စီစဉ်ထားရှိသည်ကိုသိလိုပါကြောင်းနှင့်မိမိတို့ဒေသမှနိုင်ငံရပ်ခြားတွင်သွားရောက် လုပ်ကိုင်ခဲ့သူများယခုအခါပြန်လည်ရောက်ရှိလာသူများပါရှိသဖြင့်စီမံကိန်းကြောင့်ပေါ် ပေါက်လာနိုင်သည့်အလုပ်အ ကိုင်အခွင့်အလမ်းများအကြောင်းသိရှိလိုပါသည်ဟုရိုးသားစွာတင်ပြမေးမြန်းသွားပါသည်။



မေးမြန်းမှုအပေါ် စီမံကိန်းတာဝန်ရှိသူမှမိမိတို့စီမံကိန်းအတွက်လိုအပ်သည့် အလုပ်အကိုင်၁ဝဝခန့်တွင်ပြည်တွင်းမှလုပ် သားများ၈၀%ခန့်အလုပ်အကိုင်ခန့်အပ်မည်ဖြစ်ကြောင်းရှင်းလင်းဆွေးနွေးပါသည်။ယခုစစ်တမ်းကောက်ယူမှုသည်ဇုန် တစ်ခုလုံးအတွက်မဟုတ်ဘဲစက်ရုံတစ်ခုချင်းအလိုက်သီးခြားစစ်ဆေးသွားရန်လိုအပ်မည်ဖြစ်ကြောင်းနှင့် CSRကိုလည်း စက်မှုဇုန်ဖေါ် ထုတ်သည့် MMID နှင့်သီးခြားဆောင်ရွက်သွားရန်ရှိပါကြောင်းဦးထွန်းနိုင်အောင်မှဆက်လက်ရှင်းလင်း ပြောကြားပါသည်။



ဆက်လက်၍ ဒုရဲအုပ်နိုင်လင်းအောင်ကစီမံကိန်းမှထွက်ရှိလာသောမော်တော်ယာဉ်များကိုမည်သည့်နိုင်ငံတွင်ထုတ်လုပ် သည်ဆိုသည့် Made ကိုမည်သို့ရေးသားဖေါ် ပြမည်ကိုသိရှိလိုပါကြောင်းနှင့်အလုပ်သမားများအားမည်သည့်အခွင့်အ ရေးများပေးမည်ကိုသိရှိလိုပါကြောင်းမေးမြန်ရာ၊တာဝန်ရှိသူမှစီမံကိန်းစက်ရုံသည် မြန်မာနိုင်ငံတွင်တည်ရှိပြီးပြည်တွင်း ၌သာတပ်ဆင်ထုတ်လုပ်သောကြောင့် Made in Myanmar ဟုသာတပ်ဆင်မည်ဖြစ်ကြောင်းနှင့်အလုပ်သမားများအ တွက်နေ့လည်စာကျွေးခြင်း၊နားနေချိန်ပေးခြင်းနှင့်နေ့စဉ်အလုပ်ချိန်၈နာရီထက်ကျော်လွန်ပါကသတ်မှတ်ထားသည့်အ ချိန်ပိုလုပ်ခပေးခြင်းအပြင်ထိခိုက်မှုနှင့်နာမကျန်းမှုများကိုလည်းကျန်းမာရေးဆိုင်ရာများစီစဉ်ပေးသည်သာမကဘဲမြန်မာ နိုင်ငံရှိတည်ဆဲဥပဒေများအတိုင်းလိုက်နာသွားမည်ဖြစ်ပါကြောင်းဖြေကြားသွားပါသည်။ထိုအပြင်စီမံကိန်းအရယခုနှစ် ၁၀လပိုင်း၃၀ရက်နေ့မှစတင်ထုတ်လုပ်ရန်လျာထားသည့်အတွက်အလုပ်အကိုင်များအတွက်ကြုတင်အသိပေးခေါ် ယူ သွားမည်ဖြစ်ကြောင်းလည်းပြောကြားသွားပါသည်။

နဝရတ်ရွာမှဦးကျော်လှိုင်ကဒေသခံများကိုအလုပ်ခေါ် ယူရာတွင်ဦးစားပေးစေလိုကြောင်းမေးမြန်းရာစီမံကိန်းတာဝန်ရှိ သူမှမိမိတို့၏စီမံကိန်းအတွက်လိုအပ်သည့်လစ်လပ်နေရာများကိုဒေသခံများအားဦးစားပေးခန့်အပ်သွားမည်ဖြစ်ကြောင်း ဖြေကြားသွားပါသည်။

ပေါက်စိမ်းရွာမှဦးဝင်းမျိုးသန်းကဝန်ထမ်းဖွဲ့စည်းပုံတွင်ဒေသခံများအတွက်ဦးစားပေးရန်မေးမြန်းရာစီမံကိန်းဖေါ် ဆောင် သူမှယခုစီမံကိန်းတွင်သက်ဆိုင်ရာရာထူးများအတွက်အရည်အချင်းအလိုက်ခန့်ထားသွာမည်ဖြစ်ပါကြောင်းဖြေကြား သွားပါသည်။ဆက်လက်၍CSR အတွက်မည်သို့လျာထားသည်ကိုသိရှိလိုပါကြောင်းမေးမြန်းသွားသည်ကိုတာဝန်ရှိသူမှ မိမိတို့သည်အခြေခံအားဖြင်ကျန်းမာရေး၊သောက်သုံးရေရရှိရေး၊အိမ်အကာအရံများရရှိရေးနှင့်မီးလင်းရေးလုပ်ငန်းများ ကိုဦးစားပေးဆောင်ရွက်သွားမည်ဟုဖြေကြားသွားပါသည်။



နဝရတ်ရွာမှဦးတင်ထူးကမိမိတို့ရွာအတွက်လိုအပ်သည့် CSR ကိစ္စများအကူအညီပေးရန်တောင်းဆိုသည်ရာတွင်မည် သို့ဆက်သွယ်လုပ်ကိုင်ရမည်ကိုမေးမြန်းရာ ဦးထွန်းနိုင်အောင်က ယခုအခါCSR ကိစ္စများကိုမည်သို့လုပ်ကိုင်ဆောင် ရွက်မည်ဖြစ်ကြောင်းပြတ်သားမှုမရှိသေးသော်လည်းစီမံကိန်း၏နှစ်စဉ်အမြတ်ငွေ၏၂%ကိုစီမံကိန်းဖေါ် ဆောင်သူမှ ရံပုံငွေအဖြစ်ပေးသွင်းရန်ရှိကြောင်းဖြေကြားပါသည်။

ဆက်လက်၍မြိုသာရွာမှဒေါ် စန်းစန်းအေးကစီမံကိန်းကြောင့်မိမိတို့ဒေသသည်တိုးတက်လာမည်ကိုယုံကြည်ပါကြောင်း ထောက်ခံတင်ပြသွားပါသည်။



ထို့ နောက်အစည်းအဝေးသို့ တက်ရောက်လာသူများအား သဘာဝပတ်ဝန်းကျင်နှင့်သက်ဆိုင်သောမေးခွန်းများနှင့် လူမှုစီးပွါးရေးနှင့်သက်ဆိုင်သောမေးခွန်းများကိုလူတစ်ဦးချင်းစီအားဖြန့် ဝေပေးပါသည်။ အခန်းအနားအစီအစဉ်အရ ကောင်းကျော်စေအင်ဂျင်နီယာလုပ်ငန်းကုမ္ပဏီဉက္ကဌမှလည်းတက်ရောက်လာကြသူ များသို့ ဖြန့် ဝေထားသည့်မေးခွန်းများကိုတစ်ခုချင်းအဓိပ္ပါယ်ကိုရှင်းလင်းတင်ပြပြီးတက်ရောက်လာကြသူတစ်ဦးချင်း ဖြေဆိုနိုင်ကြစေရန်ရှင်းလင်းပြောကြားပါသည်။



မေးခွန်းများကိုရှင်းလင်းပြီးနောက်လွတ်လပ်ပွင့်လင်းစွာအကြံပြုနိုင်ကြောင်းကိုလည်း ကောင်းကျော်စေအင်ဂျင်နီ ယာလုပ်ငန်းကုမ္ပဏီ ဥက္ကဌမှပြောကြားပြီးမိမိတို့ ၏ဆန္ဒသဘောထားဖြေကြားစာပေါ် တွင်အမည်နှင့်လက်မှတ်များ ကိုမမေ့မလျှော့ရေးသွင်းရန်လိုအပ်ကြောင်းနှင့်အဆိုပါ ဆန္ဒသဘောထားဖြေကြားစာပေါ် တွင်အမည်နှင့်လက်မှတ် များမပါရှိပါကပယ်မဲအဖြစ်သတ်မှတ်မည်ဖြစ်ကြောင်းဆက်လက်မှာကြားသွားပါသည်။ ထို့ နောက်မေးခွန်းများကို လွတ်လပ်စွာဖြေဆိုစေပြီးကောင်းကျော်စေအင်ဂျင်နီယာလုပ်ငန်းကုမ္ပဏီဥက္ကဌမှအပိတ်ကျေးဇူးတင်စကားပြော ကြားပြီးအခမ်းအနားကိုအောင်မြင်စွာကျင်းပပြီးစီးခဲ့ပါသည်။



တက်ရောက်လာကြသူများထဲမှမေးမြန်းထားသည့်မေးခွန်းများကိုဖြေဆိုရာတွင်အောက်ပါအတိုင်းတွေ့ ရှိရပါသည်။ အစည်းအဝေးသို့ တက်ရောက်သူအများစုမှာဆယ်အိမ်မှုးများရပ်ကွက်မြို့ နယ်အထောက်အကူပြုအဖွဲ့ ဝင်များအစိုး ရနှင့်အစိုးရမဟုတ်သောအဖွဲ့ များမှတာဝန်ရှိသူများနှင့်အလွှာပေါင်းစပါဝင်သောကြောင့်သက်ဆိုင်သူများအားလုံးနီး ပါးတက်ရောက်သည်ဟုယူဆနိုင်ပါသည်။ ဆွေးနွေးပွဲနှစ်ပွဲသို့ တက်ရောက်ပြီးဖြေဆိုသူ (၄၁ဦး) ရှိပါသည်။ တက်ရောက်လာသူများထဲမှအားလုံးအမည်လက်မှတ်များရေးထိုးထားသည်ကိုတွေ့ ရပါသည်။ (တက်ရောက်သူများ၏အစည်းအဝေးတက်ရောက်ကြောင်းလက်မှတ်၊မှတ်တမ်းကိုပူးတွဲတင်ပြထားပါသည်။)

မေးခွန်းများအလိုက်စစ်တမ်းကောက်ယူမှုဇယား။

မေးခွန်းအမှတ်	ထောက်ခံသူ	ကန့် ကွက်သူ	စီမံကိန်းအားသဘော တူသည့်ရာခိုင်နှုံး	မှတ်ချက်
Э	୧၉	-	၉၅. ၁၂%	မဖြေသူ ၂ ဦး
J	90	1	<u> </u>	မဖြေသူ ၁ ဦး
9	୨၉	-	၉၅. ၁၂%	မဖြေသူ ၂ ဦး
9	၃၈	-	<u>ცე.</u>	မဖြေသူ ၃ ဦး
ງ	J9	ဂ	ე၆. ○၉%	မဖြေသူ ၃ ဦး
G	65	J	eo. J9%	မဖြေသူ ၂ ဦး
5	65	J	eo. J9%	မဖြေသူ ၂ ဦး

ယခုအစည်းအဝေးသို့တက်ရောက်သူများကိုအောက်ပါအတိုင်းမှတ်တမ်းတင်အပ်ပါသည်။ အစည်းအဝေးသို့ (၁)သံဘိုရွာ (၂)ပေါက်စိမ်းရွာ (၃)နဝရတ်ရာ (၄)မြိုသာ (၅) ထန်းချောင်ရွာ (၆)သောင်ပြင်ရွာ (၇)ထန်းတပင်ရွာ (၈)ပေတောရွာ (၉)တောင်ကုန်းရွာ (၁၀)လက်ပံကျင်းရွာ တို့မှဆယ်အိမ်မှုး၊ရာအိမ်မှုးများ (၁၁)မန္တလေးမြိုသာစက်မှုဇုန်ဖွံ့ဖြိုးရေးမှတာဝန်ရှိသူနှင့် CSR တာဝန်ခံများတက်ရောက်ခဲ့ကြပါသည်။

အစည်းအဝေးသို့ တက်ရောက်သူအများစုမှာဆယ်အိမ်မှုးများရပ်ကွက်မြို့ နယ်အထောက်အကူပြုအဖွဲ့ ဝင်များအစိုး ရနှင့်အစိုးရမဟုတ်သောအဖွဲ့ များမှတာဝန်ရှိသူများအပြင်မြိုသာစက်မှုဇုန်မှတာဝန်ရှိသူများနှင့် CSR ပတ်သက်သော အဓိကသက်ဆိုင်သူများပါဝင်သောကြောင့်အရေအတွက်နဲသော်လည်းထိရောက်မှုရှိသည်ဟုယူဆနိုင်ပါသည။

တက်ရောက်လာကြသူများထဲမှမေးမြန်းထားသည့်မေးခွန်းများကိုဖြေဆိုရာတွင်အောက်ပါအတိုင်းတွေ့ ရှိရပါသည်။

ဆွေးနွေးပွဲသို့ တက်ရောက်ပြီးဖြေဆိုသူ (၄၁ဦး) ရှိပါသည်။တက်ရောက်လာသူများထဲမှအားလုံးအမည်လက်မှတ်များ ရေးထိုးထားသည်ကိုတွေ့ ရပါသည်။ (တက်ရောက်သူများ၏အစည်းအဝေးတက်ရောက်ကြောင်းလက်မှတ်၊မှတ်တမ်းကိုသိမ်းဆည်းထားပါသည်။လိုအပ်လျှင် တောင်းယူကြည့်ရှုနိုင်ပါသည်။)

အထက်ပါစစ်တမ်းများအရဆွေးနွေးပွဲသို့ တက်ရောက်သူ၄၃ ဦးတွင်နားထောင်ပြီးဖြေဆိုသူ၄၁ဦးရှိသောကြောင့်ရာခိုင် နှုံးအားဖြင့် ၉၅. ၃၄%တွေ့ ရှိရသဖြင့်ယခုစစ်တမ်းကောက်ယူမှုအရပြည့်ဝအောင်မြင်ပါသည်။

မေးခွန်းအားလုံးစုစုပေါင်းရာတွင်ပျှမ်းမျှ ၈၈. ၁၅% ကျော်ထောက်ခံမှုရရှိသည်ကိုတွေ့ ရှိရသဖြင့် Gold A Y A Motors International Group Co.,Ltdက မန္တလေးတိုင်းဒေသကြီး၊မြင်းခြံခရိုင်၊ငါန်းဇွန်မြို နယ်၊မြိုသာစက်မှုဇုန်အတွင်း ရှိကွင်း အမှတ်(၈၈၃)၊ဦးပိုင်အမှတ်(၄၅)၊ကွင်းအမှတ်(၈၈၄၊၈၈၅)၊ဦးပိုင်အမှတ်(၆၄)စုစု ပေါင်းမြေအကျယ်(၂၄၉-၄၈) ဧကရှိ မြေပေါ် တွင်မော်တော်ယာဉ်အမျိုးမျိုးတပ်ဆင်ထုတ်လုပ်သည့်စက်ရုံစီမံကိန်းကြောင်သဘာဝပတ်ဝန်းကျင်ထိ ခိုက်နိုင်မှုနဲနိုင်သမျှနဲစေရန်နှင့်လျှော့ချသည့်စနစ်ကြောင့်ထိခိုက်မှုနဲပါးနိုင်ကြောင်းနှင့်လူမှုစီးပွါးရေးထိခိုက်ပျက်စီးနိုင် မှုမရှိနိုင် သည့်အပြင်ပိုမိုကောင်းမွန်လာနိုင်ကြောင်းကိုစီမံကိန်းအနီးနေထိုင်သူဒေသခံများသိရှိသဘောပေါက်ပြီးစီမံ ကိန်းအပေါ် တွေ့ဆုံပွဲအရသက်ဆိုင်သူနှင့်ဒေသခံအများစုမှထောက်ခံသည်ကိုတွေ့ ရှိရပါသည်။

#### **Public Involvement**

ယခုစီမံကိန်းသည်နိုင်ငံတော်အတွက်သော်၄င်း၊ ဒေသခံများအတွက်သော်၄င်း၊ စက်မှုကဣာပိုမိုဖွံ့ ဖြိုးတိုးတက်လာစေ ရန်သော်၄င်း၊ ပို့ဆောင်ရေးအခြေခံစီးပွါးရေးလုပ်ငန်းများပိုမိုထွန်းကားလာစေရန်၄င်း၊ ဒေသဖွံ့ ဖြိုးလာစေရန်၄င်း၊ အလုပ်အကိုင်များဖွံ့ ဖြိုးတိုးတက်လာစေရန်အတွက၄င်း၊ဘက်စုံမှအကျိုးပြုနိုင်သောစီမံကိန်းတစ်ရပ်ဖြစ်သည်ကိုစီမံ ကိန်းအနီးတွင်နေထိုင်သူများမှကောင်းစွာသဘောပေါက်သည့်အတွက်စီမံကိန်းအပေါ် အပြုသဘောဆောင်သောပူး ပေါင်းမှုများပါဝင်ကြသည်ကိုတွေ့ ရပါသည်။

တည်ဆောက်ရေးကာလတွင်လည်းဒေသခံများအလုပ်အကိုင်များရရှိပြီး၊ တည်ဆောက်ရေးကာလပြီးဆုံး၍ပုံမှန်လုပ် ငန်းများလည်ပတ်သည့်အခါတွင်လည်းအလုပ်အကိုင်များရရှိရန်မျှော်လင့်လျက်ရှိသည်ကိုတွေ့ ရှိရပါသည်။

#### Summary and Suggestion of Operation Plans

လုပ်ငန်းများကိုလုပ်ဆောင်ခဲ့ပါသည်။

ကောင်းကျော်စေအင်ဂျင်နီယာလုပ်ငန်းကုမ္ပဏီသည် Gold A Y A Motors International Group Co.,Ltdက မန္တလေး တိုင်းဒေသကြီး၊မြင်းခြံခရိုင်၊ငါန်းဇွန်မြို နယ်၊မြို့သာစက်မှုဇုန်အတွင်းရှိကွင်းအမှတ်(၈၈၃)၊ဦးပိုင်အမှတ်(၄၅)၊ကွင်းအမှတ် (၈၈၄၊၈၈၅)၊ဦးပိုင်အမှတ်(၆၄)စုစုပေါင်းမြေအကျယ်(၂၄၉- ၄၈)ဧကရှိမြေပေါ် တွင်မော်တော်ယာဉ်အမျိုးမျိုးတပ်ဆင် ထုတ်လုပ်သည့်စက်ရုံစီမံကိန်းအပေါ် ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးနှင့်သစ်တောရေးရာဝန်ကြီးဌာနမှရည်ညွှန်းချက်များအ တိုင်းသဘာဝပတ်ဝန်းကျင်ထိခိုက်ပျက်စီးမှု ရှိ/မရှိ Environmental Impact Assessment EIA လေ့လာဆန်းစစ်သည့်

ဤကဲ့သို့ စစ်တမ်းများကောက်ယူရာတွင်လည်းနိုင်ငံတကာစံချိန်များ၊အညွှန်းကိန်းများနှင့်ကိုက်ညီပြီးမြန်မာနိုင်ငံသယံ ဇာတနှင့်သဘာဝပတ်ဝန်းကျင်ထိမ်းသိမ်းရေးဝန်ကြီးဌာနမှလက်ခံသည့်အတိုင်းဆွေးနွေးခြင်းဖြစ်ပါကြောင်းနှင့်စီမံကိန်း ၏အသေးစိပ်အချက်အလက်များကိုလည်းသက်ဆိုင်ရာတာဝန်ရှိသူများမှရှငးလင်းတင်ပြနိုင်ရန်ဖိတ်ခေါ်ခဲ့ပါသည်။ စစ်တမ်းကောက်ယူရာတွင် စီမံကိန်းဖေါ် ဆောင်မည့်ဒေသ၏စီမံကိန်း ပတ်လည်တွင်နေထိုင်သူများကိုအဓိကထား၍ ဖိတ်ကြားသည့်အတွက် အနီးအနားတွင်နေထိုင်သူများသာမကမြိုသာစက်မှုဇုန်စီမံကိန်း့ နယ်စီမံကိန်း၏အနီးရပ်ကွက် များတွင်နေထိုင်သူများအပြင်အစိုးရနှင့်အစိုးရမဟုတ်သောအဖွဲ အစည်းများ၊ကုမ္ပဏီဝန်ထမ်းများ၊ဈေးသည်များပါဝင် တက်ရောက်ဆွေးနွေးအကြံပြုကြပါသည်။ အချုပ်အားဖြင့်ယခုစီမံကိန်းသည်အနီးအနားတွင်နေထိုင်သူများအတွက်

- သဘာဝပတ်ဝန်းကျင်အားထိခိုက်နိုင်ခြင်းအပေါ် လျော့ချနိုင်ပါကြောင်းနှင့်
- လူမှုစီးပွါးရေးဆိုင်ရာထိခိုက်နိုင်မှုများမရှိခြင်းတို့ ကိုတွေ့ ရှိရပါသည်။ ထို့ အပြင်အလုပ်အကိုင်များပွင့် လင်းလာနိုင်သဖြင့်ဒေသဖွံ့ဖြိုးရေးအတွက်သာမကဘဲ၊ တစ်ဦးချင်းနှင့်နိုင်ငံတော်အတွက်ဝင်ငွေများတိုးတက် တိုးတက်လာမည်ကိုတွေ့ ရှိရပါသည်။

# Stakeholders Meeting ကျင်းပရန်စီစဉ်ဆောင်ရွက်ချက်များ။

Guidelines and Methodology

Stakeholders Meeting ကျင်းပနိုင်ရန်အတွက် ADB နှင့် UNFCC တို့ အတိုင်းစံကိုက်ညီစေရန်အောက်ပါအတိုင်း

- ာ. Target ရွေးချယ်ခြင်း။
- ၂. ကျင်းပမည့်နေ့ ရက်ရွေးချယ်ခြင်း။
- ၃. ဖိတ်စာများပေးပို့ ခြင်း။
- ၄. ရှင်းလင်းဆွေးနွေးမည့်အချက်များရွေးထုတ်စီစဉ်ခြင်း။
- ၅. တွေ့ ဆုံပွဲကျင်းပခြင်း။
- ၆. တွေ ဆုံပွဲအပေါ် မှတ်တမ်းထုတ်ယူခြင်းတို့ ကို စံနစ်တကျလုပ်ဆောင်ခဲ့ပါသည်။

# Stakeholders Meeting သို့ ဖိတ်ကြားထားသူနှင့်တက်ရောက်ကြသူများ။

Stakeholders Meeting သို့ အောက်ပါအတိုင်းအဓိကထား၍ဖိတ်ကြားခဲ့ပါသည်။ (ဖိတ်ကြားစာ၊ ပူးတွဲ)

- (က) စီမံကိန်းဒေသအနီးနေထိုင်ကြသူများ၊
- (ခ) လူမှုရေးဆိုင်ရာအဖွဲ့ အစည်းများ၊
- (ဂ) ဒေသအာဏာပိုင်အဖွဲ့ အစည်းများ။

(တက်ရောက်သည့်အမည်စာရင်းကိုပူးတွဲတင်ပြထားပါသည်။)

# Stakeholders Meeting ကျင်းပသည့်အခမ်းအနား။

မန္တလေးတိုင်းဒေသကြီးမြင်းခြံခရိုင်၊ငါန်းဇွန်မြို

နယ်၊မြို့သာစက်မှုဇုန်အတွင်းရှိစီမံကိန်းရုံးခမ်းမတွင်အနီးအနားတွင်နေ ထိုင်သူများနှင့်သက်ဆိုင်သူများပါဝင်သော Stakeholders Meeting ကိုဇူလိုင်လ၅ရက်နေ့ တို့ တွင် Gold A Y A Motors International Group Co.,Ltd ၏စီစဉ်ပံ့ပိုးမှုဖြင့်အောင်မြင်စွာကျင်းပပြုလုပ်နိုင်ခဲ့ပါသည်။

# Stakeholders Meeting သဘောထားမှတ်ချက်များ

Stakeholders Meeting ကျင်းပခဲ့သည့်အစီအစဉ်အသေးစိပ်ဆွေးနွေးတင်ပြမှုများ၊ရှင်းလင်းပြောကြားမှုများ(အထက် တွင်ဖေါ်ပြထားသည့်အတိုင်း)နှင့်တက်ရောက်လာကြသူများ၏သဘောထားမှတ်ချက်များတစ်ဦးချင်းစီ၏စစ်တမ်းအ ဖြေများအပါအဝင်မှတ်တမ်းဓါတ်ပုံများတို့ကို(နောက်ဆက်တွဲတွင်)ပြည့်စုံစွာဖေါ်ပြထားပါသည်။

စဉ်	အမည်	နိုင်ငံသားလက်မှတ်အမှတ်	အလုပ်အကိုင် နှင့် နေရပ်လိပ်စာ၊	ဆက်သွယ်ရန်ဖုံး။	လက်မှတ်
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3	3:08:36	eeppeole	किंट और इ	୦၉	<b>A</b> .
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စဉ်	အမည်	နိုင်ငံသားလက်မှတ်အမှတ်	အလုပ်အကိုင် နှင့် နေရပ်လိပ်စာ၊	ဆက်သွယ်ရန်ဖုံး။	လက်မှတ်
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76	S. y m	12/12/13/1908/496	et.ongoggs	0643020250	
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စဉ်	အမည်	နိုင်ငံသားလက်မှတ်အမှတ်	အလုပ်အကိုင် နှင့် နေရပ်လိပ်စာ၊	ဆက်သွယ်ရန်ဖုံး။	လက်မှတ်
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စဉ်	အမည်	နိုင်ငံသားလက်မှတ်အမှတ်	အလုပ်အကိုင် နှင့် နေရပ်လိပ်စာ၊	ဆက်သွယ်ရန်ဖုံး။	လက်မှတ်
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# KAUNG KYAW SAY ENGINEERING CO.,LTD



Your Most Reliable Service Company in Myanmar

The Environmental Tests Result

Project

Manufactoring and Assembling of Motor Vehicles Project

Location Date

No B 1-1 of Block Factory Area Zone 2c, Mythar Industrial Park Ngagun Tsp. Mandalay 2-5-19

The assessment points

Project (1~5 points in the project area)

2. Project Site (1~5 points in the project area)

3. Base line data (Project Site or within 3miles radius of local area 1~3 points)

Ambient Air Quality Measurement

NT_	<b>D</b>	Unit	Pt.1	Pt.2	Pt.3	Pt.4	Pt.5	
No	Parameter	Lat/Long	1043.53" N 5037.30" E	40 43 · 52 " N . 85 ° 37 · 31 " E !	043 · 52 " N 21043 · 51 " N 21043 · 51 " N 2			Remarks
1	Ammonia (NH3)	mg/Nm <sup>3</sup>	-	_	=	•	-	
2	Carbon monoxide (CO)	mg/Nm <sup>3</sup>	-	-	-		_	
3	Chlorine (CI)	mg/Nm <sup>3</sup>	_	-	-		-	
4	Formaldehyde (HCHO)	mg/Nm <sup>3</sup>	0.02	0.02	0.02	0.02	0.02	
5	Hydrogen sulfide(H2S)	mg/Nm <sup>3</sup>	-	_	-	_	_	
6	PM <sub>2.5</sub>	mg/Nm <sup>3</sup>	275	350	225	235	255	
7	PM <sub>10</sub> ,	mg/Nm <sup>3</sup>	95	120	90	70	95	
8	Volatile organic compounds (VOC)	mg/Nm <sup>3</sup>	0.16	0.15	0.16	0.16	0.16	

#### Noise Measurement (db)Room Temp.(C) RH %

	Pt.1			Pt.2		Pt.3			Pt.4		Pt.5				
Noise (db)	Temp (C°)	RH (%)	Remarks												
65	38	58	65	38	57	62	30	28	68	37.5	28	65	37	28	

Soil Test

No	Parameter			Pt.3	Pt.4	Pt.5	
	Lat/Long	11 943 5369 N	210 43.5205N	21 ° 43 'ST-33 N 95° 37 'Z946E	21043, SIGE N	2/ 043 · 53.12 N	Remarks
1	Moisture (%)	58	55	52	52	- 52	
2	PH	65	6-5	67	6.5	6.8	

#### Ground Water Quality Test(With Certified Lab. Results)

1. 18 parameters (Result shown as attached)

#### Surface Water Test (With Certified Lab.Results)

1. 18 Parameters (Result shown as attached)

#### Waste Water Effluent Test

- 1. BOD<sub>5</sub>, COD, TSS, PH, etc.
- 2. 28 Parameters for General (Result shown as attached)

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# Environmental Survey Record (Gold A Y A ) 2.5.2019

#### Points of Measure

Date	Pt.	GIS
2.5.19	1	21°43'51.27"N, 95°37'37.93"E
	2	21°43'51.37"N, 95°37'36.47"E
	3	21°43′51.53″N, 95°37′34.37″E
	4	21°43'50.69"N, 95°37'35.33"E
	5	21°43'49.98"N, 95°37'31.38"E

Ambient Air Quality Measurement (2-5-19)

		Unit/ Lat/Long	NEQEG	Pt.1	Pt.2	Pt.3	Pt.4	Pt.5	
No	Parameter			21°43'51.27"N, 95°37'37.93"E	21°43'51.37"N, 95°37'36.47"E	21°43'51.53"N, 95°37'34.37"E	21°43'50.59"N, 95°37'35.33"E	21°43'49.98"N, 95°37'31.38"E	Remarks
1	PM <sub>2.5</sub>	$\mu$ g/Nm <sup>3</sup>	25	27.5	35.0	22.5	23.5	25.5	
2	PM <sub>10</sub> ,	$\mu g/Nm^3$	50	95	120	90	70	95	
3	НСНО	$\mu g/Nm^3$	-	0.02	0.02	0.02	0.02	0.02	
4	Volatile organic compounds (VOC)	μg/Nm³	-	0.16	0.15	0.16	0.16	0.16	
5	$NO_2$	$\mu g/Nm^3$	-	0.16	0.15	0.16	0.16	0.06	
6	$SO_2$	$\mu g/Nm^3$	-	0.016	0.15	0.16	0.16	0.21	
7	CO	$\mu g/Nm^3$	-	0.2	0.2	0.2	0.2	0.2	

### Noise Result

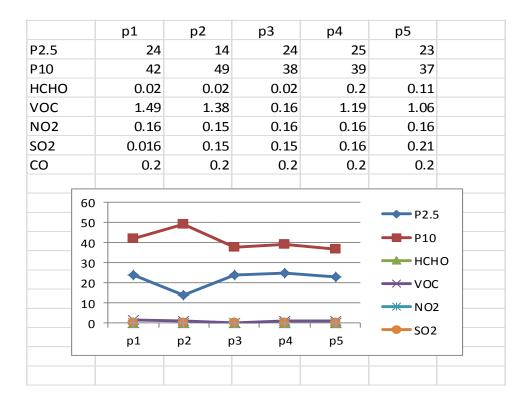
Pt.1			Pt.2			Pt.3		Pt.4		Pt.5					
21°43'53.67"N, 95°37'30.4"E			°43'52.05" 5°37'31.64"	,	21°43'51.33"N, 95°37'29.46"E		21°43'51.66"N, 95°37'34.46"E		21°43'53.12"N, 95°37'34.23"E		Remarks				
Noise (db)	Temp (C°)	RH (%)	Noise (db)	Temp (C°)	RH (%)	Noise (db)	Temp (C°)	RH (%)	Noise (db)	Temp (C°)	RH (%)	Noise (db)	Temp (C°)	RH (%)	
68	32.8	78.2	65	32.7	75.1	65	32.8	78.5	65	33.0	78.1	69	32.8	78.7	

## Soil Test

		Pt.1	Pt.2	Pt.3	Pt.4	Pt.5	
No	Parameter	21°43'53.34"N, 95°37'30.18"E	21°43'52.76"N, 95°37'38.24"E	21°43'49.34"N, 95°37'37.94"E	21°43'49.61"N, 95°37'32.28"E	21°43'47.81"N, 95°37'29.81"E	Remarks
1	Moisture (%)	78	78	78	75	78	
2	PH	7.1	7.1	7.2	7.1	7.1	



### The Air Qualtiy Test Result



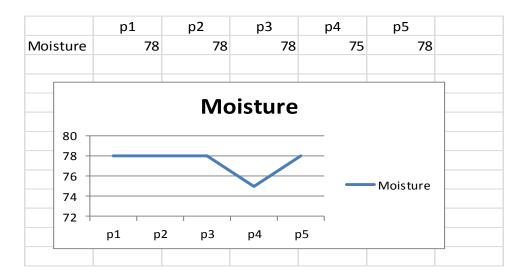
The Meter, Equipment and Appratus for Environmental Quality Test & Measurement

No	Measurement	The Equipment / Model
1	Air	(1) CEM Partical Counter (DT 9811
		(2) BRAMC Air Quality Test (BR Smart 126)
2	Noise	(1)Environment Meter CEM DT-8820
		(2)UNI-TSound Level Meter UT-352
3	Soil	Soil Survey Instrument (4in1)
4	Temperature	Compact InfraRed Thermometer (CEM-DT-8802)
5	Water	(1)Hydro Master HM-500, (2)Aquapro Water Tester AP-1

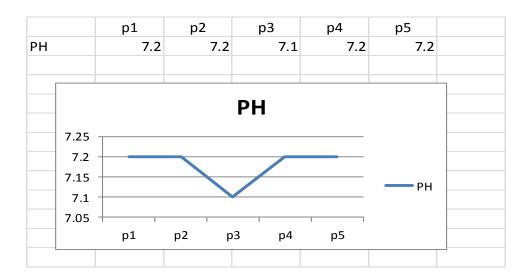
# The Noise Test Result

		p1	p2	р3	p4	р5	
Noise		65	65	65	65	69	
Temp		32.8	32.7	32.8	32.8	32.8	
RH		78.2	78.7	79.5	78.5	78.7	
	100	T					
	80			<u> </u>			
	60	+	<b>*</b>	<del>+ +</del>	<u> </u>	<b>→</b> Nois	
	40					<b>─</b> Tem	
	20					<b>→</b> RH	
	0	p1	p2	p3 p4	p5		
					11.5		

# The Soil Qualtiy Test Result (Moisture)



The Soil Qualtiy Test Result (PH)







# IXABA IXYAM TIBADHHA GGAYYADIY AMITTE

No.X.21722, Mwethargt Street, Bavintoaung, Mayangone Township, Yangon. Phone: 09-964682590, 09-964682418, Fax: 3682439, E-mail : mar kyrkyr/Ogmail.com

# CHEMICAL WATER ANALYSIS REPORT

Name

: Gold AYA

二级主港。

Date

20.9.2019

Ph No

£ 09-450833822

Place

Tested By) QC-16REV:00

: දි්ධානරේගු.අ

	Test (	Code : M-19090509	Unit	Sample-B Water Result	WHO Guideline
	1.	Appearance			najawan perangga adalah magasa Sasaya
观	2.	Odor			Nil
瓦色	3.	Color(Platinum,Cobalt,Scale)		0	≤ 15 Unit
融值	4,	Turbidity(Silica,Scale Unit)	NTU	0.15	≤ 5 NTU
州值	5.	pH Value	p.p.n1(mg/L)	6,0	6.5 - 8.5
溶物	6.	Total Dissolved Solids .	p.p.m(mg/L)	65.6	≤ 500
<b>死</b> 後	7.	Total Hardness (as CaCo <sub>3</sub> )	p.p.m(mg/L)	10	≤ 100
6700	8.	Calcium as Ca	p.p.m(mg/L)	5	≤ 75
转	9,	Magnesium as Mg	p.p.m(mg/L)	5	≤ 25
校	10.	Total Alkalinity(as CaHCO3)	p.p.m(mg/L)	5	-
业物	11.	Chloride as CL	p.p.m(mg/L)	20	≤ 250
狱	12.	Total Iron as Fe	p.p.m(mg/L)	0	≲ 0.3
就	13.	Conductivity	micro s/cm	136.9	≤ 1000
マナールが	14.	Saffrity	%	0.1	



