

Plot No. (36, 38), Room No. 9A, 9th floor, Grand Myay Nu Condominium, Myay Nu Street, Sanchaung Township, Yangon Region, The Republic of the Union of Myanmar.

Office: (+95) 1 526574, Mobile: (+95) 9775405118, 9792528677, 9449251888; Website: www.myanweiconsulting.com

MYANMAR S. FLAMINGO GARMENT CO., LTD.

Environmental Management Plan Manufacturing of Safety Clothing on (CMP Basic)





Plot No. (36, 38), Room No. 9A, 9th floor, Grand Myay Nu Condominium, Myay Nu Street, Sanchaung Township, Yangon Region, The Republic of the Union of Myanmar.

Office: (+95) 1 526574, Mobile: (+95) 9775405118, 9792528677, 9449251888; Website: www.myanweiconsulting.com

Date: 21. 6. 2022

Attention: Dear Director

Environmental Conservation Department

Subject: Environmental Management Plan (EMP) Report in respect of the Manufacturing of Garment by Myanmar S.Flamingo Garment Company Limited.

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

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

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

LIN HTET SEIN
DIRECTOR
MYANWEI ENVIRONMENTAL SOLUTIONS
COMPANY LIMITED.



Dear: Director

Environmental Conservation Department

Nay Pyl Taw

Subject: Environmental Management Plan (EMP) Report in respect of the Manufacturing of Garment

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

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

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

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

We acknowledge and understand that



i

TABLE OF CONTENTS

TABLE OF (CONTENTS	I
LIST OF TA	BLES	V
LIST OF FIG	GURES	VI
LIST OF AP	PENDICES	VII
	FION	
အစီရင်စံစာအဂ	ျဉ်းချု ပ်	IX
EXECUTIVE	SUMMARY	XVII
	DDUCTION	
1.1. PRO 1.1.1.	JECT BACKGROUNDProject Proponent Profile	
1.1.2.	Director List	1-2
1.1.3.	Investment Plan and Salient Features of the Project	1-2
	RONMENTAL CONSULTANT PROFILE	
	CY, LEGAL AND INSTITUTIONAL FRAMEWORK	
	NMAR REGULATORY FRAMWORK	
2.1.1.	o	
	RNATIONAL GUIDELINESIMITMENT OF MYANMAR S.FLAMINGO GARMENT COMPANY LIMITED	
	ECT DESCRIPTIONECT DESCRIPTION	
	ATION	
	ECTIVES OF THE PROJECT	
3.2.1.	Site Description of the project site	3-1
3.2.2.	Production Process	3-3
3.2.3.	Products	3-7
3.3. UTIL	ITIES	3-11
3.3.1.	Raw Material	3-12
3.3.2.	Machinery and equipment	3-13
3.3.3.	Human Resource	3-14
3.3.4.	Water	3-16
3.3.5.	Electricity and fuel requirement	3-16
3.4. FAC	LITIES	3-17
3.4.1.	Fire Fighting Facility	3-17
3.4.2.	Drainage System and Storm Water	3-18
3.5. STA	TUS OF THE FACTORY	3-18
3.6. GEN	ERATION OF WASTE, EMISSION AND DISTURBANCES	3-19

Environment	al Management Plan	
3.6.1.	Industrial Wastes	3-19
3.6.2.	Human wastes	3-19
3.6.3.	Waste Balance	3-19
4. BRIE	EF DESCRIPTION OF SURROUNDING ENVIRONMENT	4-1
	THODOLOGY FOR DATA COLLECTION AND ANALYSIS	
	VIRONMENTAL BASELINE STUDY	
4.3. PHY 4.3.1.	YSICAL COMPONENT Topography	
4.3.1.	Geology	
4.3.3.	Tectonics	
4.3.4.	Soil	
4.3.5.	Hydrogeology	
4.3.6.	Climate and Meteorology	4-5
4.4. BAS 4.4.1.	SELINE ENVIRONMENTAL MONITORING	
4.4.2.	Noise	4-7
4.4.3.	Ground Water Quality	4-8
4.4.4.	Air Quality	4-10
4.4.5.	Light	4-12
4.4.6.	Indoor Temperature and Humidity	4-13
4.5. BIO	LOGICAL COMPONENT	4-14
4.6. SO	CIO-ECONOMIC COMPONENT	4-14
4.6.1.	Population	4-14
4.6.2.	Religion	4-14
4.6.3.	Local Economy	4-14
4.6.4.	Public Infrastructure and Access	4-15
	LTURAL AND VISUAL COMPONENTSITURAL AND VISUAL COMPONENTS	
	THODOLOGY FOR THE ASSESSMENTS	
	ACT IDENTIFICATIONS	
5.2.1.	Positive Impact	5-2
5.2.2.	Negative Impact	5-2
5.3. IMP	ACT ON ENVIRONMENTAL RESOURCES	5-3
5.3.1.	Impact on Air Quality	5-3
5.3.2.	Impact on Water Quality	5-4

Environment	al Management Plan	
5.3.3.	Impact on Soil Quality	5-5
5.3.4.	Impact of Noise	5-5
5.4. IMP	ACT ON ECOLOGICAL RESOURCES	5-5
5.5. IMP	ACT ON HUMAN	5-6
5.5.1.	Socio-economic	5-6
5.5.2.	Occupational Health and Safety	5-6
5.5.3.	Waste Disposal	5-6
5.6. PRO	DJECT ACTIVITIES AND ITS SIGNIFICANT IMPACTS	5-7
	IGATION MEASURES OF IMPACT ON ENVIRONMENTAL RESOURCES.	
5.7.1.	Recommended Air Impact Mitigation Measures	5-9
5.7.2.	Mitigation Measure of Impact on Water	5-10
5.7.3.	Mitigation Measure of Impact on Soil Contaminate	5-11
5.7.4.	Mitigation Measure of Impact on Noise	5-11
5.8. MIT	IGATION MEASURES OF IMPACT ON HUMAN	
5.8.1.	Mitigation Measures on Fire Hazard	5-11
5.8.2.	Mitigation Measure for Occupational Health and Safety	5-12
5.8.3.	First Aid Guidelines and Facilities	5-13
5.8.4.	Mitigation Measure of Waste Generation	5-14
6. ENV	RONMENTAL MANAGEMENT PLAN	6-1
6.1. AIR	POLLUTION/DUST MANAGEMENT PLAN	6-1
6.2. NOI	SE MANAGEMENT PLAN	6-1
	ID WASTE MANAGEMENT PLAN	
_	STEWATER MANAGEMENT PLAN	6-2
	RGY MANAGEMENT PLAN TER CONSUMPTION MANAGEMENT PLAN	
	ERGENCY RESPONSE AND DISASTER MANAGEMENT PLAN	
	CUPATIONAL SAFETY AND HEALTH MANAGEMENT PLAN	
6.9. FIR	E MANAGEMENT PLAN	6-5
6.10. ENV	/IRONMENTAL MONITORING SCHEDULE AND REPORTING	6-6
	PACITY BUILDING AND TRAINING PLAN	
	EVANCE REDRESS MECHANISM (GRM)	
	RPORATE SOCIAL RESPONSIBILITY (CSR) PLANPublic School	
	Non-profit Training	
	Healthcare	
_	LIC CONSULTATION	7-1
/1 PIII	STILLUNDULLATION PROLESS	/_1

7.2.	RECOMMEND SUGGESTION AND COMMENT	7-1
8.	CONCLUSION & RECOMMENDATION	8-1
8.1.	CONCLUSION	8-1
8.2.	RECOMMENDATION	8-1
9.	REFERENCE	9-3

LIST OF TABLES

Table 1-1	Information of Investor1-1	
Table 1-2	Salient features of the project1-2	
Table 1-3	Member of EMP Study Team1-3	
Table 2-1	List of Myanmar's Law relating to environmental management2-1	
Table 3-1	Annual production rate	
Table 3-2	List of Raw Material Requirement3-12	
Table 3-3	List of Machinery3-14	
Table 3-4	Employment Schedule	
Table 4-1	Annual rainfall and temperature4-6	
Table 4-2	Relative humidity and temperature measure at factory4-6	
Table 4-3	Noise level measurement result4-7	
Table 4-4	Coordinated point of water and wastewater collection point4-9	
Table 4-5	Ground Water quality laboratory results4-9	
Table 4-6	Observed air quality results4-10	
Table 4-7	Recommended illumination and limiting glare index based on IES Code, 19684-12	
Table 4-8	Result of light measurement in Myanmar S.Flamingo Garment Co., Ltd4-13	
Table 4-9	Relative humidity and temperature measure at Myanmar S.Flamingo Garment CLtd4-13	Co.
		Co.
Table 4-10	Ltd	Co.
Table 4-10 Table 4-11	Ltd	Co.
Table 4-10 Table 4-11 Table 4-12	Ltd	Co.
Table 4-10 Table 4-11 Table 4-12 Table 4-13	Ltd	Co.
Table 4-10 Table 4-11 Table 4-12 Table 4-13 Table 4-14	Ltd	Co.
Table 4-10 Table 4-11 Table 4-12 Table 4-13 Table 4-14 Table 4-15	Ltd	Co.
Table 4-10 Table 4-11 Table 4-12 Table 4-13 Table 4-14 Table 4-15 Table 5-1	Ltd	Co.
Table 4-10 Table 4-11 Table 4-12 Table 4-13 Table 4-14 Table 4-15 Table 5-1 Table 5-2	Ltd	Co.
Table 4-10 Table 4-11 Table 4-12 Table 4-13 Table 4-14 Table 4-15 Table 5-1 Table 5-2 Table 5-3	Ltd	Co.
Table 4-10 Table 4-11 Table 4-12 Table 4-13 Table 4-14 Table 4-15 Table 5-1 Table 5-2 Table 5-3 Table 6-1	Ltd	Co.
Table 4-10 Table 4-11 Table 4-12 Table 4-13 Table 4-14 Table 4-15 Table 5-1 Table 5-2 Table 5-3 Table 6-1 Table 6-2	Ltd	Co.
Table 4-11 Table 4-12 Table 4-13 Table 4-14	Ltd	Co.

LIST OF FIGURES

Figure 1-1 Organization Chart of Myanmar S.Flamingo Garment Company Limited	1-3
Figure 3-1 Location Map	3-1
Figure 3-2 Project Adjacent Area	3-2
Figure 3-3 Factory Layout Map (Ground Floor)	3-2
Figure 3-4 Factory Layout Drawing (First Floor)	3-3
Figure 3-5 Process Flow Diagram of Myanmar S.Flamingo Garment Co., Ltd	3-5
Figure 3-6 Production Process Photos of Myanmar S.Flamingo Garment Co., Ltd	3-7
Figure 3-7 Product Photos	3-11
Figure 3-8 Product Storage Area	3-11
Figure 3-9 Raw Material Storage	3-13
Figure 3-10 Overhead Water Storage Tank and Drinking Water Supply	3-16
Figure 3-11 Electricity Facility at Myanmar S.Flamingo Garment Co., Ltd	3-17
Figure 3-12 Fire Fighting System in Factory	3-18
Figure 3-13 Drainage System in Factory	3-18
Figure 3-14 Balance Diagram of garment production	3-20
Figure 4-1 Geological Map of Yangon Region	4-2
Figure 4-2 Soil Map of Yangon (Source: Land use of Bureau of Yangon)	4-4
Figure 4-3 Noise Level Result Graph	4-8
Figure 4-4 Sound Level Measurement Photos	4-8
Figure 4-5 Air Quality Measurement at the Project Site	4-11
Figure 4-6 Light Quality Measurement	4-12
Figure 4-7 Temperature and Humidity Measurement in Operation Area of the Factory.	4-13
Figure 5-1 Potential Negative Impact Affect from Proposed Factory Project	5-3
Figure 5-2 Impact Significance of the Proposed Project	5-9
Figure 5-3 Drainage and Septic Tank in Project Area	5-10
Figure 5-4 Firefighting Plan and Escape Plan	5-12
Figure 5-5 Factory Clinic	5-14
Figure 5-6 Garbage Bins	5-14
Figure 6-1 Environmental Organization Structure in Factory	6-12
Figure 6-2 Grievance Redress Mechanism Flow Diagram	6-13
Figure 7-1 Public Consultation Meeting	7-2

LIST OF APPENDICES

APPENDIX A Company Document of Myanmar S.Flamingo Garment Company Limited

APPENDIX B Transitional Consultant Registration Certificate

APPENDIX C Monitoring Result

APPENDIX D First Aid

APPENDIX E Fire Safety Training

APPENDIX F Treated Water Analysis Result

Abbreviation

1. CEMP = Construction Environmental Management Plan

2. CMP = Contract Manufacturing Process
 3. CSR = Corporate Social Responsibility

4. ECC = Environmental Compliance Certificate
 5. ECD = Environmental Conservation Department

6. EIA = Environmental Impact Assessment
 7. EMoP = Environmental Monitoring Plan
 8. EMP = Environmental Management Plan
 9. GIIP = Good International Industry Practices
 10. HSE = Health, Safety and Environment
 11. IEE = Initial Environmental Examination
 12. IFC = International Finance Corporation

13. NEQG = National Environmental Quality (Emission) Guidelines

14. MIC = Myanmar Investment Commission

15. MOECAF = Ministry of Environmental Conservation and Forestry

16. MONREC = Ministry of Natural Resources and Environmental Conservation

17. OEMP = Operation Environmental Management Plan
 18. OSHA = Occupational Safety and Health Administration

19. PPE = Personal Protective Equipment
 20. WHO = World Health Organization

21. YCDC = Yangon City Development Committee 22. YESB = Yangon City Electricity Supply Board

အစီရင်ခံစာအကျဉ်းချုပ်

နိုဒါန်း

အဆိုပြုလုပ်ငန်းသည် CMP စနစ်ဖြင့် လုံခြုံရေးသုံး အဝတ်အထည်များ ချုပ်လုပ်ခြင်းလုပ်ငန်းအတွက် ရင်နှီးမြှုပ်နံသော ကုမ္ပဏီဖြစ်ပါသည်။ ရင်းနှီးမြှုပ်နှံမှုလိုင်စင်ကို ၂၀၁၉ခုနှစ်၊ ဩဂုတ်လ၊ ၂၇ ရက်နေ့တွင် (အတည်ပြုမိန့်အမှတ် ရကတ- ၂၃၉/၂၀၁၉)ဖြင့် ရန်ကုန်တိုင်းဒေသကြီး ရင်းနှီးမြှုပ်နှံမှုကော်မတီမှ ရရှိပြီးဖြစ်ပါသည်။ လုပ်ငန်းလည်ပတ်ရန်အတွက် မြန်မာနိုင်ငံသယံဇာတနှင့် သဘာဝပတ်ဝန်းကျင် ထိန်းသိမ်းရေးဝန်ကြီးဌာန (MONREC) ၏ အတည်ပြုချက်ရယူရန် လိုအပ်ကြောင်း ကော်မရှင်မှ မှာကြားခဲ့ပါသည်။

ထို့ကြောင့် မြန်မာနိုင်ငံ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေး ဥပဒေ (၂၀၁၂)အရ၊ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် (EMP) ပြုလုပ်ရန်လိုအပ်ကြောင်း ၂၀၁၉ ခုနှစ်၊ ဇူလိုင်လ၊ ၃၁ ရက်နေ့တွင် (စာအမှတ်၊ ရက-၁/၃/၄ (အီးအိုင်အေ) (၁၄၀၄/၂၀၁၉) ဖြင့် ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန ရန်ကုန်တိုင်းဒေသကြီးမှ သဘောထားမှတ်ချက် ရရှိပြီးဖြစ်ပါသည်။ ထို့ကြောင့် EMP အစီအရင်ခံစာရေးဆွဲရန် တတိယအဖွဲ့အစည်းဖြစ်သော Myanwei Environmental Solutions Co., Ltd.မှ တာဝန်ယူရေးဆွဲခဲ့ပါသည်။

EMP အစီအစဉ်တွင် Myanmar S.Flamingo Garment Co., Ltd. ၏ CMP စနစ်ဖြင့် လုံခြုံရေးသုံး အပတ်အထည်များ ထုတ်လုပ်ခြင်းစီမံကိန်းအတွက် Myanwei Environmental Solutions Co., Ltd. မှ ရေးသားပြုစုထားသော ပတ်ပန်းကျင်စီမံခန့်ခွဲမှု အစီရင်ခံစာဖြစ်သည်။ အဆိုပါ လေ့လာဆန်းစစ်ခြင်း၏ ရည်ရွယ်ချက်များမှာ-

- ✓ သဘာဂပတ်ဂန်းကျင်နှင့် လူမှုစီးပွားပတ်ဂန်းကျင်အပေါ် စီမံကိန်းဆောင်ရွက်ချက်များကြောင့်
 ထိခိုက်မှုများကိုလေ့လာရန်။
- 🗸 ထိုထိခိုက်မှုများကို လျှော့ချနိုင်ရန် လျှော့နည်းစေမည့်နည်းလမ်းများကို ဖော်ပြရန်။
- 🗸 စီမံကိန်းအတွက် ပတ်ပန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်ကို ပြင်ဆင်ရန်နင့် အကောင်အထည်ဖော်ရန်။
- ✓ စီမံကိန်းအတွက် ပတ်ပန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် အစီရင်ခံစာ လုပ်ဆောင်ရာတွင်
 လုံလောက်မှုရှိစေရန်။
- ✓ ဒေသခံမျာ၏ လူမှုရေးသက်သာချောင်ချိမှုများ တိုးမြှင့်ရန်နှင့် ဒေသတွင်း ဖွံ့ဖြိုးတိုးတက်မှုများ
 အတွက် မရှိမဖြစ်အရေးပါသော လူမှုစီးပွားတာဂန်ယူမှုအစီအစဉ်အား
 အကောင်အထည်ဖော်ရန်တို့ဖြစ်ပါတယ်။

အဆိုပြုထားသော စီမံကိန်း၏ ရည်ရွယ်ချက်သည် CMP စနစ် (ဖြတ်-လုပ်-ထုတ်) စနစ်ကို အသုံးပြု၍ လုံခြုံရေးသုံးအပတ်အထည်များကို ထုတ်လုပ်ပီး နိုင်ငံခြားသို့ ၁ပပ % တင်ပို့ရန်ဖြစ်ပါသည်။

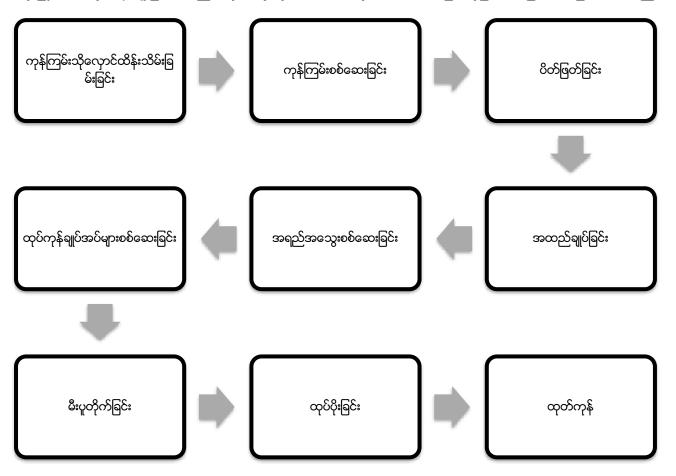
ဥပဒေနှင် မူဝါဒဆိုင်ရာ အချက်အလက်များ

ရေးဆွဲရြခင်း၏ရည်ရွယ်ချက်မှာ နိုင်ငံတော်နှင့် နိုင်ငံတကာမှ ချမှတ်ထားသော ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးအစီအစဉ်များ၊ စည်းမျဉ်းစည်းကမ်းများ၊ ဥပဒေနှင့် နည်းဥပဒေများကို လိုက်နာပြီး ပတ်ဝန်းကျင်နှင့်လိုက်ရောညီထွေရှိသော ထိခိုက်မှုလျှော့ချရေး အစီအစဉ်များပြုလုပ်ရန်ဖြစ်ပါသည်။ ပတ်ပန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် အစီရင်ခံစာရေးသားပြုစုသူများ၏ ကျွမ်းကျင်မှုနယ်ပယ်ဆိုင်ရာ ဖေ ဖော်ပြချက်များကို ရေးသားဖော်ပြထားပါသည်။ ဥပဒေနှင့် နည်းဥပဒေ အခန်းတွင် MONREC မှ ထုတ်ပြန်ထားသည့် ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်းများ၊ အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များအပြင် စက်ရုံနှင့်ဆက်စပ်သက်ဆိုင်နေပြီး လိုက်နာရမည့် ဥပဒေနှင့် နည်းဥပဒေများ၊ ဒေသတွင်း သို့မဟုတ် အပြည်ပြည်ဆိုင်ရာ သဘာဝပတ်ဝန်းကျင်နှင့် လူမှုပတ်ဝန်းကျင်ဆိုင်ရာ မူဝါဒများ၊ နိုင်ငံတကာသဘောတူချက်များကို အကျဉ်းချုပ်ရေးသားဖော်ပြထားပါသည်။ ဆက်စပ်နေသည့် စက်ရုံအတွင်းလိုက်နာ ဆောင်ရွက်ရမည့် စည်းမျဉ်းစည်းကမ်းများ၊ လုပ်ငန်းခွင် အွန္တရာယ်ကင်းရင်းရေးနင့် ကျန်းမာရေးဆိုင်ရာ အခြေခံစည်းမျည်းစည်း ကမ်းများလည်း ထည့်သွင်းဖော်ပြထားပါသည်။ Myanmar S.Flamingo ၏ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဆိုင်ရာ ကတိကဝတ်များအပြင် Limited Company ပတ်ဝန်းကျင်ထိခိုက်မှုလျှော့ချရေး မူဝါဒများကိုလဲ ထည့်သွင်းဖော်ပြထားပါသည်။

စီမံကိန်းဆိုင်ရာအချက်အလက်

အဆိုပြုထားသော စီမံကိန်း	လုံခြုံရေးသုံး အပတ်အထည်များ ချုပ်လုပ်ခြင်း
ရင်းနှီးမြုပ်နှံမှုပုံစံ	၁() % နိုင်ငံခြားသားရင်းနှီးမြုပ်နှံမှု
ကုမ္ပဏီအမည်	Myanmar S.Flamingo Garment Co., Ltd.
အဆိုပြုရင်းနီးမြုပ်နှံမှုကာလ	နှစ် ၃၀
စုစုပေါင်းမြေကွပ်ဧရိယာ	၂.၀၅ ဧက (၈,၂၉၆.၀၅၆ စတုရန်းမီတာ)
မြေနေရာပုံစံ	စက်မှုဇုန်မြေ
တည်ဆောက်မှုကာလ	€ N
စီမံကိန်း တည်နေရာ	မြေကွက်အမှတ် ၁၆၅၊ မြေတိုင်းရပ်ကွက်အမှတ် ၁၁၃၊ ဒဂုံမြို့သစ်
	(အရှေ့ပိုင်း) မြို့နယ်၊ ရန်ကုန်တိုင်းဒေသကြီး။
ဆက်သွယ်ရန် ဖုန်းနံပါတ်	ပ၉-၄၂ပပၥဂု၅ပဂု

အဆိုပြုလုပ်ငန်းအတွက် တည်နေရာနှင့် စက်ရုံအတွင်းပါရှိသည့် အဆောင်များ၊ စားသောက်ဆောင်၊ စတို၊ ပြုပြင်ထိန်းသိမ်းရေးအခန်း၊ မီးဖိုချောင် အစရှိသည်တို့ကိုသီးခြားဖော်ပြထားပါသည်။ထို့အပြင် ထုတ်လုပ်မှုနည်းလမ်းများ၊ လိုအပ်သည့်ကုန်ဂြာမ်းများ၊ နှစ်စဉ်ထွက်ကုန်များ နှင့် စက်ပစ္စည်းများအား ဖော်ပြထားပါသည်။ အဆိုပြုလုပ်ငန်းအတွက်လိုအပ်သည် စွမ်းအင်နှင့် အသုံးပြုသည့်ပမာကာများကိုလဲ ထည့်သွင်းဖော်ပြထားပါသည်။ ကျန်လုပ်ငန်းသုံးယာဉ်နှင့် ရုံးသုံးပစ္စည်းများကို ပြည်တွင်းမှ ဝယ်ယူအသုံးပြုပါသည်။ ကုန်ထုတ်လုပ်ခြင်းလုပ်ငန်းမှာ automatic machine နှင့် လူစွမ်းအားကို အသုံးပြုသော လုပ်ငန်းမျိုးဖြစ်ပါသည်။ ထုတ်လုပ်ပုံအဆင့်ဆင့်ကို အောက်ဖော်ပြပါ ပုံပြဇယားဖြင့် ဖော်ပြထားပါသည်။



လုပ်ငန်းမှ ပထမနှစ်မှ ၁၀ နှစ်အတွင်း အထည်ရေ (၁၀,၈၆၀,၀၀၀) မှ (၁၁,၉၄၆,၀၀၀)အထိ တိုးမြှင့်ထုတ်လုပ်သွားမည်ဖြစ်သည်။ နိုင်ငံခြားသားလုပ်သား (၈)ဦး နှင့် နိုင်ငံသား (ပြည်တွင်း)လုပ်သား (၉၀၃) ဦး စုစုပေါင်း ဝန်ထမ်း(၉၁၁) ဦးဖြင့် ဆောင်ရွက်သွားမည်ဖြစ်သည်။ ထုတ်ကုန်ပစ္စည်းများမှာ တစ်ကိုယ်ရေကာကွယ်ရေးသုံး အကျီများဖြစ်သည့် ဗက်စ်၊ ဆွယ်တာ၊ ဟူဒီ၊ တီရုပ်၊ ဂျာကင်များဖြစ်သည်။

အနီးပတ်ဝန်းကျင် အခြေအနေ

ကနဦးစစ်တမ်းကောက်ယူခြင်းနှင့် ဒေသဆိုင်ရာမှအချက်အလက်များရယူခြင်းသည် အလွန်အရေးကြီးပါသည်။ ပတ်ဂန်းကျင်အရည်အသွေး တိုင်းတာခြင်းကဲ့သို့သော ကနဦးစစ်တမ်းကောက်ယူခြင်းသည် ပတ်ဂန်းကျင်စီမံခန့်ခွဲမှု အရေးပါသောအခန်းအဖြစ် အစီရင်ခံစာတွင် တည်ရှိနေသည်။ ထို့အတွက် စီမံကိန်းဒေသသို့ ကွင်းဆင်းလေ့လာမှုများကို ရက်၊ ဒီဇင်ဘာလ၊ ၂၀၁၉ တွင်လက်တွေ့ကွင်းဆင်းလေ့လာခဲ့ပီးလိုအပ်သည့် လေအရည်အသွး၊ ဆူညံမှု၊ အလင်း၊ အပူချိန်နှင့် စိုထိုင်းမှု အချက်အလက်များကို ရယူခဲ့ပါသည်။ ကွင်းဆင်းလေ့လာထားသည် အချက်အလက်များကို အစရှိသည့်

သက်ဆိုင်ရာခေါင်းစဉ်အလိုက် အမျိုးသားပတ်ပန်းကျင်ဆိုင်ရာ အရည်အသွး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များနှင့် နှိုင်းယဉ်၍ ဖော်ပြထားပါသည်။ ထိုနည်းတူ လျှော့ချရမည့်နည်းလမ်းများကိုလဲ ထည့်သွင်းဖော်ပြထားပါသည်။ စီမံကိန်းတည်ရှိရာဒေသရှိ ရာသီဉတု၊ မိုးရေချိန်၊ လူမှုစီးပွားရေဆိုင်ရာ အချက်အလက်များကိုလဲ ထည့်သွင်းဖော်ပြထားပါသည်။

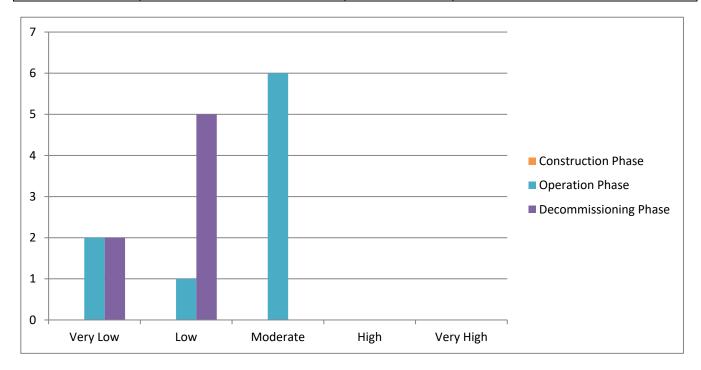
ပတ်ဝန်းကျင်ထိခိုက်မှုနှင့် လျှော့ချရေး အစီအစဉ်

စီမံကိန်းဆောင်ရွက်ချက်များကြောင့် ပတ်ပန်းကျင်ဆိုင်ရာအရင်းအမြစ်များ၊ ဂေဟ ဆိုင်ရာ အရင်းအမြစ်များ၊ လူ ့စွမ်းအားအရင်းအမြစ်များနှင့် စွန့်ပစ်ပစ္စည်းများစွန့်ပစ်ခြင်း စသည့်ဖြစ်လာနိုင်သည့်ထိခိုက်မှုများကို ခွဲခြားသတ်မှတ်ပြီး ၎င်းတို့၏ ရလဒ်များကို ထိခိုက်မှုဆန်းစစ်သည့် နည်းလမ်းများကို အသုံးပြု၍ သတ်မှတ်ခဲ့ပါသည်။ စီမံကိန်းအား ထိခိုက်မှုများကို အပိုင်းသုံးပိုင်းခွဲ၍ သတ်မှတ်ထားသည်။ အမျိုးအစားမှာ တည်ဆောက်သည့်ကာလ၊ လုပ်ငန်းလည်ပတ်သည့်ကာလ နှင့် လုပ်ငန်းဖျက်သိမ်းသည့်ကာလများ ဖြစ်ပါသည်။ ပတ်ပန်းကျင်ထိခိုက်မှု လျော့ပါးစေရေး နည်းလမ်းများကိုလဲထည့်သွင်းဖော်ပြထားပါသည်။

ပတ်ဝန်းကျင် လက္ခကာ	လုပ်ငန်းလုပ်ဆောင်မှု	ထိရိုက်မှုအဆင့်	လျှော့ချရေးနှင့် ထိန်းချုပ်မှု		
	တည်ဆောက်ရေးကာလ။ ။ပတ်ဝန်းကျင်ထိရိက်မှုလေ့လာချိန်တွင် စက်ရုံတည်ဆောက်ပြီး လုပ်ငန်းလည်ပတ်နေချိန်ဖြစ်သော်ကြောင့် ဤကာလကိုထည့်သွင်း မစဉ်းစားတော့ပါ။				
လုပ်ငန်းလည်ပတ်ခြင်း	ကာလ				
လေထုညစ်ညမ်းမှု	 သယ်ယူပို့ဆောင်ရေးသုံး ဖ မော်တော်ယာဉ်တို့ကြော ကာင့် ဖုန်မှုံနှင့် ဖန်လုံအိမ်ဓါ ဓါတ်ငွေ့ထွက်ခြင်း လုပ်ငန်းခွင်အတွင်းဖုန်မှုံထွက်ခြင ခင်း မီးဖိုနှင့် ရေနွးငွေ့ဘွိုင်လာ လာတို့မှ မီးခိုးထွက်ခြင်း အရေးပေါ် သုံးမီးစက်မှာ စွန့်ထ ့ထုတ်အခိုးအငွေ့ ထွက်ခြင်း 	အဘင့်တင့်	 ဘွိုင်လာနှင့်မီးစက် တို့တွင် မီးခိုးခေါင်းတိုင် တပ်ဆင်ခြင်းဖြင့် အခိုးအ ငွေ့ကြောင့် ပတ်ဝန်းကျင် ထိခိုက်မှုကို လျှော့ချခြင်း၊ စက်ရုံအတွင်းနှင့် အနီး အနားတွင် သစ်ပင်ပန်းမံ စိုက်ပျိုးခြင်းဖြင့် carbon ထွက်ရှိမှုကို လျှော့ချပေးခြင်း၊ NOx ထွက်ရှိမှုနည်းသောနည်းပညာမြင မင့် စက်ပစ္စည်း များသုံးခြင်း၊ စက်ပစ္စည်းများကို ပုံမှန်ပြုပြင်ထိန်းသိမ်းပေးခြင်း။ 		
ဖ ရ	မိလ္လာစွန့်ထုတ်ရေ စက်ပစ္စည်း၊ မော်တော တာ်ယာဉ်များမှဆီယိုဖိတ်ခြင်း	အနည်းငယ်	 လက်ရှိရေဆိုးစွန့်ပစ်မှုပုံစံဖြစ်ဖေ ်သော မိလ္လာစနစ်ကို ပံ ပုံမှန်စစ်ဆေးပေးခြင်း၊ မိလ္လာကန်နှင့် မိလ္လာ စနစ်ကို လူဦးရေန ရနှင့် သင့်တင့်သည့် ပမ ပမာကာ ရှိရန် စီစဉ်ထားခြင်း၊ 		

	T	I	
			 ပုံမှန်သန့်ရှင်းရေးပြုလုပ်ပေးခြင်း။ စက်ပစ္စည်းများကို ပုံမှန်ပြုပြင်ထိန်းသိမ်းပေးခြင်း။
မြေဆီလွှာညစ်ညမ်းမှု	• မတော်တစ စက်ပစ္စည်း၊ မော်တော တာ်ယာဉ်များမှ ဆီယိုဖိတ်ခြင်း	အလွန်နည်း	 စက်ပစ္စည်းများကို ပုံမှန်ပြုပြင် ထိန်းသိမ်းပေးခြင်း။ မတော်တစမှု မဖြစ်စေရန် ထိန်းသိမ်းခြင်း။
ဆူညံသံ	ဘိုုင်လာ၊ မီးစက်၊ လေမှုတ်စက် နှင့် မော်တော် ယာဉ် အသုံးပြု မှုကြောင့် ပတ်ဝန်းကျင် ဆူညံမှု	အသင့်တင့်	 ဆူညံသံထွက်သောနေရာများကို အကာအကွယ် ဖြင့်ထားရှိခြင်း စက်ပစ္စည်းများကို ပုံမှန်ပြုပြင်ပေးခြင်း
မီးဘေးအွန္တရာယ်	• ကုန်ကြမ်းသိုလှောင်မှု နှင့် လျပ်စစ်သုံးစွဲ ပေါ့လျော့မှု	အသင့်တင့်	ကုန်ကြမ်းများအား သီးသန့်ထားရှိခြင်းလျပ်စစ်သုံးစွဲမှုများအား စနစ်တကျ အသုံးပြုစေခြင်း
စွန့်ပစ်အမှိုက်	 ထုတ်လုပ်ရာတွင် ကျန်ရှိသော ပိတ်စ အပိုင်းအစများ။ မီးဖိုချောင်နှင့် ရုံးတွင်းစွန့်ပစ်ပစ္စည်းများ 	အသင့်တင့်	• စွန့်ပစ်အမှိုက်များအား ပြန်လည်သုံးစွဲရန် နှင့် စွန့်ပစ်ရန် အဖြစ်သတ်မှတ်ပီး သီးခြားစွန့်ပစ်စေခြင်း
စွန့်ပစ်အရည်	• နေအိမ်၊ စားသောက်ဆောင် တို့မှစွန့်ထုပ်ရေ။ မိလ္လာကန်စနစ်	အသင့်တင့်	 စွန့်ပစ်အရည်များအား ပြန်လည်သုံးစွဲရန်(ရေသန့်စင်ခြင်း) နှင့် စွန့်ပစ်ရန် အဖြစ်သတ်မှတ်ပီး သီးခြားစွန့်ပစ်စေခြင်း
အွန္တရာယ်ရှိအမှိုက်	• စက်များမှ ဆီယိုစိမ့်မှုများ၊ မော်တော တာ်ယာဉ်များပြုပြထိမ်းသိမ်းမှုက ထွက်ရှိသည့်အမှိုက်များ	အလွန်နည်း	စက်သုံးဆီများအားစနစ်တကျ အသုံးပြုစေခြင်း၊ စနစ်တကျသိုလှောင်ခြင်း နှင့် အန္တရာယ်ရှိပစ္စည်းများအား စနစ်တကျထားရှိစေခြင်း
လူမှုစီးပွားဘဝ	• ဒေသခံပြည်သူများအတွက် အလုပ်အကိုင်အခွင့်အလမ်းများ ရရှိစေခြင်း	အသင့်တင့်	
လုပ်ငန်းပိတ်သိမ်းခြင်	നോസ		
လေထုညစ်ညမ်းမှု		အနည်းငယ်	 NOx ထွက်ရှိမှုနည်းသော နည နည်းပညာမြင့် စက်ပစ္စည်း များသုံးခြင်း၊ စက်ပစ္စည်းများကို ပုံမှန်ပြုပြင်ထိန်းသိမ်းပေးခြင်း။
ဖရ	• ဖြိုချပစ္စည်းများနှင့် မိလ္လာဖျက်ဆီးမှုများ	အနည်းငယ်	ပုံမှန်သန့်ရှင်းရေးပြုလုပ်ပေးခြင်း။စက်ပစ္စည်းများကို

			ပုံမှန်ပြုပြင်ထိန်းသိမ်းပေးခြင်း။
မြေဆီလွှာညစ်ညမ်းမှု		အနည်းငယ်	• မတော်တစမှု မဖြစ်စေရန် ထိန်းသိမ်းခြင်း။
အမှိုက်စွန့်ပစ်မှု		အလွန်နည်း	စွန့်ပစ်အမှိုက်များအား ပြန်လည်သုံးစွဲရန် နှင့် စွန့်ပစ်ရန် အဖြစ်သတ်မှတ်ပီး သီးခြားစွန့်ပစ်စေခြင်း
အွန္တရာယ်ရှိအမှိုက်	စက်များမှ ဆီယိုစိမ့်မှုများ၊ မော်တော တာ်ယာဉ်များပြုပြံထိမ်းသိမ်းမှုက ထွက်ရှိသည့်အမှိုက်များ ဖြိုချပစ္စည်းများ သယ်ယူမှုများ	အလွန်နည်း	စက်သုံးဆီများအားစနစ်တကျ အသုံးပြုစေခြင်း၊ စနစ်တကျသိုလှောင်ခြင်း နှင့် အွန္တရာယ်ရှိပစ္စည်းများအား စနစ်တကျထားရှိစေခြင်း
မတော်တဆ ထိခိုက်မှုများ		အနည်းငယ်	• မတော်တစမှု မဖြစ်စေရန် ထိန်းသိမ်းခြင်း။
လူမှုစီးပွားဘဝ	• ဒေသခံပြည်သူများအတွ တွက်အလုပ်အကိုင် ခေတ္တရရှိခြင်း		



ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှု အစီအစဉ်

အဆိုပြုလုပ်ငန်း၏ ပတ်ပန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်အတွက် Plan-Do-Check-Act (P D C A) စက်ဝိုင်းဖြင့် အစီစဉ်တကျ ပြုလုပ်သွားမည်ဖြစ်ပါသည်။ အစီအစဉ်တွင် စက်ရုံကြောင့် ဖြစ်ပေါ် စေနိုင်သော ပတ်ဝန်းကျင်နှင့် လူမှုဘဝအပေါ် ဆိုးကျိုးသက်ရောက်မှုများကို လျှော့ချရေး၊ စီမံခန့်ခွဲရေးနှင့် စောင့်ကြပ်ကြည့်ရှုရေး အစရှိသည့်

အစီအစဉ်များ ပါဝင်ပါသည်။ ၄င်း EMP အစီအစဉ်များကို အကောင်အထည်ဖော်ရန်အတွက် သည် စက်ရုံတွင် ကျန်းမားရေး၊ ဘေးအန္တရာယ်ကင်းရှင်းရေးနှင့် ပတ်ဝန်းကျင်ဆိုင်ရာ အဖွဲ့ အစည်းတစ်ခုထားရှိပြီး လျှော့ချရေး၊ စီမံခန့်ခွဲရေးနှင့် စောင့်ကြပ်ကြည့်ရှုရေး အစီအစဉ်များကို အကောင်အထည်ဖော်သွားမည်ဖြစ်ပါသည်။ အဆိုပါစက်ရုံ၏ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်ကို ရေရှည်ဖွံ့ဖြိုးတိုးတက်ကောင်းမွန်သော ပတ်ဝန်းကျင် အဖြစ် အကောင်အထည်ဖော်ဆောင်ရွက်ရန် ပတ်ဝန်းကျင်ဆိုင်ရာ ဆိုးကျိုးသက်ရောက်မှုများကို လျှော့နည်းစေရန် စီမံခန့်ခွဲမှုအစီအစဉ်များနှင့် စောင့်ကြပ်ကြည့်ရှုရမည့်အစီအစဉ်များကို အောက်ပါအတိုင်းပတ်ဝန်းကျင်ဆိုင်ရာ အကြောင်းအရာတစ်ခုချင်းစီအလိုက် ခွဲခြားမှ ပြုလုပ်ထားပါသည်။

၁။ လေထုညစ်ညမ်းမှုနှင့် ဇုန်မှုန့်ဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်

၂။ ရေသုံးစွဲမှုဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်

၃။ ရေဆိုးစွန့်ပစ်မှုဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်

၄။ အမှိုက်စွန့်ပစ်မှုဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်

၅။ ဆူညံမှုထိန်းခြင်းဆိုင်ရာ စီမံခန့်ခွဲမှု အစီအစဉ်

၆။ အရေးပေါ် တုန့်ပြန်ရေး အစီအစဉ်

၇။ စောင့်ကြပ်ကြည့်ရှုရေး အစီအစဉ်

၈။ လူမှုအကျိုးတူ ပူးပေါင်းပါဝင်မှု အစီအစဉ် CSR Plan

၉။ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်အတွက် ငွေကြေးလျာထားမှု

၁ဂ။ မကြေနပ်မှု ဖြေရှင်းခြင်း နည်းလမ်း

အဆိုပြုလုပ်ငန်း၏ လူထုအကျိုးတူပူးပေါင်းပါလင်မှုများအဖြစ် အကျိုးအမြတ်၏ ၂% ကို ကျန်းမာရေး၊ ပညာရေးနှင့် နယ်ပယ်ဖွံဖြိုးတိုးတက်ရေးများတွင် ထည့်လင်လှူတန်းသွားမည်ဖြစ်ပါသည်။ အဆိုပြုလုပ်ငန်း၏ ပတ်လန်းကျင်စောင့်ကြပ်ကြည့်ရှု့ရေးလုပ်ဆောင်ရမည့် လုပ်ငန်းစဉ်များနှင့် ဖြေရှင်းရမည့်နည်းလမ်းများကိုလဲ ထည့်သွင်းဖော်ပြထားပါသည်။

သက်ဆိုင်သူများနှင့် တွေ့ဆုံဆွေးနွေးခြင်း

သက်ဆိုင်သူများနှင့် တွေ့ ဆုံဆွေးနွေးခြင်း အစီအစဉ်တွင် စက်ရုံ၏ EMP အစီရင်ခံစာ အကြောင်းကို ရှင်းလင်းတင်ပြခြင်းဖြစ်သည်။ တွေ့ဆုံပွဲကို ၂၀ ရက်၊ ဒီဇင်ဘာလ၊ ၂၀၁၉ ခုနှစ်တွင် ဒဂုံမြို့သစ်ဆိပ်ကမ်း စက်မှုဇုန်ကော်မတီရုံးတွင် ပြုလုပ်ခဲ့ပါသည်။ တွေ့ဆုံပွဲတွင် စက်ရုံ၏သက်ဆိုင်ရာပုဂ္ဂိုလ်များ၊ အစိုးရအဖွဲ့ ရုံးများဖြစ်သော ပတ်ဝန်းကျင်ထိန်းသိမ်းရေး ဦးစီးဌာန၊ စက်မှုကြီးကြပ်နှင့် စစ စစ်ဆေးရေး ဦးစီးဌာန၊ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးနှင့် သန့်ရှင်းရေးဌာ အစရှိသော သက်ဆိုင်ရာဌာနများ၏ တာဝန်ရှိပုဂ္ဂိုလ်များ၊ စက်မှုဇုန်စီမံခန့်ခွဲမှုကော်မတီ၏ တာဝန်ရှိပုဂ္ဂိုလ်များမှ လိုအပ်သည်များကို အကြံပေးခြင်း၊

စီမံကိန်း၏ အစီရင်ခံစာတွင် လိုအပ်သည်များကို ဖြည့်စွက်ပေးရန် အကြံပြုချက်များပေးခဲ့ပါသည်။ ပြုလုပ်ခဲ့သည့် အစီအစဉ်အကျဉ်းကိုပါ ထည့်သွင်းဖော်ပြထားပါသည်။

အချိန်	သောကြာနေ့၊ ၂၀ ရက်၊ ဒီဇင်ဘာလ၊ ၂၀၁၉	
နေရာ	ဒဂုံမြို့သစ်ဆိပ်ကမ်း၊ စက်မှုဇုန်ကော်မတီရုံး။ ရန်ကုန်မြို့။	
အစီအစဉ်အကျဉ်း	 စက်ရုံနောက်ခံအကြောင်း စက်ရုံလုပ်ငန်းအကြောင်း ပတ်ဝန်းကျင်ထိခိုက်မှုနှင့် လျှော့ချရေးအစီအစဉ် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်နှင့် စောင့်ကြပ်ကြည့်ရှုမှုအစီအစဉ် အမေးအဖြေကဏ္ဍ 	

နိဂုံး

နိဂုံးချုပ်အားဖြင့် ယခုစီမံကိန်းသည် ဆေက်လုပ်ရေးကာလ၊ လုပ်ငန်းလည်ပတ်သည့်ကာလနှင့် လုပ်ငန်းဖျက်သိမ်းသည့် ကာလသုံးခုလုံးတွင် ဒေသခံပြည်သူများကိုအလုပ်အကိုင် အခွင့်အလမ်းများ ဖန်တီးပေးနိုင်သည်။ ကာလသုံးခုလုံးတွင် ဖြစ်ပေါ် လာနိုင်သော ထိခိုက်မှုများကို လျှော့ချနိုင်မည့် နည်းလမ်းများနှင့် အကောင်အထည်ဖော်ခြင်းဖြင့် လျှော့ချနိုင်သည်။ ပတ်ဂန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်အား ပတ်လန်းကျင်စောင့်ကြပ်ကြည့်ရှုမှု အစီအစဉ်အား စီမံကိန်း၏ ပတ်ဂန်းကျင်ဆိုင်ရာ အရည်အသွေးကို တေင့်ကြပ်ကြည့်ရှုရန် မဖြစ်မနေ အကောင်အထည်ဖော်ပေးရမည်။ စီမံကိန်းကောင်အထည်ဖော်သူသည် ပတ်ဂန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာနမှ ယခုအစီရင်ခံစာအား စစ်ဆေးပီးနောက် ပြန်လည်ပေးပို့လာသော သဘောထားမှတ်ချက်နှင့် အကြံပြုချက်များကိုလိုက်နာရမည်။ ထို့ပြင် စီမံကိန်းအကောင်အထည်ဖော်သူသည် မြန်မာနိုင်ငံ၏ ပတ်ပန်းကျင်နှင့် သက်ဆိုင်သောမှုပါဒများ၊ ဥပဒေများ၊ သတ်မှတ်ချက်များကို နည်းဥပဒေများ၊ လိုက်နာရန်လိုအပ်ပါသည်။

EXECUTIVE SUMMARY

Introduction

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

The project is new investment for manufacturing of Safety Clothing by Contract Manufacturing Process (CMP) basic company from China. The project is issued by the Yangon Region Investment Committee (YRIC) on 27 August 2019 with the Endorsement No. (YGN- 184/2019). YRIC notified for the environmental approval and comments of the Ministry of the Natural Resources and Environmental Conservation (MONREC) on the proposed project and had approved the proposal for investment in Manufacturing of Safety Clothing on CMP basis under the name of Myanmar S.Flamingo Garment Company Limited as a solely owned foreign investment from the China.

According to the Myanmar Environmental Conservation Law (2012), it requires that the proponents of every development project in the country submit either an Initial Environmental Examination (IEE) or an Environmental Impact Assessment (EIA) to Ministry of Natural Resources and Environmental Conservation (MONREC). As per the comments of Environmental Conservation Department (ECD), said project requires an Environmental Management Plan (EMP) to meet the environmental assessment requirements of Notification No. Yaka- 1/3/4 (EIA) (1404/2019) on 31 July 2019. Therefore, Myanmar S.Flamingo Garment Company Limited commissioned Myanwei Consulting Company Limited for EMP report study. The specific objectives of this study are

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

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

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

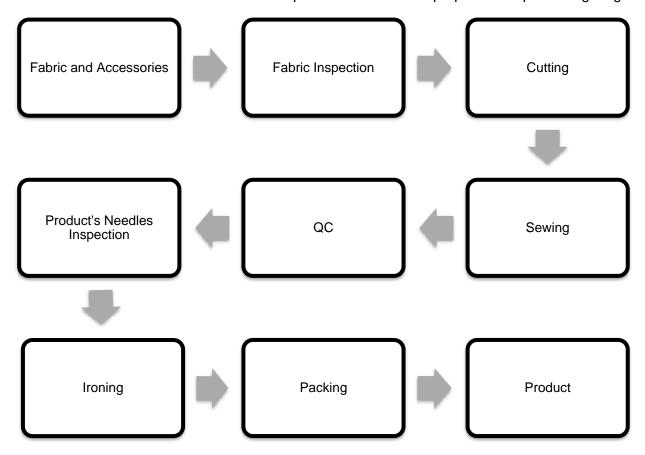
Policy, Legal and Institutional Framework

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

Project Description

Type of Proposed Business	Manufacturing of Safety Clothing on CMP Basis
Type of investment	100% Foreign Investment
Name of Company	Myanmar S.Flamingo Garment Company Limited
Land lease year	30 years
Total land area	2.05 acres (8,296.056 Square meter)
Type of land	Industrial Land
Construction Period	6 months
Address of Proposed Project	Plot No. 165, Myay Taing Block No. 113, East Dagon Myo Thit Township, Yangon Region
Contact Person	09-420017507 (Daw Mai Pyo Yin, Account)

The proposed project is located at Yangon region. The total area of project site is 2.05 acres. Main structure is designed into production area for one building. Transformer room, generator room and water treatment plant are separated by main factory building structure. The factory layout plan which is also can be seen in this report. The main product of the New Plus Company Limited factory is garments. The Utilities for proposed factory include electrical power, fuel oil for emergency used generator and water for domestic use. Electric power is used for the purpose of to provide lighting.



Production Process of Myanmar S.Flamingo Garment Company limited

Production rate of Myanmar S.Flamingo Garment Company Limited produced between first year of operation and ten years operation as 10,860,000 to 11,946,000 pieces. Products are safety

clothing like Vests, Sweaters, Hoodie, Zippered Hoodie, T-shirts and outwear jackets. It is required of work force (8) foreigners' technician and (903) local employees for first year operation to 10 years operation.

Brief Description of Surrounding Environment

Primary data and secondary data collections are very imported to assess environmental impacts. Primary data collections (environmental quality measurements and monitoring) play an important role for conducting EMP. Therefore. Myanwei Environmental Solutions Co., Ltd. Conducted air quality, temperature and humidity, noise level measurement and light pollution measurement on 5 December 2019 and compared with the National Environmental Quality (Emission) Guidelines and also described how to reduce the impact and how to maintain the pollutions. Also described the weather conditions, rainfalls and socio-economic component of the proposed project.

Environmental Impact and Mitigation Measure

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

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

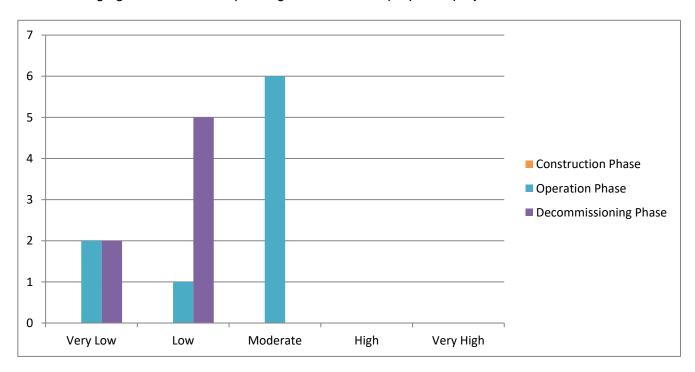
Evaluation and Perdition of Significant Impacts

Environmental	Project Activities		Significant of Potential Impacts				Impact Significance
Impact		М	D	Е	Р	SP	
Construction Phase; during EMP preparat	It is not assessed in this phase, beca	use c	of cons	structi	on is	alrea	dy completed
Operation Phase							
Air pollution	 Dust and GHGs emission from vehicles used for transporting raw materials and final products Particulate matters emission from the activities of production process Emission from emergency diesel generator 	2	4	2	4	32	Moderate
Water pollution	 Sewage disposed of from the toilets Oil spill and grease leaks from transporting vehicles and machinery equipment used in operation phase 	2	4	2	3	24	Low
Soil Contamination	Accidental spillage of oil used by vehicles operating	1	4	1	2	12	Very Low
Noise Pollution	Generating noise from the production machinery	3	4	1	4	32	Moderate

Environmental	nvironmental Impact Project Activities		Significant of Potential Impacts				Impact Significance
impact		M	D	Е	Р	SP	
	Noise from the generating of the emergency generators						
Fire Hazard	Poor electrical installationswaste disposed areaRaw materials storage	3	5	2	4	40	Moderate
Solid waste	 residual pieces of fabric scraps from the production lines Waste from packaging materials Waste from kitchen, dormitory and office. 	3	4	1	4	32	Moderate
Hazardous waste	Used oil and lubricant from the maintenance of vehicles and machines.	2	4	1	2	14	Very Low
Occupational Health and Safety (Accidents, Injuries)	 Accidental cases cause by operating machines. Electricity and emergency diesel generators. Unloading, mixing, cutting, pressing and packaging activities. Accidental cases of thermic fluid heater 	3	4	1	4	32	Moderate
Social-economic Condition	Job opportunities for local people	ı	-	-	-	-	Positive Impact
Decommissioning Ph	ase						
Air pollution	 Decommissioning of buildings and related materials Transportation of demolished materials 	3	1	1	4	20	Low
Water pollution	Sewage form decommissioning workers Demolition machinery equipment	3	1	1	3	15	Low
Soil Contamination	 Decommissioning of buildings and related materials Transportation of demolished materials 		1	1	3	15	Low
Noise Pollution	 Decommission activities Transportation of demolished materials 		1	1	3	15	Low
Waste disposal	Sewage systemDemolished debris such as bricks, concrete materials		1	1	3	12	Very Low
Hazardous waste	Used lubricants from decommissioning vehicles and machines	2	1	1	3	12	Very Low
Occupational Health	Decommissioning activities Transportation of demolished	3	1	2	3	18	Low

Environmental Impact	Project Activities	Significant of Potential Impacts				Impact Significance	
impact			D	Е	Р	SP	
and Safety (Accidents, Injuries)	materials						
Social-economic Condition	Temporary job opportunities for local people	-	-	-	-	-	Positive Impact

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



Impact significance of the proposed project

Environment Management Program

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

The following environmental issues that require environmental management plans based upon the potential impacts of activities by for Myanmar S.Flamingo Garment Co., Ltd. are as follows:

- 1. Air pollution/Dust Management plan
- 2. Water Consumption Management Plan
- 3. Wastewater Management Plan
- 4. Solid Waste Management plan
- 5. Noise Management
- 6. Emergency Response plan
- 7. Environmental Monitoring and Reporting
- 8. Corporate Social Responsible (CSR) Plan
- 9. Budget Plan
- 10. Grievance Redress Mechanism

Public Consulting

This chapter presents results of public consultation and information disclosure conducted for the Myanmar S.Flamingo Garment Co., Ltd. Public participation can considered as the required element of the EMP process. In this study various stakeholder's participation were made. Public consultation during preparation of EMP report was conducted on 20, December 2019, following the EIA procedure. The project's stakeholders in this category are key officials or representatives of the regional and local authorities who have direct responsibilities for the administration of the EMP process for environmental and social clearance and issuing operation permits for proposed development projects. For this factory, relevant key offices at the national level are Environmental Conservation Department (ECD) and Industry Supervision and Inspection Department. Relevant key office at the regional level is Yangon City Development Committee (YCDC), General Administrative Department, Fire Department, Factories and General Labor Law Inspection Department, Public Health Department, Industrial Supervision and Inspection Department.

Time and Date	Friday, 20 December 2019
	10:30-12:30
Venue	Dagon Myo thit Seik Kann, Zone Committee Meeting Room
Agenda	Presentation on the Background Information of Project,
	Project Description,
	Impact Assessment, Environmental Mitigation
	Environmental Management Plan and Monitoring Plan
	Received and Answer from feedback of participants

Conclusion & Recommendation

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

This is recommended that;

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

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

1. INTRODUCTION

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

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

1.1. PROJECT BACKGROUND

The project is new investment for manufacturing of Safety Clothing on CMP Basis from China. The Yangon Region Investment Committee (YRIC) issues the project on 27 August 2019 with the Endorsement No. (YGN- 239/2019). The committee must issues the notification for the environmental approval and comments of the Ministry of the Natural Resources and Environmental Conservation (MONREC) on the proposed project and had approved the proposal for investment in manufacturing of Safety Clothing on CMP Basis under the name of Myanmar S.Flamingo Garment Company Limited.

According to the Myanmar Environmental Conservation Law (2012), it requires that the proponents of every development project in the country submit either an Initial Environmental Examination (IEE) or an Environmental Impact Assessment (EIA) to Ministry of Natural Resources and Environmental Conservation (MONREC). As per the comments of Environmental Conservation Department (ECD), said project requires an EMP to meet the environmental assessment requirements of Notification No. Yaka- 1/3/4 (EIA) (1404/2019) on 31 July 2019. Therefore, Myanmar S.Flamingo Garment Co., Ltd. commissioned Myanwei Consulting Company Limited for EMP report study.

1.1.1. Project Proponent Profile

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

Table 1-1 Information of Investor

Investor Name:	Mr. Yang Wenxuan
ID No.:	EB 2030073
Citizenship:	Chinese
Address of Registration office:	Room 402, Unit 1, Building 1, Hengxing Ming Yuan, Shuxi Street, Wuyi Country, Zhejiang Province, China.

1.1.2. Director List

No.	Name of Shareholder	Citizenship	Share Percentage
1.	Mr. Yang Wenxuan	Hong Kong	80%
2.	Mr. Chen Meng	China	20%

1.1.3. Investment Plan and Salient Features of the Project

The estimated authorized capital investment is 0.997 Million US Dollar and salient features of the proposed project were described in (Table 1-2). Organization chart of Myanmar S.Flamingo Garnent Company Limited presented in Figure 1-1.

Table 1-2 Salient features of the project

Type of Proposed Business	Manufacturing of Safety Clothing on CMP Basis
Type of investment	100% foreign investment
Type of Share	Ordinary Share
Type of land	Industrial Land
Total land area	2.05 acres (8,296.056 square meter)
Total building area	One 2-storey production building (40 meter × 60 meter)
	One 2-storey office building
	One 1 storey security building
	One 1-storey generator room
Land lease year	30 years
Construction period	6 months
Operation starting date	30-year investment permit
Address	Plot No. 165, Myay Taing Block No. 113, East Dagon Myo Thit Township, Yangon Region
Contact person	Daw Mai Pyo Yin (Account) 09-420017507

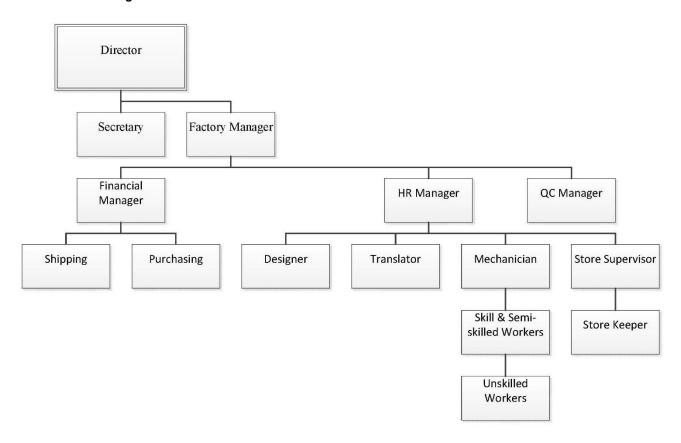


Figure 1-1 Organization Chart of Myanmar S.Flamingo Garment Company Limited

1.2. ENVIRONMENTAL CONSULTANT PROFILE

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

Table 1-3 Member of EMP Study Team

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

Environmental Management Flan	
BSc Physics	
DMEI (Diploma in Mechanical Engineering) (UK)	
(INTI)	
Mr. Sai Poeng Saing Kham (Member)	Report Writing, Secondary Data Study
B.A History	Troport Whing, Geochaary Bata Glady
Ms. Nan Htet Myintzu (Member)	Report Writing, Secondary Data Study
BSc (Hons) Geology	Troport Whing, Geochaary Bata Glady
Mr. Kyaw Win Han (Member)	Baseline Data Monitoring, Site Surveying
B.E. Chemical Engineering	Communication with Stakeholder in Project Area
B. Tech Chemical Engineering	Communication with Statemolder in Project Area
Mr. Aung Kyaw Moe (Member)	
B.E. Chemical Engineering	Report Writing, Secondary Data Study
B. Tech Chemical Engineering	
Mr. Saw Yan Naung (Member)	Baseline Data Monitoring, Site Surveying,
B.E. Chemical Engineering	Communication with Stakeholder in Project Area
B. Tech Chemical Engineering	Communication with Statemolder in Project Area
Mr. Myat Ko Ko (Member)	Baseline Data Monitoring, Site Surveying,
B.Sc (Hons) Geology	Communication with Stakeholder in Project Area
M.Sc (Economic & Mining Geology)	
Mr. Si Yan Hein (Member)	Baseline Data Monitoring, Site Surveying,
B.Sc (Geology)	Communication with Stakeholder in Project Area
Ms. Ei Ei Khin Myo (Member)	Report Writing, Secondary Data Study
B.Sc (Geology)	Troport Triming, Goodinaary Data Staay
Ms. Khin Thuzar Myint (Member)	
B.E. Materials and Metallurgy Engineering	Report Writing, Secondary Data Study
Diploma in Environmental Planning and	Troport Triming, Goodinaary Data Staay
Management	
Mr. Htoo Nanda Aung (Member)	Baseline Data Monitoring, Site Surveying,
B.Sc (Forestry)	Communication with Stakeholder in Project Area
Ms. Mu Kham Kyu (Member)	Report Writing, Secondary Data Study & Auto CAD
B.E. Mechatronics Engineering	Drawing.
B. Tech Mechatronics Engineering	
Ms. Wah Wah Zaw (Member)	
B.E. Material and Metallurgy	
Diploma in Environmental Planning and	Report Writing, Secondary Data Study
Management	
M.S Environmental Planning and Management	



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

01-501221

2. POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK

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

2.1. MYANMAR REGULATORY FRAMWORK

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

2.1.1. Laws and Regulations Related to Environmental and Social Considerations

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

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

Law and Regulation	Description	
National Environmental Policy of Myanmar, (Notification No. 26/94 dated 5 December 1994)	To achieve harmony and balance between socioeconomic, natural resources and environment through the integration of environmental considerations into the development process enhancing the quality of the life of all its citizens.	
	Constitution 2008	
Section 37, (a)	The Union is the ultimate owner of all lands and all-natural resources above and below the ground, above and beneath the water and in atmosphere in the Union.	
Section 37, (b)	The Union shall permit citizens rights of private property, right of inheritance, right of private initiative and patent in accord with the laws.	
Section 372	The Union guarantees the right to ownership, the use of property and the right to private invention and patent in the conducting of business if it is not contrary to the provisions of this Constitution and the existing laws.	
Section 45	The Union shall protect and conserve natural environment.	
Section 390, (a),(b),(c),(d)	Every citizen has the duty to assist the Union in preserving and safeguarding the cultural heritage, conserving the environment, striving for the development of human resources, and protecting and preserving the public property.	
Envir	onmental Conservation Law, 30 March 2012	
Objectives	to contract a healthy and clean environmental and to conserve natural and cultural heritage for the benefit of present and future generations; to maintain the sustainable development through effective management of natural resources and to enable to promote international, regional and bilateral cooperation in the matters of environmental conversation.	
Section 3	c) to enable to emerge a healthy and clean environment and to enable to conserve natural and cultural heritage for the benefit of present and future generations;(d) to reclaim ecosystems as may be possible which are starting to degenerate and disappear;	

	(e) to enable to manage and implement for decrease and loss of natural resources and for enabling the sustainable use beneficially;
Provisions of Duties and Powers relating to the Environmental Conservation of the Ministry: Section 7	(a) To specify categories and classes of hazardous wastes generated from the production and use of chemicals or other hazardous substances in carrying out industry, agriculture, mineral production, sanitation and other activities;
	(b) To prescribe categories of hazardous substances that may affect significantly at present or in the long run on the
	environment;
	(c) To promote and carry out the establishment of necessary factories and stations for the treatment of solid wastes, effluents and emissions which contain toxic and hazardous substances;
	(j) To prescribe the terms and conditions relating to effluent treatment in industrial estates and other necessary places and buildings and emissions of machines, vehicles and mechanisms;
	(m) To lay down and carry out a system of EIA and SIA as to whether or not a project or activity to be undertaken by any Government department, organization or person may cause a significant impact on the environment;
	(o) To manage to cause the polluter to compensate for environmental impact, cause to contribute fund by the organizations which obtain benefit from the natural environmental service system, cause to contribute a part of the benefit from the businesses which explore, trade and use the natural resources in environmental conservation works.
Chapter VI Environmental Quality	The Ministry may, with the approval of the Union Government and the Committee, stipulate the following environmental quality standards:
Standards: Section10	(a) suitable surface water quality standards in the usage in rivers, streams, canals, springs, marshes, swamps, lakes, reservoirs and other inland water sources of the public;
	(b) water quality standards for coastal and estuarine areas;
	(c) underground water quality standards;
	(d) atmospheric quality standards;
	(e) noise and vibration standards;
	(f) emissions standards;
	(g) effluent standards;
	(h) solid wastes standards;
	(i) other environmental quality standards stipulated by the Union Government.
Section 14	A person causing a point source of pollution shall treat, emit, discharge and deposit the substances which cause pollution in the environment in accord with stipulated environmental quality standards.
Section 15	The owner or occupier of any business, material or place which causes a point source of pollution shall install or use an on-site facility or controlling equipment in order to monitor, control, manage, reduce or eliminate environmental pollution. If it is impracticable, it shall be arranged to dispose the wastes in accord with environmentally sound methods.
Section 16	A person or organization operating business in the industrial estate or business in the SEZ or category of business stipulated by the Ministry: (a) is responsible to carry out by contributing the stipulated cash or kind in the relevant combined scheme for the environmental conservation including
	the management and treatment of waste; (b) shall contribute the stipulated users' charge s or management fees for
	the environmental conservation according to the relevant industrial estate,

	SEZ and business organization; (c) shall comply with the directives issued for environmental conservation according to the relevant industrial estate, SEZ or business.
Section 24	The project proponent has to allow relevant governmental organization or department to inspect whether performing is conformity with the terms and condition include in prior permission, stipulated by the ministry, or not.
Section 25	The project proponent has to comply with the terms and conditions include in prior permission.
Section 29	The project proponent has to abide by the stipulations included in the rules, regulations, by-law, order, notification and procedure, which are issued by said law.
E	nvironmental Conservation Rules, 2014
Rules 58	The Ministry shall form the EIA Report Review Body with the experts from the relevant Government departments, organizations.
Rules 59	The Ministry may assign duty to the Department to scrutinize the report of EIA prepared and submitted by any organization or person relating to EIA and report through the EIA Report Review Body.
Rules 61	The Ministry may approve and reply on the EIA report o IEE or EMP with the guidance of the Committee.
Sub-rule (a) of rule 68	The project proponent has to avoid emit, discharge or dispose the materials which can pollute to environment, or hazardous waste or hazardous material prescribed by notification in the place where directly or indirectly injure to public.
Sub-rule (b) of rule 68	The project proponent has to avoid performing to damage to ecosystem and the environment generated by said ecosystem.
Environmen	tal Impact Assessment Procedure (December 2015)
Objectives	The project proponent has to be liable for all adverse impacts caused by doing or emitting of project owner or contractor, sub-contractor, officer, employee, representative or consultant who is appointed or hired to perform on behalf of project owner, under sub-paragraph (a) of paragraph 102.
	The project proponent has to support, after consulting with effected persons by project, relevant government organization, government department and other related persons, to resettlement and rehabilitation for livelihood until the effected persons by the project receiving the stable socio-economy which is not lower than the status in pre-project, under sub-paragraph (b) of paragraph 102
	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. Screening: Section 23 a) The project proponent shall submit the Project Proposal to the Ministry for Screening. b) The Ministry will send the Project Proposal to the Environmental Conservation Department to determine the need for environmental assessment. c) Following the preliminary Screening and verification that the Project Proposal contains all required documents and related materials, subject to Articles 8, 9, 10, 11, 26 and 27 the Department shall make a determination in accordance with Annex 1 _ Categorization of Economic Activities for Assessment Purposes', taking into account Article 25 and the additional factors listed in Article 28 in order to designate the Project as one of the following, and then submit it to the Ministry: i) An EIA Type Project, or ii) An IEE Type Project, or iii) A Non IEE or EIA Type, and therefore not required to National Environmental Quality (Emission) Guidelines (NEQG) (December 2015) Objectives To provide the basis for regulation and control of noise and vibration, air

To provide the basis for regulation and control of noise and vibration, air emissions, and liquid discharges from various sources in order to prevent pollution for purposes of protection of human and ecosystem health.

National Environmental Policy of Myanmar (2019)

Vision A clean environment, with healthy and functioning ecosystem, that ensures includes development and wellbeing for all people in Myanmar. Mission	
To establish national environmental policy principle for guiding environmental protection and sustainable development and for mainstreaming environmental consideration into all polices, laws, regulation, plans, strategic, programmes and projects in Myanmar.	
Foreign Investment Law, 2012	
(a) To support the primary objectives of the national economic development plan, and for businesses that cannot yet be run by the State and citizens or businesses that have insufficient funds and technology.	
(b) Development of employment activities	
(I) Protection and conservation of the environment.	
(q) Appearing the required modern services for the Union and citizens.	
(a) To abide by the existing laws of the Republic of the Union of Myanmar.	
(b) To carry out the business by forming a company under the existing laws of Myanmar by the investor.	
(h) To carry out not to cause environmental pollution or damage in accord with existing laws in respect of investment business.	
(k) To carry out the systematic transfer of high technology relating to the business which are carried out by the investor to the relevant enterprises, departments or organizations in accord with the contract.	
Foreign Investment Rule, 2013	
The promoter or investor shall:	
(a) comply with Environmental Protection Law in dealing with environmental protection matters related to the business;	
(b) shall carry out socially responsible investment in the interest of the Union and its people;	
(c) shall co-operate with authorities for occasional or mandatory inspection;	
(d) shall exercise due diligence to be in conformity and harmony with norms and standards prescribed by relevant Union Ministry in conducting construction of factories, workshops, buildings, and other activities;	
(e) shall enforce Safety and Health	
Myanmar Investment Rules, 2017	
The project proponent has to comply with the conditions of the permit issued by the MIC and applicable laws when making the investment	
The project proponent has to fully assist while negotiating with the authority for settling the grievance of the local community which has been affected due to investment	
The project proponent has to submit the passport, expert evidence or document of degree and profile to the MIC office for approval if decide to appoint a foreigner as senior management, technician expert or consultant according to subsection (a) of section 51 of Myanmar Investment Law	
Section 15 - If the project proponent uses the owned vehicles the project owner has to ensure the insurance for the injured person.	
Section 16 - The project proponent has to ensure insurance to compensate for general damages because the project may cause damages to the environment and injury to the public.	

Payment of Wages Law (2016)		
Section 3 & 4	The project proponent has to pay the wages in accord with section 3 and 4 of said law,	
Section 5	The project proponent has to submit with the agreements of employees & reasonable ground to the department if it is difficult to pay because of force majeure included in a natural disaster	
Section 7-13	The project proponent has to abide by the provisions of section 7 to 13 in the chapter (3) in respect of deduction from wages.	
Section 14	The project proponent has to pay the overtime fees, prescribed by law, to the employees who work over working hours	
Yangon City Development Committee Law (2018)		
Section (317)	The proponent shall not block the natural river channel, change the course, and disrupt the water channel, filling with soil within the city boundaries without the consent of the Committee	
Section (318)	The project proponent shall not construct buildings, factories, and industries without sewage, toilet, septic tanks, and wastewater treatment system	
Section (322)	The project proponent is not allowed to make activities that will produce noise pollution, water pollution, air pollution, and soil pollution to impact the environment within the city's boundaries	
The Amended Law for Factories Act, 1951 (2016)		
Hygiene in Working Environment: Section 3	Mentions responsibilities of employer and manager regarding waste disposal, ventilation, extreme temperature, dust and gas generation, minimum space for each worker, lighting, portable drinking water and toilets for employees.	
Safety in Working Environment: Section 4	States responsibilities of employer and manager concerning with machine guarding, personal protective equipment, housekeeping, aisles and exits, chemical storage and fire protection system to avoid accident.	
The Private Industrial Enterprise Law, 1990		
Basic Principles: Section 3	Private Industrial Enterprises shall be conducted in accordance with the following basic principles:- (a) to enhance the higher proportion of the manufacturing value added in the gross national product and value of services, and to increase the production of the respective economic enterprises which are related to the	
	industrial enterprise;	
	(b) to acquire modern technical know-how for raising the efficiency of industrial enterprises and to establish the sale of finished goods produced by the industrial enterprise not only in the local market, but also in the foreign market;	
	(d) to cause narrowing down of the gap between rural development and urban development by causing the development and improvement of industrial enterprises;	
	(e) to cause opening up of more employment opportunities;	
	(f) to cause avoidance of or reduction of the use of technical know-how which cause environmental pollution;(g) to cause the use of energy in the most economical manner.	
Objectives	The Export and Import Law (2012)	
Objectives	The objectives of this law are as follows:	

	a) To enable to implement the economic principles of the State successfully.						
	b) To enable to lay down the policies relating to export and import that supports the development of the State.						
	c) To cause the policies relating to export and import of the State and activities are to be in conformity with the international trade standards.						
	d) To cause to be streamlined and speedy in carrying out the matters relating to export and import.						
Prohibitions: Section 5	No persons shall export or import restricted, prohibited and banned goods.						
Prohibitions: Section 6	Without obtaining license, no person shall export or import the specified goods which are to obtain permission.						
Prohibitions: Section 5	A person who obtained any license shall not violate the conditions contained in the license.						

The Prevention of Hazard from Chemical and Related Substances Law, 2013

This law was enacted with the objectives of :

- a. To protect from being damaged the natural environment resources and being hazardous any living beings by chemical and related substances:
- b. To supervise systematically in performing the chemical and related substances business with permission for being safety;
- c. To perform the system of obtaining information and to perform widely educative and research for using the chemical and related substance systematically;
- d. To perform the sustainable development for the occupational safety, health and environmental conservation.

Regarding the chemical management and storage, currently, regulations governing chemicals management are divided between various Acts, mostly dating from colonial times; hence the legislation is in many respects related to the British framework. The Factory Act and the Public Health Act contain the provisions for chemicals management and storage. Some chemicals are likely to require permits.

Underground Water Act

The underground water act enacted on the date of 21st June in 1930 whereas it is expedient to conserve and protect underground sources of water supply in the Union of Burma. This act prohibits sinking of a tube for the purpose of obtaining underground water except under and in accordance with the terms of a license granted by the water officer. Township Officer or sub-divisional officer had power to close a license tube after exercising jurisdiction over the local area concerned and the expense of such closure shall be recoverable from the owner of the tube as if it were an arrear of land-revenue.

Myanmar Fire Brigade Law (2015)

The Pyidaungsu Hluttaw enacted this law by Law No.11/2015 on the date of 17th March, 2015 with the following objectives :

- (a) to take precautionary and preventive measures and loss of state own property, private property, cultural heritage and the live and property of public due to fire and other natural disasters
- (b) to organize fire brigade systemically and to train the fire brigade
- (c) to prevent from fire and to conduct release work when fire disaster, natural disaster, epidemic disease or any kind of certain danger occurs
- (d) to educate ,organize and inside extensively so as to achieve public corporation
- (e) to participate if in need for national security, peace for the citizens and law and order

Section-8 Fire Safety Procedures					
Rule17	The relevant Government Department or organization shall, for the purpose of precaution and prevention obtain the approval of the Fire force Department before granting permission for the following cases: a. Constructing three-storied and above buildings market and condominium				

	buildings ,				
	b. Operating hotel, motel, guest house enterprise				
	c. Constructing factory, workshop ,storage facilities and warehouse				
	d. Operating business expose to fire hazard by using in inflammable materials or explosive materials				
	e. Producing and selling fire-extinguishing apparatuses				
	f. Doing transport business ,public utility vehicles train, airplane, helicopter ,vessel, ship, tonkin tug				
Rule18	The relevant government department or organization shall obtain the opinion of the Fire Services Department for the purpose of fire precaution and prevention, when laying down plans for construction for town, village and downtown or village development plans				
The Flectricity Law (2014)					

The Electricity Law (2014)

In 2014, the new Electricity Law, a comprehensive piece of legislation covering licensing, a new regulatory commission, standards, inspection, tariff, and restrictions, replaced the Electricity Law of 1984. The Electricity Law divides projects into "small" (up to 10 MW), "medium" (between 10 MW to 30 MW) and large (upwards of 30 MW); the states and regions can issue permits for small and medium power plants. In case these plants are not connected to the national grid, the Union Government Ministry is not the primary authority involved. The authorities have a legal right to use land for the purpose of power plants under the Electricity Law, and have the right to expand and maintain their facilities. The law also provides that the authorities can build transmission lines in accordance with existing laws.

Labor Dispute Settlement Law (28 Mar 2012 replacing 1929 version)

The Pyidaungsu Hluttaw hereby enacts this Law for safeguarding the right of workers or having good relationship between employer and workers and making peaceful workplace or obtaining the rights fairly, rightfully and quickly by settling the dispute of employer and worker justly.

The Social Security Law (2012)

The Social Security Law, enacted in 2012, was amended the Social Security Act in 1954. It stipulates the formation and implementation of social security systems.

Section 53(a)

The employers and workers shall co-ordinate with the Social Security Board or insurance agency in respect of keeping plans for safety and health in order to prevent employment injury, contracting disease and decease owing to occupation and in addition to safety and educational work of the workers and accident at the establishment;

Labor Dispute Settlement Law (28 Mar 2012 replacing 1929 version)

This law was enacted for safeguarding the right of workers or having good relationship between employer and workers and making peaceful workplace or obtaining the rights fairly, rightfully and quickly by settling the dispute of employer and worker justly. It stipulates that employer in which more than 30 workers are employed shall form the workplace coordinating committee consisting of the representatives of workers and the representatives of employer.

Section 23	A party, employer or worker, may complain individual dispute relating to his grievance to the Conciliation Body and if he is not satisfied with the conciliation of such body in accord with stipulated manners, may apply to the competent court in person or by the legal representative.
Section 24	The relevant Conciliation Body shall, in respect of the collective dispute known or received by the complaint of either party, employer or worker, in respect of the dispute; information sent by the Minister or the Region or State Government or any other means, carry out as follows: (a) conciliating so as to be settled within three days, not including the official holidays, from the day of knowing or receipt of such dispute; (b) concluding mutual agreement if the settlement is reached in conciliating under sub-section (a), before the Conciliation Body.

Section 25	The Conciliation Body shall refer the collective dispute which does not reach settlement to the relevant Arbitration Body and inform the persons relating to the dispute.				
Section 38	No employer shall fail to negotiate and coordinate in respect of the complaint within the prescribed period without sufficient cause.				
Section 39	No employer shall alter the conditions of service relating to workers concerned in such dispute at the consecutive period before commencing the dispute within the period under investigation of the dispute before the Arbitration Body or Tribunal, to affect the interest of such workers immediately.				
Section 40	The project proponent has to not close the work without negotiation, discussion on dispute in accord with this law, decision by Tribunal				
Section 51	The project proponent has to pay the compensation decided by Tribunal f violates any act or any emission to omission to damage the interest of labour by reducing of product without efficient cause.				
Section 46	Any employer who violates any prohibition contained in sections 38 and 39 shall, on conviction, be punished with a fine for a minimum of one-lakh kyats.				
The	employment and skill development (2013)				
workplace or obtaining the rights fair	ding the right of workers or having skillful of workers and making peaceful ly, rightfully and quickly by settling the dispute of employer and worker justly. I training to enhance the skills of workers.				
Section 5	he project proponent has to appoint employees with the contract in line vith the provision of section 5 of said law.				
Section 14	Employer shall conduct occupational training to enhance the skills of workers who are to be employed as well as workers who are presently employed in accordance with the requirements of the enterprise and the policy of the Skills Development Agency.				
The Worker's Compensation Act, 1923	It stipulates that employer is required to make payments to employees who become injured or who die in any accidents arising during and in consequence of their employment. Such compensation also must be made for diseases which arise as a direct consequence of employment, such as carpal tunnel syndrome.				
The Payment of Wages Act, 1936	The Payment of Wage Act defines the payment obligation to the workers employed in the factories or railway administration. It stipulates the method of payment stating that the payment should be made in cash on a regular payday, and allows legal action against delayed payment or un-agreeable deduction.				
The Leave and Holidays Act (1951, partially revised in 2014)	This act has been used as the basic framework for leaves and holidays f workers with minor amendment in 2006 and 2014. This defines the pub holidays that every employee shall be granted with full payment. It all defines the rules of leaves for workers including medical leave, earned leave and maternity leave.				
The Minimum Wage Law (2013)	The minimum wage law, passed in March 2013, was replaced the 1949 Minimum Wage Act. The law provides a framework for minimum wage determination: the presidential office establishing a tripartite minimum wage committee shall decide minimum wage with industrial variation based on a survey on living costs of workers possibly every two years. This also stipulates equal payment.				
Public Health Law (1972)	Chapter 2; Prevention of Public Health				
Objectives	To ensure the public health include not only employees but also resident				

	people and cooperation with the authorized person or organization of health			
	department. This law focuses as follows			
	The project owner has to cooperate with the authorized person or organization in line with the section 3 and 5 of said law.			
	The project proponent has to abide by any instruction or stipulation for public health under the section 3 of said law.			
	The project proponnent has to allow any inspection, anytime, anywhere if it is needed under the section 5 of said law.			
Prevention and Contro	ol of Communicable Disease Law 1995 (Amendment in 2011)			
Chapter 2 Prevention	4. When a Principal Epidemic Disease of a Notifiable Disease occurs;			
	Immunization and other necessary measures shall be undertaken by the Department of Health, in order to control the spread thereof;			
	The public shall abide by measures undertaken by the Department of Health under sub-section (a).			
Chapter 4 Environmental Sanitation	For prevention of the outbreak of Communicable Disease and effective control of Communicable Disease when it occurs, the public shall under the supervision and guidance of the Health Officer of the relevant are undertake the responsibility of carrying out the following environment sanitation measures;-			
	Indoor, outdoor sanitation or inside the fence outside the fence sanitation;			
	Well, ponds and drainage sanitation;			
	Proper disposal o refuse and destruction thereof by fire;			
	Construction and use of sanitary latrines;			
	Other necessary environmental sanitation measures.			
Oc	ccupational Safety and Health Law (2019)			
Purpose:	To effectively implement measures related to safety and health in every industry and to set occupational safety and health standards;			
Section-26 Sub-section (e)	The project proponent has to provide adequate and relevant personal protective equipment to workers free of charge and make them wear it during work so as not to expose workers to any serious occupational diseases or hazards.			
Section-26 Sub-section (1)	The project proponent has to arrange and display occupational safety and health instructions, warning signs, notices, posters, and signboards.			
Section-30 Sub-section (a)	The worker shall wear or use at all times any protective clothes, equipment and tools provided by the employer for the purpose of safety and health.			
Section-30 Sub-section (d)	The worker shall proper and systematic use any equipment and tools, machines, any parts of the machines, vehicles, electricity and other substances being used at the workplace.			
Section-30 Sub-section (e)	The worker shall take reasonable care for the safety and health of himself/ herself and of other persons who may be affected by his/ her acts or omissions at work.			
	The law on Standardization			
Objectives	The Objectives of this Law are as follows:			
-	to enable to determine Myanmar Standard			
	to enable to support export promotion by enhancing quality of production organizations and their product, production processes and services			
	to enable to protect the consumers and user by guaranteeing imports and products are not lower than prescribed standard, and safe from health hazards			

	to enable to support protection of environment related to products, production process and services from impact, and conservation of natural resources
	to enable to protect manufacturing, distributing and importing the disqualified goods which do not meet the prescribed standard and those which are not safe and endangered to the environment
	to support on establishing the ASEAN Free Trade Area and to enable to reduce technical barriers to trade
	to facilitate technological transfer and innovation by using the standards for the development of national economic and social activities in accordance with the national development programme.
Chapter 7 Taking Action by Committee No. 19	The committee may, if it is found out that holder of certificate of certification violates any term or condition contained in the relevant recommendation, pass any of the following administrative order: warning suspending the certificate of certification for limited period cancelling the certificate of certification
လုပ်ငန်းခွင်၁	ှုံးပေါက်ကွဲစေတက်သောပတ္တုပစ္စည်းများဆိုင်ရာဥပဒေ (၂၀၁၈)
ရည်ရွယ်ချက်	လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတက်သော ပတ္တုပစ္စည်းများကို စနစ်တကျပြုလုပ်ခြင်း၊ တင်သွင်းခြင်း၊ သယ်ယူခြင်း၊ သိုလှောင်ခြင်းနှင်း သုံးစွဲခြင်းတို့ပြုနိုင်ရန်၊
	ယမ်းဘီလူးနှင့် ဆက်စပ်သုံးပစ္စည်းများ အသုံးပြုသည့် လုပ်ငန်းခွင်ဘေးအွန္တရာယ် ကင်းရှင်း၍ လုံခြုံမှုရှိစေရန်၊
	လုပ်ငန်းခွင်သုံး ပေါက်ကွဲစေတက်သော ဂတ္တုပစ္စည်းများ ပြုလုပ်သုံးစွဲမှုများကို စနစ်တကျ ကြီးကြပ်နိုင်ရန်။
အခန်း ဂု တားမြစ်ချက်များ အမှတ် ၁၈	လိုင်စင်ရရှိသူနှင့် ခွင့်ပြုချက်ရရှိသူ မည်သူမှု စစ်ဆေးရေးအရာရှိချုပ် သို့မဟုတ် စစ်ဆေးရေးအရာရှိ၏ စစ်ဆေးခြင်းကို ခံယူရန် ငြင်းပယ်ခြင်းမပြုရ။
အမှတ် ၁၉ (စ)	ပုဒ်မ ၈ အရ ကာကွယ်ရေးဌာနကောင်စီ အမှုဆောင်အဖွဲ့၏ အတည်ပြုချက်မရရှိဘဲ လုပ်ငန်းခွင် ပေါက်ကွဲစေတက်သော ဂတ္တုပစ္စည်းများကို ဖျက်ဆီးခြင်းမပြုရ။
အမှတ် ၁၉ (ဂ)	ဤဥပဒေအရ ထုတ်ပြန်သည့် နည်းဥပဒေ၊ စည်းမျဉ်း၊ စည်းကမ်း၊ အမိန့်ကြော်ငြာစာ၊ အမိန့်နှင့် ညွှန်ကြားချက်များနှင့်အညီ ဆောင်ရွက်ရန် ပျက်ကွက်ခြင်း မရှိစေရ။
	The Motor Vehicles Law (2015)
Objectives	When the constructions periods and if it is needed in operation and production period for all vehicles
	 The project proponent has to promise to abide by the nearly all provisions of said law and rules, especially the provisions related to air pollution, noise pollution and life safety.
The Conse	rvation of Water Resources and Rivers Law (2006)
Aims	The aims of this Law are as follows:
	 (a) to conserve and protect the water resources and rivers system for beneficial utilization by the public;
	(b) to smooth and safety waterways navigation along rivers and creeks;
	(c) to contribute to the development of State economy through

Environmentar management i jan						
	improving water resources and river system;					
	(d) to protect environmental impact.					
Chapter 5 Prohibitions	No person shall:					
No. 8	(a) carry out any act or channel shifting with the aim to ruin the water resources and rivers and creeks.					
	(b) cause the wastage of water resources wilfully.					
No. 10	No person shall anchor the vessels where vessels are prohibited fro anchoring in the rivers and creeks.					
No.11 (a)	No person shall: dispose of engine oil, chemical, poisonous material and other materials which may cause environmental damage, or dispose of explosives from the bank or from a vessel which is plying, vessel which has berthed, anchored, stranded or sunk.					
No. 12	No person shall carry out growing of garden, digging, filling, silt trapping, closing pond, dyke building or erecting spur in the river-creek boundary, bank boundary and waterfront boundary without the permission of the relevant government department and organization.					
No. 15	No person shall carry out the construction of switchback, dockyard, wet dockyard, water-tight dockyard, building of jetty, pier, landing stage or vessel landing by drainage in the river-creek boundary, bank boundary and waterfront boundary without the permission of the Directorate.					
The	Commercial Tax Law (1990) Amended 2014					
Chapter 5 Registration and Intimation of Commencement of Enterprise 11 (b)	Any Person who commences operation of a goods production enterprise or service enterprise shall furnish letter of intimidation on the commencement of the operation as such to the relevant Township Revenue Officer as stipulated by regulations.					
Chapter 6	Any person who has taxable proceed of sale or receipt from service					
Monthly Payment of Tax and	within a year, shall pay due monthly tax within ten days after the end of					
Sending of Three-Monthly Return	the relevant month. Moreover, a three-monthly return shall be furnished					
12 (a)	to the relevant Township Revenue Officer within one month after the					
	end of relevant three-month.					
12 (b)	The Township Revenue Officer may intimate any person to pay due monthly tax and send three-monthly return if there is cause to consider that he has taxable proceed of sale or receipt from service within a year.					
12 (c)	If it is failed to pay tax under sub-section (a) or (b), or if there is cause to consider that the tax paid is less than the tax payable, the Township Revenue Officer may, based on the information received, estimate and claim the tax payable or the additional tax payable.					
12 (d)	The tax paid under sub-section (a), (b) or (c) shall be set-off from the tax due in the assessment.					
12 (e)	The tax payable on goods imported under sub-section (c) of section 4 of the Law shall be collected together with the customs duties by the Customs Department in accord with the manner of collecting customs duties.					

2.2. INTERNATIONAL GUIDELINES

Organization's Guidelines, World Bank Safeguard Policies, IFC Performance Standards and National Environmental Quality (Emission) Guidelines (2015) are referred for EMP of the proposed factory project.

2.3. COMMITMENT OF MYANMAR S. FLAMINGO GARMENT COMPANY LIMITED

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

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

3. PROJECT DESCRIPTION

3.1. LOCATION

Myanmar S.Flamingo Garment Company Limited is located at Plot No. 165, Myay Taing Block No. 113, East Dagon Myo Thit Township, Yangon region. Location map and Factory layout map are described in Figure 3-1.

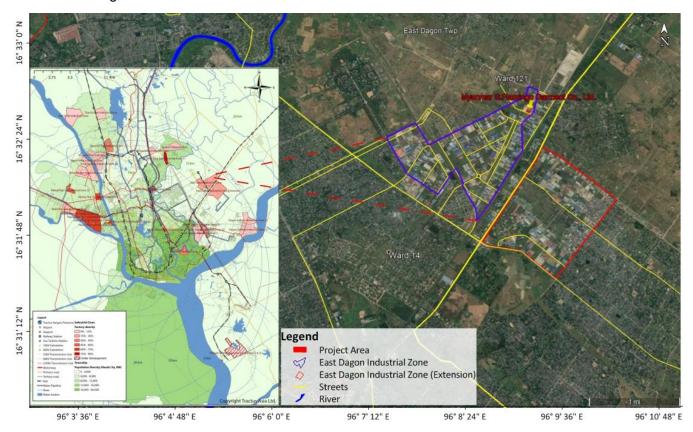


Figure 3-1 Location Map

3.2. OBJECTIVES OF THE PROJECT

The proposed project intends to manufacture of safety clothing on CMP basic and to export 100% of the finished products. Zhejiang Shunfa Reflective Clothing Co., Ltd. will supply raw materials for safety clothing in People Republic of China. Zhejiang Shunfa Reflective Clothing Company Limited agrees to supply to ready make products and pay CMP charges to Myanmar S.Flamingo Garment Company Limited.

3.2.1. Site Description of the project site

The total area of project site is 2.05 acres (8,296.056 square meters). Main structure is designed into office area for 2 storey building and QC department, sewing department, cutting department and iron department for production building. Total buildings are three buildings such as production building, office building and dormitory. Transformer room, generator room are separated by main factory building structure. The factory layout plan can be seen in Figure 3-3 and Figure 3-4. Working time is from 9:00 AM to 5:00 PM. Total working days is 162 days in a year.



Figure 3-2 Project Adjacent Area

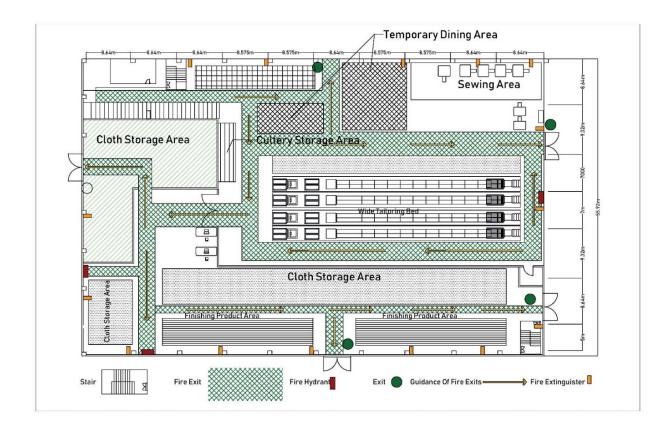


Figure 3-3 Factory Layout Map (Ground Floor)

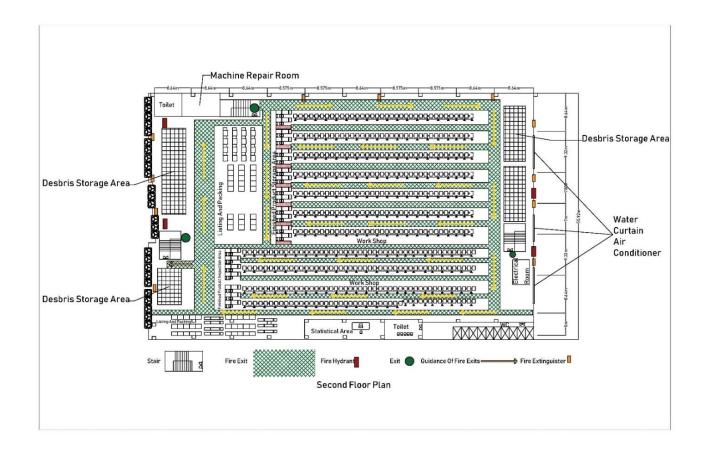


Figure 3-4 Factory Layout Drawing (First Floor)

3.2.2. Production Process

The process flow diagram for manufacturing of Safety Clothing is shown in Figure 3-5. The sewing was operated one and two-needle sewing machine after fabric cutting and checked by quality control supervisor on each sewing line. Sewing is carried out after cutting the fabric. After sewing, the garment is reached to the quality control section. Then the garment is treated in finishing section. Then garment packing is completed and prior to shipping to its destinations. Production process steps by steps are expressed in below;

1. Raw Material Receipt

Factory receive fabric from overseas textile manufacturers in large bolts with cardboard or plastic center tubes. The fabric typically arrives in steel commercial shipping containers and is unloaded with a forklift. The factory has a warehouse or dedicated area to store fabric between arrival and manufacturing.

2. Fabric Inspection

The factory integrates quality assurance into this process to ensure that the quality of the fabric meets customer standards. This step is performed by manually spot-checking each bolt of fabric using a backlit surface to identify manufacturing defects such as colour inconsistency or flaws in the material. Fabrics that fail to meet customer standards are returned to the textile manufacturer.

3. Cutting

After the fabric has been relaxed, it is transferred to the spreading and cutting area of the garment manufacturing facility. The fabric is first to cut into uniform plies and then spread either manually or using a computer-controlled system in preparation for the cutting process. The fabric is spread to:

- allow operators to identify fabric defects;
- control the tension and slack of the fabric during cutting; and
- ensure each ply is accurately aligned on top of the others.

The number of plies in each spread is dependent on the fabric type, spreading method, cutting equipment, and size of the garment order.

Next, garment forms or patterns are laid out on top of the spread, either manually or programmed into an automated cutting system. Lastly, the fabric is cut to the shape of the garment forms using either manually operated cutting equipment or a computerized cutting system.

4. Sewing

Stitching or sewing is done after the cut pieces are bundled according to size, colour and quantities determined by the sewing room.

Garments are sewn in an assembly line, with the garment becoming complete as it progresses down the sewing line. Sewing machine operators receive a bundle of cut fabric and repeatedly sew the same portion of the garment, passing that completed portion to the next operator. For example, the first operator may sew the collar to the body of the garment and the next operator may sew a sleeve to the body. Quality assurance is performed at the end of the sewing line to ensure that the garment has been properly assembled and that no manufacturing defects exist. When needed, the garment will be reworked or mended at designated sewing stations. This labor-intensive process progressively transforms pieces of fabric into designer garments.

- The central process in the manufacture of clothing is the joining together of components.
- Stitching is done as per the specification is given by the buyer.
- High power single needle or computerized sewing machines are used to complete the sewing operation. Fusing machines for fusing collar components, button, and buttonhole, sewing machines for sewing button and buttonholes are specifically employed.

5. QC Checking

It is realistic to assume that however well checking or quality control procedures operate within a factory there will always be a certain percentage of garments rejected for some reason or other. The best way to carry out quality checks is by

- Establishing a standard as a criterion for measuring quality achievement.
- Production results can be measured and compared to the planned quality standard.
- Corrective measures to be carried out if there are any deviations in the plans.

Ideally, any system should detect possible deviations before they occur through forecasting. Work produced with minus defects will produce quality products, enhance economy and productivity.

6. Ironing

After a garment is fully sewn and assembled, it is transferred to the ironing section of the facility for final pressing. Each ironing station consists of an iron and an ironing platform. The irons are similar looking to residential models but have steam supplied by an on-site electric boiler. Workers control the steam with foot pedals and the steam is delivered via overhead hoses directly to the iron. In most facilities, the ironing platforms are equipped with a ventilation system that draws steam through the ironing table and exhausts it outside the factory.

7. Packaging

In the last steps of making a product retail-ready, garments are folded, tagged, sized, and packaged according to customer specifications. Also, garments may be placed in protective plastic bags, either manually or using an automated system, to ensure that the material stays clean and pressed during shipping. Lastly, garments are placed in cardboard boxes and shipped to client distribution centers to eventually be sold in retail stores.

Products are packed in plastic bags, either at the end of production or when they enter the finished goods store. The products are bagged and boxed directly after final inspection and enter the stores in prepacked form. For these and similar types of products, many automatic machines are used.

When the boxed or hanging garment has to be transported in bulk the garment or boxes are packed into cartons which can be sealed by adhesive paper or plastic Manual and automatic machines are available for both.

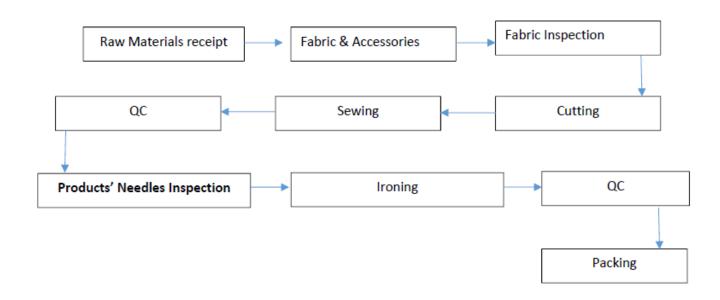


Figure 3-5 Process Flow Diagram of Myanmar S.Flamingo Garment Co., Ltd.







Raw Storage





Cutting





Sewing



Figure 3-6 Production Process Photos of Myanmar S.Flamingo Garment Co., Ltd.

3.2.3. Products

The products of Myanmar S.Flamingo Garment Co., Ltd. are vests, sweater, hoodie, zippererd hoodie, jacket and T-shirt and so and so. Table 3-1 is described in annual production rate. Annual production rate is 1086000pcs in first 1 to 3 year and 11946000pcs in 4 to 10 years. Products storage system is expressed in Figure.

Table 3-1 Annual production rate

No.	Particular	Unit	Year 1-3	Year 4-10			
Productions (Pcs)							
1.	Vest # 1	Pcs	3,500,000	3,850,000			
2.	Vest # 2	Pcs	2,800,000	3,080,000			
3.	Vest # 3	Pcs	1,200,000	1,320,000			
4.	Vest # 4	Pcs	800,000	880,000			
5.	Vest with short sleeves	Pcs	200,000	220,000			
6.	Sweater	Pcs	100,000	110,000			
7.	Hoodie # 1	Pcs	150,000	165,000			
8.	Hoodie # 2	Pcs	200,000	220,000			
9.	Zippered Hoodie	Pcs	200,000	220,000			
10.	Outwear Jacket	Pcs	100,000	110,000			
11.	T-shirt # 1	Pcs	400,000	440,000			
12.	T-shirt # 2	Pcs	100,000	110,000			
13.	T-shirt # 3	Pcs	300,000	330,000			
14.	T-shirt # 4	Pcs	250,000	275,000			
15.	T-shirt with Long sleeves	Pcs	80,000	88,000			
16.	Outwear Jacket # 1	Pcs	200,000	220,000			
17.	Outwear Jacket # 2	Pcs	180,000	198,000			
18.	Outwear Jacket # 3	Pcs	20,000	22,000			
19.	Outwear Jacket # 4	Pcs	30,000	33,000			
20.	Outwear Jacket # 5	Pcs	50,000	55,000			
	Total		10,860,000	11,946,000			



Vest #1



Vest #2



Vest #3



Vest #4



Vest with short sleeves



Sweater



Hoodie #1



Hoodie #2



Zippered Hoodie



Outwear Jacket



T-shirt #1



T-shirt #2



T-shirt #3



T-shirt #4



T-shirt with Long sleeves



Outwear Jacket #1



Outwear Jacket #2



Outwear Jacket #3



Outwear Jacket #4



Outwear Jacket #5

Figure 3-7 Product Photos









Figure 3-8 Product Storage Area

3.3. UTILITIES

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

3.3.1. Raw Material

The main Raw Materials are yarns, which are imported from Korea, China, Japan. Raw materials require for a piece of product is described in Table 3-2. Raw material storage system is expressed in Figure.

Table 3-2 List of Raw Material Requirement

No.	Particular	HS Code	Unit	Year 1-3	Year 4-10
1.	Fabric	5407	М	11,472,000	12,619,200
2.	Lining # 1	5903	М	960,000	1,056,000
3.	Lining # 2	5903	М	1,271,500	1,389,650
4.	Lining # 3	5903	М	825,000	908,050
5.	Reflective stripe	3919	М	40,107,000	44,117,700
6.	Filling	8422	М	825,500	908,050
7.	Cloth liner	6001	М	76,500	84,150
8.	Zipper	9607	Pcs	1,750,000	1,925,000
9.	Rib	5208	M	67,000	73,7000
10.	Snap Button	9606	Pairs	4,000,000	4,400,000









Figure 3-9 Raw Material Storage

3.3.2. Machinery and equipment

Lists of machinery and equipment required for the Myanmar S.Flamingo Garment Co., Ltd. is following in Table 3-3.

Table 3-3 List of Machinery

No.	Description	HS Code	Unit	Quantity	
1.	Single Auto Machine	8479	SET	500	
2.	Single Cutter Machine	8464	SET	140	
3.	4 th Overlock Machine	8447	SET	30	
4.	5 th Overlock Machine	8447	SET	30	
5.	Double Needle Machine	8453	SET	30	
6.	Auto Double Needle Machine	8452	SET	10	
7.	Computer Long Arm Patten Machine	8452	SET	10	
8.	Seam Sealing Machine	8451	SET	16	
9.	Auto Sewing Line	8441	М	14	
10.	Bartack Machine	8452	SET	7	
11.	Button Hole Machine	8452	SET	6	
12.	Air Snap Machine	8452	SET	2	
13.	Patten Machine	8463	SET	4	
14.	Band Knife Machine	8208	SET	4	
15.	Fusing Machine	8451	SET	2	
16.	Heat Press Machine	8462	SET	4	
17.	Cloth Cutter Machine	8441	SET	8	
18.	Iron Machine	8451	SET	20	
19.	Needle Detector Machine	8451	SET	2	
20.	Patten Laser Cutter Machine	8456	SET	3	
21.	Marker Machine	8479	SET	2	
22.	Special Machine	8468	SET	100	

3.3.3. Human Resource

Human resource required by foreign experts/technicians and local persons for administrative and production process are about 911 persons during 10 years (Table 3-4). Currently there are total male 22 and female 353 employees. Payment method for overtime is normally as 1200 kyats per hour. Working time is from 9:00 AM to 5:00 PM. Total working days is 162 days in a year

Table 3-4 Employment Schedule

No.	Particular	Year 1		Year 2		Year 3-10	
NO.		Local	Foreign	Local	Foreign	Local	Foreign
1.	Secretary	1		1		1	
2.	Financial Manager	1	1	1	1	1	1
3.	Shipping Manager	1		1		1	
4.	Human Resources Manager	1		1		1	
5.	Quality Control	30		35		40	
6.	Store Supervisor	1		1		1	
7.	Store Keeper	10		10		10	
8.	Clerk	5		5		5	
9.	Mechanic	5	1	5	1	5	1
10.	Electrician Wireman	2		2		2	
11.	Driver	2		2		2	
12.	Security Staff	3		3		3	
13.	Cleaner	4		4		4	
14.	Skill and Semiskill Workers	520		550		570	
15.	Unskilled Workers	205		220		250	
16.	Translator	5		5		5	
17.	Fire Safety Officer	2		2		2	
18.	Factory Manager		1		1		1
19.	Purchasing Manager		1		1		1
20.	Designer		1		1		1
21.	Sampling Technician		2		1		1
22.	Patterning Technician		2		1		1
23.	Quality Control Manager						
	_ :	798	10	848	8	903	8
	Total		808		856		911

3.3.4. Water

East Dagon Myo Thit Township has no centralized water supply system and the factory gets water from the tube wells installed inside the factory compound. Groundwater from this tube well is pumped in the storage tanks for the factory and domestic use. The main water use in the proposed project is for domestic usage such as for personal washing, food preparation, and washing of utensils. Capacity of water storage tank used for production and domestic is 3000 gallons tank. Drinking water will be provided by outsource suppliers. Figure 3-10 is described by water storage tank and drinking water supply for Myanmar S.Flamingo Garment Company Limited and also described the analysis result of treated water in **Appendix**.





Figure 3-10 Overhead Water Storage Tank and Drinking Water Supply

3.3.5. Electricity and fuel requirement

The proposed project is waiting to get required electricity supply form Yangon City Electricity Supply Board (YESB). The Current source of energy 400 kVA transformer, 725 and 500 kVA generators are used for production. Monthly electricity usage is about 300 unit. Annual diesel usage is about 528.634 gallons.







Figure 3-11 Electricity Facility at Myanmar S.Flamingo Garment Co., Ltd.

3.4. FACILITIES

3.4.1. Fire Fighting Facility

The project proponent has provided fire extinguishers and fire hydrants on the walls of the factory for fire emergency cases. The emergency contact numbers of township and district fire services department must be printed and tagged at easily visible places for fire emergency cases. The emergency fire alarms are installed at the factory for alerting the workers in case of fire. The main entrances and route for emergency cases of the factory must not be blocked with materials or machines for fire emergency cases. The plan to install fire alarm system and fire-frightening system are mentioned in Figure.





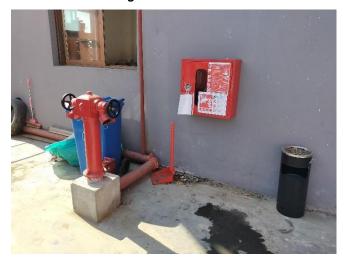




Figure 3-12 Fire Fighting System in Factory

3.4.2. Drainage System and Storm Water

Kitchen and plastic washing wastewater were drainage pipe with 4-inch diameter PVC to drain wastewater from wastewater treatment into the concrete channel. Within the factory compound, there was drainage channel with concrete to collect rainwater in the factory area. The factory has already provided internal rainwater drainage system in connection with local drainage system outside the factory to drain into Industrial Zone water channel.





Figure 3-13 Drainage System in Factory

3.5. STATUS OF THE FACTORY

Myanmar S.Flamingo Garment Company Limited is using ground water for both industrial and household purpose, which is supplied by deep tube well. The factory also has generators for electricity generation. The fuel used in the industry is Diesel. The sanitary liquid waste of the factory is stored in septic tank.

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

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

3.6. GENERATION OF WASTE, EMISSION AND DISTURBANCES

3.6.1. Industrial Wastes

Wastes generated from the garment factory are cloth scraps of 50% from cutting section, 35% from sewing section and 15% from packing section. In addition, packing waste of plastic sheet, carton box and fabric paper tube are generated from cutting line and packing section. Total amount of waste about maximum 1 ton per month, which are generated from operation process.

3.6.2. Human wastes

The number of staff and workers required in the day shift for the factory is maximum 393 persons during operation. Solid waste generated from maximum number of operators and office staffs with assumption of waste generation rate at 20 kg/week calculated based on solid waste generation rate of 0.36 kg/person/day1.

Domestic wastewater generated by maximum amount of 393 persons with assumption rate 42.0 m³/day was calculated based on domestic wastewater generated rate of 0.1 m³/person/day2. This water will be released in operation hour discharge to septic tank or factory drainage.

3.6.3. Waste Balance

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

¹ The Yangon City solid waste generation rate as of 2012 is 0.39 kg per person per day (Pollution Control and Cleansing Department, Yangon City Development Committee, 2014).

² The domestic wastewater generation was based on typical wastewater generation rate of 0.1 m3 per person per day (Metcalf & Eddy, 2004)

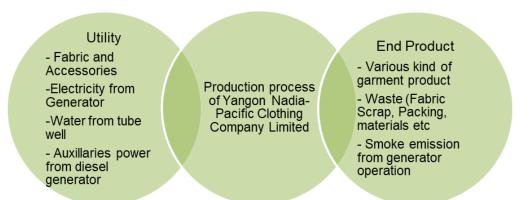


Figure 3-14 Balance Diagram of garment production

4. BRIEF DESCRIPTION OF SURROUNDING ENVIRONMENT

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

4.1. METHODOLOGY FOR DATA COLLECTION AND ANALYSIS

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

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

4.2. ENVIRONMENTAL BASELINE STUDY

The field observation for determining the environmental baseline of the proposed project area was undertaken during construction period. The survey team consists of the senior consultant and environmental quality team. The baseline data collected regarding the environmental condition of the project area was conducted in the following section.

4.3. PHYSICAL COMPONENT

4.3.1. **Topography**

The proposed project area is situated East Dagon Myo Thit Township, and its topographic condition is flat. The proposed project site is primarily agricultural land, but now is initiated into the industrial zone area.

4.3.2. **Geology**

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

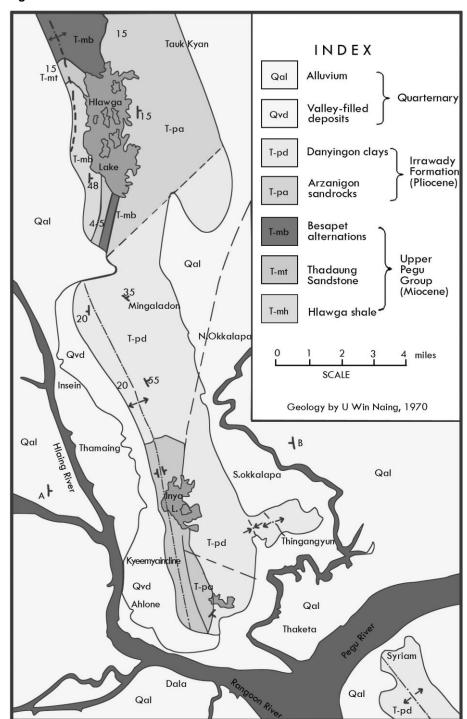


Figure 4-1 Geological Map of Yangon Region

4.3.3. Tectonics

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

4.3.4. **Soil**

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

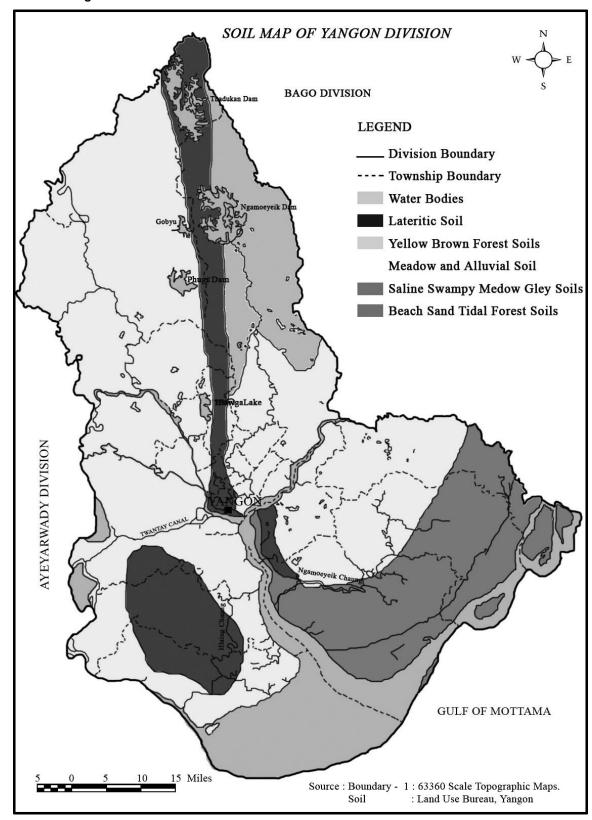


Figure 4-2 Soil Map of Yangon (Source: Land use of Bureau of Yangon)

4.3.5. Hydrogeology

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

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

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

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

4.3.6. Climate and Meteorology

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

Rainfall and Relative Humidity: The climate of Myanmar follows a typical monsoon pattern. Historically, the average annual mean rainfall for Yangon is 2,681 mm with the annual average rainy days of 129.3 days. During the course of 2013, the Department of Meteorology and Hydrology (Myanmar) reported an annual precipitation of approximately 2700 mm. The month with the most precipitation was in July. The relative humidity was generally higher from May to October 2013. The dry season occurs from November to April. Based on the historical weather for the last twelve months in Yangon, no precipitation was observed in December 2012, February 2013 and March 2013. The least humid month of the last 12 months was February 2013 with an average daily low humidity of 34%, and the most humid month was September with an average daily high humidity of 80%. The proposed project is located at East Dagon Myo Thit Township, Yangon Region. The climate condition of East Dagon Myo Thit Township is the dry season of area in which the project lies starts in December and ends in March. The raining season starts in June and ends in September and the cold season follow with the cooler, drier months of October to January. The highest temperature ranging 38°C and low range 30°C reference from Township Meteorology data, Regional Data of East Dagon Myo Thit Township. 2013 to 2017 Yearly data of rainfall and temperature is presented in Table 4-1. The weather condition during 19 August 2019 shows the average temperature of 29 °C while the average humidity is 83 percent Table 4-2. [1]

Table 4-1 Annual rainfall and temperature

Year	Ra	infall	Temperature		
	Raining day	Rainfall value	Summer season Max (°C)	Winter season Min (°C)	
2013	107	87.78	34	30	
2014	103	70.88	34	30	
2015	107	84.91	34	30	
2016	106	87.78	37	30	
2017	107	85.89	38	30	

Source: Department of Administrative East Dagon Myo Thit Township, Regional data (www.gad.gov.mm.com)

Table 4-2 Relative humidity and temperature measure at factory

Date and Time	Description	Result value	Environmental parameter air station guideline
5 December 2019	Relative Humidity RH %	73.5 (%)	Present condition
(10:00 am to 4:00 pm)	Temperature	32.24 °C	Present condition

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

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

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

Notes

Physical component and biological data are referenced from government official website of regional data.

Website Link - www.gad.gov.mm

4.4. BASELINE ENVIRONMENTAL MONITORING

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

4.4.1. Weather Condition

The weather condition during 5 December 2019 shows the average temperature of 37°C while the average humidity is 30.69% and its sunshine and patchy clouds day. There were raining on the day between 10:00 am and 4:00 pm and the wind speed is 6 to 13 km/h SW direction.

4.4.2. Noise

The Noise level measured by using Digital Sound Level Meter for working 6 hours on 5 December 2019. The average noise level in the project site area is presented in Table 4-3 compared with NEQ guideline. However, according to the Noise source monitoring at operation area (inside the production sector) of noise level is exceeding the acceptable level of National Environmental Quality (Emission) Guideline. Since the project is garment factory, monitoring is done during the operation in daytime only.

Noise level is above the guideline limit because monitoring is done inside the sewing machine of production. It needs to mitigate the noise level in factory and mitigation plan is also expressed in next chapter of mitigation measures.

Table 4-3 Noise level measurement result

Date and Time	Location	GPS value	Result value	Guideline
5 December 2019 (10:00 am to 4:00 pm)	Operation area	16°54'27.93"N 96°14'40.87"E	74.54 dBA	70 dBA

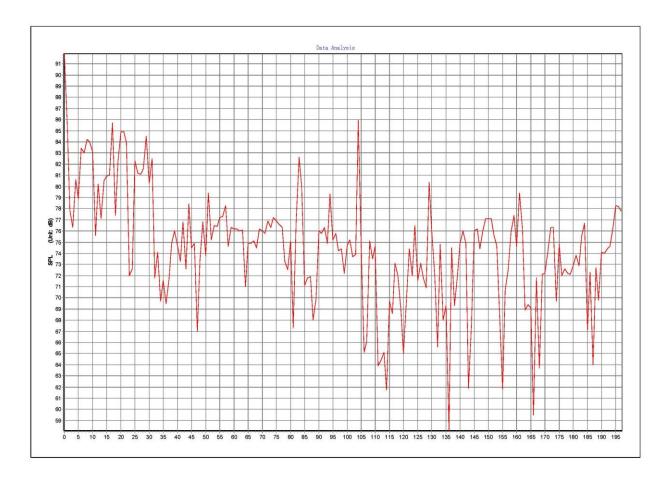


Figure 4-3 Noise Level Result Graph



Figure 4-4 Sound Level Measurement Photos

4.4.3. Ground Water Quality

The baseline data on ground water quality were collected on 5 December 2019 with respect to WHO Guidelines for Drinking Water Standard and Laboratory analysis results can be seen in Table 4-5 for groundwater. The water quality of the nearest water features, which are likely to be affected by the project, was studied with the aim of understanding, preventing and minimizing water pollutions in the

public water sources so as to ensure human health and biodiversity. Water quality is one of the key factors affecting the environment and health. Analyzed results of groundwater result compare with Drinking water guideline,

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

Table 4-4 Coordinated point of water and wastewater collection point

Water Parameter	GPS Value	Location
Ground Water	16°54'27.8"N 96°14'40.1"E	Within proposed site of Ground water tank

4.4.3.1. Ground water result

Table 4-5 Ground Water quality laboratory results

No	Parameter	Unit	Water result	Drinking standard
1	рН		6.8	6.5-8.5
2	Colour (True)	TCU	Nil	15 TCU
3	Turbidity	NTU	1	5 NTU
4	Conductivity	Micro S/cm	15	
5	Total Hardness	mg/l as CaCO₃	4	500 mg/l as CaCO₃
6	Calcium Hardness	mg/l as CaCO₃	2	
7	Magnesium Hardness	mg/l as CaCO₃	2	
8	Total Alkalinity	mg/l as CaCO₃	12	
9	Phenolphthalein Alkalinity	mg/l as CaCO₃	Nil	
10	Carbonate(CaCO ₃)	mg/l as CaCO₃	Nil	
11	Bicarbonate (HCO ₃)	mg/l as CaCO₃	12	
12	Iron	mg/l	0.05	0.3 mg/l
13	Chloride (as CL)	mg/l	6	250 mg/l
14	Sodium Chloride (as NaCL)	mg/l	10	
15	Sulphate (as SO ₄)	mg/l	Nil	500 mg/l
16	Total Solids	mg/l	12	1500 mg/l
17	Suspended Solids	mg/l	1	
18	Dissolved Solids	mg/l	11	1000 mg/l
19	Manganese	mg/l	Nil	0.05 mg/l

20	Phosphate	mg/l	Nil	
21	Phenolphthalein Acidity	mg/l	3	
22	Methyl Orange Acidity	mg/l	Nil	
23	Salinity	ppt	0.1	

NG= No guideline

4.4.4. Air Quality

To determine the existing baseline ambient air quality status within the project site on 5 December 2019, 24 hours of working period air pollutants level for indoor and outdoor, which include dust (PM_{10} and $PM_{2.5}$), SO_2 and NO_2 . To reveal the existing status of baseline air quality, the average ambient air qualities measured were compared with National Environmental Quality (Emission) Guideline and international ambient air quality standard (NAAQS, ACGIH) guidelines. The measurement location point is situated at latitude 16°54'27.93"N and longitude 96°14'40.87"E.

It was observed that the air quality of CO, CO₂ and SO₂ concentration level are within the limit of NEQ (emission) guideline but particulate matter (PM₁₀, PM_{2.5}) and gases level of Nitrogen Dioxide (NO₂) are also within the National Environmental Quality (Emission) Guideline. ^[4]

Table 4-6 Observed air quality results

Table 1 0 Case 1 of the first term of the first								
Parameters	Observed value	Guideline value	Unit	Organization	Period			
Indoor Air Qualit	Indoor Air Quality Measurement							
PM ₁₀	30.4125	50	µg/m³	NEQG	24 hours			
PM _{2.5}	21.75	25	μg/m³	NEQG	24 hours			
Outdoor Air Qua	lity Measurement							
PM ₁₀	31.075	50	μg/m³	NEQG	24 hours			
PM _{2.5}	22.975	25	µg/m³	NEQG	24 hours			
SO ₂	71.95	500	μg/m³	NEQG	10 mins			
NO ₂	52.91	200	µg/m³	NEQG	1 hours			

NEQ = National Environmental Quality (Emission) Guideline

 ${\sf NAAQS = National\ Ambient\ Air\ Quality\ Standards\ were\ developed\ by\ the\ U.S.\ EPA}$

ACGIH = the American Council of Governmental Industrial Hygienists recommends



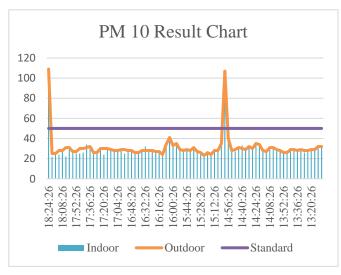


Indoor Air Quality Measurement Photos





Outdoor Air Quality Measurement Photos



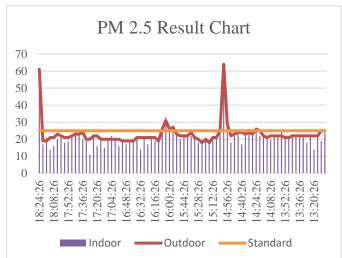


Figure 4-5 Air Quality Measurement at the Project Site

4.4.5. **Light**

Activities of the workers in the garment factory are highly dependent on the quality of light. Therefore, the consultant conducted the light measurement in the garment factory is presented in Table 4-7. The illustrates the recommended illumination and limiting glare index applicable to typical works (fairly severe to very severe tasks) in garments factory is provided in Figure 4-6.

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

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

Table 4-7 Recommended illumination and limiting glare index based on IES Code, 1968

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

Source: Koenigsberger, et al. 1975

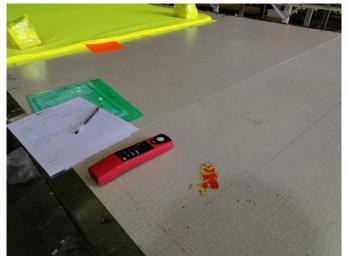




Figure 4-6 Light Quality Measurement

Table 4-8 Result of light measurement in Myanmar S.Flamingo Garment Co., Ltd.

No.	Location	Measure value (Lux)	Standard*
1	Cutting area	988	1000
2	Sewing area	747.5	400
3	Quality control	626	600
4	Warehouse	611	500
5	Packing area	765	600

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

According to the monitoring results, Myanmar S.Flamingo Garment Company Limited's light level is a little bit higher than the guideline that's why some places need to reduce the light level and ought to put on the electricity bulb more over the higher places. On the other hand, some places are a bit lower than the guideline that is why which need to change like a more powerful light bulb in that light level lower places. In this way are able to adjust the light pollution of this factory.

Since the factory is garment, it is important that the sewing, QC, warehouse and packing area is needed to get high light well. So, it assumes that high light level is acceptable.

4.4.6. Indoor Temperature and Humidity

The indoor temperature and humidity condition during 5 December 2019 show the average temperature of 32.24 °C while the average humidity is 73.55 %.

Table 4-9 Relative humidity and temperature measure at Myanmar S.Flamingo Garment Co., Ltd.

Date and Time	Description	Result value	Environmental parameter air station guideline
	Relative Humidity RH %	58.65 (%)	Present condition
(10:00 am to 4:00 pm)	Temperature	31.94 °C	Present condition





Figure 4-7 Temperature and Humidity Measurement in Operation Area of the Factory

4.5. BIOLOGICAL COMPONENT

The proposed project site is not located in or near a sensitive ecosystem as the proposed project area is situated in East Dagon Satt Mhu Township especially East Dagon Myo Thit Township. The Project Site is a built-environment and the species of flora surveyed at the site are native species uncommon to the Yangon area. There were no protected species or species of conservation value identified.

4.6. SOCIO-ECONOMIC COMPONENT

4.6.1. Population

Myanmar S.Flamingo Garment Co., Ltd. is located across East Dagon Myo Thit Township in Yangon Region. In 2017, the population of East Dagon Myo Thit Township is about 156336 peoples as present in Table 4-10. [1]

Table 4-10 Population of Males and Females at East Dagon Myo Thit Township (2017)

Item	Older 18 year			Younger 18 year			Total		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Urban	48237	52827	101064	23554	24280	47834	71791	77107	148898
Rural	2284	2536	4820	1329	1289	2618	3613	3825	7438
Total	50521	55363	105884	24883	25569	50521	75404	80932	156336

Source: Department of Administrative East Dagon Myo Thit Township, Regional data (www.gad.gov.mm.com)

4.6.2. Religion

The different kinds of religion present in East Dagon Myo Thit Township are shown in Table 4-11. More than 90% of the people living in the township are Buddhists. [1]

Table 4-11 Religion in East Dagon Myo Thit Township (2017)

Township	Buddhist	Christian	Hindu	Muslim	Total
East Dagon Township	151,695	2,274	1,213	1,154	156,336

Source: Department of Administrative East Dagon Myo Thit Township, Regional data (www.gad.gov.mm.com)

4.6.3. Local Economy

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

- post office
- beauticians
- butcher
- hairdressers
- furniture and electrical store
- restaurants
- cafes
- · shoe and clothing shops
- · industrial services

- pharmacy
- veterinarian
- bus service
- · gift stores
- · music store
- pubs and bars
- florist

4.6.4. Public Infrastructure and Access

4.6.4.1. Communication and Transportation

Major transportation route in East Dagon Myo Thit Township are railway, port, and car road as presented in Table 4-12. [1]

Table 4-12 Transportation route

Catagorias	Township	Miles	
Categories	From	to	
Train Station	Toe Kyaung Kalay	Dagon University	5
Bus Line (10,15,24,25,26,27,28,29,30,66)	Dagon University & Mental Health Hospital (Yangon)	Downtown Area	
Highway Road	-	•	-

Source: Department of Administrative East Dagon Myo Thit Township, Regional data (www.gad.gov.mm.com)

4.6.4.2. Electricity

The electricity demand of East Dagon Myo Thit Township is higher and higher due to the normally increased in population and infrastructure. [1]

4.6.4.3. Education

Location of major schools were situated i.e. basic education primary school (B.E.P.S.), basic education middle school (B.E.M.S), basic education high school (B.E.H.S) and university, in the East Dagon Myo Thit Township. The name and the located village tract/ ward of schools are described in Table 4-13. [1]

Table 4-13 List of major school in East Dagon Myo Thit Township

No.	Name of School	Location
1	Dagon University	NO.52,Ward
2	BEHS (1)	13 Ward
3	BEHS (2)	3 Ward
4	BEHS (3)	12 Ward
5	BEHS (4)	9 Ward
6	BEHS (5)	133 Ward
7	BEMS (1)	12 Ward
8	BEMS (4)	Ywar Thar Gyi
9	BEMS (2)	13 Ward
10	BEPS (1 to 22)	Dagon Myothit (East)

Source: Department of Administrative East Dagon Myo Thit Township, Regional data (www.gad.gov.mm.com)

4.6.4.4. Health Status

The diseases of high prevalence reported in 2013 are Tuberculosis (TB), followed by Acute Respiratory Infection (ARI), Diarrhea, TB and snakebites. With reference to the Township Health Profile 2014 of East Dagon Myo Thit Township, no accidental work injuries reported to the township hospital in 2013. The common diseases are shown in Table 4-14 and Table 4-15.

Table 4-14 Common Diseases in the East Dagon Myo Thit Township

Diagona	East Dagon Township			
Disease	Morbidity	Mortality		
Malaria (Per 100000P)	-	-		
ARI(Per 100000<5Children)	-	-		
Dysentery	33	-		
Diarrhea (Per 100000P)	827	-		
TB (Sputum+)(Per 10000P)	334	12		
HIV/AIDS (2015-2016)	37	8		
(2016-2017)	21	1		

Table 4-15 Lists of hospital in the East Dagon Myo Thit Township

Hospital Name	Beds/Services	Responsible	
Mental Health Hospital (Yangon)	Above 25 Beds	Government	
General Hospital in East Dagon Township	16 Beds	Government	

Source: Department of Administrative East Dagon Myo Thit Townships, Regional data (www.gad.gov.mm.com)

4.7. CULTURAL AND VISUAL COMPONENTS

East Dagon Myo Thit Township is growing into a busy and vibrant community. The population fluctuates; however, there has been steady growth over the last decade. It tends to be a stopover on a

journey rather than a destination. It has a number of sites that are interesting; however, there is no main attraction. Visitors to the town are generally visiting for work, investment or family reasons.

5. ENVIRONMENTAL IMPACT AND MITIGATION MEASURES

5.1. METHODOLOGY FOR THE ASSESSMENTS

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

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

Table 5-1 Impact assessment parameters and its scale

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

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

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

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

5.2. IMPACT IDENTIFICATIONS

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

5.2.1. Positive Impact

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

5.2.2. Negative Impact

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

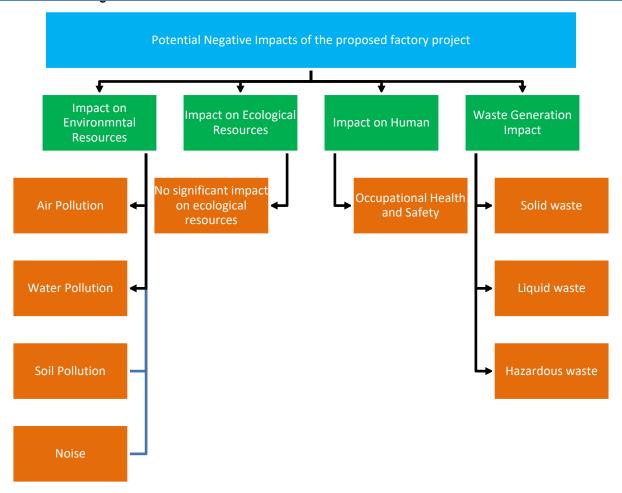


Figure 5-1 Potential Negative Impact Affect from Proposed Factory Project

5.3. IMPACT ON ENVIRONMENTAL RESOURCES

5.3.1. Impact on Air Quality

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

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

Though main electricity source for the factory is the national grid line, sound-proof diesel generators will be set-up in case of electricity shortages. So, 725 kVA and 550 kVA of standby generator will be used for both operation and administration appliances. The proposed project will use annually about 528.634 gallons of diesel for vehicles such as transportation vehicle and emergency use of a generator. The following table shows the amount of CO₂ emission coming from the combustion of fuels.

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

Category of GHGs Assessment

Category	Range
Negligible	no GHG assessment necessary
Low	< 20 kt/y CO2-equivalent per year
Medium-Low	20 – 100 kt CO2- equivalent per year
Medium-High	100 kt – 1 Mt CO2- equivalent per year
High	>1 Mt CO2-e equivalent per year

Source: EBRD GHG Assessment Methodology, 2010

CO₂ Emission by the Uses of Fuel

No.	Туре	Amount(gallon/year)	Equivalent CO2 emission (Kilotons)	Status
1	Diesel for generator	528.634	0.00624	Negligible

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

5.3.2. Impact on Water Quality

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

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

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

5.3.3. Impact on Soil Quality

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

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

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

5.3.4. Impact of Noise

During the construction phase, significant impact on noise and vibration to surrounding environment must be generated from the movements of vehicles, operating the machinery, excavation activities and transportation of equipment and construction materials by heavy trucks. However, the project factory is already constructed during environmental assessment study and site visit. Therefore, the proposed project is located in industrial zone and already finished the construction, the potential impact on noise and vibration is not assessed and short-term affect must be caused the construction period is temporary.

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

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

5.4. IMPACT ON ECOLOGICAL RESOURCES

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

5.5. IMPACT ON HUMAN

5.5.1. Socio-economic

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

5.5.2. Occupational Health and Safety

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

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

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

5.5.3. Waste Disposal

5.5.3.1. Solid Waste

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

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

5.5.3.2. Liquid Waste

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

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

5.6. PROJECT ACTIVITIES AND ITS SIGNIFICANT IMPACTS

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

Table 5-2 Evaluation and Perdition of Significant Impacts

Environmental Project Activities		Significant of Potential Impacts				Impact Significance	
Impact			D	E	Р	SP	
Construction Phase; It is not assessment in this phase, because of construction is already comp during EMP preparation.							
Operation Phase							
Air pollution	 Dust and GHGs emission from vehicles used for transporting raw materials and final products Particulate matters emission from the activities of production process Emission of smoke from kitchen Emission from emergency diesel generator 	2	4	2	4	32	Moderate
Water pollution	 Sewage disposed of from the toilets Oil spill and grease leaks from transporting vehicles and machinery equipment used in operation phase 	2	4	2	3	24	Low
Soil Contamination	 Accidental spillage of oil used by vehicles operating 	1	4	1	2	12	Very Low
Noise Pollution	 Generating noise from the production machinery Noise from the generating of the emergency generators 		4	1	4	32	Moderate
Fire Hazard	Poor electrical installationswaste disposed areaRaw materials storage		5	2	4	40	Moderate
Solid waste	residual pieces of fabric scraps from	3	4	1	4	32	Moderate

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

Environmental Impact	Project Activities	Significant of Potential Impacts					Impact Significance
impact			D	Е	Р	SP	
Social-economic Condition	Temporary job opportunities for local people		-	-	-	-	Positive Impact

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

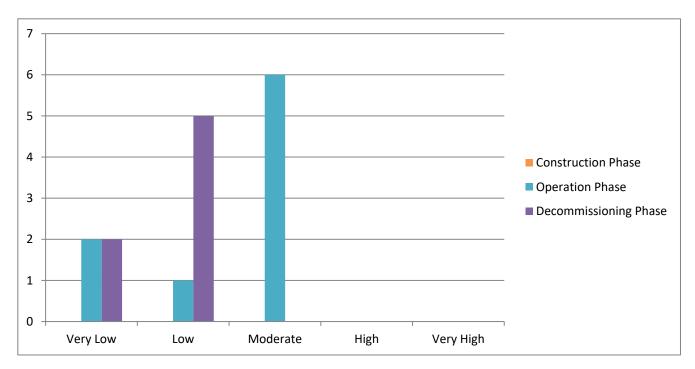


Figure 5-2 Impact Significance of the Proposed Project

5.7. MITIGATION MEASURES OF IMPACT ON ENVIRONMENTAL RESOURCES

5.7.1. Recommended Air Impact Mitigation Measures

During the operation phases, ventilation system of the factory is enough for the workers cause the proponent has installed Moist Fan around the factory building. To control air pollution, the vehicles, generators and machineries have to check and maintain regularly. Since the factory compound area is paved with concrete, dust emission from the movements of vehicles and cars is not significant. The project proponent is installing good exhaust system at the kitchen to reduce adverse impacts of indoor air quality. Ensuring vehicles, compressor and generator are well maintained. Above mitigation plan of air quality controlling is enough since the project is garment factory.

During the decommissioning phases, the impact on air quality can be controllable and reduced to minimum level and minimized dust emissions from material handling sources. Sprinkling

water on the top soil can reduce dust emission from the demolishing activities. In the proposed project area, vehicle movements should be limit and maintain and check the vehicles and machineries regularly. Burning the demolished materials and residual wastes must not be allowed.

5.7.2. Mitigation Measure of Impact on Water

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



Figure 5-3 Drainage and Septic Tank in Project Area

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

5.7.3. Mitigation Measure of Impact on Soil Contaminate

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

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

5.7.4. Mitigation Measure of Impact on Noise

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

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

5.8. MITIGATION MEASURES OF IMPACT ON HUMAN

5.8.1. Mitigation Measures on Fire Hazard

The project proponent has provided fire extinguishers, fire hose reels and fire hydrants on the walls of the factory for fire emergency cases. Regular inspection for existing firefighting equipment must be done. In case of fire emergency, water storage tank for fire frightening is also constructed with the capacity of 25,000 gallons at the proposed area. The emergency contact numbers of township and district fire services department must be printed and tagged at easily visible places for fire emergency cases. The emergency fire alarms are installed at the factory for alerting the workers in case of fire. The main entrances and route for emergency cases of the factory must not be blocked with materials or machines for fire emergency cases. In addition, the project proponent has plans to provide trainings on firefighting for the workers by a professional or otherwise by sending to training courses. The plan to install fire alarm system and fire-frightening system are mentioned in below.









Figure 5-4 Firefighting Plan and Escape Plan

5.8.2. Mitigation Measure for Occupational Health and Safety

The proposed project has a clinic and a nurse. Medicines and first aid kits are provided in this clinic. Moreover, these medicines and first aid are provided for emergency cases of workers. First aid training, safety training, firefighting training or other essential training for machinery handling must be provided for workers. According to the observed light intensity values, the proponent provides sufficient lighting for workers for safe working and reducing optical problems of the workers. Personal Protective Equipment (PPEs) like earmuffs, safety gloves, helmets and goggles are provided for each department. To prevent electric shock hazards, electrical maintenance staff (handyman) is to be assigned to do regular inspections and take preventive measures. The project proponent must manage the drainage systems of the factory to prevent health risk of the workers.

The Occupational Safety and Health Administration (OSHA) have recommended permissible noise exposure limit for industrial workers, which is based on 90 dB (A) for 8 hours exposure a day with 5dB trading rates. The limits are mentioned in Table 5-3. According to OSHA, the maximum allowable noise level for workers is 90 dB (A) for 8 hours exposure a day. Thus, adequate protective noise impact measures in the form of ear muffs/ear plugs to the workers working in high noise areas, need to provide if actual noise level monitoring results are more than 90 dB (A) at the work site for working time hours for 8 hours. [5]

Table 5-3 Permissible exposure of noise limits

Total Time of Exposure Per Day in Hours	Noise Level dB(A)
8	90
6	92
4	95
3	97
5	100
1	105
1/2	110
1/4	115

http://www. Osha.gov/pls/oshaweb/owadisp

5.8.3. First Aid Guidelines and Facilities

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

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









Figure 5-5 Factory Clinic

5.8.4. Mitigation Measure of Waste Generation

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





Figure 5-6 Garbage Bins

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

6. ENVIRONMENTAL MANAGEMENT PLAN

6.1. AIR POLLUTION/DUST MANAGEMENT PLAN

	T					
Objectives:	To minimize the adverse impact to air quality caused by stack gas emission from generator and also dust management generated from vehicular movement.					
	To comply with relevant government rules					
Relevant	National Environmental Quality	(Emission) Guidelines (2015)				
government law and rule	Motor Vehicles Act, (2015)					
Time Frame	Entire life spans of the factory o	peration				
Management	Must be plant around the pro	posed project to reduce carbon emission				
Plan	Should be prohibited burning	of waste material at the proposed project site				
	Must be control air pollution, the vehicles, generators and machineries have to check and maintain regularly.					
	The factory should use chimney for generator through which the flue gas is emitted for reducing the impact of stack emission on environment.					
	Must be ensuring vehicles, compressor and generator are well maintained.					
Monitoring &	Frequency	Biannually				
Reporting	Monitoring Point	Indoor and Outdoor of proposed project				
	Parameters	PM 2.5, PM 10, SO2, NO2, O3, CO				
Estimated cost	1,000,000 Kyats per year					
Responsibility	Management of the factory;					
Head of maintenance: Total implementation of above of air pollution plan						
	Production manager: Air quality in the production area is good enough					
	Manager: To hire organization/independent third-party testing air quality					
	EHS officer-Monitor the hyginactory	giene of ambient air quality in surrounding of the				

6.2. NOISE MANAGEMENT PLAN

Objectives:	 To avoid nuisance noise to nearby residents generated from generator and other machineries. To comply with noise standard of National Environmental Quality (Emission) Guideline
Relevant government law and rule	National Environmental Quality (Emission) Guidelines (2015)
Time Frame	Throughout the project life
Management Plan	 Building noise insulated generator room and ensure satisfactory maintenance of relevant equipment Impose speed limit to track and vehicles at the transportation route. Provide sufficient personal protective equipment (PPE) at the work place

	· ·	All the related personnel will be provided proper training about the relevant issues and ensure PPE wear during working in noisy area.				
Monitoring 8	Frequency	Biannually				
Reporting	Monitoring Point	Two points in operation area (especially cutting and sewing)				
	Parameters	Sound Decibel				
Estimated cost	100,000 Kyats per yea	100,000 Kyats per year				
Responsibility	HSE Manager or En Company Limited	HSE Manager or Environmental Management Team of Myanmar S.Flamingo Garment Company Limited				

6.3. SOLID WASTE MANAGEMENT PLAN

Objectives:	To minimize waste generation by developing strategies for the management and disposal of all waste in a manner that is sustainable and sensitive to the environment		
	To comply government waste management policy		
Relevant government law and rule Yangon City Development Committee Law (2018), National Waste Management Strand Action Plan (Draft 2018)			
Time Frame	Entire life spans of the factory operation		
Management Plan	 Must be provides separate garbage bins at each building. All of the solid wastes will be collected separately in garbage based on their types and stored in relevant separated waste storage area Final wastes should be disposed by using YCDC's service. 		
Monitoring & Reporting	 Daily wastes have to be collected and hand over to YCDC waste collector The inventory record of waste disposal will be maintained as proof for proper management as designed 		
Estimated cost	50,000 Kyats per month		
Responsibility	Manager (HR) Responsible for overall site cleanliness and waste management Regular waste collection to minimize excessive waste storage		

6.4. WASTEWATER MANAGEMENT PLAN

Objectives:	To implementation plan for the management of liquid waste from collection, through treatment and resource recovery, to residual disposal					
Relevant government law and rule	Yangon City Development Committee Law (2018), National Environmental Quality (Emission) Guidelines (2015), Underground Water Act					
Time Frame	Entire life spans of the factory operation					
Management Plan	Regular inspection and cleaning, oil traps, septic tank and adequate covers for all storage and waste disposal areas can decrease these contaminations.					

		Frequency	Biannually	
		Parameters	pH, Turbidity, Conductivity, Iron, Sulphate, TSS, TDS, Manganese, COD, BOD, Cyanide, Copper, Zinc, Carbonate	
		of drainage and sewerage system will be conducted periodically		
Estimated cost		800,000 Kyats per year		
Responsibility		Manager -To hire organization/independent third-party testing wastewater quality		
E		EHS officer-Monitor the condition of factory's drainage and sewerage system		

6.5. ENERGY MANAGEMENT PLAN

Objectives:	To improve energy efficiency, reduce cost, optimize capital investment, reduce environmental and greenhouse gas emissions, and conserve natural resources		
Relevant government law and rule	National Energy Management Committee (Myanmar Energy Master Plan 2015)		
Time Frame	Once in a year throughout the factory life		
Management Plan	 Installation of timers and thermostats to control heating and cooling Energy saving light installed in different area of the factory for saving energy Used of energy saving devices must be installed 		
	Ensure that good housekeeping measures such as turning off equipment and lights when not in use		
Monitoring & Reporting	Conduct annual energy efficiency of adult to find out the scope for energy saving		
Estimated cost	Approximately 100,000 Kyats per year		
Responsibility	Manager		
	To arrange energy audit technical personnel		
	To monitor and record electricity consumption, other related energy issues and take necessary actions if any problem arises		

6.6. WATER CONSUMPTION MANAGEMENT PLAN

Objectives:	The water consumption management is aimed at minimizing ground water use
Performance Indicator:	 Prohibitions on accessing and using underground water without a license Water consumption saving of general water use from groundwater
Relevant government law and rule	The Underground Water Act (1930)
Management Plan	 Install water meter for internal control of water consumption All staff trains and makes aware conservation practices and proper methods of water use must be place in toilets and other areas of water consumption The contamination of water is avoided by suitable management of oil and fuel used in machineries and vehicles

	Trees plantation surrounding the factory	
Monitoring & Reporting	Daily visual inspections	
Time Frame	Once in a year throughout the factory life	
Estimated cost	Approximately 5 million kyats (annually)	
Responsibility	Manager	
	Arrange audit on water usage controls environmental officer	

6.7. EMERGENCY RESPONSE AND DISASTER MANAGEMENT PLAN

Objectives:	 To reduce the harmful effects of all hazards, including disasters. The World Healt Organization defines an emergency as the state in which normal procedures ar interrupted, and immediate measures (management) need to be taken to prevent it fror becoming a disaster, which is even harder to recover from. 		
Relevant government law and rule	The Employment and Skill Development Law (August 2013), ILO guide to Myanmar Labour Law (2017)		
Time Frame	Entire life spans of the factory operation		
Management Plan	The factory management has taken proper measures to handle any emergency situation like fire, earthquake, flood and storm		
	 Provision and inspection of firefighting equipment and fire hydrant system in all the sections 		
	 A detail evaluation plan (fire exist, emergency exit door, etc.) is established and communicated with workers 		
	 Periodic inspection of safety relief valve provided with pressure vessels and equipment, preventive maintenance; aware the workers about electric shock by necessary training. 		
	Regular fire drill operation is conducted		
	 Workers are informed about what to do in earthquake like stay in a safe place such as under table of desk, not to try move outside during earthquake, workers who will be outside during earthquake shall remain stay out of the building, trees, lump post, etc. Other relevant safety instruction of emergency situation it informed to workers by training 		
	 Workers are aware of dangers from physical hazards such as obstacles covered by floodwater (storm debris, drainage opening, ground erosion) and from displaced reptiles (Snake) or other animals. 		
	A medical team has been prepared for primary treatment (First Aid)		
	 Prepare an emergency contact directory consisting contact numbers of nearest fire service, local police station, hospitals, etc. and display it in a place that everybody can see it easy. 		
	Build a safety committee which from firefighting team, rescue team. The committee arrange a meeting every month to discuss about safety management		
	• Ensure proper training of the employees about the disaster management, fire safety as well as occupational health and safety		
Monitoring &	Weekly check fire extinguishers and water hydrant in position		
Reporting	Daily inspect that all fire exist are open		
	Servicing fire extinguisher and records accidents,		
Estimated cost	Approximately 1,500,000 Kyats per year		
Responsibility	Manager and EHS officer		

Arrange firefighting training after every 3 months
 Responsible for fire control and response
 Monitoring daily danger warning and bans

6.8. OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT PLAN

Objective	To provide a broad framework for improving standards of workplace health and safety to reduce work-related injury and illness.		
Relevant Government Law and Rule	Public Health Law (1972), Prevention and Control of Communicable Diseases Law 1995 (Amendment 2011), Occupational Safety and Health Law (2019)		
Time Frame	Entire life spans of proposed project		
Management Action	 First aid training, safety training, firefighting training or other essential training for machinery handling must be provided for emergency cases of workers. According to the observed light intensity values, the proponent provides sufficient lighting for workers for safe working and reducing optical problems of the workers. Personal Protective Equipment (PPE) like earmuffs, safety gloves, helmets and goggles are provided for each department. To prevent electric shock hazards, electrical maintenance staff (handyman) is to be assigned to do regular inspections and take preventive measures. Manage the drainage systems of the factory to prevent health risk of the workers. The maximum allowable noise level for workers is 90dB(A) for 8hours exposure a day. Thus, adequate protective noise impact measures in the form of ear muffs/ear plugs to the workers working in high noise areas. 		
Monitoring and Reporting	 Weekly check fire extinguishers and water hydrant in position Daily inspect that all fire exist are open Servicing fire extinguisher and records accidents 		
Estimated Cost	500,000 Kyats per year		
Responsible Person	HSE Manager, Operation Manager or Environmental Management Team of Myanmar S.Flamingo Garment Company Limited		

6.9. FIRE MANAGEMENT PLAN

Objectives:	To ensure that fire control practices are implemented on site to minimise the risk of fire from site operations and bush fires
Relevant government law and rule	Myanmar Fire Brigade Law 2015
Time Frame	Entire life spans of proposed project operation

Management Plan	 Must be provide fire extinguishers, fire hose reels and fire hydrants on the walls of the factory for fire emergency cases. Must be indicated the emergency exit and assembly point in public area. Regular inspection for existing firefighting equipment must be done. In case of fire emergency, water storage tank for fire frightening. The emergency fire alarms are installed at the factory for alerting the workers in case of fire. The main entrances and route for emergency cases of the factory must not be blocked with materials or machines for fire emergency cases. 		
Monitoring & Reporting	To check monthly Visual inspection, Firefighting equipment (fire extinguish, firefighting hose, portable fire pumps, fire hose reels, fire monitor and firefighting nozzles)		
Estimated cost	1,200,000 Kyats per year		
Responsibility	HSE Manager, Operation Manager or Environmental Management Team of Myanmar S.Flamingo Garment Company Limited		

6.10. ENVIRONMENTAL MONITORING SCHEDULE AND REPORTING

The EMP cell members responsible may conduct daily, weekly or monthly general inspections of the project area and facilities. The objectives are to identify non-compliances to EMP. Table 6-1 is provided the environmental monitoring schedule for Myanmar S.Flamingo Garment Company Limited. The factory submits monitoring report to the Ministry not less frequently than every six (6) months, as provided in a schedule in the EMP,

Table 6-1 Environmental monitoring schedule for Myanmar S.Flamingo Garment Co., Ltd.

Issues	Parameter	Frequency	Area to be monitored	Monitoring cost	Responsible Organization
		Oper	ation Phase		
Common	Monitoring of mitigation measures	Yearly (3 years after operation)	The project	2500,000 Kyats	Environmental Management Team's Myanmar S.Flamingo Garment Co.,Ltd.
Air quality	PM 2.5, PM 10, SO2, NO2, O3, CO	Biannually monitoring and reporting to ECD (first 3 years after operation)	Outdoor and Indoor of proposed project	800,000 Kyats	Environmental Management Team's Myanmar S.Flamingo Garment Co.,Ltd.
Waste Generation	Solid waste, Liquid waste and Hazardous waste	weekly	Recycle house and waste house and at the factory office	50,000 Kyats	Environmental Management Team's Myanmar S.Flamingo

Issues	Parameter	Frequency	Area to be monitored	Monitoring cost	Responsible Organization
					Garment Co.,Ltd.
Fire Hazardous	Visual inspection, firefighting equipment	Monthly	At the factory	500000 Kyats	Environmental Management Team's Myanmar S.Flamingo Garment Co.,Ltd.
Light intensity	Illuminance	Monthly	At the production line (especially cutting and QC)	20,000 Kyats	Environmental Management Team's Myanmar S.Flamingo Garment Co.,Ltd.
		Decomm	issioning Phase		
Air quality	PM 2.5, PM 10, SO2, NO2, O3, CO	One time during this phase	One point in the production area	1000000 Kyats	Land Owner
Noise	Noise level in decibel (dBA)	One time during this phase	One points in demolishing area	1000000 Kyats	Land Owner
Rehabilitation	Recovering and Revegetation		All decommissioning area		Land Owner

6.11. CAPACITY BUILDING AND TRAINING PLAN

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

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

6.11.1. Assignment of Responsibilities

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

6.11.2. Emergency Procedures

Emergency procedures are operating instructions for employees to follow in emergency case About work safety in the concerned processing, the management team should

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

6.11.3. Training for Emergencies

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

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

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

6.11.4. Fire Prevention and Protection

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

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

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

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

- Emergency plans
- Alarm systems
- Portable fire extinguishers
- Fire Protection Equipment

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

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

6.11.5. Fire Protection Equipment

1. Explosion Suppression Systems: Explosion suppression systems should be used in unusually hazardous areas such as elevator legs, boots and head, or in areas such as bins, distributors and tanks.

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

Fire Evacuation plans should include the following information

- o Emergency escape routes must be clearly shown on floor plans and workplace maps
- Employers must know that their employees know the emergency escape routes
- Procedures for employees who must remain to operate critical equipment before evacuating
- Identification and assignment of personnel responsible for rescue or emergency medical aid
 Fire Safety Plans should include the following information:
- 1. Procedure for reporting a fire or other emergency
- 2. Site plans indicating the following
 - The Occupancy assembly point
 - The locations of fire hydrants
 - The normal routes of fire department vehicles access
- 3. Floor Plans identifying the locations of the following
 - Exits
 - Primary evacuation routes
 - Secondary evacuation routes
 - Accessible egress routes
 - Areas of refuge
 - Exterior area for assisted rescue
 - Manual fire alarm boxes
 - Portable fire extinguishers
 - Occupant-use hose stations
 - Fire alarm annunciators and controls

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

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

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

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

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

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

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

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

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

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

6.11.7. Site Fire Control

- 1. Alert other people through fire alarm
- 2. If small, control using an extinguisher
- 3. Contact fire brigade if not under immediate control
- 4. Attend to human life in immediate danger
- 5. For electrical fires turn off power before fighting
- Once out of the building, stay out. Do not allow people to go back into the burning building to collect valuables. While evacuating the building, close doors (but do not lock) to slow down the spread of fire
- 7. Obey all instructions
- 8. Proceed to an emergency evacuation area (Muster Point)

6.11.8. Employee Information and Training

Employees must be informed about any operations in their work area where hazardous chemicals or materials are present. They must also be informed about the locations and availability of the hazard communication program, list of chemicals and SDSs. Employees must receive training on the following:

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

6.11.9. Health and Safety Training Plan for Worker

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

Table 6-3 Training Plan Used in Myanmar S.Flamingo Garment Company Limited

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

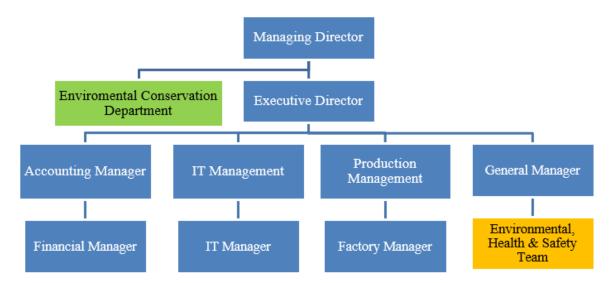


Figure 6-1 Environmental Organization Structure in Factory

6.12. GRIEVANCE REDRESS MECHANISM (GRM)

People who live near the project affected area or stakeholders can complain about the problems and impacts that they suffer; they can complain though Grievance Committee, which includes the responsible persons of Myanmar S.Flamingo Garment Company Limited representative from East Dagon Myo Thit and representative from General Administration Department (East Dagon Myo Thit Township). Small issues will be solved at the Grievance Committee stage and other unsolved problems will be submitted to higher responsible authorities and finally the responsible person decided by the court in legal terms. The following diagram (Figure 6-2) show steps of Grievance Redress Mechanism of Proposed Factory Project.

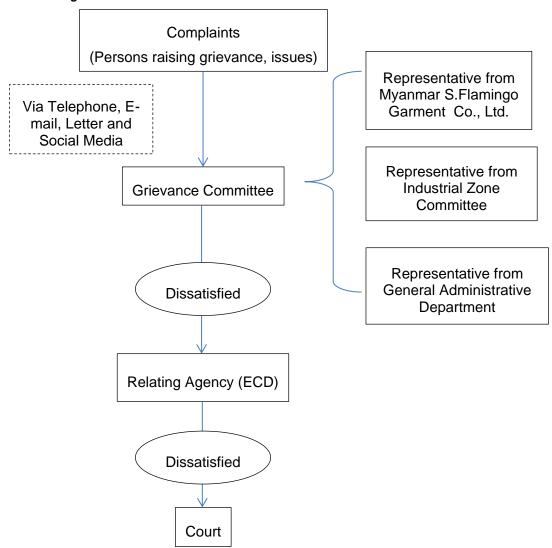


Figure 6-2 Grievance Redress Mechanism Flow Diagram

6.13. CORPORATE SOCIAL RESPONSIBILITY (CSR) PLAN

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

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

Table 6-4 CSR plan at Myanmar S.Flamingo Garment Company Limited

No	Particle	Contribution
1	Public school	0.5%

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

6.13.1. Public School

We will contribute 0.5% of our net profit to the public school near the factory to be a part of creating the better community. We will also work together with the school to understand more about the needs and we will also ensure that our contributions will be used in the most effective and efficient way for the society.

6.13.2. Non-profit Training

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

6.13.3. Healthcare

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

7. PUBLIC CONSULTATION

7.1. PUBLIC CONSULTATION PROCESS

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

Public consultation during preparation of EMP report was conducted on 20, December 2019, following the EIA procedure.

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

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

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

Public consultation carried out after the presentation on the project, followed by questions, answers and discussion. U Saw Yan Naung presented EMP study and findings from Myanwei, after the presentation following question and answer section. Summary of public consultation meeting is presented Table 7-1 is shown the consultation meeting photo.

Table 7-1 Summary of public consultation meeting

	, .
Time and	Friday, 20 December 2019
Date	10:30 - 12:30
Venue	Dagon Myo thit Seik Kann, Zone Committee Meeting Room
	Presentation on the Background Information of Project,
	Project Description,
Agenda	Impact Assessment, Environmental Mitigation
	Environmental Management Plan and Monitoring Plan
	Received and Answer from feedback of participants

7.2. RECOMMEND SUGGESTION AND COMMENT

After the presentation, the floor opened for questions and answers. There is no question and comment for presentation and EMP draft report, because the project is sample manufacturing of Safety Clothing on CMP Basis. In addition, ECD suggested that for the occupational health and safety during project implementation about project planning and environmental issues. The following listed is suggestion of government officer.

Daw Myat Su Mon, Environmental Conversation Department;

To control the dust emission from the cutting line and other dust emission area

Environmental Management Plan

- To describe the mitigation plan of dust emission level in the report
- To describe the monitoring plan of air quality and detail parameter in the report
- To describe the detail plan for fire safety management in the report
- To describe the measurement of wastewater discharge form domestic water usage

Daw Mi Mi Aung, industrial Supervision and Inspection Department;

- To give awareness of using PPE for employee's safety
- To manage the wastewater and solid waste disposal for conversation of environment

Note

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

Environmental information of proposed project to public will also inform form social media Facebook page of Myanwei Environmental Solutions Company Limited.









Figure 7-1 Public Consultation Meeting

8. CONCLUSION & RECOMMENDATION

8.1. CONCLUSION

Environmental Management Plan (EMP) has been prepared for Myanmar S.Flamingo Garment Company Limited is located at Plot No. (165), Myay Taing Block No. (113), East Dagon Myo Thit Township, Yangon Region. The main objective of the study is focused specially on the required environmental management measures or creating environmentally friendly workplace. An EMP has been carried out for the factory according to the requirement of the proponent as it has been made for Safety Clothing manufacturing factory.

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

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

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

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

8.2. RECOMMENDATION

This is recommended that;

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

Environmental Management Plan

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

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

9. REFERENCE

- 1] General Administrative Department (East Dagon Myo Thit Township), East Dagon Myo Thit Township Data (2017).
- [2] Hla Hla Aung, "Potential Seismicity of Yangon Region (Geological Approach), "Yangon Surface Displacement as Detected by Insar Time Series Analyisi" July 2011.
- [3] Ministry of Natural Resources and Environmental Conversation (MONREC), "Environmental Impact Assessment Procedure" December 2015.
- [4] Ministry of Natural Resources and Environmental Conversation (MONREC), "National Environmental Quality (Emission) Guidelines" December 2015.
- [5] Specifications for accident prevention signs and tags, regulations (standards 29-CFR), Occupational Safety and Health Administration.

APPENDIX A

Company Document of Myanmar S.Flamingo Garment Company Limited



ပုံစံ (၅-ခ)

ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော် ရန်ကုန်တိုင်းဒေသကြီးရင်းနှီးမြှုပ်နှံမှုကော်မတီ အတည်ပြုမိန့်

အတည်ပြုမိနိ	န့် အမှတ် ရကတ–၂၃၉/၂၀၁၉	၂၀၁၉ ခုနှစ် သြဂုတ် လ 🏻 🗤 ရက်
	န်တိုင်းဒေသကြီး ရင်းနှီးမြှုပ်နှံမှု ကော်မဝ)အရ ဤအတည်ပြုမိန့်ကိုထုတ်ပေးလိုက်	ဂီသည် မြန်မာနိုင်ငံ ရင်းနှီးမြှုပ်နှံမှု ဥပဒေ သည် –
(c)	ရင်းနှီးမြှုပ်နှံသူ/ကမကထပြုသူအမည်	MR. YANG WENXUAN
(J)	နိုင်ငံသား CHINESE	
(5)	နေရပ်လိပ်စာ ROOM 402, UNIT 1, B	UILDING 1, SHUXI STREET, HENGXING
	MING YUAN, WUYI COUNTY, ZHEJIA	ANG PROVINCE, PEOPLE'S REPUBLIC
	OF CHINA	
(9)	ပင်မအဖွဲ့ အစည်းအမည်နှင့်လိပ်စာ	မြေကွက်အမှတ်–၁၆၅၊ မြေတိုင်းရပ်ကွက်
	အမှတ်– ၁၁၃၊ စက်မှု မြို့၊ အရှေ့ဒဂုံမြို့နပ	
(၅)	ဖွဲ့ စည်းရာအရပ် မြန်မာ	
(G)		CMP စနစ်ဖြင့် လုံခြုံရေးသုံး အဝတ်
1	အထည်များ ချုပ်လုပ်ခြင်းလုပ်ငန်း	10-10-1
(9)		မြေကွက်အမှတ်–၁၆၅၊ မြေတိုင်းရပ်ကွက်
(()	အမှတ်– ၁၁၃၊ စက်မှု မြို့၊ အရှေ့ဒဂုံမြို့နပ	
(െ)	နိုင်ငံခြားမတည်ငွေရင်း ပမာဏ အခေ	
(e)		ည့်ကာလ အတည်ပြုမိန့် ရရှိသည့်
(6)	နေ့မှ ၆လ အတွင်း	
(00)		အမေရိကန်ဒေါ်လာ ၀.၉၉၇ သန်းနှင့်
(00)	ညီမျှသော မြန်မာကျပ်ငွေ	00(11.
(၁၁)	တည်ဆောက်မှု/ ပြင်ဆင်မှုကာလ ၆၀	22
(၁၂)	ရင်းနှီးမြှုပ်နှံမှု ခွင့်ပြုသည့်သက်တမ်း	
-	ရင်းနှီးမြှုပ်နှံမှုပုံစံ ရာခိုင်နှုန်း	
(၁၃)	ရင်းနှီးမြုပ်နှံမှုပုံစ ပြာခိုင်မှုရှ	Chi decelorate de la minico CADMENT
(99)		ည် MYANMAR S. FLAMINGO GARMENT
	COMPANY LIMITED	





THE REPUBLIC OF THE UNION OF MYANMAR

Yangon Region Investment Committee

ENDORSEMENT

Endorseme	nt No. YGN -239/2019 Date 27 August 2019
This	endorsement is issued by Yangon Region Investment Committee in
accordance	with Section 25(d)of the Myanmar Investment Law-
(1)	Investor Name MR. YANG WENXUAN
(2)	Citizenship CHINESE
(3)	Residence Address ROOM 402, UNIT 1, BUILDING 1, SHUXI STREET
	HENGXING MING YUAN, WUYI COUNTY, ZHEJIANG PROVINCE, PEOPLE'S REPUBLIC OF CHINA
(4)	Name and Address of Principal Organization PLOT NO. 165, MYAY TAING BLOCK NO. 113, EAST DAGON MYO THIT TOWNSHIP, YANGON REGION
(5)	Place of Incorporation MYANMAR
(6)	Type of Business MANUFACTURING OF SAFETY CLOTHING ON CMP
	BASIS
(7)	Place(s) of investment Project PLOT NO. 165, MYAY TAING BLOCK
	NO. 113, EAST DAGON MYO THIT TOWNSHIP, YANGON REGION
(8)	Foreign Capital Amount US\$ 0.997 MILLION
(9)	Period for Foreign Capital to be brought in WITHIN 6 MONTHS FROM
	THE DATE OF ISSUANCE OF ENDORSEMENT
(10)	Total Amount of Capital (Kyat) EQUIVALENT IN KYAT OF US\$ 0.997
	MILLION
(11)	Construction/ Preparation Period 6 MONTHS
(12)	Validity of Endorsement 10 YEARS
(13)	Form of Investment WHOLLY FOREIGN OWNED
(14)	Name of Company Incorporated in Myanmar MYANMAR S. FLAMINGO





GARMENT COMPANY LIMITED

(Phyo Min Thein)
Chairman

- (c) The annual rent for land and building shall be USD 99,552.60 (United States Dollar ninety-nine thousand and five hundred fifty-two and sixty cents only) for the total area of the land measuring 2.05 acres.
- (d) Myanmar S. Flamingo Garment Company Limited may submit an application form for the right to use land under Chapter XII and exemptions and reliefs under Sections 75,77 and 78 of the Chapter XVIII of the Myanmar Investment Law.
- (e) Myanmar S. Flamingo Garment Company Limited shall use its best efforts to achieve a timely realization of the work stated in the Endorsement application.
- (f) Myanmar S. Flamingo Garment Company Limited shall obey and respect the responsibilities of investors under section 65 of the Myanmar Investment Law and Chapter XX of the Myanmar Investment Rules.
- (h) Myanmar S. Flamingo Garment Company Limited shall abide by the Fire Services Department' s rules, regulations, directives and instructions. Moreover, Myanmar S. Flamingo Garment Company Limited shall undertake fire prevention measures such as the appropriate placement of water storage tank, fire hooks, sand bags, and fire extinguishers, and training will be provided to all employees regarding the use of fire fighting equipment. Myanmar S. Flamingo Garment Company Limited shall also appoint a specific individual who shall be called the Fire Safety Officer (FSO) who shall be designated responsible for on-site safety and coordination within the organization.
- (i) Myanmar S. Flamingo Garment Company Limited shall submit to the Myanmar Investment Commission any sublease, mortgate, 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 the Myanmar Investment Rules.

Confidential



THE REPUBLIC OF THE UNION OF MYANMAR YANGON REGION INVESTMENT COMMITTEE

Plot No. 49, Seinlae May Street,

Kabar Aye Pagoda Road, Yankin Township, Yangon

Tel: 01- 658263 Our ref: YRIC -1 /E-239/2019(705)

Fax: 01- 658264 Date : 24 August 2019

Subject: Decision of the Yangon Region Investment Committee regarding an

Endorsement for manufacturing of safety clothing on CMP basis under the name of Myanmar S. Flamingo Garment Company Limited

Reference: Myanmar S. Flamingo Garment Company Limited's letter dated 12/8/2019

- 1. The Yangon Region Investment Committee, at its (13/2019) meeting held on 13/8/2019, approved the Endorsement for investment for manufacturing of safety clothing on CMP basis under the name of Myanmar S. Flamingo Garment Company Limited submitted by Mr. Yang Wenxuan (80%), Mr. Chen Meng (20%) from People's Republic of China as a wholly foreign owned investment in accordance with the Myanmar Investment Law and Rules.
- 2. The terms and conditions of the Endorsement as follows:
 - (a) The term of the Endorsed project shall be an initial ten (10) years commencing from the date of the issuance of the Endorsement by the Yangon Region Investment Committee, and shall be extendable for a period of ten(10)years, and a further consecutive period of ten(10)years.
 - (b) The term of the Land and Building Lease Agreement shall be an initial ten (10) years commencing from the date of the agreement between Daw Kyauk Chi Phone (Lessor) and Myanmar S. Flamingo Garment Company Limited (Lessee) and shall be extendable for a period of ten (10) years, and a further consecutive period of ten (10) years by mutual agreement between the Lessor and the Lessee.

- (j) Myanmar S. Flamingo Garment Company Limited shall submit an annual report in the prescribed form to the Myanmar Investment Commission within three (3) months of the end of the financial year in accordance with Rule 196 of the Myanmar Investment Rules and shall disclose a summary of the report on its website or the Myanmar Investment Commission's website.
- (k) Myanmar S. Flamingo Garment Company Limited must, during the operation period under the Endorsement of the Myanmar Investment Commission, submit its operating report quarterly in the prescribed form in accordance with Rule 197 of Myanmar Investment Rules.
- 3. Myanmar S. Flamingo Garment Company Limited shall carry out in accordance with the laws, regulations and stipulations of relevant Union Ministries, governmental department and governmental organizations the obtaining of any license, permit or registration as per Section 65(d) of the Myanmar Investment Law.
- 4. Myanmar S. Flamingo Garment Company Limited shall submit five (5) copies of all approvals, licences, permits and similar authorizations relevant to the initial implementation of the investment and land Lease Agreement to the Yangon Region Investment Committee.

(Phyo Min Thein)

Chairman ____

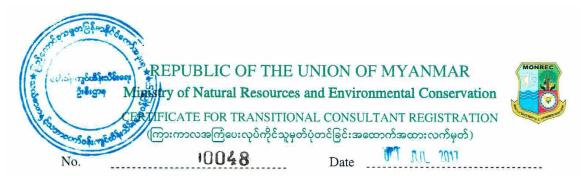
Myanmar S. Flamingo Garment Company Limited

- cc: 1. The Office of the Union Government
 - 2. Ministry of Home Affairs
 - 3. Ministry of Office of the Union Government
 - 4. Ministry of Natural Resources and Environmental Conservation
 - 5. Ministry of Labour, Immigration and Population

Confidential

- 6. Ministry of Industry
- 7. Ministry of Commerce
- 8. Ministry of Planning and Finance
- 9. Ministry of Investment and Foreign Economic Relations
- 10. Central Bank of Myanmar
- 11. Office of the Myanmar Investment Commission
- 12. Chairman, CMP Enterprises Supervision Committee
- 13. Director General, Department of Environmental Conservation
- 14. Director General, Directorate of Labour
- 15. Director General, Department of Immigration 16
- 16. Director General, Directorate of Industrial Supervision and Inspection17
- 17. Director General, Department of Trade
- 18. Director General, National Archives Department
- 19. Director General, Customs Department20
- 20. Director General, Internal Revenue Department21
- 21. Director General, Directorate of Investment and Company Administration
- 22. Monitoring and Supervision Division, Directorate of Investment and Company Administration

APPENDIX B Transitional Consultant Registration Certificate



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

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

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

31 March 2018

Duration of validity

(သက်တမ်းကုန်ဆုံးရက်)

25,00,00

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

Areas of Expertise Permitted (နွင့်ပြုသည့် ကျွမ်းကျင်မှုနယ်ပယ်များ)

1. Geology and Soil

EXTENSION သက်တစ်းတိုးမြှင့်ခြင်း The VALIDITY of this certificate is extended for nine months from (1.4.2019) to (31.12.2019) ဤလက်မှတ်အား (၁-၄-၂၁၁၉) ရက်နေမှ (၃.၁၂.၂၁၁၉) ရက်နေ့အထိ (၉)လသလ်တမ်း တိုးမြှင့်သည်။ For Director General (Soe Naing, 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)

No.	00068	Date 2 4 MAY 2019
certific	cate to the organization under Environm	vironmental Conservation, hereby, issues this ental Impact Assessment Procedure, Notification
	.6/2015.	
(ပတ်ဝ	န်းကျင် ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံး	လုပ်နည်း၊ အမိန့်ကြော်ငြာစာအမှတ်၊ ၆၁၆/၂၀၁၅ အရ
သယံစ	ာတနှင့် သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေး	ဝန်ကြီးဌာနသည် ဤအထောက်အထားလက်မှတ်ကို
	ပးလိုက်သည်။)	
(a)	Name of Organization	Myanwei Consulting Co., Ltd.
	(အဖွဲ့ အစည်းအမည်)	
(b)	Name of the representative in the	U Nyan Lynn Aung
	organization	
	(အဖွဲ့ အစည်းကိုယ်စားလှယ်၏အမည်)	
(c)	Citizenship of the representative in the	Myanmar
	organization	
	(အဖွဲ့ အစည်းကိုယ်စားလှယ်၏နိုင်ငံသား)	
(d)	Identity Card /Passport Number of the	12/Sakhana(N)056196
	representative person in the organization	
	(အဖွဲ့ အစည်းကိုယ်စားလှယ်၏ မှတ်ပုံတင်/	
	နိုင်ငံကူးလက်မှတ် အမှတ်)	
(e)	Address of organization	No. 28, Myay nu street, Sanchaung Township,
	(ဆက်သွယ်ရန်လိပ်စာ)	Yangon, Myanmar.
		Mobile phone: 09440251888
		E mail: ceo@myanweiconsulting.com
(f)	Type of Consultancy	Organization
	(အကြံပေးလုပ်ကိုင်မှုအမျိုးအစား)	31 December 2019
(g)	Duration of validity	31 December 2019
	(သက်တမ်းကုန်ဆုံးရက်)	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
		တို့ ပို့ ပို့ ဦးစီးဌာန
		දී දී:ම්:යුංද <u>දීව</u> ්
		7 Yangan and American American
		30 woo of water of the contract of the contrac

Director General Environmental Conservation Department

Ministry of Natural Resources and Environmental Conservation

Areas of Expertise Permitted (ခွင့်ပြုသည့် ကျွမ်းကျင်မှုနယ်ပယ်များ)

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



APPENDIX C Monitoring Result

Light Result



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

Project Name: Myanmar S.Flamingo Garment Company Limited

Plot No. 165, Myay Taing Block No. 113, East Dagon Myo Thit Township, Yangon Region. Project

Location:

Sampling December 5, 2019

Date: Sampling 1:00 pm to 4:00 pm

Time: Sampling Condition:

Environmental Team Represented By Myanwei Consulting Group Sampling By:

Company Limited

Instrument	Туре	Sampling Rate	Location
Uni-T (Luminometer)	UT380 Series	100 times/second	16°54'27.93"N 96°14'40.87"E

No.	Measure area	Unit	Result	Standard	Remark
1	Cutting Area	Lux	988	1000	Below
2	Sewing Area	Lux	747.5	400	Above
3	Quality Control	Lux	626	600	Above
4	Warehouse	Lux	611	500	Above
5	Packing Area	Lux	765	600	Above

Department	Type of Light	Wattage of Light	Lux Level
Fabric store	Fluorescent tube light	40 W	300
Sewing floor	LED tube light	20 W (T8)	400
Cutting floor	LED tube light	22 W (T8)	1000
Finishing	LED tube light	28 W (T8)	600
Inspection points	LED tube light	28 W (T8)	900 (except 1500 at audit tables)
Sampling	LED tube light	22 W (T8)	500
Office areas	Fluorescent tube light	36 W (T)	300

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



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

Project Name: Myanmar S.Flamingo Garment Company Limited

Plot No. 165, Myay Taing Block No. 113, East Dagon Myo Thit Township, Yangon Region. Project

Location:

Sampling Date:

December 5, 2019

Sampling Time:

1:00 pm To 4:00 pm

Sampling Condition:

Environmental Team Represented By Myanwei Consulting Group Sampling By:

Company Limited

Instrument	Туре	Sampling Rate	Location
Digital Sound Level Meter	GM 1356 USB	30 -130 dB	16°54'27.93"N and 96°14'40.87"E

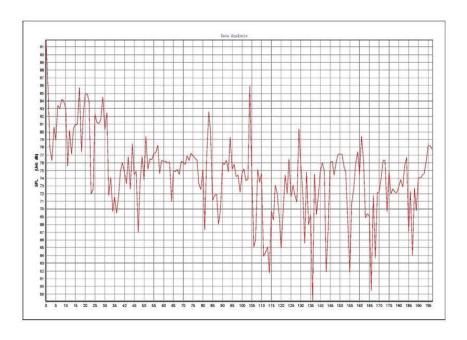
No	Place	Unit	Result	Standard	Remark
1	Operation Area	dBA	74.82	70 dBA	Slightly Above

National Environmental Quality (Emission) Guideline

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

Environmental Consult Myanwei Consulting Co., Ltd

Monitoring Graph





Plot No. (36, 38), Room No. 94, 9th floor, Grand Myay Nu Condominium, Myay Nu Street, Sanchaung Township, Yangon Region, The Republic of the Union of Myanmar. Office: (+95) 1 526574, Mobile: (+95) 9775405118, 9792528677, 9449251888; Website: www.myanweiconsulting.com

Project Name: Myanmar S.Flamingo Garment Company Limited

Project Plot No. 165, Myay Taing Block No. 113, East Dagon Myo Thit

Location: Township, Yangon Region.

Sampling December 5, 2019 Date: Sampling 1:00 am to 4:00 pm

Time: Sampling Condition:

Sampling By: Environmental Team Represented By Myanwei Consulting Group

Company Limited

Instrument	Туре	Sampling Rate	Location
OCEANUS- AQM-09	PM, O ₃ , NO ₂ , SO ₂ , CO Detector	0-999.9 (µg/M³)	Operation Area (Indoor & Outdoor)

National Environmental Quality (Emission) Guideline

Parameter	Averaging period	Guideline value	Unit
PM 10 ^a	1-year 24-hour	20 50	(µg/M³
PM 2.5ª	1-year 24-hour	10 25	(µg/M³
O ₃ a	8-hour	100	(µg/M³
NO ₂ ª	1-year 1-hour	40 200	(µg/M³
SO ₂ a	24-hour 10-min	20 500	(µg/M³
COp	15-min 30-min 1-hour	100 60 30	(µg/M³
	8-hour	10	

a. Values from air quality guidelines-global update 2005. particulate matter, ozone, nitrogen dioxide and sulfur dioxide. b. Values from air quality guidelines for Europe, 2nd edition.

Monitoring Result

Parameters	Observed value	Guideline value	Unit	Organization	Period
Indoor Air Qu	ality Measurem	ent			
PM ₁₀	30.4125	50	μg/m³	NEQG	24 hours
PM _{2.5}	21.75	25	µg/m³	NEQG	24 hours

Outdoor Air Quality Measurement						
PM ₁₀	31.075	50	μg/m³	NEQG	24 hours	
PM _{2.5}	22.975	25	μg/m³	NEQG	24 hours	
SO ₂	71.95	500	μg/m³	NEQG	10 mins	
NO ₂	52.91	200	μg/m³	NEQG	1 hours	

Lin Htet Sein

Environmental Consultant Myanwei Consulting Co., Ltd.

APPENDIX D First Aid



Nurseaid and Pharmacistaid Training C

No.122, (3rd floor), 38th-street (lower), Kyauktada Township, Yangon, Myanmar PH: 0999-72089, 095-158638, (95-1) 391162, (95-1) 376073

E-mail: aungsinkyar@mail4u.com.mm AUNGSINKYAR (LOIKAW) No 239, Hiaytama, Chitkal, Loikaw, Kayah

Certificate of Nurse Assistant and Basic Pharmacology (NABP)

Ph: 083-21376

This is to certify that MS/Mr. HLR HLR THROY of Mr. HLA NORINT courses.

N.R.C.No. 13 FMA SA SA SA SA SA O31749 son/daughter was examined and successfully completed the following

Nurseaid

I. Nursing Foundation 2. Anatomy and Physiology

SANSANHLA

B.N.Sc (Ygn), L.L.B

Dip. Nursing & Midwifery

3. Pharmacology Microbiology and personal H

4 Marcroal and Child Health Care

Pharmacistaid

fund of assimbound 1 I Classiff amon or diags



(Pharmacist)

SOE MIN TUN B.Pharm.(Mdy).

TINSOF (Manager)

DAIC 30.6 2007

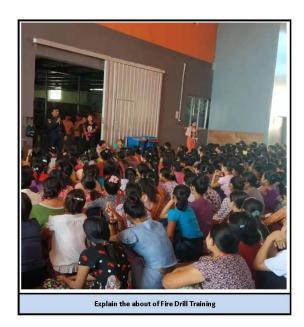
Certificate No. PKN 045.

APPENDIX E Fire Safety Training

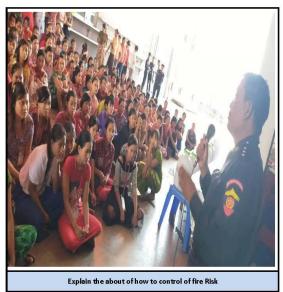


Myanmar S.Flamingo Garment Co.,Ltd Plot No.165, Myay Taing Block No.113, East Dagon MyoThit Township, Yangon Region, Myanmar.

Fire Drill Training









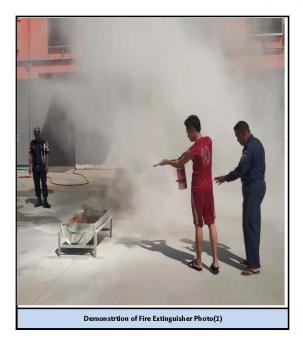
Trainer Signature



Myanmar S.Flamingo Garment Co.,Ltd Plot No.165, Myay Taing Block No.113, East Dagon MyoThit Township, Yangon Region, Myanmar.

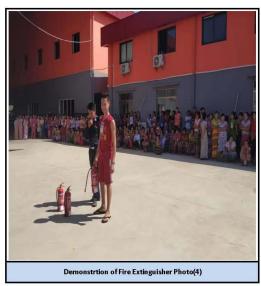
Fire Drill Training











Demonstrtion of Fire Extinguisher By -



Myanmar S.Flamingo Garment Co.,Ltd Plot No.165, Myay Taing Block No.113, East Dagon MyoThit Township, Yangon Region, Myanmar.

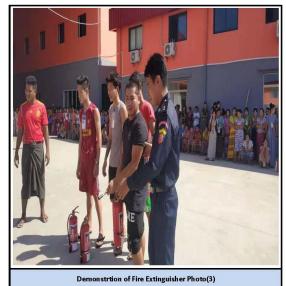
Fire Drill Training

30.11.2019





Demonstrtion of Fire Extinguisher Photo(2)



Demonstrtion of Fire Extinguisher By -



Demonstrtion of Fire Extinguisher Photo(4)



Myanmar S.Flamingo Garment Co.,Ltd Plot No.165, Myay Taing Block No.113, East Dagon MyoThit Township, Yangon Region, Myanmar.

Fire Drill Training

30.11.2019











Demonstrtion of Fire Extinguisher Photo(2)

Demonstrtion of Fire Extinguisher Photo(4)



Myanmar S.Flamingo Garment Co., Ltd Plot No.165, Myay Taing Block No.113, East Dagon MyoThit Township, Yangon Region, Myanmar.

Fire Drill Training

30.11.2019









Demonstrtion of Fire Extinguisher By -



Myanmar S.Flamingo Garment Co., Ltd Plot No.165, Myay Taing Block No.113, East Dagon MyoThit Township, Yangon Region, Myanmar.

Fire Drill Training

30.11.2019







Meeting With Fire Safety Department officer of Photo-(2)



Meeting With Fire Safety Department officer of Photo-(3)



Meeting With Fire Safety Department officer of Photo-(4)

APPENDIX F Treated Water Analysis Result









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

WTL-RE-001 Issue Date - 01-12-2012 Effective Date - 01-12-2012 Issue No - 1.0/Page 1 of 1

W0417 285

WATER QUALITY TEST RESULTS FORM

Client	MYANMAR S.FLAMINGO GARMENT CO., LTD	
Nature of Water	Treated Water	
Location	DAGON	
Date and Time of collection	2.9.2019	
Date and Time of arrival at Laboratory	3.9.2019	
Date and Time of commencing examination	4.9.2019	
Date and Time of completing	9.9.2019	

Results of Water Analysis

WHO Drinking Water Guideline (Geneva - 1993)

pH	6.8		6.5 - 8.5
Colour (True)	Nil	TCU	15 TCU
Turbidity	1	NTU	5 NTU
Conductivity	15	micro S/cm	
Total Hardness	4	mg/l as CaCO ₃	500 mg/l as CaCO ₃
Calcium Hardness	2	mg/l as CaCO ₃	
Magnesium Hardness	2	mg/l as CaCO ₃	
Total Alkalinity	12	mg/l as CaCO ₃	
Phenolphthalein Alkalinity	Nil	mg/l as CaCO ₃	
Carbonate (CaCO ₃)	Nil	mg/l as CaCO ₃	
Bicarbonate (HCO ₃)	12	mg/l as CaCO ₃	
Iron	0.05	mg/l	0.3 mg/l
Chloride (as CL)	6	mg/l	250 mg/l
Sodium chloride (as NaCL)	10	mg/l	
Sulphate (as SO ₄)	Nil	mg/l	200 mg/l
Total Solids	12	mg/l	1500 mg/l
Suspended Solids	1	mg/l	*
Dissolved Solids	11	mg/l	1000 mg/l
Manganese	Nil	mg/l	0.05 mg/l
Phosphate	Nil	mg/l	
Phenolphthalein Acidity	- 3	mg/l	
Methyl Orange Acidity	Nil	mg/l	
Salinity	0.1	ppt	

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

Tested by Signature:

Approved by Signature:

Name:

Bookil Soe Thit B.E (Civil) 1980 Technical Officer ISO TECH Laboratory

(a division of WEG Co., Ltd SO TECH Laboratory Sr. Chemist

Name:

Zaw Hein Oo

B.Sc (Chemistry

No.18, Lanthit Road, Nanthargone Quarter, Insein Township, Yangon, Myanmar.

Ph: 01-640955, 09-73225175, 09-73242162, Fax: 01-644506, E-mail: isotechlaboratory@gmail.com, Website: weg-myanmar.com

Commitment List

Myanmar S.Flamingo Garment Company Limited ၏ CMP စနစ် အထည်ချုပ်လုပ်ငန်းအတွက် တင်ပြလာသော ပတ်ပန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် (Environmental Management Plan – EMP) တွင် ပါဝင်ရမည့် အချက်များကို အကောင်အထည်ဖော် စီမံဆောင်ရွက်သွားမည် ဖြစ်ကြောင်း။ အောက်ဖော်ပြပါ ဇယားဖြင့် အကျဉ်းချုပ် စာရင်းပြုစု ဖော်ပြထားပါသည်။

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
မူဝါဒ၊ဥပဒေနှင့် အဖွဲ့အစည်းဆိုင်ရာမူဘောင် များ	Э	ပတ်ဝန်းကျင် ထိန်းသိမ်းရေး ဥပဒေ (၂၀၁၂) ပတ်ဝန်းကျင် ထိန်းသိမ်းရေး နည်းဥပဒေ (၂၀၁၄) ပတ်ဝန်းကျင် ထိန်းသိမ်းရေး နည်းဥပဒေ (၂၀၁၄) ပတ်ဝန်းကျင် ထိရိက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်း (၂၀၁၅) မြန်မာနိုင်ငံမှ ချမှတ်ထားသော စက်ရုံနှင့် သက်ဆိုင်သည့် တခြား လိုက်နာဆောင်ရွက်ရမည့် လုပ်ထုံးလုပ်နည်း၊ ဥပဒေ၊ နည်းဥပဒေ နှင့် မူဝါဒများ အမျိုးသား ပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက် (၂၀၁၅) နှင့် နိုင်ငံတကာ ပတ်ဝန်းကျင်ဆိုင်ရာ စံသက်မှတ်ချက်များနှင့် ပတ်ဝန်ကျင် စီမံခန့်ခွဲမှုဆိုင်ရာ လမ်းညွှန်ချက်များ	အခန်း (၂)
ပတ်ဝန်းကျင်အရည်အသွေး တိုင်းတာမှု	J	အမျိုးသား ပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက် (၂၀၁၅) နှင့် နိုင်ငံတကာ ပတ်ဝန်းကျင်ဆိုင်ရာ စံသက်မှတ်ချက်များနှင့် ပတ်ဝန်ကျင် စီမံခန့်ခွဲမှုဆိုင်ရာ လမ်းညွှန်ချက်များကို အခြေခံလေ့လာ တိုင်းတာထားပါသည်	အခန်း (၄)
လေအရည်အသွေး	ე.၁	အမျိုးသား ပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက် (၂၀၁၅) ၏ ထုတ်လွှတ်အခိုးအငွေ့ (Air emissions) လမ်းညွှန်သက်မှတ်ချက် (PM ₁₀ , PM _{2.5)} တို့ဖြင့် နိုင်းယှဉ် ဖော်ပြထားပါသည်။	အပိုဒ်ခွဲ (၄.၄.၄)
ဆူညံသံ	J.J	အမျိုးသား ပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညှှန်ချက် (၂၀၁၅) ၏	အပိုဒ်ခွဲ

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
		အမြင့်ဆုံးလက်ခံနိုင်သည့် ဆူညံသံအဆင့် (Noise level) လမ်းညွှန်သက်မှတိချက် စက်မှုဇုန် ဧရိယာတွင် (70 One-hour LAeq (dBA)) ဖြင့် နိုင်းယှဉ် ဖော်ပြထားပါသည်	(၄.၄.၂)
စက်ရုံတွင်း အလင်းရောင် ရရှိမှု	J.5	Illumination and Limiting Glare Index based on IES Code, 1968 ဖြင့် နိုင်းယှဉ် ဖော်ပြထားပါသည်	အပိုဒ်ခွဲ (၄.၄.၅)
ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှု	9	Myanmar S.Flamingo Garment Company Limited သည် စက်ရုံအခြေအနေ၊ အလုပ်သမား၊ ဒေသခံလူထုအမြင်၊ အစုရှယ်ယာဂင်များနှင့် ညှိနှိုင်းဆွေးနွေးခြင်းအပါအဂင် စောင့်ကြပ်ကြည့်ရှုခြင်းများကို ဆောင်ရွက်မည်။ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်သည် စက်ရုံ၏ ဘေးအွန္တရာယ်ကင်းရှင်းရေးအတွ က်ပါ ဖြည့်စွက်ဆောင်ရွက်ထားပါသည်။	အခန်း (၆)
လေထုညစ်ညမ်းမှုနှင့် ဖုန်မှုန့်	p.0	 လေထုညစ်ညမ်းခြင်းကို ကာကွယ်ရန်နှင့် ကာဗွန်ထုတ်လုပ်မှုကို လျော့ချပေးနိုင်ရန်အတွက် စက်ရုံပင်းအတွင်း အပင်များစိုက်ပျိုးခြင်း မီးစက်များကို ပြုပြင်ထိန်းသိမ်းခြင်း အမှိုက်များ မီးရှို့ခြင်းကို တားမြစ်ခြင်း ဖုန်ထူထပ်သော နေရာများတွင် တာပန်ထမ်းဆောင်သော ပန်ထမ်းများအတွက် နှာခေါင်းစီးများ ပတ်ဆင်စေခြင်း 	အပိုဒ်ခွဲ (၆.၁)
ဆူညံသံထွက်ရှိမှု	۲.9	 အသံလုံအခန်းများတည်ဆောက်ပြီး စက်ပစ္စည်းများကို သေချာစွာ ပြုပြင်ထိန်းသိမ်းစေခြင်း သယ်ယူပို့ဆောင်ရေးလမ်းကြောင်းတွင် ယာဉ်များ၏ အမြန်နှုန်းကို ကန့် သတ်ခြင်း လုံလောက်သော တစ်ကိုယ်ရည်သုံး အကာအကွယ်ပစ္စည်းများ ထားရှိပေးခြင်း သက်ဆိုင်ရာ ပန်ထမ်းများအားလုံးကို သင့်လျော်သော သင်တန်းများပို့ချခြင်းနှင့် 	အပိုဒ်ခွဲ (၆.၄)

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
မီးဘေးအွန္တရာယ်	9.9	ဆူညံသော နေရာတွင် အလုပ်လုပ်စဉ် တစ်ကိုယ်ရည်သုံး အကာအကွယ်များ တပ်ဆင်စေခြင်း	အပိုဒ်ခွဲ (၆.၉)
လုပ်ငန်းခွင်ထိခိုက်မှုနှင့် ကျန်းမာရေး	2. 9	 အဓိက ပင်ပေါက်ထွက်ပေါက်များကို ပိတ်ဆို့ထားခြင်း မပြုလုပ်စေခြင်း ရှေးဦးသူနာပြုသင်တန်း၊ ဘေးအွန္တရာယ်ကင်းရှင်းရေးသင်တန်း၊ မီးဘေးအွန္တရာယ်ကာကွယ်ရေး သင်တန်း၊ စက်ယွန္တယားများ ကိုင်တွယ်ခြင်းသင်တန်းများ ပို့ချခြင်း လေ့လာတွေ့ရှိထားသော အလင်းတိုင်းတာချက်များအရ၊ အလုပ်သမားများ ဘေးကင်းလုံခြုံစွာ လုပ်ကိုင်နိုင်စေရန် လုံလောက်သောအလင်းရောင် ရရှိစေရန် ဆောင်ရွက်ခြင်း တစ်ကိုယ်ရည်သုံး ကာကွယ်ရေးကိရိယာများ (ဥပမာ- နားကြပ်၊ လက်အိတ်၊ ခေါင်ဆောင်း၊ မျက်မှန်) များကို ဌာနအလိုက် ပေးအပ်ခြင်း ဓာတ်လိုက်ခြင်း အွန္တရာယ်မှ ကာကွယ်ရန်အတွက် လျှပ်စစ်ထိန်းသိမ်းစောင့်ရှောက်ရေးပန်ထမ်းအား ပုံမှန်စစ်ဆေးခြင်းနှင့် ကြိုတင်ကာကွယ်မှုပြုလုပ်ရန် တာပန်ပေးခန့်အပ်ခြင်း ရေနတ်မြောင်းများ ရေစီးရေလာကောင်းအောင် ဆောင်ရွက်ခြင်းဖြင့် အလုပ်သမားများ၏ 	အပိုဒ်ခွဲ (၆.၈)

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
		ကျန်းမာရေး ဘေးအွန္တရာယ် ကာကွယ်ခြင်း • အလုပ်သမားများအတွက် အများဆုံးခွင့်ပြုနိုင်သော ဆူညံသံအဆင့်မှာ 90dB(A)သည် တစ်ရက်လျှင် စနာရီသာ ဖြစ်သည်။ ထို့ကြောင့် ဆူညံသောနေရာများတွင် လုပ်ကိုင်ပါက နားကြပ်ကိရိယာ တပ်ဆင်ခြင်းရမည်။	
အမှိုက်စွန့်ပစ်မှု	२ .၅	 စီမံကိန်းမှ ထွက်ရှိသော စွန့်ပစ်အမှိုက်များကို စက်ရုံလင်းအတွင်း (သို့မဟုတ်) ဒေသရှိ အင်းအိုင်၊ ချောင်း၊ မြောင်း၊ မြစ် စသည်တို့ထဲသို့ စွန့်ပစ်ခြင်း မပြုလုပ်ပါ။ စွန့်ပစ်အမှိုက်များကို တစ်နေရာတည်းတွင် စနစ်တကျ ခွဲ၍ စုဆောင်းရန် လိုအပ်ပြီး အထည်အလိပ် စွန့်ပစ်အမှိုက်များကို သီးခြားသိုလှောင်သိမ်းဆည်းခြင်း၊ အန္တရာယ်ရှိသော စွန့်ပစ်ပစ္စည်းများနှင့် တခြားသော သတ္တုပစ္စည်းများကို သီးခြား သိုလှောင်သိမ်းဆည်းခြင်း ပြန်လည်အသုံးပြုနိုင်သော အလတ်စ၊ ပိတ်စ၊ ကတ်ထူပြား၊ ပလတ်စတစ်ပြား စသည်တို့ကို တစ်ဆင့် ပြန်လည်ရောင်းချခြင်းဖြင့် ပြန်လည်အသုံးပြုခြင်း သတ္တုပစ္စည်း (သို့မဟုတ်) ဖန်စများကို ပြန်လည် အသုံးပြုခြင်း နေ့စဉ်ထွက်ရှိသော အမှိုက်များကို ရန်ကုန်မြို့တော်စည်ပင်ယာရေးကော်မတီနှင့် ရိုတ်ဆက်စွန့်ပစ်ခြင်း 	အပိုဒ်ခွဲ (၆.၃)
စွန့်ပစ်အရည်	P.G	 ရေနတ်မြောင်းလိုင်းကို သင့်တော်သော အကျယ်၊ အနက်ရှိစေပြီး မိလ္လာစနစ်သည် ရေလုံပြီး စနစ်တကျ သိုလှောင်နိုင်ခြင်း မိလ္လာပိုက်လိုင်းကို အမြဲစစ်ဆေးခြင်းနှင့် ထိန်းသိမ်းခြင်း ရေနတ်မြောင်းကို အနံ့အသက်များ ကင်းစေရန် အမှိုက်များ ပိတ်ဆို့စေခြင်းမရှိအောင် ဆောင်ရွက်ခြင်း 	အပိုဒ်ခွဲ (၆.၄)

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
အရေးပေါ် အရြေအနေ	9.9	 ဘွိုင်လာရေ၏ အပူချိန်ကို မြောင်းအတွင်း မစွန့်ပစ်ခင် တိုင်းတာခြင်း စက်ရုံအနေဖြင့် အရေးပေါ် ဖြစ်ပေါ် လာနိုင်သော မီးဘေးအွန္တရာယ်၊ ငလျင်၊ ရေကြီးခြင်းနှင့် မှန်တိုင်းများအတွက် စီမံထားရှိခြင်း မီးသတ်ပစ္စည်းကိရိယာများနှင့် မီးသတ်ဆေးဘူးများကို နေရာတိုင်းတွင် တပ်ဆင်ထားခြင်းနှင့် စစ်ဆေးခြင်း အသေးစိတ်အခြေအနေပြ ရုပ်ပုံ (အရေးပေါ် ထွက်ပေါက်တံခါး စသည်) ကို အလုပ်သမားများ သိရှိစေရန် ဆောင်ရွက်ထားခြင်း ရေဂိုက်ခေါင်း၊ မီးသတ်ဘူး စသည်တို့ကို ထားရှိခြင်း၊ စစ်ဆေးခြင်းနှင့် ဓာတ်လိုက်ခြင်းမှ ကာကွယ်ရန် လျှပ်စစ်အွန္တရာယ် အသိပေး သင်တန်းများ ပို့ချခြင်း အလုပ်သမားများအား ငလျင်လှုပ်သောအခါ စားပွဲအောက်ကဲ့သို့သော ဘေးကင်းသောနေရာများတွင် နေထိုင်ရန်၊ အပြင်သို့ မရွေ့ရန်၊ အပြင်တွင်ရှိနေသော အလုပ်သမားများအနေဖြင့် အဆောက်အဦးအောက်၊ သစ်ပင်အောက်၊ တိုင်များအောက်တွင် နေထိုင်ခြင်းမပြုဘဲ ကွင်းပြင်တွင်သာ နေထိုင်ရန်၊ တခြားသော သက်ဆိုင်ရာ ဘေးကင်းလုံခြုံရေး လမ်းညွှန်ချက်များကို အသိပညာပေးခြင်း ရေလွှမ်းမိုးမှု (မုန်တိုင်းအပျက်အစီးများ၊ ရေမြောင်းများ ပွင့်နေခြင်း၊ မြေတိုက်စားမှု) နှင့် ရွေ့ပြောင်း တွားသွားသတ္တပါများ (မြွေ သို့မဟုတ် တခြားတိရိတ္ဆန်များ) ၏ အန္တရာယ်များကို သတိပြုစေခြင်း 	(အခန်း) အပိုဒ်ခွဲ (၆.၇)
		 အရေးပေါ် ဆေးအဖွဲ့များနှင့် ဆေးပစ္စည်းများ ထားရှိုခြင်း အရေးပေါ် ဆက်သွယ်နိုင်သည့် မီးသတ်ဌာန၊ ရဲတပ်ဖွဲ့၊ ဆေးရုံ စသည့် 	

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
		တယ်လီဖုန်းနံပါတ်များကို မြင်သာနိုင်သည့်နေရာတွင် ကပ်ထားခြင်း • မီးငြိမ်းသတ်ရေးအဖွဲ့၊ ကယ်ဆယ်ရေးအဖွဲ့တို့ဖြင့် ဘေးကင်းရေးကော်မတီတစ်ရပ် တည်ဆောက်ခြင်းနှင့် ကော်မတီအနေဖြင့် ဘေးအွန္တရာယ်ကင်းရှင်းရေးဆိုင်ရာ စီမံခန့်ခွဲမှုနှင့် ပတ်သတ်၍ လစဉ်အစည်းအပေး ကျင်းပခြင်း • သဘာပဘေးအွန္တရာယ်စီမံခန့်ခွဲရေး၊ မီးဘေးအွန္တရာယ်နှင့် လုပ်ငန်းခွင်ထိခိုက်မှုနှင့် ကျန်းမာရေး ကာကွယ်ရေးအတွက် သင့်လျော်သော သင်တန်းများပို့ချခြင်း	
စောင့်ကြပ်ကြည့်ရှုမှု	9	အဆိုပြုစီမံကိန်းသည် စောင့်ကြပ်ကြည့်ရှုမှု အစီရင်ခံစာကို ပန်ကြီးဌာနသို့ (၆)လ တစ်ကြိမ် တင်ပြဆောင်ရွက်မည်။	အခန်း (၆) အပိုဒ်ခွဲ (၆.၁၀)
လေအရည်အသွေး စစ်ဆေးမှု	9.0	 ဆာလဖာဒိုက်အောက်ဆိုဒ်ဓာတ်ငွေများ၊နိုက်ထရိုဂျင်ဒိုင်အောက်ဆိုဒ်ဓာတ်ငွေများ၊ ကာဗွန်ဒိုင် အောက်ဆိုဒ်ဓာတ်ငွေများ၊ ကာဗွန်မိုနောက်ဆိုဒ်ဓာတ်ငွေများနှင့် အမှုန်အမွှားများ တိုင်းတာခြင်း တစ်နှစ် (၂) ကြိမ်တိုင်းတာပြီး ပတ်ဝန်းကျင်ထိန်းသိမ်းရေး ဦးစီးဌာနသို့ တင်ပြခြင်း ထုတ်လုပ်မှုဧရိယာအတွင်း တိုင်းတာခြင်း 	ဇယား (၆.၁)
စွန့်ပစ်ပစ္စည်းထွက်ရှိမှုအ ခြေအနေ	9·J	 စွန့် ပစ်အစိုင်အခဲ၊ စွန့်ပစ်အရည်နှင့် အန္တရာယ်ရှိသော စွန့်ပစ်ပစ္စည်းများ အပတ်စဉ် စွန့်ပစ်ခြင်း စက်ရုံအတွင်း ပြန်လည်အသုံးပြု သိုလှောင်ခြင်း၊ စွန့်ပစ်နေရာသတ်မှတ်ခြင်း 	ဇယား (၆.၁)
မီးဘေးအွန္တရယ် စစ်ဆေးမှု	9.9	• ထွက်ပေါက်လမ်းပြပုံများ ကပ်ထားခြင်း၊ မီးသတ်ပစ္စည်း ကိရိယာများ တပ်ဆင်ခြင်း • လစဉ်	ဇယား (၆.၁)

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
		• စက်ရုံဖရိယာအတွင်း တိုင်းတာခြင်း	
စက်ရုံတွင်း အလင်းရောင်အခြေအနေ	9.9	 အလင်းရောင်တိုင်းတာခြင်း လစဉ် ထုတ်လုပ်မှုဧရိယာအတွင်း တိုင်းတာခြင်း (အထူးသဖြင့် အပတ်ဖြတ်ခြင်းနေရာနှင့် အရည်အသွေးစစ်ဆေးခြင်းနေရာ) 	ဇယား (၆.၁)
စွမ်းရည်မြှင့်တင်ခြင်းနှင့် သင်တန်းများပေးခြင်း	9	လုပ်ငန်းခွင်အတွင်း ဖြစ်ပေါ် လာနိုင်သော အရေးပေါ် အခြေအနေများအားလုံးကို ကိုင်တွယ်ရန်အတွက် အရေးပေါ် တုံ့ပြန်ရေးအစီအစဉ်များကို ချမှတ်မည်။ ဓာတုပစ္စည်းလောင်ကျွမ်းခြင်းနှင့် မတော်တဆဖြစ်ရပ်များ (ဥပမာ- လျှပ်စစ်အွန္တရာယ်၊ မီးဘေးအွန္တရာယ်) ကို ကာကွယ်ရန် လုပ်ဆောင်နေစဉ်အတွင်း ဂရုစိုက်ဆောင် ရွက်မည်။	အခန်း (၆) အပိုဒ်ခွဲ (၆.၁၁)
လူထုအကျိုးပြုလုပ်င ငန်းများဆောင်ရွက်ခြင် း	G	လူထုအကျိုးပြုဆောင်ရွက်ချက်များကို လူနေမှုအဆင့်အတန်း မြင့်မားစေရန်နှင့် စီမံကိန်းရေိယာရှိ လူနေမှုအသိုင်းအပိုင်းများအားလုံးနှင့် အဆင်ပြေစေရန် ရည်ရွယ်ပါသည်။ Myanmar S.Flamingo Garment Company Limited ၏ လူထုအကျိုးပြု ဆောင်ရွက်ချက်များအနေဖြင့် ဒေသအ တွင်း ပညာရေးအထောက်အပံ့များ ဆောင်ရွက်ခြင်း၊ အကျိုးအမြတ်မယူသော သင်တန်းများ ဖော်ဆောင်ပေးခြင်း၊ လုပ်သားများ၏ကျန်းမာရေးစောင့်ရှောက်မှုများ ဆောင်ရွက်ခြင်းဟူ၍ကဏ္ဍသုံးခုအလိုက် က် ဆောင်ရွက်ပါမည်။	အခန်း (၆) အပိုဒ်ခွဲ (၆.၁၃)
သက်ဆိုင်သူများနှင့် တွေ့ဆုံဆွေ ဆွးနွေးခြင်း	૧	သက်ဆိုင်သူများနှင့် တွေ့ဆုံဆွေးနွေးခြင်း အစီအစဉ်တွင် Myanmar S.Flamingo Garment Company Limited စက်ရုံ၏ EMP အစီရင်ခံစာ အကြောင်းကို ရှင်းလင်းတင်ပြခြင်းဖြစ်သည်။ တွေ့ဆုံပွဲကို ၂၀ ရက်၊ ဒီဇင်ဘာလ၊ ၂၀၁၉ ခုနှစ်တွင်	အခန်း (၇)

ကတိကဝတ်၏ အတိုချုပ် အမည်	အမှတ်စဉ်	ကတိကဝတ်အား ရှင်းလင်းဖော်ပြချက်	အစီရင်ခံစာပါ ရည်ညွှန်းချက် (အခန်း)
		ဒဂုံမြို့သစ်ဆိပ်ကမ်း၊ စက်မှုဇုန်ကော်မတီရုံးတွင် ပြုလုပ်ခဲ့ပါသည်။ တွေ့ဆုံပွဲတွင် စက်ရုံ၏သက်ဆိုင်ရာပုဂ္ဂိုလ်များ၊ အစိုးရအဖွဲ့ ရုံး များဖြစ်သော ပတ်ဝန်းကျင်ထိန်းသိမ်းရေး ဦ ဦးစီးဌာန၊စက်မှုကြီးကြပ်နှင့်စစ်ဆေးရေးဦးစီးဌာန၊ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးနှင့် သန့်ရှင်းရေးဌာန အစရှိသော သက်ဆိုင်ရာဌာနများ၏ တာဝန်ရှိပုဂ္ဂိုလ်များ၊ စက်မှုဇုန်စီမံခန့်ခွဲမှုကော်မတီ၏ တာဝန်ရှိပုဂ္ဂိုလ်များမှ လိုအပ်သည်များကို အကြံပေးခြင်း၊ စီမံကိန်း၏ အစီရင်ခံစာတွင် လိုအပ်သည်များကို ဖြည့်စွက်ပေးရန် အကြံပြုချက်များပေးခဲ့ပါသည်။	
အများပြည်သူနှင့် ပူးပေါင်းပါဝင်မှုနှင့် ပြသနာမ ၁များ ဖြေရှင်းခြင်း	6	စီမံကိန်းဖရိယာအတွင်း နေထိုင်သူများနှင့် ဒေသရှိ အစိုးရအဖွဲ့အစည်းများအနေဖြင့် စီမံကိန်းကြောင့် ဖြစ်ပေါ် လာသော ပြသာနာများနှင့် ထိရိက်နှစ်နာမှုများဖြေရှင်းရေးအဖွဲ့ ဖွဲ့စည်းသွားမည်ဖြစ်ပြီး ယင်းအဖွဲ့တွင် Myanmar S.Flamingo Garment Company Limited တာပန်ရှိ လူကြီးများနှင့် ရွှေလင်ဗန်းစက်မှုဇုန်မှ တာပန်ရှိလူကြီးများဖြင့် ဖွဲ့စည်းဆောင်ရွက်သွားမည် ဖြစ်သည်။ အသေးမွှားကိစ္စရပ်များကို ထိရိက်နှစ်နာမှုများ ဖြေရှင်းရေးအဖွဲ့မှ ဖြေရှင်းမညဖြစ်ပြီး တရြားသော ကိစ္စရပ်များကို သက်ဆိုင်ရာ အာကာပိုင်များနှင့် ဖြေရှင်းဆောင်ရွက်မည်ဖြစ်သည်။	အခန်း (၇) အပိုဒ်ခွဲ (၇.၂)