

WONDERFUL APPAREL COMPANY LIMITED

Environmental Management Plan

Manufacturing of Garment on CMP Basis



Myanwei Environmental Solutions Company Limited

27-May-23



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Subject: Commitment of Environmental Management Plan (EMP) Report in respect of the Manufacturing of garment on CMP basis by WONDERFUL APPAREL 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.



WONDERFUL APPAREL COMPANY LIMITED

万德福服装有限公司

Address : No-294.295.296 Myaungtagar Thanmani Industrial Zone, Hmawbi Township,
Yangon, Myanmar

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

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

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

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

WONDERFUL APPAREL COMPANY LIMITED will always comply fully with all commitment and obligations in the EMP report.

We acknowledge and understand that

LIST OF CONTENTS

LIST OF CONTENTS	I
LIST OF TABLES	V
LIST OF FIGURES	VII
LIST OF APPENDICES	IX
ABBREVIATION	X
အစီရင်ခံစာအကျဉ်းချုပ်	XI
EXECUTIVE SUMMARY	XXXII
1. INTRODUCTION	1
1.1. AIM OF ENVIRONMENTAL MANAGEMENT PLAN	1
1.2. OBJECTIVE OF ENVIRONMENTAL MANAGEMENT PLAN	1
1.2.1. Institutional Requirement.....	3
1.2.2. Responsibilities of the EMP.....	3
1.2.3. Structure and Responsibilities for the EMP Development and Implementation.....	3
1.3. PROJECT BACKGROUND	5
1.4. PROJECT PROPONENT PROFILE	5
1.4.1. Investment Plan and Salient Features of the Project.....	6
1.5. ENVIRONMENTAL CONSULT PROFILE	7
2. POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK	9
2.1. MYANMAR REGULATORY FRAMWORK	9
2.1.1. Laws and Regulations Related to Environmental and Social Considerations	9
2.2. NATIONAL ENVIRONMENTAL QUALITY (EMISSION) GUIDLINES	21
2.2.1. General Guidelines	21
2.2.2. Garment, Textile and Leather Products Manufacturing.....	24
2.2.3. IFC EHS Guidelines.....	25
2.3. INSTITUTIONAL ARRANGEMENT	26
2.4. COMMITMENT OF WONDERFUL APPAREL COMPANY LIMITED	26
3. PROJECT DISCRPTION	28
3.1. LOCATION OF PROPOSED PROJECT	28
3.2. OBJECTIVES OF PROPOSED PROJECT	28
3.3. SITE DESCRIPTION OF PROPOSED PROJECT SITE	28
3.4. ADJACENT MAP OF PROPOSED PROJECT	28
3.5. PROJECT OPERATION	32

Environmental Management Plan

3.5.1.	Production Process.....	32
3.6.	UTILITIES.....	34
3.6.1.	Raw Material.....	34
3.6.2.	Machinery and Equipment.....	43
3.6.3.	Human Resource.....	47
3.6.4.	Water Requirement.....	48
3.6.5.	Electricity and Fuel Requirement.....	49
3.6.6.	Steam Boiler.....	50
3.7.	FACILITIES.....	51
3.7.1.	Status of the Factory.....	51
3.7.2.	Industrial Wastes facilities.....	51
3.7.3.	Human wastes facilities.....	52
3.7.4.	Fire hazards protect facility.....	53
3.7.5.	Ventilation System.....	53
3.7.6.	Toilet facilities.....	54
3.7.7.	Medical and Health facilities for employees.....	55
3.8.	DECOMMISSIONING PHASE.....	56
4.	BRIEF DESCRIPTION OF SURROUNDING ENVIRONMENT.....	57
4.1.	METHODOLOGY FOR DATA COLLECTION AND ANALYSIS.....	57
4.2.	ENVIRONMENTAL BASELINE STUDY.....	57
4.3.	PHYSICAL COMPONENT IN PROJECT AREA.....	58
4.3.1.	Topography.....	58
4.3.2.	Geology.....	58
4.3.1.	Tectonics.....	59
4.3.2.	Soil.....	60
4.3.1.	Hydrogeology.....	61
4.3.2.	Climate and Meteorology.....	61
4.3.3.	Indoor temperature and humidity.....	62
4.3.4.	Air Quality.....	63
4.3.5.	Wind Speed and Direction.....	64

Environmental Management Plan

4.3.6. Noise	68
4.3.7. Light	69
4.4. BIOLOGICAL COMPONENT	70
4.5. SOCIO-ECONOMIC COMPONENT	70
4.5.1. Population	70
4.5.2. Religion	70
4.5.3. Local Economy	71
4.5.4. Public Infrastructure and Access.....	71
4.6. CULTURAL AND VISUAL COMPONENTS.....	73
5. ENVIRONMENTAL IMPACT AND MITIGATION MEASURES	74
5.1. METHODOLOGY FOR THE ASSESSMENTS	74
5.2. IMPACT IDENTIFICATION	75
5.2.1. Positive Impact	75
5.2.2. Negative Impact.....	75
5.3. ENVIRONMENTAL IMPACT DURING CONSTRUCTION & DECOMMISSIONING PHASE	76
5.4. PROJECT ACTIVITIES AND ITS SIGNIFICANT IMPACTS	76
6. ENVIRONMENTAL MANAGEMENT ACTION	85
6.1. AIR POLLUTION/ DUST MANAGEMENT PLAN	85
6.2. NOISE MANAGEMENT PLAN	86
6.3. FIRE MANAGEMENT PLAN	86
6.4. OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT PLAN.....	87
6.5. SOLID WASTE MANAGEMENT PLAN	88
6.6. LIQUID WASTE MANAGEMENT PLAN (WASTEWATER).....	89
6.7. HAZARDOUS WASTE MANAGEMENT PLAN	89
6.8. ENERGY MANAGEMENT PLAN	90
6.9. EMERGENCY RESPONSE AND DISASTER MANAGEMENT PLAN	90
6.10. ENVIRONMENTAL MONITORING SCHEDULE AND REPORTING.....	91
6.11. CAPACITY BUILDING AND TRAINING PLAN	93
6.11.1. Assignment of Responsibilities.....	93
6.11.2. Emergency Procedures	93
6.11.3. Training for Emergencies	94
6.11.4. Fire Prevention and Protection.....	94
6.11.5. Fire Protection Equipment.....	94
6.11.6. Fire Safety and Evacuation Plan.....	95

Environmental Management Plan

6.11.7. Site Fire Control.....	96
6.11.8. Employee Information and Training	96
6.11.9. Health and Safety Training Plan for Worker	97
6.12. CORPORATE SOCIAL RESPONSIBILITY (CSR) PLAN	97
6.13. GRIEVANCE REDRESS MECHANISM (GRM)	98
7. PUBLIC CONSULTATION	100
7.1. PUBLIC CONSULTATION PROCESS.....	100
7.2. PUBLIC CONSULTATION MEETING.....	100
7.3. RECOMMENDATION SUGGESTION AND COMMENT	102
8. CONCLUSION & RECOMMENDATION	107
8.1. CONCLUSION.....	107
8.2. RECOMMENDATION	107
9. REFERENCE	109

LIST OF TABLES

Table 1-1	Responsibilities of HSE Members.....	4
Table 1-2	Information of Investor.....	6
Table 1-3	Director List.....	6
Table 1-4	Salient features of the project	6
Table 1-5	Member of EMP Study Team.....	7
Table 2-1	List of Myanmar’s Law relating to environmental management.....	9
Table 2-2	WHO’s Air Quality Guideline	22
Table 2-3	Wastewater, Storm Water Runoff, Effluent and Sanitary Discharges.....	22
Table 2-4	Noise Levels of National Environmental Quality (Emission) Guideline.....	23
Table 2-5	Community health and safety contents.....	25
Table 3-1	WONDERFUL APPAREL COMPANY LIMITED’s Project Life Span.....	32
Table 3-2	Annual Production Rate	33
Table 3-3	List of Raw Materials Requirement	35
Table 3-4	List of Machinery and Equipment.....	43
Table 3-5	Employment Schedule of WONDERFUL APPAREL COMPANY LIMITED.....	48
Table 3-6	Specification of Electric Boiler.....	50
Table 4-1	Location of the Survey Point	57
Table 4-2	Annual Rainfall and Temperature	62
Table 4-3	Relative humidity and temperature measure at factory	62
Table 4-4	Observed air quality results.....	63
Table 4-5	Results of Wind Speed and Direction Measurement.....	64
Table 4-6	Noise level measurement result.....	68
Table 4-7	Recommended illumination and limiting glare index based on IES Code, 1968	69
Table 4-8	Result of light measurement in WONDERFUL APPAREL COMPANY LIMITED	70
Table 4-9	Population of Males and Females at Hmawbi Township (2019)	70
Table 4-10	Religion in Hmawbi Township (2019)	71
Table 4-11	Transportation route	71

Environmental Management Plan

Table 4-12 List of major school in Hmawbi Township.....	72
Table 4-13 Common Diseases in the Hmawbi Township	73
Table 4-14 Lists of hospital in the Hmawbi Township.....	73
Table 5-1 Impact assessment parameters and its scale.....	74
Table 5-2 Evaluation and Perdition of Significant Impacts and Mitigation Measures on Operation phase	77
Table 5-3 Evaluation and Predication of Significant Impacts and Mitigation Measure on Decommissioning Phase.....	81
Table 6-1 Environmental Monitoring Process	92
Table 6-2 American National Fire Fighting Association (NFFA) Standards	95
Table 6-3 Training Plan Used in WONDERFUL APPAREL COMPANY LIMITED	97
Table 6-4 CSR plan at WONDERFUL APPAREL COMPANY LIMITED.....	98
Table 7-1 Summary of Public Consultation Meeting.....	100

LIST OF FIGURES

Figure 1-1 Continuous Improvement Circle.....	2
Figure 1-2 Organization Structure of Environmental Management Plan	4
Figure 3-1 Location Map of WONDERFUL APPAREL COMPANY LIMITED	29
Figure 3-2 Factory Layout Drawing	30
Figure 3-3 Adjacent Location Map of Proposed Project.....	31
Figure 3-4 Production flow diagram of WONDERFUL APPAREL COMPANY LIMITED	32
Figure 3-5 Production Photos	33
Figure 3-6 Products Photo	34
Figure 3-7 Water storage tank and drinking water supply.....	49
Figure 3-8 Electricity Facilities	50
Figure 3-9 Installed photo of boiler	51
Figure 3-10 Solid Waste Disposal System	52
Figure 3-11 Drainage System of Factory.....	52
Figure 3-12 Emergency safety and fire management	53
Figure 3-13 Ventilation System.....	54
Figure 3-14 Toilet Facilities Photos	55
Figure 4-1 Baseline Study Map.....	58
Figure 4-2 Geological Map of Yangon Region	59
Figure 4-3 Soil map of Yangon (Source: Land use of Bureau of Yangon)	60
Figure 4-4 Humidity and Temperature Measurement Photo.....	63
Figure 4-5 Air Quality Measurement Photos	64
Figure 4-6 Wind Speed and Wind Direction	67
Figure 4-7 Noise level result graph.....	68
Figure 4-8 Sound level measurement photo	68
Figure 4-9 Light quality measurement	69
Figure 5-1 Potential negative impact affect from proposed factory project	75
Figure 5-2 Comparison of Impact Significant of Proposed Project	84

Environmental Management Plan

Figure 6-1 Grievance Redress Mechanism flow diagram99

LIST OF APPENDICES

APPENDIX A Company Document's WONDERFUL APPAREL COMPANY LIMITED

APPENDIX B Transitional Consultant Registration Certificate

Appendix C Drinking Water Certificate

APPENDIX D Monitoring Result

APPENDIX E Fire Certificate & Fire Safety Training

APPENDIX F Boiler Certificate

APPENDIX G Public Disclose Power Point Presentation

APPENDIX H Attendant List of Public Consultation Meeting

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. MOECF = Ministry of Environmental Conservation and Forestry
16. MONREC = Ministry of Natural Resources and Environmental Conservation
17. OEMP = Operation Environmental Management Plan
18. OSHA = Occupational Safety and Health Administration
19. PPE = Personal Protective Equipment
20. WHO = World Health Organization
21. YCDC = Yangon City Development Committee
22. YESB = Yangon City Electricity Supply Board

အစီရင်ခံစာအကျဉ်းချုပ်

နိဒါန်း

လူတိုင်းသည် သန့်ရှင်းပြီး ကျန်းမာသည့် နေရာတွင်နေထိုင်လိုကြသည်။ ယခုအချိန်တွင် ကမ္ဘာ့မြေ၏အဓိက စိုးရိမ်ပူပန်မှုမှာ ပတ်ဝန်းကျင် ပြောင်းလဲမှုဖြစ်စဉ်များကြောင့်ဖြစ်သည်။ အဘယ်ကြောင့်ဆိုသော် လူသားတို့၏ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအပေါ် ပေါ့ဆမှုကြောင့်ဖြစ်သည်။ ထို့ကြောင့် သဘာဝပတ်ဝန်းကျင် ထိခိုက်မှုမဖြစ်စေရေး၊ ရေရှည်စဉ်ဆက်မပြတ် တိုးတက်ကောင်းမွန်ရေးအတွက် စနစ်ကျသော ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်ရှိရန်လိုအပ်ပါသည်။ ထို့ကြောင့် WONDERFUL APPAREL COMPANY LIMITED ၏ ထုတ်လုပ်မှုလုပ်ငန်းအတွက် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ် (EMP) ကို အကောင်အထည်ဖော်ခဲ့ပါသည်။ EMP ၏ အဓိက ရည်ရွယ်ချက်မှာ ညစ်ညမ်းမှုထိန်းသိမ်းရေး၊ စွန့်ပစ်ပစ္စည်းလျှော့ချရေးနှင့် စွန့်ပစ်ပစ္စည်းများကို ပြန်လည်အသုံးပြုရေး အစီအစဉ်များကို အလေးထားဖော်ပြထားပြီး၊ စက်မှုလုပ်ငန်းဆိုင်ရာ တိကျသော ထိန်းချုပ်မှု အစီအမံများအပြင် အခြားအဆိုပြုထားသည့် စက်မှုလုပ်ငန်းသည် အောက်ပါလမ်းညွှန်ချက်များကို လိုက်နာသင့်သည်။

အဆိုပြုလုပ်ငန်းသည် CMP စနစ်ဖြင့် အဝတ်အထည်အမျိုးမျိုး ချုပ်လုပ်ခြင်းလုပ်ငန်းအတွက် ရင်းနှီးမြှုပ်နှံသော ကုမ္ပဏီဖြစ်ပါသည်။ ရင်းနှီးမြှုပ်နှံမှုလိုင်စင်ကို ၂၀၂၀ပြည့်နှစ်၊ ဇွန်လ၊ ၁၁ ရက်နေ့တွင် (အတည်ပြုမိန့်အမှတ်-ရကတ-၃၈၉/၂၀၂၀) ဖြင့် ရန်ကုန်တိုင်းဒေသကြီးရင်းနှီးမြှုပ်နှံမှုကော်မတီ မှ ရရှိပြီးဖြစ်ပါသည်။ လုပ်ငန်းလည်ပတ်ရန်အတွက် မြန်မာနိုင်ငံသယံဇာတနှင့် သဘာဝပတ်ဝန်းကျင် ထိန်းသိမ်းရေးဝန်ကြီးဌာန (MONREC) ၏ အတည်ပြုချက်ရယူရန် လိုအပ်ကြောင်း ကော်မရှင်မှ မှာကြားခဲ့ပါသည်။

ထို့ကြောင့် မြန်မာနိုင်ငံ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေး ဥပဒေ (၂၀၁၂)အရ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် (EMP) ပြုလုပ်ရန်လိုအပ်ကြောင်း ၂၀၂၀ပြည့်နှစ်၊ ဇွန်လ၊ ၂ ရက်နေ့တွင် စာအမှတ်၊ရက-၁/၃/၄(အီးအိုင်အေ) (၁၆၉၉/၂၀၂၀) ဖြင့် ညွှန်ကြားရေးမှူးရုံး၊ ရန်ကုန်တိုင်းဒေသကြီး၊ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန မှ သဘောထားမှတ်ချက် ရရှိပြီးဖြစ်ပါသည်။ ထို့ကြောင့် EMP အစီအရင်ခံစာရေးဆွဲရန် တတိယအဖွဲ့အစည်းဖြစ်သော Myanwei Environmental Solutions Company Limited မှ တာဝန်ယူရေးဆွဲခဲ့ပါသည်။

ရင်းနှီးမြှုပ်နှံသူ၏ အချက်အလက်

ရင်းနှီးမြှုပ်နှံသူ အမည်	MR. XU, LIANGSHENG
နိုင်ငံကူးလက်မှတ်အမှတ်	EE-1445968
နိုင်ငံသား	တရုတ်နိုင်ငံသား
မှတ်ပုံတင်သွင်းသည့် လိပ်စာ	Room-1801, 18 Floor, Building A, CFC, 300 East Zhongshan Road, Nanjing, Jiangsu Province, People's Republic of China.
ဖုန်းနံပါတ်	ဒေါ်လွဲယဉ်သန်းဝင်း (Accountant) 09-684840007

Environmental Management Plan

အဆိုပြုထားသော စီမံကိန်း၏ အဓိကလက္ခဏာများ

အဆိုပြုထားသော စီမံကိန်း	CMP စနစ်ဖြင့် အဝတ်အထည်ချုပ်လုပ်ခြင်းလုပ်ငန်း
ရင်းနှီးမြုပ်နှံမှုပုံစံ	ဖက်စပ်နိုင်ငံခြားရင်းနှီးမြုပ်နှံမှု
ကုမ္ပဏီအမည်	WONDERFUL APPAREL COMPANY LIMITED
အဆိုပြုရင်းနှီးမြုပ်နှံမှုကာလ	၃၀ နှစ်
စုစုပေါင်းမြေကွက်ဧရိယာ	၆.၈၆၀ ဧက (၂၇၇၆၁.၄၃ စတုရန်းမီတာ)
မြေနေရာပုံစံ	စက်မှုဇုန်မြေ
တည်ဆောက်မှုကာလ	၁နှစ်
စီမံကိန်း တည်နေရာ	မြေကွက်အမှတ်-၂၉၄+၂၉၅+၂၉၆၊ မြေတိုင်းရပ်ကွက်အမှတ်-မြောင်းတကာ သံမဏိစက်မှုဇုန်၊ မော်ဘီမြို့နယ်၊ ရန်ကုန်တိုင်းဒေသကြီး။
ဆက်သွယ်ရန် ဖုန်းနံပါတ်	ဒေါ်လွဲယဉ်သန်းဝင်း (Accountant) 09-684840007 laeyin.wffinance14@gmail.com

အဆိုပြုလုပ်ငန်း၏ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်ကို Myanwei Environmental Solutions Co., Ltd. မှ တာဝန်ယူ ရေးဆွဲထားပါသည်။

ဥပဒေနှင့် မူဝါဒဆိုင်ရာ အချက်အလက်များ

ဥပဒေနှင့် နည်းဥပဒေ အခန်းတွင် MONREC မှ ထုတ်ပြန်ထားသည့် ပတ်ဝန်းကျင်ထိခိုက်မှု ဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်းများ၊ အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များအပြင် စက်ရုံနှင့်ဆက်စပ်သက်ဆိုင်နေပြီး လိုက်နာရမည့် ဥပဒေနှင့် နည်းဥပဒေများ၊ ဒေသတွင်း သို့မဟုတ် အပြည်ပြည်ဆိုင်ရာ သဘာဝပတ်ဝန်းကျင်နှင့် လူမှုပတ်ဝန်းကျင်ဆိုင်ရာ မူဝါဒများ၊ ဆက်စပ်နေသည့် နိုင်ငံတကာသဘောတူချက်များကို အကျဉ်းချုပ်ရေးသားဖော်ပြထားပါသည်။

1. Constitution 2008
2. Environmental Conservation Law, 30 March 2012
3. Environmental Conservation Rules, 2014
4. Environmental Impact Assessment Procedure (December 2015)
5. National Environmental Quality (Emission) Guideline (NEQG) (December 2015)
6. National Environmental Policy of Myanmar (2019)
7. Foreign Investment Law, 2012

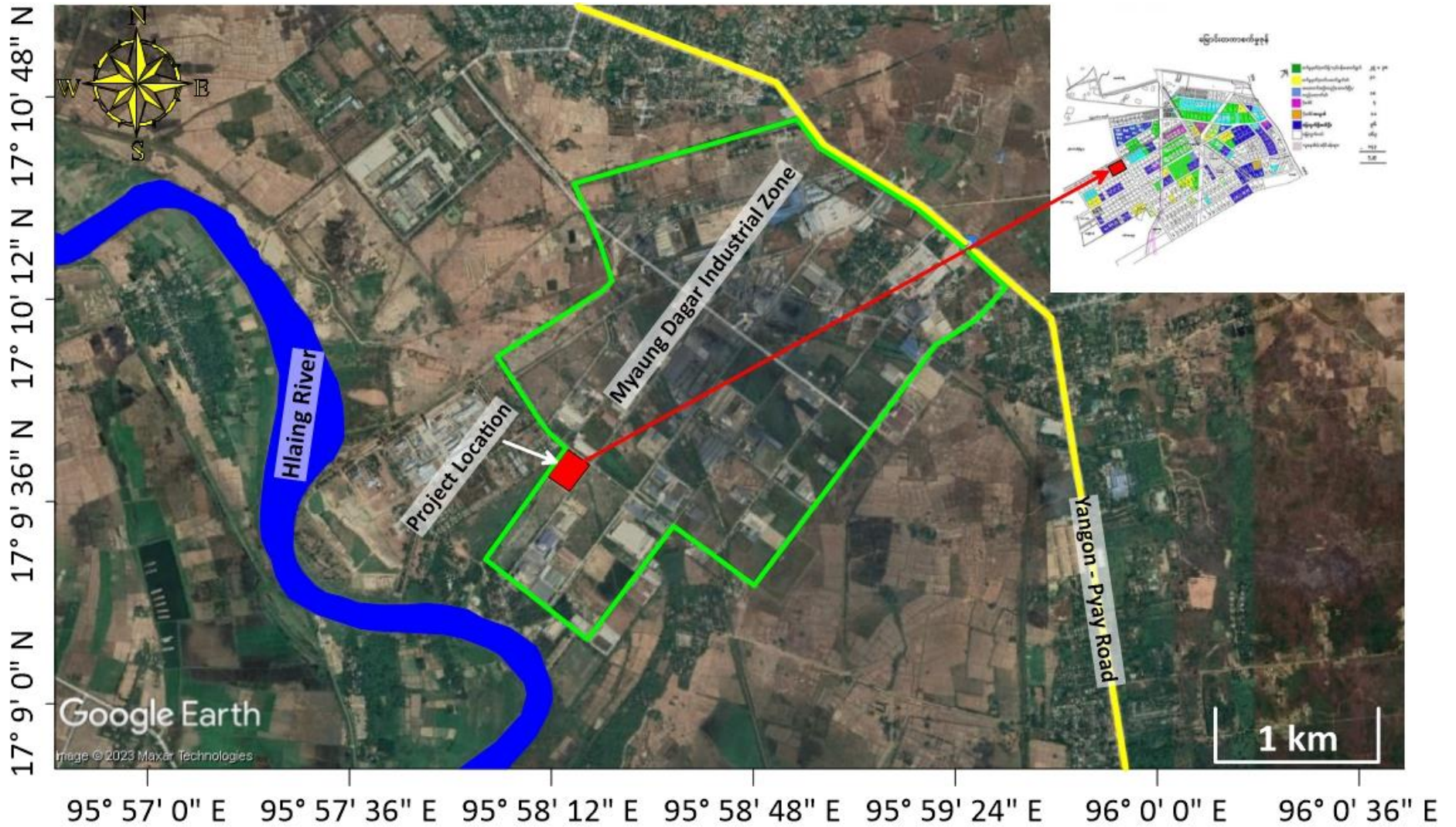
Environmental Management Plan

8. Foreign Investment Rule, 2013
9. Myanmar Investment Rule, 2017
10. Myanmar Insurance Law (1993)
11. Payment of Wages Law (2016)
12. Yangon City Development Committee Law (2018)
13. The Amended Law for Factories Act, 1951 (2016)
14. The Private Industrial Enterprise Law, 1990
15. The Export and Import Law (2012)
16. The Prevention of Hazard from Chemical and Related Substances Law, 2013
17. Underground Water Act
18. Myanmar Fire Brigade Law (2015)
19. The Electricity Law (2014)
20. Boiler Law (2015)
21. Labor Dispute Settlement Law (28 March 2012 replacing 1929 version)
22. The Social Security Law (2012)
23. The Employment and Skill Development (2013)
24. The Worker's Compensation Act, 1923
25. The Payment of Wages Act, 1936
26. The Leave and Holidays Act, (1951, partially revised in 2014)
27. The Minimum Wage Law (2013)
28. Public Health Law (1972)
29. Prevention and Control of Communicable Disease Law 1995 (Amendment in 2011)
30. Occupational Safety and Health Law (2019)
31. The Law on Standardization
32. လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတက်သောဝတ္ထုပစ္စည်းများဆိုင်ရာဥပဒေ (၂၀၁၈)
33. The Motor Vehicles Law (2015)
34. The Conservation of Water Resources and River Law (2006)
35. The Commercial Tax Law (1990) Amended 2014

လုပ်ငန်းအကြောင်းအရာဖော်ပြချက်

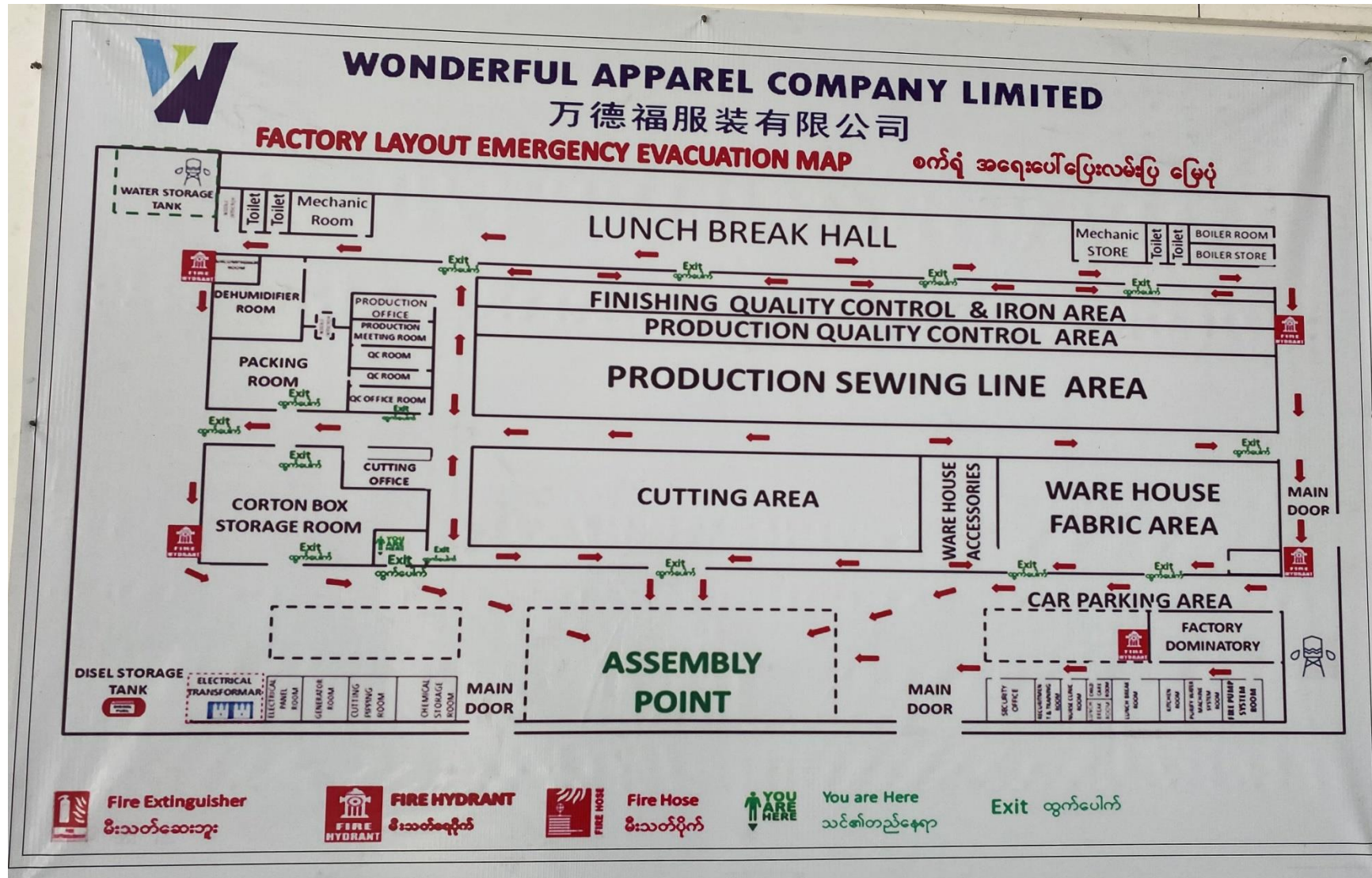
WONDERFUL APPAREL COMPANY LIMITED စက်ရုံသည် မြေကွက်အမှတ်-၂၉၄+၂၉၅+၂၉၆၊ မြေတိုင်းရပ်ကွက်အမှတ်-မြောင်းတကာ သံမဏိစက်မှုဇုန်၊ မှော်ဘီမြို့နယ်၊ ရန်ကုန်တိုင်းဒေသကြီးတွင်တည်ရှိပြီး မြေဧရိယာစုစုပေါင်း ၆.၈၆၀ ဧက (၂၇၇၆၁.၄၃ စတုရန်းမီတာ) ကျယ်ဝန်းပါသည်။

Environmental Management Plan



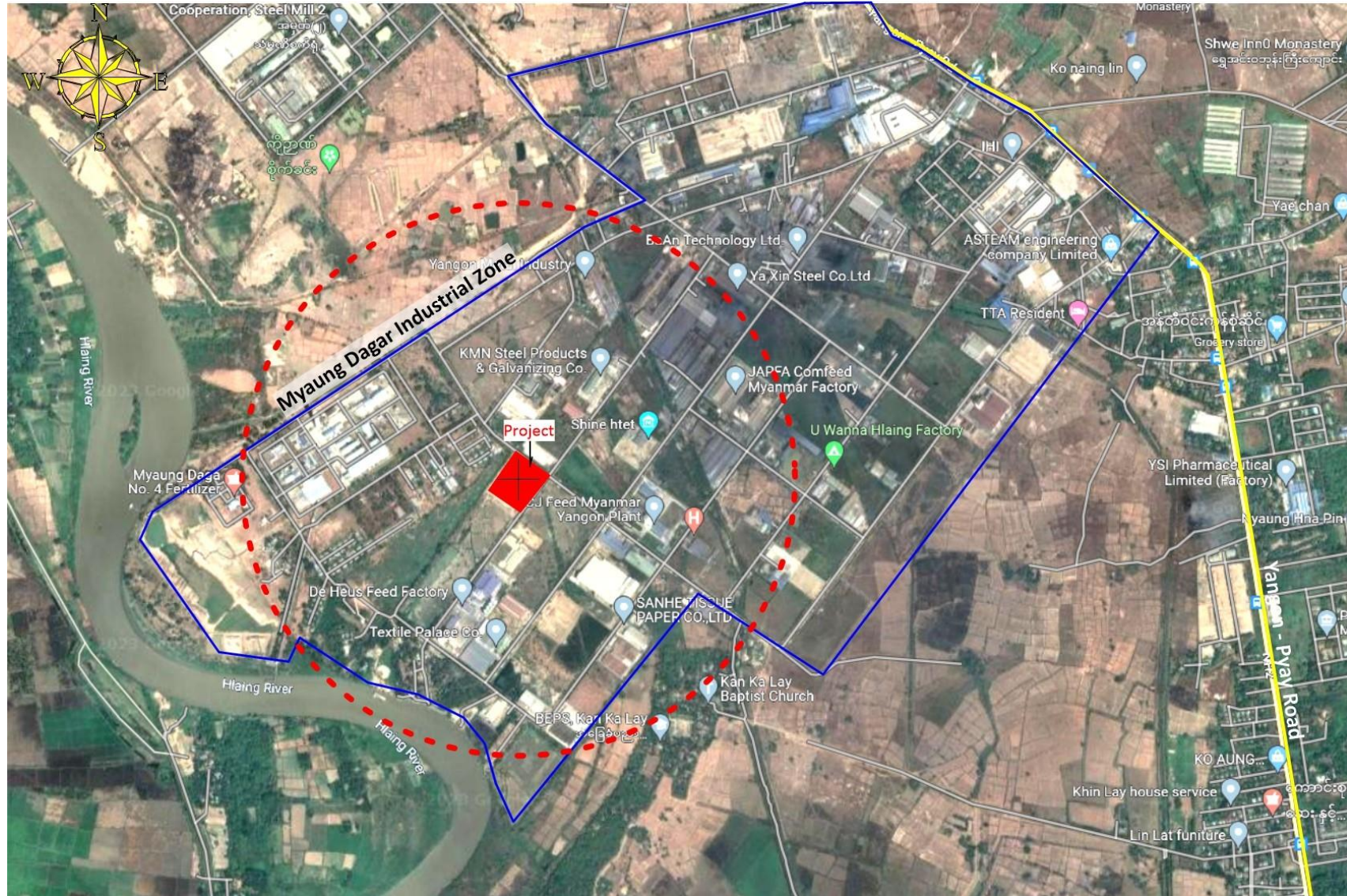
စက်ရုံ၏ တည်နေရာပြမြေပုံ

Environmental Management Plan



စက်ရုံ၏ တည်ဆောက်မှုပြပုံ

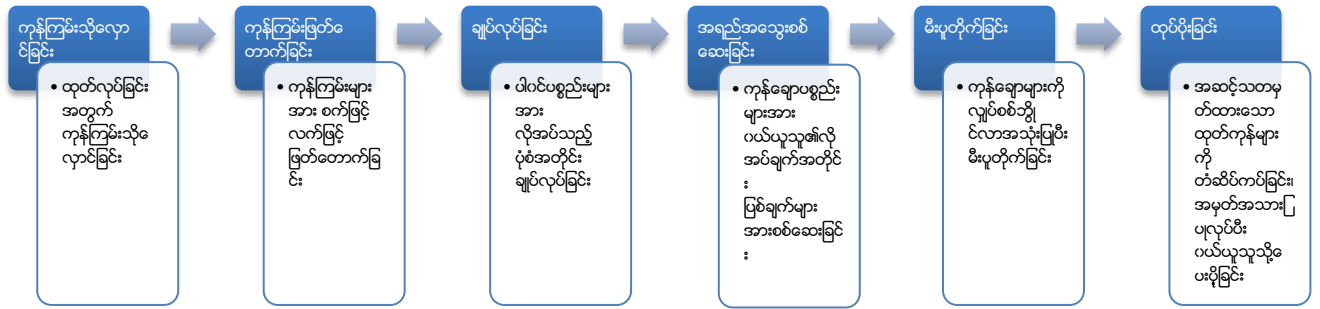
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စက်ရုံ၏ပတ်ဝန်းကျင်ပြမြေပုံ

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WONDERFUL APPAREL COMPNY LIMITED ၏ အဓိက ကုန်ကြမ်းမှာ fabrics, button, interlining, thread, zipper, label, price tag နှင့် အခြားဆက်စပ်ပစ္စည်းများဖြစ်ပြီး တရုတ်နိုင်ငံမှ အဓိကမှာယူတင်သွင်းပါသည်။ ကုန်ကြမ်းများကို ကုန်ကြမ်းသိုလှောင်ခန်းတွင် စနစ်တကျ သိုလှောင်ထားရှိပါသည်။ WONDERFUL APPAREL COMPNY LIMITED ၏ အဓိက ထုတ်ကုန်မှာ အဝတ်အထည်အမျိုးမျိုးဖြစ်ပါသည်။



ထုပ်လုပ်ပုံ လုပ်ငန်းအဆင့်ဆင့်

လုပ်ငန်းမှ ပထမနှစ် မှ ၃၀ နှစ်အတွင်း အထည်ရေ (၁,၉၉၀,၀၀၀) မှ (၂,၆၃၇,၀၀၀) အထိ တိုးမြှင့် ထုတ်လုပ်သွားမည်ဖြစ်သည်။ နိုင်ငံခြားသားလုပ်သား (၃) ဦး နှင့် နိုင်ငံသား (ပြည်တွင်း)လုပ်သား (၄၂၁) ဦးဖြင့် ဆောင်ရွက်သွားမည်ဖြစ်သည်။



Warehouse



Cutting Area

Environmental Management Plan



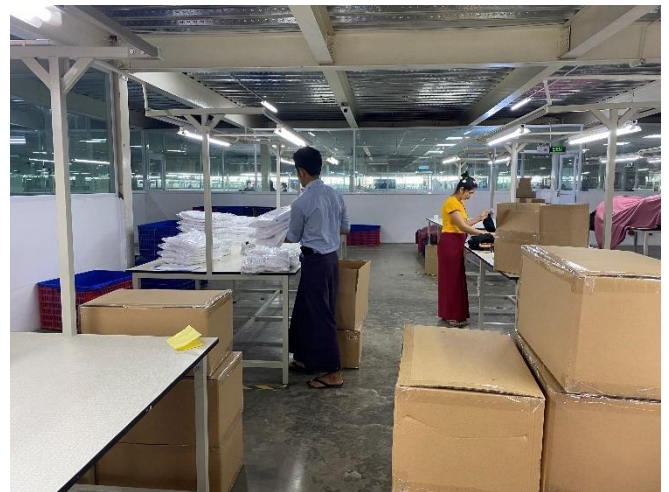
Sewing Area



Ironing Area



QC Area



Packing Area

ထုတ်လုပ်ပုံအဆင့်ဆင့်



Environmental Management Plan



ထုတ်ကုန်ဓာတ်ပုံ

အနီးပတ်ဝန်းကျင်အခြေအနေဆိုင်ရာ ဖော်ပြချက်

လက်ရှိပတ်ဝန်းကျင်၏ ပတ်ဝန်းကျင်ဆိုင်ရာအချက်အလက်၊ ပတ်ဝန်းကျင်အရည်အသွေး တိုင်းတာခြင်းများနှင့် သက်ရောက်မှုများကို ၂၀၂၃ ခုနှစ်၊ ဖေဖော်ဝါရီလ၊ ၂၅ ရက်နေ့တွင် ပြုလုပ်ခဲ့ပါသည်။ ထို့အပြင် စက်ရုံတည်နေရာနှင့် သက်ဆိုင်သည့် အချက်အလက်များဖြစ်သော လူမှုစီးပွားအခြေအနေ၊ ရူပပတ်ဝန်းကျင်ဆိုင်ရာ အချက်အလက်များ၊ ဇီဝပတ်ဝန်းကျင်ဆိုင်ရာ အချက်အလက်များ၊ ရာသီဥတုဆိုင်ရာ အချက်အလက်များ အစရှိသည့်များကို ရန်ကုန်တိုင်းဒေသကြီး၊ မှော်ဘီမြို့နယ်မှ တရားဝင်ပြဌာန်းထားသော မြို့နယ်ဆိုင်ရာ အချက်အလက်များမှ ကိုးကားဖော်ပြထားပါသည်။

အဆိုပြုလုပ်ငန်း၏စစ်တမ်းကောက်ယူမှု

အမျိုးအစား	ရလဒ်
ရာသီဥတုအခြေအနေ	
အပူချိန်	၃၈.၁ °C
စိုထိုင်းဆ	၄၀.၅ %
ရူညံသံ	
ထုတ်လုပ်မှုဧရိယာအတွင်း	၅၆.၂. dBA
လေထုအရည်အသွေး	
PM 10	၁၆.၃ µg/m ³
PM 2.5	၁၀.၉ µg/m ³
SO ₂	၆.၃၆ µg/m ³
NO ₂	၂၃.၃၈ µg/m ³
O ₃	၃၃.၄ µg/m ³

Environmental Management Plan

CO	၀.၅၂ µg/m ³
အလင်းရောင်တိုင်းတာမှု	
ကုန်ကြမ်းသိုလှောင်ထားရှိမှု ဧရိယာ	၆၇၅ Lux
ဖြတ်တောက်ခြင်း ဧရိယာ	၈၃၅ Lux
ချုပ်လုပ်ခြင်း ဧရိယာ	၉၇၀ Lux
မီးပူတိုက်ခြင်း	၈၄၀ Lux
အရည်အသွေး စစ်ဆေးခြင်း ဧရိယာ	၁၀၈၀ Lux
ကုန်ချော ထုတ်ပိုးခြင်း ဧရိယာ	၈၂၀ Lux

ပတ်ဝန်းကျင်ထိခိုက်မှု ဆန်းစစ်ခြင်းနှင့် လျော့ချရေးနည်းလမ်းများ

အဆိုပြု စီမံကိန်း၏ အဓိကဖြစ်ပေါ်စေနိုင်သော ပတ်ဝန်းကျင်ထိခိုက်မှုကို အခြေခံစစ်တမ်းများ ပေါ်မူတည်၍ ယေဘုယျ နည်းလမ်းများအတိုင်း လျော့ချမှုများ ပြုလုပ်သွားပါမည်။ ပတ်ဝန်းကျင် ထိခိုက်မှုကို လေ့လာဆန်းစစ်ရာတွင် စီမံကိန်းကာလအတွင်း ထိခိုက်မှု တစ်ခုချင်းစီ၏ ပမာဏ၊ ကြာမြင့်ချိန်၊ ကျယ်ပြန့်မှုနှင့် ဖြစ်နိုင်ချေတို့အား ဖော်ပြထားပါသည်။

အကဲဖြတ်ခြင်း	အတိုင်းအတာ				
	၁	၂	၃	၄	၅
ပမာဏ	မလုံလောက်သော	အနည်းငယ်နှင့် လုပ်ငန်းခွင် ပြောင်းလဲမှု ဖြစ်စေနိုင်သော	အသင့်အတင့် နှင့် အနည်းငယ် လုပ်ငန်းခွင် ပြောင်းလဲမှု ဖြစ်စေနိုင်သော	မြင့်မားနှင့် သိသာစွာလုပ်ငန်းခွင်ပြောင်းလဲမှု ဖြစ်စေနိုင်သော	အလွန်မြင့်မားနှင့် အမြဲတမ်းလုပ်ငန်းခွင် ပြောင်းလဲမှု ဖြစ်စေနိုင်သော
အချိန်	၀-၁ နှစ်	၂-၅ နှစ်	၆-၁၅ နှစ်	လုပ်ငန်း လည်ပတ်စဉ် ကာလ တစ်လျှောက်	လုပ်ငန်းပိတ်သိမ်းခြင်းကာလအထိ
ကျယ်ပြန့်မှု	လုပ်ငန်းခွင်အတွင်း	ဒေသအတွင်း	မြို့နယ်အတွင်း	နိုင်ငံအတွင်း	နိုင်ငံတကာအတွင်း
ဖြစ်နိုင်ချေ	လုံးဝ မဖြစ်နိုင်သော	မဖြစ်နိုင်သော	ဖြစ်နိုင်သော	ဖြစ်နိုင်ချေမြင့် သော	အတိအကျ

$$\text{သတ်မှတ်ချက်} = (\text{ပမာဏ} + \text{အချိန်} + \text{ကျယ်ပြန့်မှု}) * \text{ဖြစ်နိုင်ချေ}$$

ပတ်ဝန်းကျင်ထိခိုက်မှုကိုအောက်ပါအတိုင်း ခွဲခြားနိုင်သည်။

Environmental Management Plan

သတ်မှတ်ချက်	ထိခိုက်မှုအဆင့်
<၁၅	အလွန်နိမ့်
၁၅ - ၂၉	နိမ့်
၃၀ - ၄၄	အလယ်အလတ်
၄၅ - ၅၉	မြင့်
၆၀	အလွန်မြင့်

ပတ်ဝန်းကျင် လက္ခဏာ	လုပ်ငန်းလုပ်ဆောင်မှု	လျော့ချရေးနှင့် ထိန်းချုပ်မှု
လေထုအရည်အသွေး	<ul style="list-style-type: none"> သယ်ယူပို့ဆောင်ရေးသုံး မော်တော်ယာဉ်တို့ကြောင့် ဖုန်မှုန့်နှင့် ဖန်လုံအိမ်ဓါတ်ငွေ့ ထွက်ခြင်း လုပ်ငန်းခွင်အတွင်းဖုန်မှုန့် ထွက်ခြင်းအရေးပေါ်သုံး မီးစက်မှာ စွန့်ထုတ်အစိုးအငွေ့ ထွက်ခြင်း 	<ul style="list-style-type: none"> မီးစက် တို့တွင် မီးခိုးခေါင်းတိုင် တပ်ဆင်ခြင်းဖြင့် အစိုးအငွေ့ကြောင့် ပတ်ဝန်းကျင် ထိခိုက်မှုကို လျော့ချခြင်း၊ စက်ရုံအတွင်းနှင့် အနီး အနားတွင် သစ်ပင်ပန်းမံ စိုက်ပျိုးခြင်းဖြင့် carbon ထွက်ရှိမှုကို လျော့ချပေးခြင်း၊ စက်ပစ္စည်းများကို ပုံမှန်ပြုပြင်ထိန်းသိမ်းပေးခြင်း။
မြေဆီလွှာညစ်ညမ်းမှု	<ul style="list-style-type: none"> မတော်တစ စက်ပစ္စည်း၊ မော်တော်ယာဉ်များမှ ဆီယိုဖိတ်ခြင်း 	<ul style="list-style-type: none"> ထိခိုက်မှုလျော့ချရန်မလိုပါ။
ရေအရည်အသွေး	<ul style="list-style-type: none"> မီးဖိုချောင်သုံးမှထွက်ရှိခြင်း 	<ul style="list-style-type: none"> ထိခိုက်မှုလျော့ချရန်မလိုပါ။
ဆူညံသံ နှင့် တုန်ခါမှု	<ul style="list-style-type: none"> မီးစက်၊ အထည်ချုပ်စက် နှင့် မော်တော် ယာဉ် အသုံးပြုမှုကြောင့် ပတ်ဝန်းကျင် ဆူညံမှု 	<ul style="list-style-type: none"> ဆူညံသံများသောစက်ရုံလုပ်ငန်းနေရာများတွင် တစ်ကိုယ်ရည်သုံး ကာကွယ်ရေးပစ္စည်းများ တပ်ဆင်အသုံးပြုခြင်း။ အသံထုတ်လွှတ်မှုနည်းသော စက်ပစ္စည်းများ အသုံးပြုခြင်းနှင့် မီးစက်ခန်း၊ ကွန်ပရက်ဆာခန်းများ သီးသန့်ထားရှိခြင်း။
ကုန်းနေ အပင်နှင့် သတ္တဝါများ၊ ရေနေသတ္တဝါများ	<ul style="list-style-type: none"> အဝတ်အထည်အမျိုးမျိုး ချုပ်လုပ်ခြင်း လုပ်ငန်း 	<ul style="list-style-type: none"> ထိခိုက်မှုလျော့ချရန်မလိုပါ။
မီးဘေးအန္တရာယ်	<ul style="list-style-type: none"> ကုန်ကြမ်းသိုလှောင်မှု နှင့် လျှပ်စစ်သုံးစွဲ ပေါ့လျော့မှု 	<ul style="list-style-type: none"> စက်ရုံ၏မီးဘေးအန္တရာယ်ကာကွယ်ရန်အတွက် မီးသတ်ပူ၊ မီးသတ်ပိုက်၊ မီးသတ်ခေါင်း များထားရှိခြင်း။ မီးသတ်ဆိုင်ရာစက်ပစ္စည်းကိရိယာများကိုပုံမှန်စစ်ဆေးခြင်း ၊ အရေးပေါ်အခြေနေအတွက် မီးသတ်ရေကန်အဆင်သင့်ထားရှိခြင်း။

Environmental Management Plan

ပတ်ဝန်းကျင် လက္ခဏာ	လုပ်ငန်းလုပ်ဆောင်မှု	လျော့ချရေးနှင့် ထိန်းချုပ်မှု
		<ul style="list-style-type: none"> • စက်ရုံအတွင်းအရေးပေါ် အချက်ပေးစနစ်များထားရှိခြင်း။ • အရေးပေါ် ထွက်ပေါက်များတစ်လျှောက်တွင် ကုန်ပစ္စည်းများပိတ်ဆို့ခြင်းမရှိအောင်ရှင်းလင်းထားရှိခြင်း။
လုပ်ငန်းခွင် ဘေးအန္တရာယ်	<ul style="list-style-type: none"> • စက်ပစ္စည်းများလည်ပတ်ခြင်းကြောင့် မတော်တဆ ထိခိုက်မှုများ ဖြစ်ပေါ်နိုင်ခြင်း။ • ပစ္စည်းတင်ချပြုလုပ်ခြင်း၊ ဖြတ်တောက်ခြင်း၊ ရောနှောခြင်း၊ ဖိနှိပ်ခြင်း၊ ထုတ်ပိုးခြင်း။ • ရေခဲခဲသုံးမီးပူများကြောင့် မတော်တဆထိခိုက်မှုများ ဖြစ်ပေါ်နိုင်ခြင်း။ 	<ul style="list-style-type: none"> • အရေးပေါ် အခြေအနေများအတွက် စက်ပစ္စည်းကိုင်တွယ်မှုသင်တန်းပေးခြင်း၊ ကြက်ခြေနီသင်တန်းပေးခြင်း၊ မီးသတ်သင်တန်းပေးခြင်း။ • လုပ်ငန်းခွင်တွင်း အလုပ်သမားများ အလင်းရောင်ကောင်စွာရရှိစေရန်နှင့် အမြင်အာရုံမထိခိုက်စေရန် အလင်းရောင်များကို လုံလောက်စွာထားရှိခြင်း။ • အလုပ်သမားများအတွက်တစ်ကိုယ်ရေကာကွယ်ရေးသုံးပစ္စည်းများဖြစ်သည့် နားကြပ်၊ လက်အိတ်၊ ဦးထုပ်၊ မျက်မှန်များ အသုံးပြုစေခြင်း။ • လျှပ်စစ်အန္တရာယ်မဖြစ်စေရန် နှင့် ပြုပြင်ထိန်းသိမ်းမှုများ ပြုလုပ်ရန်အတွက် ဝန်ထမ်းထားရှိ၍ ပုံမှန်စစ်ဆေးခြင်း။
ကျန်းမာရေး	<ul style="list-style-type: none"> • အရေးပေါ် မီးစက်များမှ ဆူညံသံများထွက်ပေါ်လာခြင်း။ 	<ul style="list-style-type: none"> • လုပ်သားများအတွက်ကျန်းမာရေးမထိခိုက်စေရန် ရေမြောင်းများကိုစနစ်တကျထားရှိခြင်း။ • လုပ်သားများအတွက် ရှုပ်နာရီအတွင်းလက်ခံနိုင်သည့်အာမြင့်ဆုံး ဆူညံမှု နှုန်းမှာ 90dB(A) ဖြစ်သည်။ အသံဆူညံမှုအမြင့်ဆုံးနေရာများတွင် နားကြပ်များ တပ်ဆင်စေခြင်း။
စွန့်ပစ်အစိုင်အခဲ	<ul style="list-style-type: none"> • ထုတ်လုပ်ရာတွင် ကျန်ရှိသော ပိတ်စ အပိုင်းအစများ၊ မီးဖိုချောင်နှင့် ရုံးတွင်းစွန့်ပစ်ပစ္စည်းများ 	<ul style="list-style-type: none"> • စက်ရုံအတွင်း အမှိုက်ပုံးများထားရှိခြင်း။ • သတ်မှတ်ထားသောနေရာတွင် အမှိုက်စို၊ အမှိုက်ခြောက်များခွဲခြားစွန့်ပစ်ခြင်း။ • အမှိုက်များကို ရန်ကုန်စည်ပင်သာယာရေးကော်မတီနှင့် ချိတ်ဆက်၍စွန့်ပစ်ခြင်း။
စွန့်ပစ်အရည်	<ul style="list-style-type: none"> • နေအိမ်၊ စားသောက်ဆောင် တို့မှစွန့်ထုတ်ရေ၊ ဘွိုင်လာစွန့်ပစ်ရေ နှင့် မိလ္လာကန်စနစ် 	<ul style="list-style-type: none"> • ဆီကန်၊ မိလ္လာကန်များ ကိုပုံမှန်စစ်ဆေးခြင်း၊ သန့်စင်ခြင်းများပြုလုပ်ခြင်းဖြင့် စွန့်ပစ်အရည်များ စိမ့်ဝင်မှုများကိုလျော့ကျစေနိုင်ခြင်း။
အန္တရာယ်ရှိစွန့်ပစ်ပစ္စည်းများ	<ul style="list-style-type: none"> • စက်များမှ ဆီယိုစိမ့်မှုများ၊ မော်တော်ယာဉ်များပြုပြင်ထိန်းသိမ်းမှုက ထွက်ရှိသည့်အမှိုက်များ 	<ul style="list-style-type: none"> • အန္တရာယ်ရှိ စွန့်ပစ်ပစ္စည်းများသိုလှောင်မှု အားထိန်းသိမ်းခြင်း စစ်ဆေးခြင်း။ • အန္တရာယ်ရှိစွန့်ပစ်ပစ္စည်းများကို စည်ပင်သာယာရေး ကော်မတီ (သို့မဟုတ်) လိုင်စင်ရ အမှိုက်စွန့်ပစ်ရေးဆိုင်ရာအဖွဲ့အစည်းများ

Environmental Management Plan

ပတ်ဝန်းကျင် လက္ခဏာ	လုပ်ငန်းလုပ်ဆောင်မှု	လျော့ချရေးနှင့် ထိန်းချုပ်မှု
		နှင့်ချိတ်ဆက်၍စွန့်ပစ်ခြင်း။
သဘာဝဘေးအန္တရာယ် (ငလျင်၊ ရေကြီးရေလျှံ၊ မြေပြို၊ မုန်တိုင်း)		အရေးပေါ်အကြောင်းရင်းနှင့် အခြေအနေများအတွက် သက်ဆိုင်ရာမှတ်တမ်းများနှင့် ကရိယာများကို ထိန်းသိမ်းခြင်း
လျှပ်စစ်ပိုင်းဆိုင်ရာ ချွတ်ယွင်းခြင်း	စက်ပစ္စည်းအဟောင်းများ အသုံးပြုခြင်း၊ အော်ပရေတာ အမှားများရှိခြင်း၊ ကြိုတင်ပြုပြင်ထိန်းသိမ်းမှု များမရှိခြင်း၊ ပြုပြင်ထိန်းသိမ်းမှု များ မလုပ်ဆောင်ခြင်း	ပုံမှန်စစ်ဆေးခြင်းနှင့် လျှပ်စစ်ပိုင်းဆိုင်ရာ ထိန်းသိမ်းမှုများကို ဆောင်ရွက်ခြင်း၊ ပျက်စီးယိုယွင်းနေသော လျှပ်စစ်လိုင်းများကို မထိတွေ့စေခြင်း၊ သန့်ရှင်းရေးနှင့် အခြားလုပ်ငန်းများ ဆောင်ရွက်ချိန်တွင် လျှပ်စစ်လိုင်းများနှင့် မထိတွေ့စေရန် ရှောင်ရှားခြင်း
စက်ပစ္စည်းဆိုင်ရာ ချွတ်ယွင်းခြင်း	မသင့်လျော်သော စက်ပစ္စည်းလည်ပတ်မှုနှင့် ကြိုတင်ကာကွယ်မှုများ မလုပ်ဆောင်ခြင်း၊ ပြုပြင်ထိန်းသိမ်းမှုများ မလုပ်ဆောင်ခြင်း၊ စက်ပစ္စည်းကိရိယာများကို စဉ်ဆက်မပြတ် စောင့်ကြပ်ကြည့်ရှုရန် ပျက်ကွက်ခြင်း	ပြုပြင်ထိန်းသိမ်းခြင်းများ လုပ်ဆောင်ရန် အချိန်ဇယားချမှတ်ခြင်း၊ ဖြစ်နိုင်ချေရှိသော စက်ပစ္စည်းချို့ယွင်းချက်များကို ဖယ်ရှားခြင်း၊ စက်ပစ္စည်းကိရိယာများ စောင့်ကြပ်ကြည့်ရှုခြင်းများ လုပ်ဆောင်ခြင်း
စက်ပိုင်းဆိုင်ရာနှင့် တည်ဆောက်ပုံဆိုင်ရာ ချွတ်ယွင်းခြင်း	စက်မှုလုပ်ငန်းသုံး စက်ချို့ယွင်းမှုတွင် စက်ပစ္စည်းဟန်ချက်ချို့ယွင်းခြင်း ၊ သတ္တုပစ္စည်းများပျက်စီးခြင်း၊ သံချေးတက်ခြင်း၊ ချိန်ညှိမှုများယွင်းခြင်း၊ အထွေထွေမျက်နှာပြင် ပျက်စီးခြင်း၊ ပစ္စည်းရွေးချယ်မှုများယွင်းခြင်း၊ ဒီဇိုင်းတွက်ချက်မှုနှင့် အသေးစိတ်အချက်အလက်များ တွင် အမှားအယွင်းရှိခြင်း၊ မှားယွင်းသော ဆောက်လုပ်ရေးနည်းပညာ များနှင့် အရည်အသွေးထိန်းချုပ်မှုနှင့် ကြီးကြပ်မှုမလုံလောက်ခြင်း ကွန်ကရစ်အဆောက်အဦများ	ပုံမှန်စစ်ဆေးခြင်း၊ ဓာတ်ပြုထိန်းသိမ်းခြင်း၊ ကာကွယ်ထိန်းသိမ်းခြင်းနှင့် ကြိုတင်ထိန်းသိမ်းခြင်းများဆောင်ရွက်ခြင်း၊ အဆောက်အဦးဆိုင်ရာ ပျက်စီးယိုယွင်းခြင်းများ လျော့ချရန် အရည်အသွေးပြည့်မီသော ဒီဇိုင်းကန်ထရိုက်တာများနှင့် ထိရောက်စွာ ဆက်သွယ်ဆောင်ရွက်ခြင်း၊ ဂရုတစိုက်နှင့် အရည်အသွေးပြည့်မီသော ဆောက်လုပ်ရေးလုပ်ငန်းများ ဆောင်ရွက်ခြင်းနှင့် ကြီးကြပ်စစ်ဆေးမှုများ ဆောင်ရွက်ခြင်း

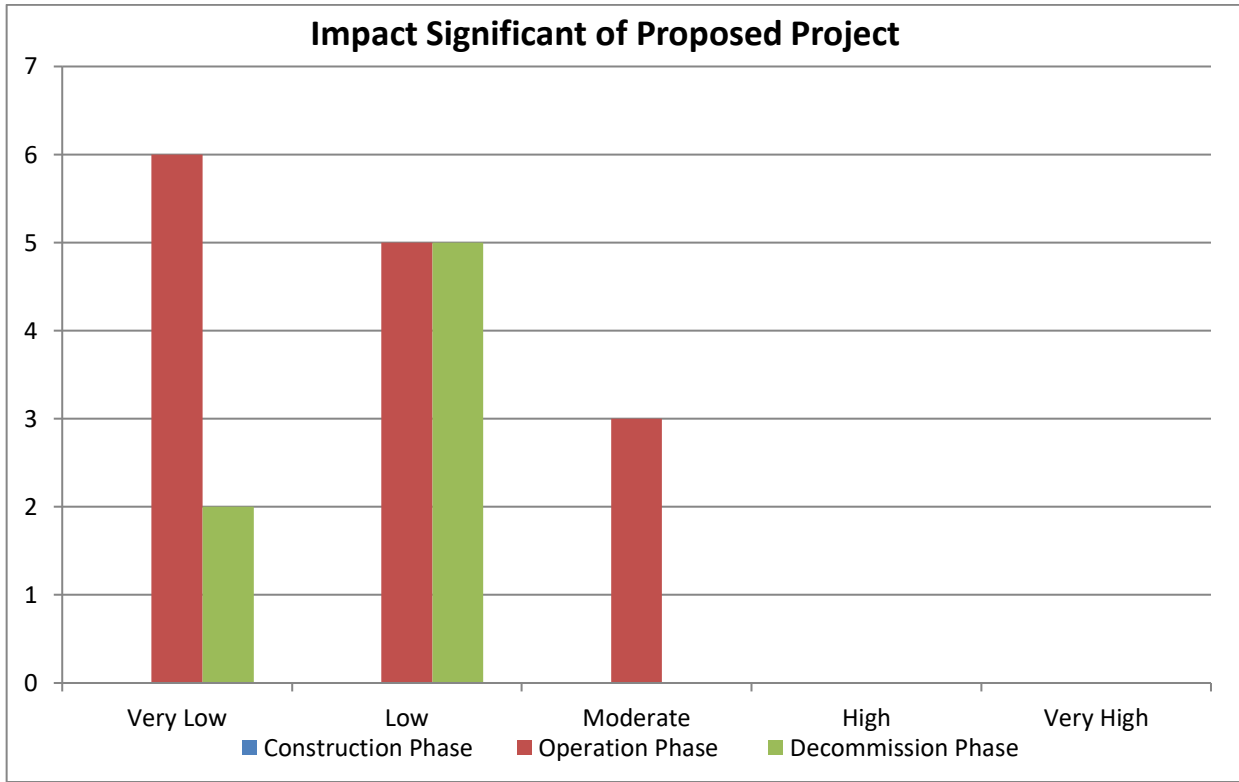
Environmental Management Plan

ပတ်ဝန်းကျင် လက္ခဏာ	လုပ်ငန်းလုပ်ဆောင်မှု	လျော့ချရေးနှင့် ထိန်းချုပ်မှု
	အပေါ် ပြင်ပစက်မှုဆိုင်ရာထိခိုက်မှုများ	
စီမံကိန်းပိတ်သိမ်းချိန်ကာလ		
လေထုညစ်ညမ်းခြင်း	အဆောက်အဦများ ဖြိုချခြင်း၊ ဖြိုဖျက်ထားသော အရာဝတ္ထုများ သယ်ယူပို့ဆောင်ခြင်း	ဖျက်သိမ်းခြင်းဧရိယာအတွင်း ဖုန်မှုန့်ထခြင်း မဖြစ်စေရန် တစ်နေ့နှစ်ကြိမ် ရေဖြန်းခြင်း၊ ဖျက်သိမ်းခြင်းဧရိယာမှ ထွက်ရှိလာသော အပိုင်းအစများ၊ ဆောက်လုပ်ရေးအရာဝတ္ထုများ နှင့် ကွဲရှစေတက်သော ပစ္စည်းများကို ပိုက်စိမ်းများ၊ ကင်းဗတ်စများဖြင့် ဖုံးအုပ်ထားခြင်း
ရေညစ်ညမ်းခြင်း	လုပ်သားများ၏ မိလ္လာအညစ်အကြေးများ၊ စက်ပစ္စည်းများ၏ ဖြိုဖျက်ခြင်း	မိလ္လာကန်များကို စနစ်တကျ ဆောက်လုပ်ထားခြင်း
မြေဆီလွှာ	အဆောက်အဦများ ဖြိုချခြင်း၊ ဖြိုဖျက်ထားသော အရာဝတ္ထုများ သယ်ယူပို့ဆောင်ခြင်း	မိလ္လာစနစ်နှင့် လောင်စာဆီများ၏ ယိုဖိတ်မှုများကို စီမံခန့်ခွဲခြင်း
ဆူညံသံနှင့် တုန်ခါမှု	ဖြိုဖျက်ထားသော အရာဝတ္ထုများ သယ်ယူပို့ဆောင်ခြင်းနှင့် ဖြိုဖျက်ခြင်းလုပ်ငန်းဆောင်ရွက်ချက်များ	လုပ်သားများကို နားကြပ်များစီစဉ်ပေးခြင်း၊ နေ့အချိန်လုပ်ငန်းဆောင်ရွက်မှုများ၊ စက်ပစ္စည်းများနှင့် စက်တပ်ယာဉ်များ၏ ဆူညံသံများကို ထိန်းသိမ်းခြင်း
အမှိုက်စွန့်ပစ်မှု	အုတ်ခဲ၊ ကွန်ကရစ်အကျိုးအပဲ့များကဲ့သို့ ဖြိုဖျက်ထားသော အပိုင်းအစများ	ပြန်လည်အသုံးပြုခြင်းနှင့် သတ်မှတ်ဧရိယာများတွင် စွန့်ပစ်ခြင်း
အန္တရာယ်ရှိ စွန့်ပစ်အမှိုက်များ	စက်ပစ္စည်းများတွင် အသုံးပြုသော စက်သုံးဆီများ	အန္တရာယ်ရှိ စွန့်ပစ်မှုကို စနစ်တကျ စီမံခန့်ခွဲထားရှိခြင်း
လုပ်ငန်းခွင် ကျန်းမာရေးနှင့် အန္တရာယ်	အဆောက်အဦများ ပယ်ဖျက်ခြင်း၊ ဖြိုဖျက်ထားသော အရာဝတ္ထုများ သယ်ယူပို့ဆောင်ခြင်း၊ ဖြိုဖျက်ခြင်းလုပ်ငန်းဆောင်ရွက်ချက်များ	အန္တရာယ်ရှိ ဇုန်နယ်နိမိတ်များတွင် အကာအရံများထားရှိခြင်း၊ နယ်နိမိတ်သတ်မှတ်ခြင်း၊ သင့်လျော်သောသတိပေးဆိုင်းဘုတ်များနှင့် ဘေးကင်းရေးဆိုင်းဘုတ်များ တပ်ဆင်ခြင်း၊ အညစ်အကြေးများနှင့် စက်သုံးဆီဖိတ်စင်မှုများကို သန့်ရှင်းရေးပြုလုပ်ခြင်း၊ အန္တရာယ်ရှိပစ္စည်းများကို ဖယ်ရှားရန်နှင့် ပြင်ပဝန်ထမ်းပညာရှင်များမှ အကူအညီများရယူခြင်း။

လုပ်ငန်းလည်ပတ်စဉ်ကာလတွင် သတ်မှတ်ချက်များမှာ အလယ်အလတ် သတ်မှတ်ချက် ၃ခု (အစိုင်အခဲစွန့်ပစ်ပစ္စည်း၊ မီးဘေးအန္တရာယ်၊ လုပ်ငန်းခွင်ဘေးအန္တရာယ်)၊ နိမ့် သတ်မှတ်ချက် ၃ခု (စွန့်ပစ်အရည်၊

Environmental Management Plan

လေထု၊ ဆူညံသံနှင့် တုန်ခါမှု) နှင့် အလွန်နိမ့်သတ်မှတ်ချက် ၅ခု (ဂေဟဗေဒ၊ ကျန်းမာရေး၊ မြေထုညစ်ညမ်းမှု၊ ရေထုညစ်ညမ်းမှု နှင့်အန္တရာယ်ရှိစွန့်ပစ်အမှိုက်) များနှင့် လုပ်ငန်းပိတ်သိမ်းစဉ်ကာလတွင် သတ်မှတ်ချက်များမှာ အလွန်နိမ့် ၂ခု (စွန့်ပစ်အစိုင်အခဲနှင့် အန္တရာယ်ရှိစွန့်ပစ်အမှိုက်) နှင့် နိမ့်သတ်မှတ်ချက် ၅ခု (လေထုအရည်အသွေး၊ ရေထုညစ်ညမ်းမှု၊ မြေဆီလွှာညစ်ညမ်းမှု၊ ဆူညံသံနှင့် လုပ်ငန်းခွင်ဘေးအန္တရာယ်) တို့တွေ့ရှိရပြီး ၎င်းအားပုံနှင့်နှိုင်းယှဉ်ဖော်ပြထားပါသည်။



အဆိုပြုလုပ်ငန်း၏ ပတ်ဝန်းကျင်အပေါ် သက်ရောက်မှုများ နှိုင်းယှဉ်ပြပုံ

ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု ဆောင်ရွက်ချက်

စီမံကိန်းဖော်ဆောင်သည့် အချိန်အတွင်း ပတ်ဝန်းကျင်အပေါ် သက်ရောက်မှုများ၊ လျော့ချရေး နည်းလမ်းများ၊ အစီအစဉ်များ၊ တိုင်းတာမှုများ စသည့် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်များကို လုပ်ဆောင်ရပါသည်။ WONDERFUL APPAREL COMPANY LIMITED မှ စက်ရုံတွင် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်အတွက် အဖွဲ့အစည်းဖွဲ့စည်းခြင်း၊ ပုံမှန်ဆန်းစစ်လေ့လာခြင်းများ ပြုလုပ်သွားမည်ဖြစ်ပါသည်။ ပတ်ဝန်းကျင် လေထုအရည်အသွေး၊ မိလ္လာစနစ်၊ စွန့်ပစ်အစိုင်အခဲ စွန့်ပစ်မှုများကို စက်ရုံ၏ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် အဖွဲ့အစည်းမှ ဆန်းစစ်သွားမည်ဖြစ်ပါသည်။ အဆိုပြုစီမံကိန်းမှ လူထုအကျိုးပြုလုပ်ငန်းများ နှင့် အရေးပေါ်ဆောင်ရွက်ချက်များ၊ ဒေသဆိုင်ရာ အကျိုးပြုလုပ်ငန်းများကို လုပ်ဆောင်သွားမည်ဖြစ်ပါသည်။ အဆိုပြုစီမံကိန်းသည် ရရှိလာသော အကျိုးအမြတ်၏ ၂% ကို လူမှုဖူလုံရေးလုပ်ငန်းများတွင် သုံးစွဲသွားမည် ဖြစ်ပါသည်။

WONDERFUL APPAREL COMPANY LIMITED ၏ လူထုအကျိုးပြုလုပ်ငန်းများဆောင်ရွက်မည့် အစီအစဉ်

စဉ်	အကြောင်းအရာ	လှူဒါန်းမှု ရာခိုင်နှုန်း	ခန့်မှန်းလှူဒါန်းငွေကျပ်
၁။	စာသင်ကျောင်းများ	၀.၅%	၁,၅၀၀,၀၀၀/တစ်နှစ်
၂။	သင်တန်းကျောင်းများ	၁%	၂,၅၀၀,၀၀၀/တစ်နှစ်
၃။	ဝန်ထမ်းများ၏ ကျန်းမာရေးစောင့်ရှောက်မှု	၀.၅%	၁,၅၀၀,၀၀၀/တစ်နှစ်

စက်ရုံအတွက် သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာလုပ်ဆောင်ချက်များသည် စက်ရုံသို့ကွင်းဆင်းလေ့လာခဲ့သော ကျွမ်းကျင်ပညာရှင်များမှ စက်ရုံ၏ဆောင်ရွက်ချက်များ၊ စက်ရုံဝန်ထမ်းများ၊ နယ်ပယ်ဆိုင်ရာအဖွဲ့အစည်းများ၏ အမြင်များ နှင့် စက်ရုံမှ သက်ဆိုင်သူများ၏တိုင်ပင်ဆွေးနွေးအကြံပြုချက်များအပေါ် အခြေခံ၍ ရေးဆွဲပြင်ဆင်ထားပါသည်။ ဖြစ်နိုင်ချေရှိသော ပတ်ဝန်းကျင်ထိခိုက်မှုများအပေါ် မူတည်၍ လိုအပ်သည့် သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာ စီမံခန့်ခွဲမှုလုပ်ဆောင်ချက်များမှာ အောက်ပါအတိုင်းဖြစ်ပါသည်။

၁။ လေထုညစ်ညမ်းမှုနှင့် ဖုန်မှုန့်ဆိုင်ရာ စီမံခန့်ခွဲမှုအစီအစဉ်

- ❖ စက်ရုံတွင် ကာဗွန် နှင့် လေထုညစ်ညမ်းမှု လျော့ချရန် သစ်ပင်ပန်းပင်များ စိုက်ပျိုးထားရှိခြင်း၊
- ❖ စက်ရုံအတွင်း မည်သည့် စွန့်ပစ်အမှိုက်များကို မီးရှို့ဖျက်စီးခြင်းအား မပြုလုပ်စေခြင်း၊
- ❖ လေထုညစ်ညမ်းမှုမဖြစ်ပေါ်စေရန် မော်တော်ယာဉ်၊ မီးစက် နှင့် စက်ပစ္စည်းများကိုပုံမှန်စစ်ဆေးခြင်း
- ❖ မီးစက်မှထွက်ရှိသော အခိုးအငွေ့ကြောင့် ပတ်ဝန်းကျင်ပေါ်ထိခိုက်မှုမဖြစ်စေရန် မီးခိုးခေါင်းတိုင်တပ်ဆင်ခြင်း
- ❖ မော်တော်ယာဉ်များ၊ ကွန်ပရက်ဆာများနှင့် မီးစက်များကို ကောင်းမွန်စွာပြုပြင်ထိန်းသိမ်းခြင်း

၂။ ဆူညံသံဆိုင်ရာ စီမံခန့်ခွဲမှုအစီအစဉ်

- ❖ မီးစက်အသုံးပြုမှုအတွက် အသံလှုပ်ခန်းများဆောက်လုပ်ထားရှိခြင်း၊
- ❖ လုပ်ငန်းသုံးပြုသည့်ယာဉ်များကို သတ်မှတ်အရှိန်ထက် ကျော်လွန်၍ မမောင်းနှင်စေခြင်း
- ❖ လုပ်သားများကို PPE အသုံးပြုမှုနှင့် ပတ်သက်၍ သင်တန်းများပို့ချပေးခြင်းနှင့် ဆူညံသံများသော နေရာတွင် အလုပ်လုပ်စဉ်တွင် PPE များကိုသေချာစွာ အသုံးပြုစေခြင်း။

၃။ မီးဘေးအန္တရာယ် စီမံခန့်ခွဲမှုအစီအစဉ်

- ❖ စက်ရုံ၏မီးဘေးအန္တရာယ်ကာကွယ်ရန်အတွက် မီးသတ်ပူး၊ မီးသတ်ပိုက်၊ မီးသတ်ခေါင်း များထားရှိခြင်း။

Environmental Management Plan

- ❖ အရေးပေါ်ထွက်ပေါက်နှင့် အရေးပေါ်စုရပ်များအား ညွှန်ပြထားရှိခြင်း။
- ❖ မီးသတ်ဆိုင်ရာစက်ပစ္စည်းကိရိယာများကိုပုံမှန်စစ်ဆေးခြင်း၊အရေးပေါ်အခြေနေအတွက် မီးသတ်ရေကန်အဆင်သင့်ထားရှိခြင်း။
- ❖ စက်ရုံအတွင်းအရေးပေါ်အချက်ပေးစနစ်များထားရှိခြင်း။
- ❖ အရေးပေါ်ထွက်ပေါက်များတွင်တစ်လျှောက်တွင် ကုန်ပစ္စည်းများပိတ်ဆိုခြင်း မရှိအောင်ရှင်းလင်းထားရှိခြင်း။

၄။ လုပ်ငန်းခွင်ဘေးအန္တရာယ်ကင်းရှင်းရေးနှင့် ကျန်းမာရေးဆိုင်ရာ စီမံခန့်ခွဲမှုအစီအစဉ်

- ❖ အရေးပေါ်အခြေအနေများအတွက် စက်ပစ္စည်းကိုင်တွယ်မှုသင်တန်းပေးခြင်း၊ ကြက်ခြေနီသင်တန်းပေးခြင်း၊ မီးသတ်သင်တန်းပေးခြင်း။
- ❖ လုပ်ငန်းခွင်တွင်း အလုပ်သမားများ အလင်းရောင်ကောင်စွာရရှိစေရန်နှင့် အမြင်အာရုံမထိခိုက်စေရန် အလင်းရောင်များကို လုံလောက်စွာထားရှိခြင်း။
- ❖ အလုပ်သမားများအတွက်တစ်ကိုယ်ရေကာကွယ်ရေးသုံးပစ္စည်းများဖြစ်သည့် နားကြပ်၊ လက်အိတ်၊ ဦးထုတ်၊ မျက်မှန် များ အသုံးပြုစေခြင်း။
- ❖ လျှပ်စစ်အန္တရာယ်မဖြစ်စေရန် နှင့် ပြုပြင်ထိန်းသိမ်းမှုများ ပြုလုပ်ရန်အတွက် ဝန်ထမ်းထားရှိ၍ ပုံမှန်စစ်ဆေးခြင်း။
- ❖ လုပ်သားများအတွက်ကျန်းမာရေးမထိခိုက်စေရန် ရေမြောင်းများကိုစနစ်တကျထားရှိခြင်း။
- ❖ လုပ်သားများအတွက် ရှစ်နာရီအတွင်းလက်ခံနိုင်သည့်အာမြင့်ဆုံး ဆူညံမှု နှုန်းမှာ 90dB(A) ဖြစ်သည်။ အသံဆူညံမှုအမြင့်ဆုံးနေရာများတွင် နားကြပ်များ တပ်ဆင်စေခြင်း။

၅။ အစိုင်အခဲစွန့်ပစ်ပစ္စည်း စီမံခန့်ခွဲမှုအစီအစဉ်

- ❖ စက်ရုံအတွင်း အမှိုက်ပုံးများထားရှိခြင်း။
- ❖ သတ်မှတ်ထားသောနေရာတွင် အမှိုက်စို၊ အမှိုက်ခြောက်များခွဲခြားစွန့်ပစ်ခြင်း။
- ❖ အမှိုက်များကို စည်ပင်သာယာရေးကော်မတီနှင့် ချိတ်ဆက်၍စွန့်ပစ်ခြင်း။

၆။ စွန့်ပစ်အရည် (ရေဆိုး) စီမံခန့်ခွဲမှုအစီအစဉ်

- ❖ ဆီကန်၊ မိလ္လာကန်များ ကိုပုံမှန်စစ်ဆေးခြင်း၊ သန့်စင်ခြင်းများပြုလုပ်ခြင်းဖြင့် စွန့်ပစ်အရည်များ စိမ့်ဝင်မှုများကိုလျော့ကျစေနိုင်ခြင်း။

Environmental Management Plan

၇။ အန္တရာယ်ရှိ စွန့်ပစ်ပစ္စည်းစီမံခန့်ခွဲမှုအစီအစဉ်

- ❖ အန္တရာယ်ရှိ စွန့်ပစ်ပစ္စည်းများသိုလှောင်မှု အားထိန်းသိမ်းခြင်း စစ်ဆေးခြင်း။
- ❖ လုပ်ငန်းခွင်ကျန်းမာရေး လုံခြုံမှုနှင့်ပတ်ဝန်းကျင်ဆိုင်ရာ လိုအပ်ချက်များ နှင့်ကိုက်ညီမှုရှိစေရန် ဓာတုပစ္စည်းများကို စနစ်တကျစွန့်ပစ်ခြင်း။
- ❖ ဓာတုပစ္စည်းသိုလှောင်သည့် ပုံးခွန်များကို စနစ်တကျပြန်လည်အသုံးပြုခြင်း (သို့မဟုတ်) စနစ်တကျ စွန့်ပစ်ခြင်း။
- ❖ အန္တရာယ်ရှိစွန့်ပစ်ပစ္စည်းများကို စည်ပင်သာယာရေး ကော်မတီ နှင့်ချိတ်ဆက်၍စွန့်ပစ်ခြင်း။

၈။ စွမ်းအင် စီမံခန့်ခွဲမှုအစီအစဉ်

- ❖ အပူအအေးထိန်းညှိပေးသည့် ကရိယာများတပ်ဆင်စေခြင်း
- ❖ စွမ်းအင်လျှော့ချသည့် မီးလုံး၊ မီးချောင်းများတပ်ဆင်စေခြင်း
- ❖ စွမ်းအင်လျှော့ချသည့်ကရိယာများ တပ်ဆင်ခြင်း
- ❖ ပစ္စည်းကိရိယာများနှင့် မီးချောင်းများကို အသုံးမပြုသည့်အခါတွင်ပိတ်ထားစေခြင်း

၉။ အရေးပေါ်တုံ့ပြန်မှုနှင့် သဘာဝဘေးအန္တရာယ်စီမံခန့်ခွဲမှုအစီအစဉ်

- ❖ မီးငလျင်၊ ရေကြီးမှု နှင့် မုန်တိုင်းကဲ့သို့သော အရေးပေါ်အခြေအနေများအတွက် သင့်တော်သောစီမံခန့်ခွဲမှုများ ထားရှိခြင်း
- ❖ မီးသတ်ကိရိယာများနှင့် မီးသတ်နည်းစနစ်များကို လုပ်ငန်းဆောင်ရွက်သည့် နေရာတိုင်းတွင် ထားရှိပေးခြင်းနှင့် သိရှိစေခြင်း
- ❖ မီးဘေးကာကွယ်ရေး လမ်းကြောင်းမြေပုံ အသေးစိတ်ကို ပြုလုပ်ထားရှိရန်နှင့် လုပ်သားများကို အသိပေးထားခြင်း
- ❖ လျှပ်စစ်အန္တရာယ်သတိရှိစေရန် လုပ်သားများအား လေ့ကျင့်ပေးထားခြင်း
- ❖ မီးသတ်လေ့ကျင့်ရေးလုပ်ငန်းများကို ပုံမှန်ပြုလုပ်စေခြင်း
- ❖ လုပ်သားများကို ငလျင်လှုပ် လျှင် လုပ်ဆောင်ရမည့် အချက်များကို အသိပေးထားခြင်း
- ❖ စက်ရုံ၏ ဆေးဘက်ဆိုင်ရာ အဖွဲ့အစည်းမှ ရှေးဦးသူနာပြုစုနည်းများ အတွက် ပြင်ဆင်ထားရှိခြင်း
- ❖ အရေးပေါ်ဆက်သွယ်ရမည့်ဖုန်းနံပါတ်များကို လူအများမြင်သာသည့်နေရာများတွင် ချိတ်ဆွဲဖော်ပြ ထားခြင်း
- ❖ မီးသတ်တပ်ဖွဲ့ ၊ ကယ်ဆယ်ရေးအဖွဲ့များ ဖြင့် လုံခြုံရေးကော်မတီ ဖွဲ့စည်းခြင်း၊ ကော်မတီမှ လုံခြုံရေး စီမံခန့်ခွဲရေး နှင့် ပတ်သက်သည်များ ဆွေးနွေးရန် လစဉ် အစည်းအဝေးများ ပြုလုပ်စေခြင်း
- ❖ သဘာဝဘေးအန္တရာယ်စီမံခန့်ခွဲမှု၊ မီးဘေးအန္တရာယ်၊ လုပ်ငန်းခွင်ကျန်းမာရေးနှင့်ပတ်သက်၍ လုပ်သားများအား သင့်လျော်သောလေ့ကျင့်မှုများ ပြုလုပ်စေခြင်း

၁၀။ သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာ စောင့်ကြပ်ကြည့်ရှုခြင်းနှင့် အစီရင်ခံခြင်း

Environmental Management Plan

၁၁။ သင်ကြားပို့ချမှု အစီအစဉ်

သက်ဆိုင်သူများနှင့် တွေ့ဆုံဆွေးနွေးခြင်း

၂၀၂၃ ခုနှစ်၊ မေလ၊ (၁၇)ရက်နေ့တွင် လူထုတွေ့ဆုံပွဲအစီအစဉ်ကို မြေကွက်အမှတ်-၂၉၄+၂၉၅+၂၉၆၊ မြေတိုင်းရပ်ကွက်အမှတ်-မြောင်းတကာ သံမဏိစက်မှုဇုန်၊ မှော်ဘီမြို့နယ်၊ ရန်ကုန်တိုင်းဒေသကြီး (Wonderful Apparel Co., Ltd) တွင် ပြုလုပ်ခဲ့ပါသည်။

Time and Date	Thursday, 17 th May 2023 10:30 AM – 11:45 PM
Venue	Meeting Room of Wonderful Apparel Company Limited, (Myaung Tagar Industrial Zone, Hmawbi Township.)
Agenda	Introduction of Wonderful Apparel Company Limited. Project Activities and its Significant Impacts Environmental Baseline Study of the proposed project Risk Assessment and Mitigation Measures Environmental Management Plan Environmental Monitoring Plan and Budget Plan Corporate Social Responsibilities and factory's activities
Organized by	Myanwei Environmental Solutions Company Limited.

နိဂုံးနှင့် အကြံပြုချက်

အကျဉ်းချုပ်အားဖြင့် ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်၏ လမ်းညွှန်ချက်များ၊ ပတ်ဝန်းကျင်ဆိုင်ရာ ဥပဒေ၊ နည်းဥပဒေ၊ စည်းမျဉ်းစည်းကမ်းများနှင့် ချမှတ်ထားသော မူဝါဒလမ်းညွှန်ချက်များအတိုင်း ပတ်ဝန်းကျင်ဆိုင်ရာ စီမံခန့်ခွဲမှု အလေ့အကျင့်များ၊ လုပ်ငန်းစဉ်များနှင့် လိုက်နာဆောင်ရွက်ကျင့်သုံးရန်တာဝန်များကို ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်တွင် ဖော်ပြရှင်းလင်းတင်ပြထားပါသည်။ စီမံကိန်းနှင့် သက်ဆိုင်သူများအား စီမံကိန်းဆိုင်ရာ အကြောင်းအရာများ ရှင်းလင်းတင်ပြခြင်း၊ အကြံပြုချက်များနှင့် ဆွေးနွေးတင်ပြလာသည့် သဘောထား အကြံဉာဏ်များကိုရယူပြီး အစီအရင်ခံစာတွင် ဖော်ပြထားပါသည်။

အကြံပြုချက်များအရ-

- အစီရင်ခံစာတွင် ဖော်ပြထားသည့် ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှုအစီအစဉ်နှင့် ကတိကဝတ်များကို စီမံကိန်း၏ သက်တမ်းတလျှောက်တွင် အကောင်အထည်ဖော် ဆောင်ရွက်ရမည်။
- အစိုင်အခဲနှင့် အရည် စွန့်ပစ်ပစ္စည်းများကို ရန်ကုန်မြို့တော် စည်ပင်သာယာရေးကော်မတီ၏ စည်းကမ်းများအတိုင်း စွန့်ပစ်ရမည်။
- အလုပ်သမားများအား သင့်တော်သော သင်တန်းများပေးခြင်း၊ လုပ်ငန်းခွင်အတွင်း တစ်ကိုယ်ရည် ကာကွယ်ရေး ပစ္စည်းများ အသုံးပြုစေခြင်းများ ဆောင်ရွက်ရမည်။
- ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှုအစီအစဉ်များကို နေ့စဉ်၊ လစဉ်နှင့် နှစ်စဉ် လုပ်ငန်းခွင်အတွင်း လုပ်ဆောင်ရမည်။

Environmental Management Plan

- ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှုအစီအစဉ် မှတ်တမ်းများကို သေချာသိမ်းဆည်း၍ တတိယအဖွဲ့အစည်းသို့ တင်ပြရမည်။
- ပြည်ထောင်စုသမ္မတ မြန်မာနိုင်ငံတော်၏ လမ်းညွှန်ချက်များ၊ ပတ်ဝန်းကျင်ဆိုင်ရာ ဥပဒေ၊ နည်းဥပဒေ၊ စည်းမျဉ်းစည်းကမ်းများနှင့် ချမှတ်ထားသော မူဝါဒ လမ်းညွှန်ချက်များအတိုင်း ပတ်ဝန်းကျင်ဆိုင်ရာ စီမံခန့်ခွဲမှု အလေ့အကျင့်များ၊ လုပ်ငန်းစဉ်များနှင့် လိုက်နာဆောင်ရွက်ရ မည်။

အချုပ်အားဖြင့်ဆိုသော် အဆိုပြုသူသည် ပတ်ဝန်းကျင်ထိန်းသိမ်းရေး ဦးစီးဌာနမှ ညွှန်ကြားလာသော အဆိုပြုချက်များ၊ အကြံပြုချက်များကို လိုက်နာဆောင်ရွက်ရမည်။ ထိရောက်သော ပတ်ဝန်းကျင်ဆိုင်ရာ စီမံခန့်ခွဲမှုကို အဆိုပြုသူမှ ဆောင်ရွက်ရမည်။ အဆိုပြုသူသည် ပြည်ထောင်စုသမ္မတ မြန်မာနိုင်ငံတော်၏ လမ်းညွှန်ချက်များ၊ ပတ်ဝန်းကျင်ဆိုင်ရာ ဥပဒေ၊ နည်းဥပဒေ၊ စည်းမျဉ်းစည်းကမ်းများနှင့် ချမှတ်ထားသော မူဝါဒ လမ်းညွှန်ချက်များအတိုင်း လိုက်နာဆောင်ရွက်ရမည်။

EXECUTIVE SUMMARY

Introduction

Everyone wants to live in a place that's clean and healthy. That is why one of the world's primary concerns is the environment. As sad as it is, the world today is dying. The environment is slowly decaying, and it's all because of human negligence. Environment Management Plan is required for ensuring sustainable development. It should not affect the surrounding environment adversely. The management plan presented. Which needs to be implemented by the proposed expansion of WONDERFUL APPAREL 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 garments on CMP Basis company from China. Yangon Region Investment Committee (YRIC) issued the project on 11 June 2020 with Endorsement No.YGN-389/2020. YRIC notified 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 Garments on CMP basis under the name of WONDERFUL APPAREL COMPANY LIMITED as a joint venture.

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) (1699/2020) on 2 June 2020. Therefore, WONDERFUL APPAREL COMPANY LIMITED commissioned Myanwei Environmental Solutions Company Limited for EMP report study.

Information of Investor

Investor Name:	MR. XU, LIANGSHENG
Passport No.:	EE 1445968
Citizenship:	Chinese
Address of Registration office:	Room-1801, 18 Floor, Building A, CFC, 300 East Zhongshan Road, Nanjing, Jiangsu Province, People's Republic of China.
Phone No.	Daw Lae Yin Than Win (Accountant) 09-684840007 laeyin.wffinance14@gmail.com

Salient Features of the Proposed Project

Type of Proposed Business	Manufacturing of Garments on CMP Basis
Type of investment	Joint Venture
Type of Share	Ordinary Share
Type of land	Industrial Land

Environmental Management Plan

Total land area	6.86 acres (27761.43 sqm)
Total building area	(80 x152 m) One Storey Factory Building
Land lease year	30 years
Construction period	1 year
Address	Plot No. (294+295+296), Myaung Tagar Thanmani Industrial Zone, Hmawbi Township, Yangon.
Contact person	Daw Lae Yin Than Win (Accountant) 09-684840007 laeyin.wffinance14@gmail.com

Includes the scope of the study of proposed project, EMP study objective and responsibility of EMP expert team of Myanwei Environmental Solutions Company Limited and also described about of objective of Environmental Management Plan.

Policy, Legal and Institutional Framework

The brief summary of relevant national environmental legislations such as Environmental Impact Assessment Procedure (2015) and National Environmental Quality (emission) Guidelines, established by the Ministry of Natural Resources and Environmental Conservation (MONREC) and overview of current local and international environmental and social policies including related international or regional convention for the proposed project. These are as follow:

1. Constitution 2008
2. Environmental Conservation Law, 30 March 2012
3. Environmental Conservation Rules, 2014
4. Environmental Impact Assessment Procedure (December 2015)
5. National Environmental Quality (Emission) Guideline (NEQG) (December 2015)
6. National Environmental Policy of Myanmar (2019)
7. Foreign Investment Law, 2012
8. Foreign Investment Rule, 2013
9. Myanmar Investment Rule, 2017
10. Myanmar Insurance Law (1993)
11. Payment of Wages Law (2016)
12. Yangon City Development Committee Law (2018)
13. The Amended Law for Factories Act, 1951 (2016)
14. The Private Industrial Enterprise Law, 1990
15. The Export and Import Law (2012)
16. The Prevention of Hazard from Chemical and Related Substances Law, 2013

Environmental Management Plan

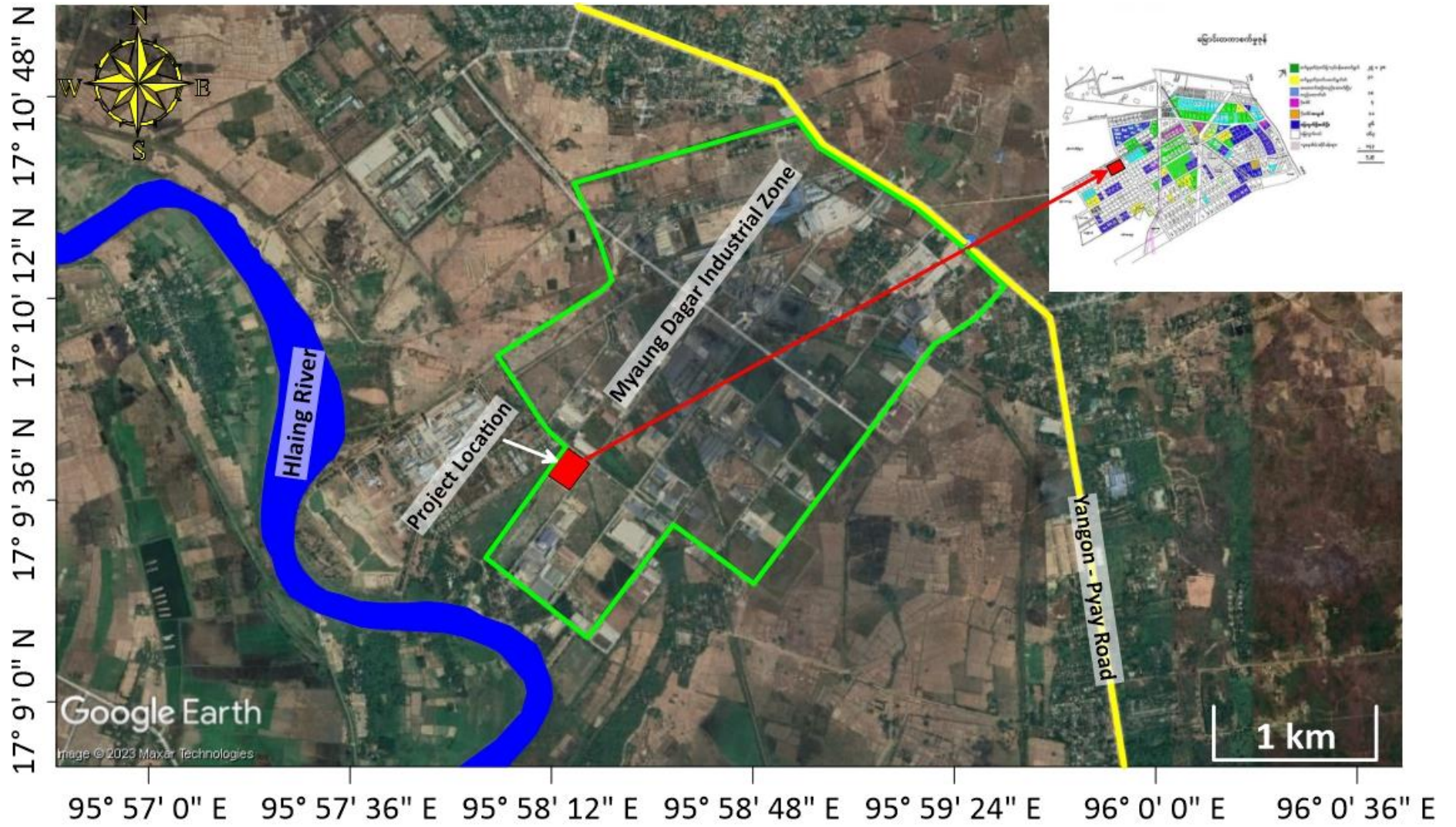
17. Underground Water Act
18. Myanmar Fire Brigade Law (2015)
19. The Electricity Law (2014)
20. Boiler Law (2015)
21. Labor Dispute Settlement Law (28 March 2012 replacing 1929 version)
22. The Social Security Law (2012)
23. The Employment and Skill Development (2013)
24. The Worker's Compensation Act, 1923
25. The Payment of Wages Act, 1936
26. The Leave and Holidays Act, (1951, partially revised in 2014)
27. The Minimum Wage Law (2013)
28. Public Health Law (1972)
29. Prevention and Control of Communicable Disease Law 1995 (Amendment in 2011)
30. Occupational Safety and Health Law (2019)
31. The Law on Standardization
32. လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတက်သောဝတ္ထုပစ္စည်းများဆိုင်ရာဥပဒေ (၂၀၁၈)
33. The Motor Vehicles Law (2015)
34. The Conservation of Water Resources and River Law (2006)
35. The Commercial Tax Law (1990) Amended 2014

And occupational health and safety guideline is referenced from International Finance Corporation (IFC) guidelines. WONDERFUL APPAREL COMPANY LIMITED is commitment and complied for environmental prevention and EMP.

Project Description

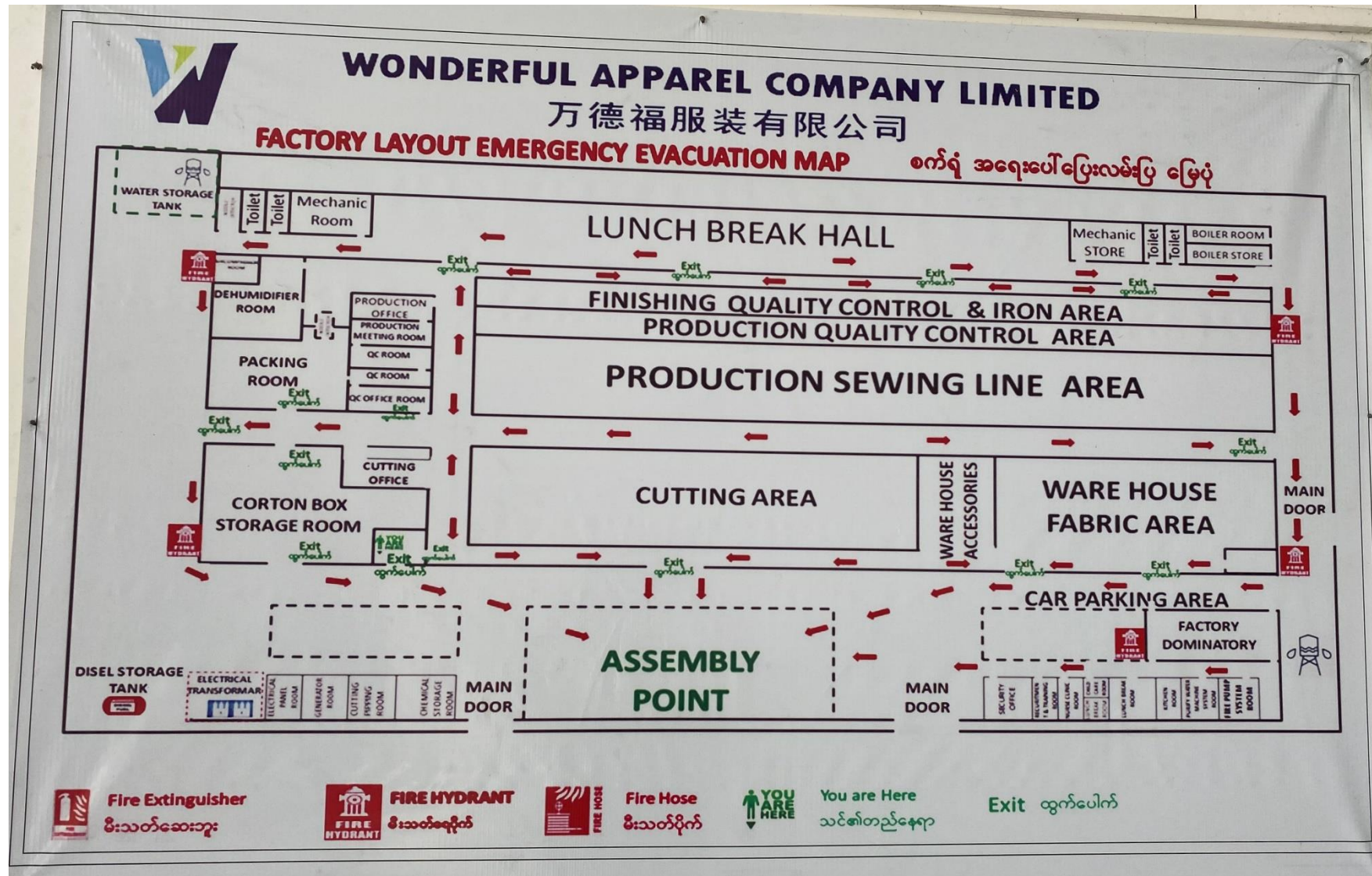
The proposed project locates at the coordinates of Latitude 17°9'38.30"N and Longitude 95°58'12.72"E. The total area of project site is 6.86 acres (27761.43 sqm). One storey building (80 ×152 m) is used for operation. Main structure is designed into office area and QC department, sewing department, cutting department and iron department for production building and transformer room and generator room are separated by main factory building structure.

Environmental Management Plan



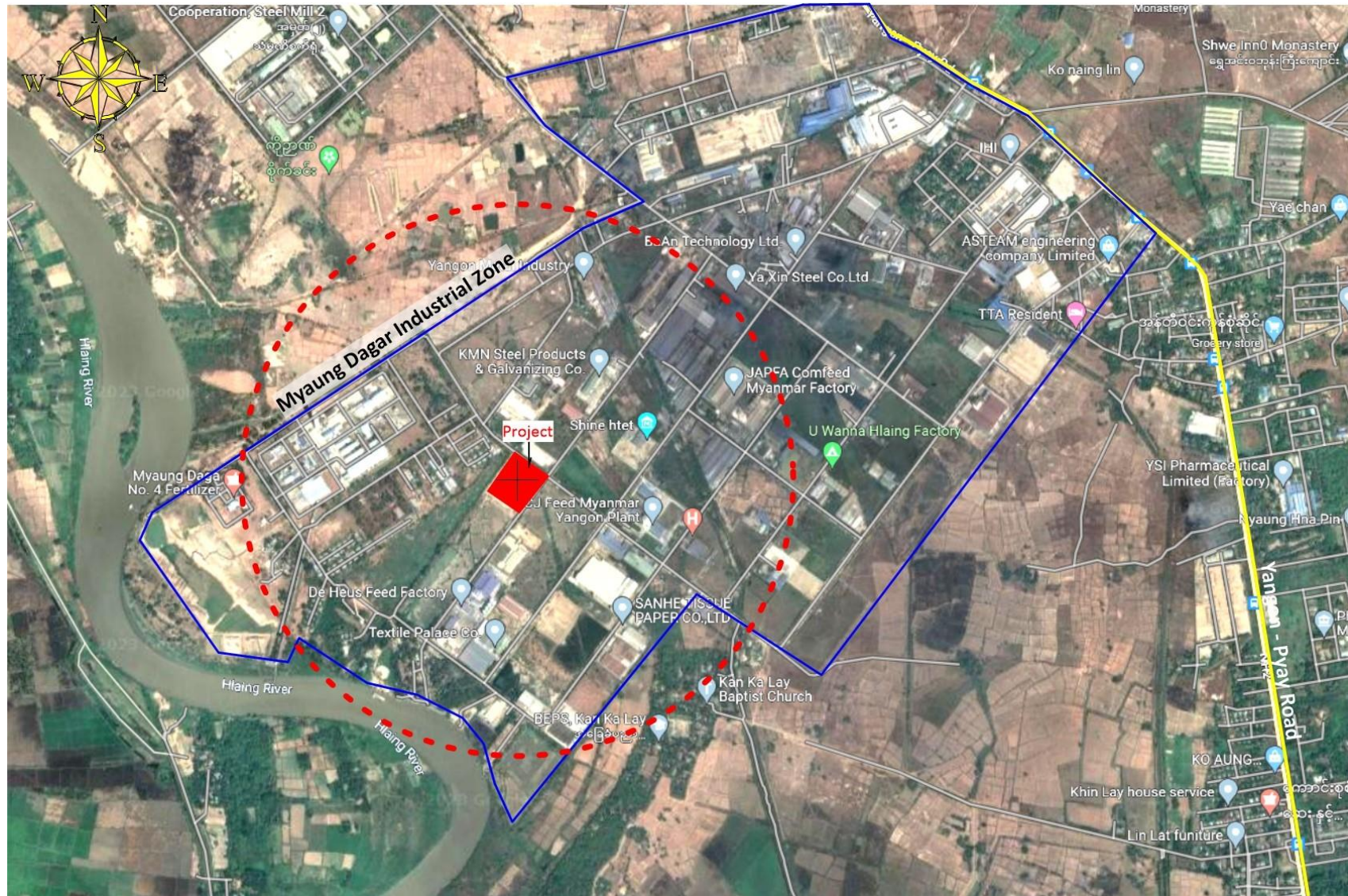
Location Map of Proposed Project

Environmental Management Plan



Factory Layout Drawing

Environmental Management Plan

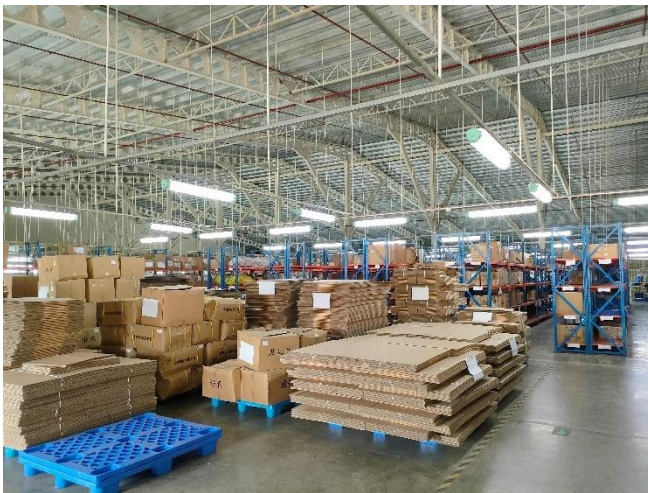
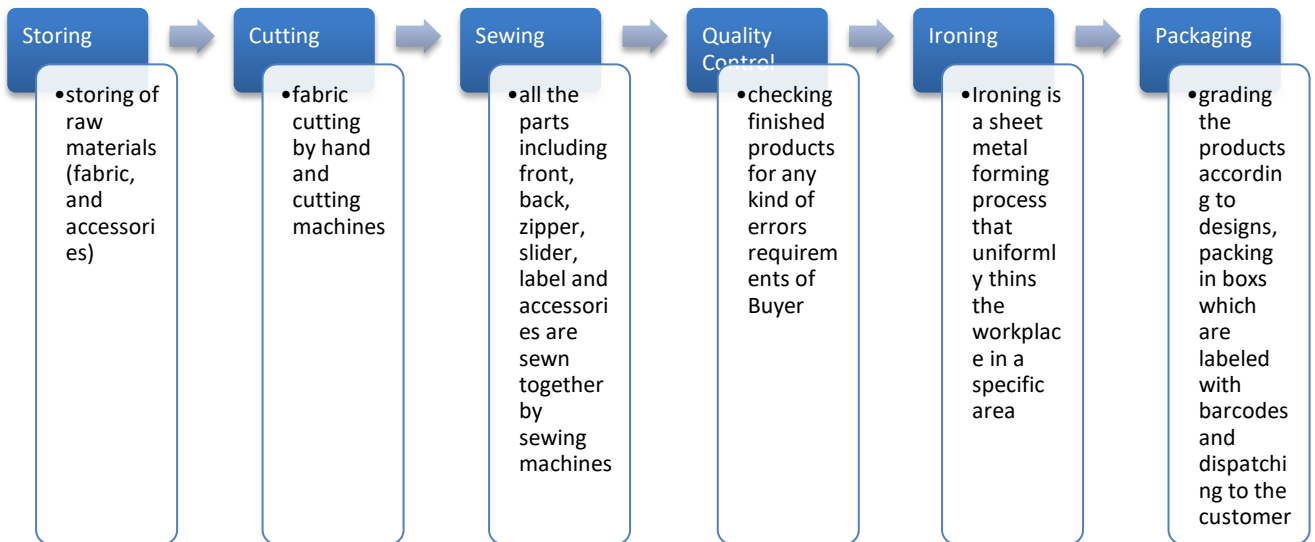


Adjacent Location Map of Proposed Project

Environmental Management Plan

The main Raw Materials are fabrics, button, interlining, thread, zipper, label, price tag etc. which imported from China and stored in specified area.

The main product of 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.



Warehouse



Cutting Area

Environmental Management Plan



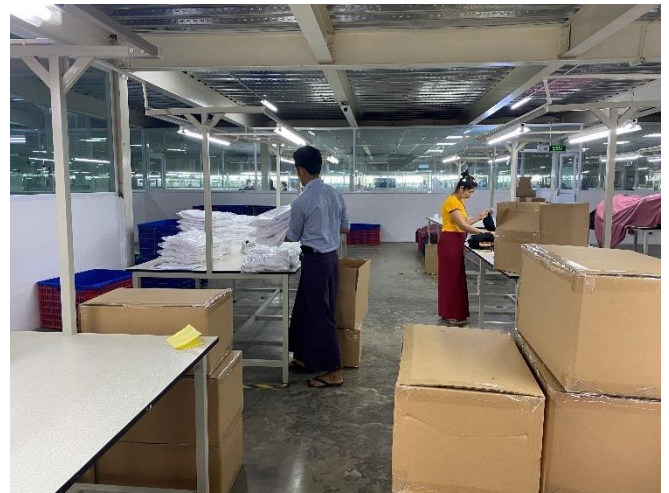
Sewing Area



Ironing Area



QC Area



Packing Area

Production Process



Environmental Management Plan



Product Photos

Production rate of factory is produced between first year of operation and thirty years operation as 1,990,000 to 2,637,000 pieces annually. It is required of work force 3 foreigner technician and 421 local employees for first year operation to 30 years operation.

Brief Description of Surrounding Environment

For environmental baseline, data were collected by onsite measurements analysis during operation phase on 25 February 2023. On-site measurement was taken by indoor temperature, humidity, noise level and operation light condition at the factory. Moreover, secondary data collection of proposed project site area such as socio-economic condition, physical/ biological environment, weather data were collected from official township data was obtained from Regional Data of Hmawbi Township.

Survey Result in Proposed Project

Type	Result
Weather Condition	
Indoor temperature	38.1 °C
Humidity	40.5 (%)
Noise level	
Operation area	56.2 dBA
Air Quality	
PM 10	16.3 µg/m ³
PM 2.5	10.9 µg/m ³
SO ₂	6.36 µg/m ³
NO ₂	23.38 µg/m ³
O ₃	33.4 µg/m ³
CO	0.52 µg/m ³
Light	
Warehouse	675 Lux
Cutting	835 Lux

Environmental Management Plan

Type	Result
Sewing Line	970 Lux
Ironing	840 Lux
Quality Control	1080 Lux
Packing	820 Lux

Risk Assessment and Mitigation Measure Plan

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.

Impact Assessment Parameter and Its Skill

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

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

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

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

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

Environmental Management Plan

60	Very high

Environmental Impact	Project Activities	Mitigation Measures
Operation Phase		
Air	Dust and GHGs emission from vehicles used for transporting raw materials and final products Emission of smoke from emergency diesel generator and vehicle movement	To control air pollution, the vehicles, generators and machineries have to check and maintain regularly. Ensuring vehicles, compressor and generator are well maintained. The factory has planted trees to reduce carbon emission and minimize air pollution
Soil	Engine oil leaks, spills at diesel storage and during fuel refueling	No mitigation measure
Water	Dormitory Cleaning and Kitchen	No mitigation measure
Noise and vibration	Generating noise from the production machinery	Should be built individual room like as generator room Low noise equipment should be used Should be provided the noise covering equipment or personal protective equipment (PPE)
Flora and fauna on terrestrial and aquatic life	Operation of the garment factory	No Mitigation Measure
Fire	Poor electrical installations Waste disposed area raw materials and chemical storage	To provide fire extinguishers, fire hose reels and fire hydrants on the walls of the factory for fire emergency cases. Regular inspection for existing firefighting equipment must be done. In case of fire emergency, water storage tank for fire frightening. The emergency fire alarms are installed at the factory for alerting the workers in case of fire. The main entrances and route for emergency cases of the factory must not be blocked with materials or machines for fire emergency cases.
Occupational Safety	Accidental cases cause by operating machines. Unloading, cutting, and packaging activities. Accidental cases of thermic fluid heater	First aid training, safety training, firefighting training or other essential training for machinery handling must be provided for emergency cases of workers. According to the observed light intensity values, the proponent provides sufficient lighting for workers for safe working and reducing optical problems of the workers. Personal Protective Equipment (PPEs) like earmuffs, safety gloves, helmets and goggles are provided for each department.

Environmental Management Plan

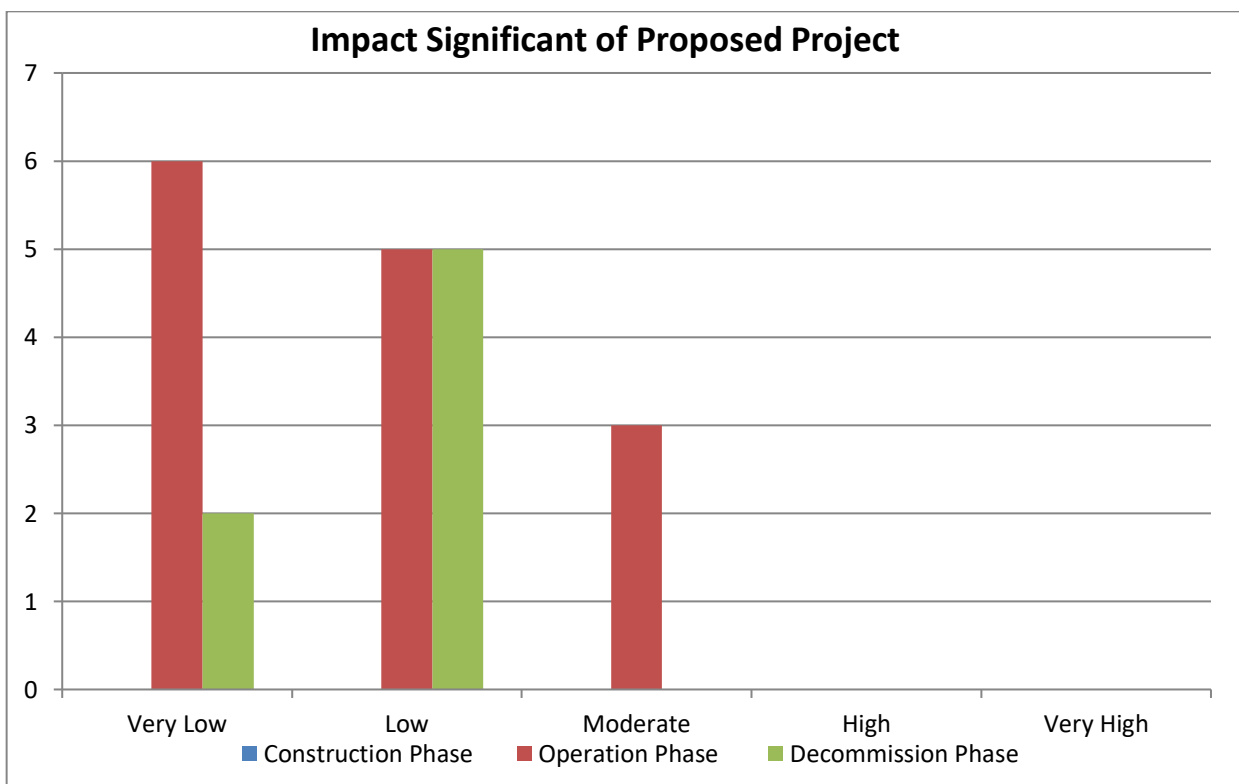
Environmental Impact	Project Activities	Mitigation Measures
		To prevent electric shock hazards, electrical maintenance staff (handyman) is to be assigned to do regular inspections and take preventive measures.
Health	Influx of people Noise from the generating of the emergency generators	Manage the drainage 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.
Solid waste	Residual pieces of fabric scraps from the production lines Waste from packaging materials Waste from kitchen, dormitory and office.	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.
Liquid waste	Septic system and sewage. Domestic liquid waste disposal from office, kitchen and dormitory.	Regular inspection and cleaning, oil traps, septic tank and adequate covers for all storage and waste disposal areas can decrease these contaminations.
Hazardous waste	Used oil and lubricant discharged from the maintenance of vehicles and machines.	Proper inspection and maintenance in storage of hazardous waste. The hazardous wastes are transported by specially licensed carriers and disposed in a licensed faculty (e.g., DOWA and YCDC)
Natural Disaster (Earthquakes, Floods, landslides and cyclone)		Preserve relevant records and equipment for the subsequent inquiry into the cause and circumstances of the emergency
Electrical failures	Aging Equipment. According to the 2019 Plant Engineering Maintenance Study, aging equipment is the leading cause of equipment failure, accounting for 40 percent of unplanned downtime in plants. Operator Error. Lack of Preventive Maintenance. Over-Maintenance.	Make regular inspection and electrical maintenance. Never touch a fallen power line. Avoid contact with overhead power lines during cleanup and other activities.
Equipment malfunctioning	Improper operation. Failure to perform preventive maintenance Too much preventive maintenance. Failure to continuously monitor equipment.	Establish a maintenance schedule. When repairs and upkeep take place on machines at regular intervals, these efforts can significantly improve the equipment reliability of these systems. Eliminate potential defects. Utilize equipment monitoring.
Mechanical and	Industrial machine failure includes	Make regular inspection, reactive maintenance,

Environmental Management Plan

Environmental Impact	Project Activities	Mitigation Measures
structural failures	things like bearing failure, metal fatigue, corrosion, misalignment, and general surface degradation. Incorrect selection of materials. Errors in design calculation and detailing. Improper construction techniques and insufficient quality control and supervision. Chemical attacks on concrete structures. External mechanical factors.	preventative maintenance, predictive maintenance Reducing failures of buildings and other structures requires competent design; clear communication of that design to the contractor by means of engineering drawings, etc.; careful and competent construction; and effective construction supervision.
Decommissioning Phase		
Air pollution	Decommissioning of buildings and related materials Transportation of demolished materials	Spray water twice a day Cover mesh trap around the decommission area Install shading net about 2 meters above temporary fence of decommission area Carry broken material with cover by canvas.
Water pollution	Sewage form decommissioning workers Demolition machinery equipment	Systematically demolish the septic tanks.
Soil Contamination	Decommissioning of buildings and related materials Transportation of demolished materials	Manage the spillage of oil and diesel and sewage.
Noise Pollution	Decommission activities Transportation of demolished materials	Carry out the activities during day time. Maintain the machines and vehicles to reduce noise pollution. Provide the ear plugs to the workers.
Waste disposal	Demolished debris such as bricks, concrete materials	Recyclable materials and dispose to the define areas.
Hazardous waste	Used lubricants from decommissioning vehicles and machines	Manage the disposal way of hazardous waste.
Occupational Health and Safety (Accidents, Injuries)	Decommissioning activities Transportation of demolished materials	Provide protective fencing or demarcation with tape at the boundaries of dangerous / hazardous zone and the appropriate warning signs, marking and safety signs and installation of the lost time injury notice board. Clean up excessive waste debris and liquid spills regularly. Use the third-party expert assisted by trained personnel to identify and remove hazardous materials.

Environmental Management Plan

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



Comparison of Impact Significant of Proposed Project

Environmental Management Action

The Environmental Management Plan (EMP) formulated with the anticipated impacts, mitigation measures, management and monitoring plans during all phases are implemented. WONDERFUL APPAREL COMPANY LIMITED has organized Environmental Management Team to accomplish these plans and to review EMP regularly for improvements and modifications. Ambient air quality, noise, water quality, sewage and solid waste disposal are monitored by Team Leaders of Committee. The project proponent has performed Corporate Social Responsibility (CSR) plan and Emergency Preparedness for the benefits of residents and local community. WONDERFUL APPAREL COMPANY LIMITED will contribute 2% of our Net Profit to social welfare activities that will help society and country of Myanmar.

CSR plan of WONDERFUL APPAREL COMPANY LIMITED

No	Particle	Contribution	Estimate Cost (Kyats)
1	Public school	0.5%	1,500,000/year
2	Non-profit training	1	2,500,000/year
3	Employee healthcare	0.5%	1,500,000/year

The environmental management action for the factory 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 action based upon the potential impacts of activities:

1. Air pollution/Dust Management plan

- Must be plant around the proposed project to reduce carbon emission
- Should be prohibited burning of waste material at the proposed project site
- Must be control air pollution, the vehicles, generators and machineries have to check and maintain regularly.
- The factory should use chimney for generator through which the flue gas is emitted for reducing the impact of stack emission on environment.
- Must be ensuring vehicles, compressor and generator are well maintained.

2. Noise 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.

3. Fire 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.

4. Occupational Safety and Health Management Plan

- 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

5. Solid Waste 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.

6. Liquid Waste Management Plan

- Regular inspection and cleaning, oil traps, septic tank and adequate covers for all storage and waste disposal areas can decrease these contaminations.

7. Hazardous Waste Management Plan

- Proper inspection and maintenance in storage of hazardous waste.
- Dispose of hazardous chemicals and containers in accordance with occupational health, safety and environmental requirements.
- The empty chemical containers will hand over to suppliers for recycle or appropriate disposal
- The hazardous wastes are transported by specially licensed carriers and disposed in a licensed faculty (e.g. DOWA and YCDC)

8. Energy 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

9. Emergency Response and Disaster 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

10. Environmental Monitoring Schedule and Reporting

11. Capacity Building and Training Plan

Public Consulting

On 17 May 2023, a public consultation and disclosure ceremony was held at Plot No.294+295+296, Myay Taing Block No. Myaung Tagar Thanmani Industrial Zone, Hmawbi Township, Yangon., following the EIA procedure.

Time and Date	Thursday, 17 th May 2023 10:30 AM – 11:45 PM
Venue	Meeting Room of Wonderful Apparel Company Limited, (Myaung Tagar Industrial Zone, Hmawbi Township.)
Agenda	Introduction of Wonderful Apparel Company Limited.

Environmental Management Plan

	Project Activities and its Significant Impacts Environmental Baseline Study of the proposed project Risk Assessment and Mitigation Measures Environmental Management Plan Environmental Monitoring Plan and Budget Plan Corporate Social Responsibilities and factory's activities
Organized by	Myanwei Environmental Solutions Company Limited.

Conclusion and Recommendation

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

This is recommended that;

- All appropriate environmental management measures detailed in this report, together with any other environmental management commitments should be implemented throughout the entire life of the factory
- Solid wastes and liquid wastes need to dispose according to YCDC rules and regulation
- 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 WONDERFUL APPAREL COMPANY LIMITED. The Environmental Management Plan (EMP) aims at controlling pollution at source with available and affordable technology followed by treatment measures. Waste minimization and waste recycling measures are emphasized. In addition to the industry specific control measures, the proposed industry should adopt following guidelines.

1.1. AIM OF ENVIRONMENTAL MANAGEMENT PLAN

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

1.2. OBJECTIVE OF ENVIRONMENTAL MANAGEMENT PLAN

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

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

Environmental Management Plan

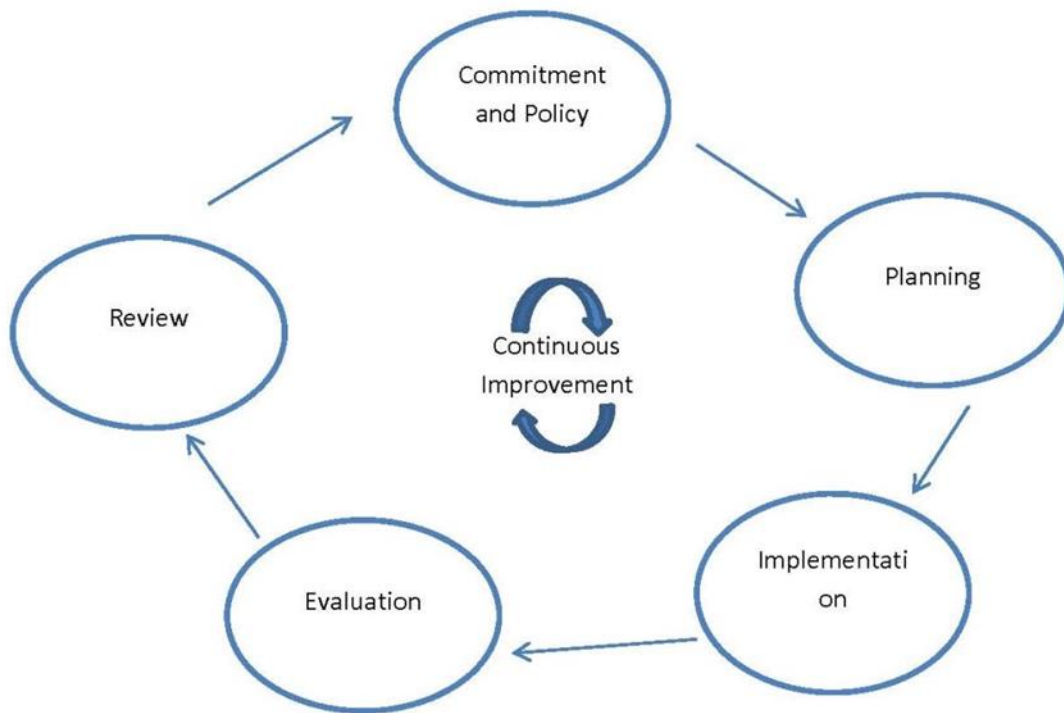


Figure 1-1 Continuous Improvement Circle

- **Commitment and Policy** – Top management commits to environmental improvement and establishes the organization’s environmental policy. The policy is the foundation of the EMS.
- **Planning** – An organization first identifies environmental aspects of its operations. Environmental aspects are those items, such as air pollutants or hazardous waste that can have negative impacts on people and the environment. An organization then determines which aspects are significant by choosing criteria considered most important by the organization. For example, an organization may choose worker health and safety, environmental compliance, and cost as its criteria. Once significant environmental aspects are determined, an organization sets objectives and targets. An objective is an overall environmental goal (e.g., minimize use of chemical X). A target is a detailed, quantified requirement that arises from the objectives (e.g., reduce use of chemical X by 25% by September 1998). The final part of the planning stage is devising an action plan for meeting the targets. This includes designating responsibilities, establishing a schedule, and outlining clearly defined steps to meet the targets.
- **Implementation** – An organization follows through with the action plan using the necessary resources (human, financial, etc.). An important component is employee training and awareness for all employees. Other steps in the implementation stage include documentation, following operating procedures, and setting up internal and external communication lines.

Environmental Management Plan

- **Evaluation** – A company monitors its operations to evaluate whether targets are being met. If not, the company takes corrective action.
- **Review** – Top management reviews the results of the evaluation to see if the EMS is working. Management determines whether the original environmental policy is consistent with the organization's values. The plan is then revised to optimize the effectiveness of the EMS. The review stage creates a loop of continuous improvement for a company.

1.2.1. Institutional Requirement

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

1.2.2. Responsibilities of the EMP

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

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

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

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

1.2.3. Structure and Responsibilities for the EMP Development and Implementation

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

Environmental Management Plan

- Ensure a monitoring system is in place to track and report all health, safety and environmental incidents;
- Carry out a thorough initial site inspection of environmental controls prior to work commencement;
- Record and provide a written report to the General Manager and production team of non-conformances with the EMP and require the HR supervisor to undertake mitigation measures to avoid or minimize any adverse impacts on environment or report required changes to the EMP.

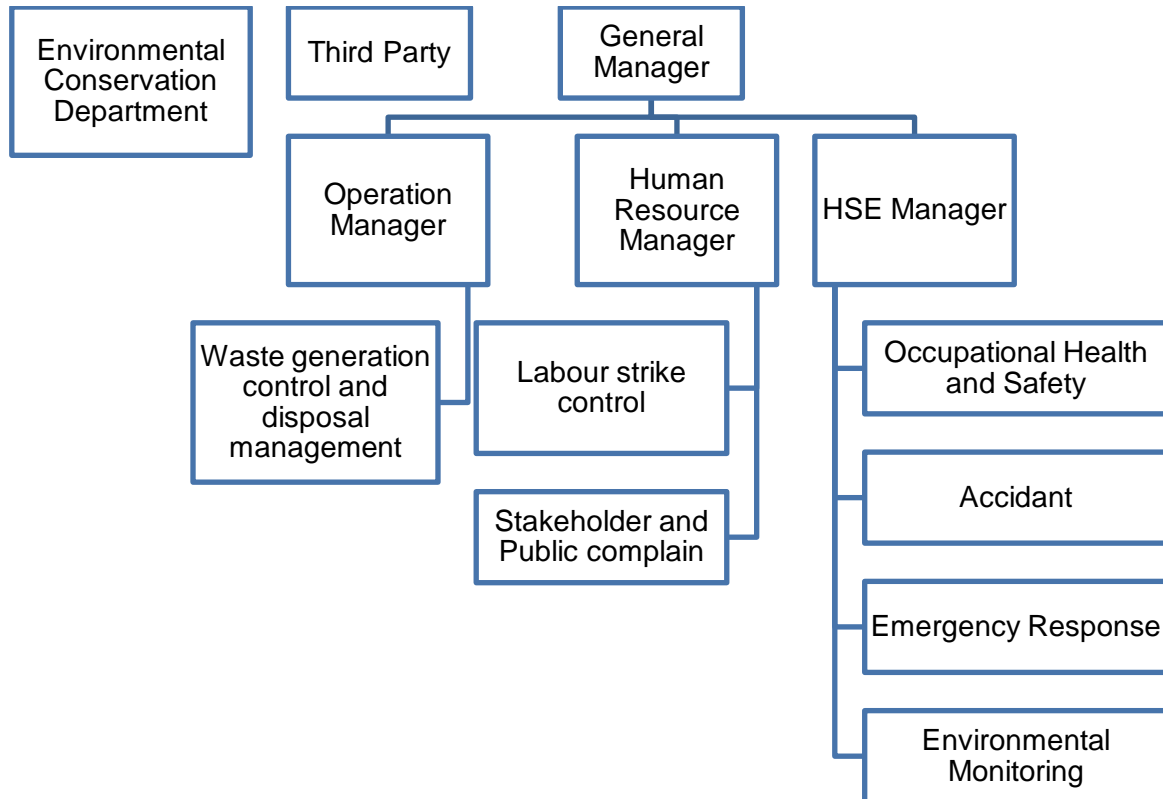


Figure 1-2 Organization Structure of Environmental Management Plan

Table 1-1 Responsibilities of HSE Members

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

Environmental Management Plan

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

1.3. PROJECT BACKGROUND

The project is new investment for manufacturing of garments on CMP basis company. The Yangon Region Investment Committee (YRIC) issues the project on 11 June 2020 with the Endorsement No. (YGN- 389/2020). YRIC notified for the environmental approval and comments of the Ministry of the Natural Resources and Environmental Conservation (MONREC) on the proposed project and had approved the proposal for investment in manufacturing of Garment on Cutting, Making and Packaging (CMP) basis under the name of WONDERFUL APPAREL 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 Environmental Management Plan (EMP) to meet the environmental assessment requirements of Notification No. Ya Ka 1/3/4 (EIA) (1699/2020) on 2 June 2020. Therefore, WONDERFUL APPAREL COMPANY LIMITED commissioned Myanwei Environmental Solutions Company Limited (Myanwei) for EMP report study.

1.4. PROJECT PROPONENT PROFILE

This is the information of project proponent from the YRIC's registration that is describing in below Table 1-2 and Table 1-4.

Environmental Management Plan

Table 1-2 Information of Investor

Investor Name:	MR. XU, LIANGSHENG
Passport No:	EE-1445968
Citizenship:	Chinese
Address of Registration office:	Room-1801, 18 Floor, Building A, CFC, 300 East Zhongshan Road, Nanjing, Jiangsu Province, People's Republic of China.
Phone No.	Daw Lae Yin Than Win (Accountant) 09-684840007 Laeyin.wffinance14@gmail.com

Table 1-3 Director List

Name of Shareholder	Citizenship	Percentage
WONDERFUL APPAREL COMPANY LIMITED Representative by;		100 %
Mr. Xu, Liangsheng	Chinese	80%
Mr. Jiang, Bin	Chinese	10%
U Than Aung	Myanmar	10%

1.4.1. Investment Plan and Salient Features of the Project

The estimated authorized capital investment is USD 1.897 million. Organization chart of WONDERFUL APPAREL COMPANY LIMITED is presented in Table 1-4.

Table 1-4 Salient features of the project

Type of Proposed Business	Manufacturing of Garment on CMP Basis
Type of investment	Joint Venture
Type of Share	Ordinary Share
Type of land	Industrial Land
Total land area	6.860 acres (27761.43 sqm)
Total building area	(80×152 m) 1 Storey Factory Building
Land lease year	30 years
Construction period	1 year
Address	Plot No.294+295+296, Myay Taing Block No. Myaung Tagar Thanmani Industrial Zone, Hmawbi Township, Yangon.
Contact person	Daw Lae Yin Than Win (Accountant) 09-684840007 Laeyin.wffinance14@gmail.com

Environmental Management Plan

1.5. ENVIRONMENTAL CONSULT PROFILE

Myanwei Environmental Solutions Company Limited prepares the EMP for the proposed project. 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.

Myanwei Environmental Solutions Company Limited	No.49(B), Inya Yeik Thar Street, Mayangone Township, Yangon, Myanmar.	01-501221 env@myanweiconsulting.com www.myanweiconsulting.com.
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Table 1-5 Member of EMP Study Team

Name	Qualification	Position	Responsibility
Mr. Lin Htet Sein (Director) TCR No. 0048	MSc (Regional Geology) BSc (Hons) Geology Diploma in Environmental Quality Monitoring & Analysis Certificate in EMS ISO-14001:2015 Certificate in ESIA practical training	Leader	Project Management, Impact assessment, management plan and overall seeing/writing the EIA assessment report
Dr. Hein Lynn Aung (Director)	M.B, B.S (Yangon), Business Management (International Collage of Management Sydney, Australia)	Co-Leader	Public Health Consultant, Project Management
Mr. Htun Lin Kyaw (Senior Environmental Consultant), Physical Specialist	B. Sc (Hons) Geology M.Sc. Geology (Structural)	Member	Baseline Study Preparation, Site Visit and Environmental Quality Monitoring, Participating and Presentation of Public Consultation Meeting,
Ms. Su Myat Hlaing (Environmental Engineer) Social and physical specialist	B.E. Civil Engineering B. Tech Civil Engineering	Member	Baseline Study Preparation, Site Visit and Environmental Quality Monitoring, Participating and Presentation of Public Consultation Meeting, Social Surveying and Data Analysis
Ms. Haymar Htet Naing (Social Expert)	B.A (Eng)	Member	Baseline Study Preparation, Site Visit and Environmental Quality Monitoring, Participating and Presentation of Public Consultation Meeting, Social Surveying and Data Analysis
Mr. Saw Yan Naung (Chemical Engineer)	B.E. Chemical Engineering B. Tech Chemical Engineering	Member	Communication with the Government and the Clients, Site Visit, Baseline data Monitoring and Analysis, Environmental Quality Monitoring, Writing Report
Mr. Kaung Sett Lwin (Environmental Consultant)	B.Sc (Hons) Geology Certificate of Geotechnical Engineering (Myanmar Geoscience Society)	Member	Baseline Study Preparation, Site Visit and Environmental Quality Monitoring, Participating and Presentation of Public Consultation Meeting,

Environmental Management Plan

Name	Qualification	Position	Responsibility
			Social Surveying and Data Analysis
Mr. Lynn Than Thaung (Environmental Consultant)	B.Sc (Forestry)	Member	Site Surveying and Environmental Quality Monitoring, Writing Report
Ms. Pyae Phyo Win (Ecological Consultant)	M. Sc (Botany)	Member	Site Surveying and Environmental Quality Monitoring, Writing Report
Ms. May Soe Kyi (Junior Environmentalist)	B.Agr.Sc (Qualified) PGDCSM- 6 Post Graduate Diploma in Civil Service Management	Member	Participating and Presentation in Public Consultation Meeting, Social Surveying and Data Analysis

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.
Environmental Conservation Law, 30 March 2012	
Objectives	to contract a healthy and clean environmental and to conserve natural and cultural heritage for the benefit of present and future generations; to maintain the sustainable development through effective management of natural resources and to enable to promote international, regional and bilateral cooperation in the matters of environmental conversation.
Section 3	c) to enable to emerge a healthy and clean environment and to enable to conserve natural and cultural heritage for the benefit of present and future generations; (d) to reclaim ecosystems as may be possible which are starting to degenerate and disappear; (e) to enable to manage and implement for decrease and loss of natural resources and for enabling the sustainable use beneficially;

Environmental Management Plan

Provisions of Duties and Powers relating to the Environmental Conservation of the Ministry: Section 7	<p>(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;</p> <p>(b) To prescribe categories of hazardous substances that may affect significantly at present or in the long run on the environment;</p> <p>(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;</p> <p>(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;</p> <p>(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;</p> <p>(o) To manage to cause the polluter to compensate for environmental impact, cause to contribute fund by the organizations which obtain benefit from the natural environmental service system, cause to contribute a part of the benefit from the businesses which explore, trade and use the natural resources in environmental conservation works.</p>
Chapter VI Environmental Quality Standards: Section 10	<p>The Ministry may, with the approval of the Union Government and the Committee, stipulate the following environmental quality standards:</p> <p>(a) suitable surface water quality standards in the usage in rivers, streams, canals, springs, marshes, swamps, lakes, reservoirs and other inland water sources of the public;</p> <p>(b) water quality standards for coastal and estuarine areas;</p> <p>(c) underground water quality standards;</p> <p>(d) atmospheric quality standards;</p> <p>(e) noise and vibration standards;</p> <p>(f) emissions standards;</p> <p>(g) effluent standards;</p> <p>(h) solid wastes standards;</p> <p>(i) other environmental quality standards stipulated by the Union Government.</p>
Section 14	A person causing a point source of pollution shall treat, emit, discharge and deposit the substances which cause pollution in the environment in accord with stipulated environmental quality standards.
Section 15	The owner or occupier of any business, material or place which causes a point source of pollution shall install or use an on-site facility or controlling equipment in order to monitor, control, manage, reduce or eliminate environmental pollution. If it is impracticable, it shall be arranged to dispose the wastes in accord with environmentally sound methods.
Section 16	<p>A person or organization operating business in the industrial estate or business in the SEZ or category of business stipulated by the Ministry:</p> <p>(a) is responsible to carry out by contributing the stipulated cash or kind in the relevant combined scheme for the environmental conservation including the management and treatment of waste;</p> <p>(b) shall contribute the stipulated users' charges or management fees for the environmental conservation according to the relevant industrial estate, SEZ and business organization;</p> <p>(c) shall comply with the directives issued for environmental conservation according to the relevant industrial estate, SEZ or business.</p>

Environmental Management Plan

Section 24	The project proponent has to allow relevant governmental organization or department to inspect whether performing is conformity with the terms and condition include in prior permission, stipulated by the ministry, or not.
Section 25	The project proponent has to comply with the terms and conditions include in prior permission.
Section 29	The project proponent has to abide by the stipulations included in the rules, regulations, by-law, order, notification and procedure, which are issued by said law.
Environmental Conservation Rules, 2014	
Rules 58	The Ministry shall form the EIA Report Review Body with the experts from the relevant Government departments, organizations.
Rules 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.
Environmental Impact Assessment Procedure (December 2015)	
Objectives	<p>The project proponent has to be liable for all adverse impacts caused by doing or emitting of project owner or contractor, sub-contractor, officer, employee, representative or consultant who is appointed or hired to perform on behalf of project owner, under sub-paragraph (a) of paragraph 102.</p> <p>The project proponent has to support, after consulting with effected persons by project, relevant government organization, government department and other related persons, to resettlement and rehabilitation for livelihood until the effected persons by the project receiving the stable socio-economy which is not lower than the status in pre-project, under sub-paragraph (b) of paragraph 102</p> <p>The project proponent has to fully implement all commitments of project and conditions included in EMP. Moreover, the project proponent has to be liable for contractor and sub-contractor who perform on behalf of him/her have to fully abide by the relevant laws, rules, this procedure, EMP and all conditions, under paragraph 103.</p> <p>The project proponent has to be liable and fully & effectively implement all requirements included in ECC, relevant laws and rules, this procedure and standards under rule 104.</p> <p>The project proponent has to inform the completed information, after specifying the adverse impacts caused by the project, from time to time, under paragraph 105.</p> <p>The project proponent has to continuously monitor all adverse impacts in the pre-construction phrase, construction phrase, operation phrase, suspension phrase, closure phrase and post-closure phrase, moreover has to implement the EMP with abiding the all conditions included in ECC, relevant laws & rules and this procedure, under paragraph 106.</p> <p>The project proponent has to submit, as soon as possible, the failures of his or her responsibility, other implementation, ECC or EMP. If dangerous impact caused by this failure or failure should be known by the Ministry the project</p>

Environmental Management Plan

	<p>proponent has to submit within 24 hours and other than this situation has to submit within 7 days from knowing it, under paragraph 107.</p> <p>The project proponent has to submit the monitoring report dually or prescribed time by Ministry in line with the schedule of EMP, under paragraph 108.</p> <p>The project proponent has to prepare the monitoring report in accord with the rule 109.</p> <p>The project proponent has to show this monitoring report in public place such as library, hall and website and office of project for the purpose to know this report by public within 10 days from the date which the report is submitted to the Ministry. Moreover, has to give the copy of this report, by email or other way which way agreed with the asked person, to any asked person or organization, under paragraph 110.</p> <p>The project proponent has to allow inspector to enter and inspect in working time and if it is needed by Ministry has to allow inspector to enter and inspect in the office and work-place of project and other work-place related to this project in any time, under paragraph 113.</p> <p>The project proponent has to allow inspector to immediately enter and inspect in any time if it is emergency or failure to implement the requirements related to social or environment or caused to it, under paragraph 115.</p> <p>The project proponent has to allow inspector to inspect the contractor and sub-contractor who implement on behalf of project, under paragraph 117.</p>
<p>Screening: Section 23</p>	<p>a) The project proponent shall submit the Project Proposal to the Ministry for Screening.</p> <p>b) The Ministry will send the Project Proposal to the Environmental Conservation Department to determine the need for environmental assessment.</p> <p>c) Following the preliminary Screening and verification that the Project Proposal contains all required documents and related materials, subject to Articles 8, 9, 10, 11, 26 and 27 the Department shall make a determination in accordance with Annex 1 ‘Categorization of Economic Activities for Assessment Purposes’, taking into account Article 25 and the additional factors listed in Article 28 in order to designate the Project as one of the following, and then submit it to the Ministry:</p> <p>i) An EIA Type Project, or</p> <p>ii) An IEE Type Project, or</p> <p>iii) A Non-IEE or EIA Type, and therefore not required to</p>
<p>National Environmental Quality (Emission) Guidelines (NEQG) (December 2015)</p>	
<p>Objectives</p>	<p>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.</p>
<p>National Environmental Policy of Myanmar (2019)</p>	
<p>National Environmental Policy Vision & mission</p>	<p>Vision A clean environment, with healthy and functioning ecosystem, that ensures includes development and wellbeing for all people in Myanmar.</p> <p>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.</p>
<p>Foreign Investment Law, 2012</p>	
<p>Section 8</p>	<p>(a) To support the primary objectives of the national economic development</p>

Environmental Management Plan

	<p>plan, and for businesses that cannot yet be run by the State and citizens or businesses that have insufficient funds and technology.</p> <p>(b) Development of employment activities</p> <p>(l) Protection and conservation of the environment.</p> <p>(q) Appearing the required modern services for the Union and citizens.</p>
Section 17	<p>(a) To abide by the existing laws of the Republic of the Union of Myanmar.</p> <p>(b) To carry out the business by forming a company under the existing laws of Myanmar by the investor.</p> <p>(h) To carry out not to cause environmental pollution or damage in accord with existing laws in respect of investment business.</p> <p>(k) To carry out the systematic transfer of high technology relating to the business which are carried out by the investor to the relevant enterprises, departments or organizations in accord with the contract.</p>
Foreign Investment Rule, 2013	
Rule 54	<p>The promoter or investor shall:</p> <p>(a) comply with Environmental Protection Law in dealing with environmental protection matters related to the business;</p> <p>(b) shall carry out socially responsible investment in the interest of the Union and its people;</p> <p>(c) shall co-operate with authorities for occasional or mandatory inspection;</p> <p>(d) shall exercise due diligence to be in conformity and harmony with norms and standards prescribed by relevant Union Ministry in conducting construction of factories, workshops, buildings, and other activities;</p> <p>(e) shall enforce Safety and Health</p>
Myanmar Investment Rules, 2017	
Rule 202	The project proponent has to comply with the conditions of the permit issued by the MIC and applicable laws when making the investment
Rule 203	The project proponent has to fully assist while negotiating with the authority for settling the grievance of the local community which has been affected due to investment
Rule 206.	The project proponent has to submit the passport, expert evidence or document of degree and profile to the MIC office for approval if decide to appoint a foreigner as senior management, technician expert or consultant according to subsection (a) of section 51 of Myanmar Investment Law
Myanmar Insurance Law (1993)	<p>Section 15 - If the project proponent uses the owned vehicles the project owner has to ensure the insurance for the injured person.</p> <p>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.</p>
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

Environmental Management Plan

	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.
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.

Environmental Management Plan

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	
<p>This law was enacted with the objectives of :</p> <p>a. To protect from being damaged the natural environment resources and being hazardous any living beings by chemical and related substances;</p> <p>b. To supervise systematically in performing the chemical and related substances business with permission for being safety;</p> <p>c. To perform the system of obtaining information and to perform widely educative and research for using the chemical and related substance systematically;</p> <p>d. To perform the sustainable development for the occupational safety, health and environmental conservation.</p> <p>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.</p>	
Underground Water Act	
<p>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.</p>	
Myanmar Fire Brigade Law (2015)	
<p>The Pyidaungsu Hluttaw enacted this law by Law No.11/2015 on the date of 17th March, 2015 with the following objectives:</p> <p>(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</p> <p>(b) to organize fire brigade systemically and to train the fire brigade</p> <p>(c) to prevent from fire and to conduct release work when fire disaster, natural disaster, epidemic disease or any kind of certain danger occurs</p> <p>(d) to educate, organize and inside extensively so as to achieve public corporation</p> <p>(e) to participate if in need for national security, peace for the citizens and law and order</p>	
Section-8 Fire Safety Procedures	
Rule17	<p>The relevant Government Department or organization shall, for the purpose of precaution and prevention obtain the approval of the Fire force Department before granting permission for the following cases:</p> <p>a. Constructing three-storied and above buildings market and condominium buildings,</p> <p>b. Operating hotel, motel, guest house enterprise</p> <p>c. Constructing factory, workshop, storage facilities and warehouse</p> <p>d. Operating business expose to fire hazard by using in inflammable materials or explosive materials</p> <p>e. Producing and selling fire-extinguishing apparatuses</p> <p>f. Doing transport business, public utility vehicles train, airplane, helicopter, vessel, ship, tonkin tug</p>
Rule18	<p>The relevant government department or organization shall obtain the opinion of the Fire Services Department for the purpose of fire precaution and prevention, when laying down plans for construction for town, village and downtown or village development plans</p>

Environmental Management Plan

The Electricity Law (2014)	
<p>In 2014, the new Electricity Law, a comprehensive piece of legislation covering licensing, a new regulatory commission, standards, inspection, tariff, and restrictions, replaced the Electricity Law of 1984. The Electricity Law divides projects into “small” (up to 10 MW), “medium” (between 10 MW to 30 MW) and large (upwards of 30 MW); the states and regions can issue permits for small and medium power plants. In case these plants are not connected to the national grid, the Union Government Ministry is not the primary authority involved. The authorities have a legal right to use land for the purpose of power plants under the Electricity Law, and have the right to expand and maintain their facilities. The law also provides that the authorities can build transmission lines in accordance with existing laws.</p>	
Boiler Law (2015)	
Chapter (2) Objective	<p>The objectives of this law are as follows:</p> <ul style="list-style-type: none"> (a) To obtain boilers in compliance with Myanmar Standards or International Standards (b) To prevent the country and citizens from hazards caused by boiler accidents (c) To use boilers in compliance with Myanmar Standards or International Standards within the country (d) To develop boiler technology and to produce experts capable of manufacturing, handling, repair, and maintenance of boilers (e) To optimize the use of boilers through effective utilization of fuel energy (f) To reduce the environmental, social and health impacts through long-lasting use of boilers.
Chapter (3) 4. With the permission of the Ministry, the inspector general can:	<p>Notify the inspection methods and instructions according to the national or international standards for safe operations of boilers in line with this law, procedures and instructions</p> <p>Only the results obtained from the prescribed boiler standards and inspection methods will be approved.</p>
Chapter (4). Boiler Registration	<p>5. Anybody who would like to use a boiler in any kind of business should be registered.</p> <p>6. Boiler should be manufactured according to Myanmar Standards or International Standards.</p> <p>7. Those who would like to apply for boiler registration according to Section 5 should apply to the inspector with the application, documents and vouchers related to boiler</p> <p>8. If the application regarding registration of boiler according to Section 7, the Registration Officer should conduct necessary inspection and submit results of the findings to the Inspector General.</p> <p>9. The Inspector General should assess and inspect the submission of the Registration Officer according to Section 8 and could allow or reject for registration of the boiler.</p> <p>10. The Inspector General shall define boiler size according to heated surface area in accordance with adopted procedures.</p>
Chapter (13) Prohibitions	<p>59. According to Section 21, nobody must alter, change, deface, deform or make embossed registration unnoticeable illegitimately.</p> <p>60. Nobody is allowed to repair a boiler without boiler repair certificate.</p> <p>61. Nobody is allowed to maintain a boiler without boiler maintenance certificate.</p> <p>62. Nobody must alter safety relief valve in order to exceed the allowable pressure due to his consent or direction given by the owner.</p> <p>63. Nobody must manufacture boilers against Section 25, Subsection 25 (a) and (b) enacted.</p>

Environmental Management Plan

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 if violates any act or any emission to omission to damage the interest of labour by reducing of product without efficient cause.
Section 46	Any employer who violates any prohibition contained in sections 38 and 39 shall, on conviction, be punished with a fine for a minimum of one-lakh kyats.
The employment and skill development (2013)	
This law was enacted for safeguarding the right of workers or having skillful of workers and making peaceful workplace or obtaining the rights fairly, rightfully and quickly by settling the dispute of employer and worker justly. Employer shall conduct occupational training to enhance the skills of workers.	

Environmental Management Plan

Section 5	The project proponent has to appoint employees with the contract in line with the provision of section 5 of said law.
Section 14	Employer shall conduct occupational training to enhance the skills of workers who are to be employed as well as workers who are presently employed in accordance with the requirements of the enterprise and the policy of the Skills Development Agency.
The Worker's Compensation Act, 1923	It stipulates that employer is required to make payments to employees who become injured or who die in any accidents arising during and in consequence of their employment. Such compensation also must be made for diseases which arise as a direct consequence of employment, such as carpal tunnel syndrome.
The Payment of Wages Act, 1936	The Payment of Wage Act defines the payment obligation to the workers employed in the factories or railway administration. It stipulates the method of payment stating that the payment should be made in cash on a regular payday, and allows legal action against delayed payment or un-agreeable deduction.
The Leave and Holidays Act (1951, partially revised in 2014)	This act has been used as the basic framework for leaves and holidays for workers with minor amendment in 2006 and 2014. This defines the public holidays that every employee shall be granted with full payment. It also defines the rules of leaves for workers including medical leave, earned leave and maternity leave.
The Minimum Wage Law (2013)	The minimum wage law, passed in March 2013, was replaced the 1949 Minimum Wage Act. The law provides a framework for minimum wage determination: the presidential office establishing a tripartite minimum wage committee shall decide minimum wage with industrial variation based on a survey on living costs of workers possibly every two years. This also stipulates equal payment.
Public Health Law (1972)	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 proponent has to allow any inspection, anytime, anywhere if it is needed under the section 5 of said law.
Prevention and Control 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 area, undertake the responsibility of carrying out the following environmental 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;

Environmental Management Plan

	Construction and use of sanitary latrines; Other necessary environmental sanitation measures.
Occupational Safety and Health Law (2019)	
Purpose:	To effectively implement measures related to safety and health in every industry and to set occupational safety and health standards;
Section-26 Sub-section (e)	The project proponent has to provide adequate and relevant personal protective equipment to workers free of charge and make them wear it during work so as not to expose workers to any serious occupational diseases or hazards.
Section-26 Sub-section (1)	The project proponent has to arrange and display occupational safety and health instructions, warning signs, notices, posters, and signboards.
Section-30 Sub-section (a)	The worker shall wear or use at all times any protective clothes, equipment and tools provided by the employer for the purpose of safety and health.
Section-30 Sub-section (d)	The worker shall proper and systematic use any equipment and tools, machines, any parts of the machines, vehicles, electricity and other substances being used at the workplace.
Section-30 Sub-section (e)	The worker shall take reasonable care for the safety and health of himself/ herself and of other persons who may be affected by his/ her acts or omissions at work.
The law on Standardization	
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 programe.
Chapter 7 Taking Action by Committee No. 19	The committee may, if it is found out that holder of certificate of certification violates any term or condition contained in the relevant recommendation, pass any of the following administrative order: warning suspending the certificate of certification for limited period cancelling the certificate of certification
လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတက်သောဝတ္ထုပစ္စည်းများဆိုင်ရာဥပဒေ (၂၀၁၈)	
ရည်ရွယ်ချက်	လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတက်သော ဝတ္ထုပစ္စည်းများကို စနစ်တကျပြုလုပ်ခြင်း၊ တင်သွင်းခြင်း၊ သယ်ယူခြင်း၊ သိုလှောင်ခြင်းနှင့် သုံးစွဲခြင်းတို့ပြုနိုင်ရန်၊ ယမ်းဘီလူးနှင့် ဆက်စပ်သုံးပစ္စည်းများ အသုံးပြုသည့် လုပ်ငန်းခွင်ဘေးအန္တရာယ်

Environmental Management Plan

	ကင်းရှင်း၍ လုံခြုံမှုရှိစေရန်၊ လုပ်ငန်းခွင်သုံး ပေါက်ကွဲစေတက်သော ဝတ္ထုပစ္စည်းများ ပြုလုပ်သုံးစွဲမှုများကို စနစ်တကျ ကြီးကြပ်နိုင်ရန်။
အခန်း ၇ တားမြစ်ချက်များ အမှတ် ၁၈	လိုင်စင်ရရှိသူနှင့် ခွင့်ပြုချက်ရရှိသူ မည်သူမျှ စစ်ဆေးရေးအရာရှိချုပ် သို့မဟုတ် စစ်ဆေးရေးအရာရှိ၏ စစ်ဆေးခြင်းကို ခံယူရန် ငြင်းပယ်ခြင်းမပြုရ။
အမှတ် ၁၉ (ခ)	ပုဒ်မ ၈ အရ ကာကွယ်ရေးဌာနကောင်စီ အမှုဆောင်အဖွဲ့၏ အတည်ပြုချက်မရရှိဘဲ လုပ်ငန်းခွင် ပေါက်ကွဲစေတက်သော ဝတ္ထုပစ္စည်းများကို 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 <ul style="list-style-type: none"> 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 Conservation of Water Resources and Rivers Law (2006)	
Aims	The aims of this Law are as follows: <ul style="list-style-type: none"> (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 improving water resources and river system; (d) to protect environmental impact.
Chapter 5 Prohibitions No. 8	No person shall: <ul style="list-style-type: none"> (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 from 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	Any Person who commences operation of a goods production enterprise or

Environmental Management Plan

Registration and Intimation of Commencement of Enterprise 11 (b)	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 Monthly Payment of Tax and Sending of Three-Monthly Return 12 (a)	Any person who has taxable proceed of sale or receipt from service within a year, shall pay due monthly tax within ten days after the end of the relevant month. Moreover, a three-monthly return shall be furnished 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. NATIONAL ENVIRONMENTAL QUALITY (EMISSION) GUIDLINES

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

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

2.2.1. General Guidelines

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

2.2.1.1. Air emission

Projects with significant sources of air emissions, and potential for significant impacts to ambient air quality, should prevent or minimize impacts by ensuring that: (i) emissions do not result in concentrations that reach or exceed national ambient quality guidelines and standards, or in their

Environmental Management Plan

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

Table 2-2 WHO's Air Quality Guideline

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

^a Particulate matter 10 micrometers or less in diameter

^b Particulate matter 2.5 micrometers or less in diameter

2.2.1.2. Wastewater

Industry-specific guidelines apply during the operations phase of projects and cover direct or indirect discharge of wastewater to the environment. They are also applicable to industrial discharges to sanitary (domestic) sewers that discharge to the environment without any treatment. Wastewater generated from project operations includes process wastewater, wastewater from utility operations, runoff from process and storage areas, and miscellaneous activities including wastewater from laboratories, and equipment maintenance shops. Projects with the potential to generate process wastewater, sanitary sewage, or storm water should incorporate the necessary precautions to avoid, minimize, and control adverse impacts to human health, safety or the environment. Industry-specific guidelines summarized hereinafter shall be applied by all projects, where applicable, to ensure that effluent emissions conform to good industry practice.

For project types where industry-specific guidelines are not set out in these Guidelines, the following general guideline values, or as stipulated on a case-by-case basis, apply during project operations.

Table 2-3 Wastewater, Storm Water Runoff, Effluent and Sanitary Discharges

Parameter	Unit	Guideline Values
5-day Biochemical oxygen demand	mg/l	50
Ammonia	mg/l	10
Arsenic	mg/l	0.1
Cadmium	mg/l	0.1

Environmental Management Plan

Chemical oxygen demand	mg/l	250
Chlorine (total residual)	mg/l	0.2
Chromium (hexavalent)	mg/l	0.1
Chromium (total)	mg/l	0.5
Copper	mg/l	0.5
Cyanide (free)	mg/l	0.1
Cyanide (total)	mg/l	1
Fluoride	mg/l	20
Heavy metals (total)	mg/l	10
Iron	mg/l	3.5
Lead	mg/l	0.1
Mercury	mg/l	0.01
Nickel	mg/l	0.5
Oil and grease	mg/l	10
pH	S.U. ^a	6-9
Phenols	mg/l	0.5
Selenium	mg/l	0.1
Silver	mg/l	0.5
Sulphide	mg/l	1
Temperature increase	°C	<3 ^b
Total coliform bacteria	100 ml	400
Total phosphorus	mg/l	2
Total suspended solids	mg/l	50
Zinc	mg/l	2

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

2.2.1.3. Noise levels

Noise prevention and mitigation measures should be taken by all projects where predicted or measured noise impacts from a project facility or operation exceed the applicable noise level guideline at the most sensitive point of reception. Noise impacts should not exceed the levels shown below, or result in a maximum increase in background levels of three decibels at the nearest receptor location off-site.

Table 2-4 Noise Levels of National Environmental Quality (Emission) Guideline

Receptor	One Hour LAeq (dBA) ^a	
	Daytime 07:00 – 22:00 (10:00 – 22:00 for public holidays)	Nighttime 22:00 – 07:00 (22:00 – 10:00 for public holidays)

Environmental Management Plan

Receptor	One Hour LAeq (dBA) ^a	
	Daytime 07:00 – 22:00 (10:00 – 22:00 for public holidays)	Nighttime 22:00 – 07:00 (22:00 – 10:00 for public holidays)
Residential, institutional, education	55	45
Industrial, commercial	70	70

^a Equivalent continuous sound level in decibels

2.2.2. Garment, Textile and Leather Products Manufacturing

This guideline applies to textile manufacturing using natural fibers, synthetic fibers (made entirely from chemicals), and regenerated fibers (made from natural materials by processing these materials to form a fiber structure). It does not include polymer synthesis and natural raw material production.

2.2.2.1. Effluent levels

Parameter	Unit	Guideline Value
5-day Biochemical oxygen demand	mg/l	30
Absorbable organic halogens	mg/l	1
Ammonia	mg/l	10
Cadmium	mg/l	0.02
Chemical oxygen demand	mg/l	160
Chromium (hexavalent)	mg/l	0.1
Chromium (total)	mg/l	0.5
Cobalt		0.5
Color		7 (436 nm ^a , yellow) 5 (525 nm, red) 3 (620 nm, blue)
Copper	mg/l	0.5
Nickel	mg/l	0.5
Oil and grease	mg/l	10
Pesticides		0.05-010 ^b
pH	S.U. ^c	6-9
Phenol	mg/l	0.5
Sulfide	mg/l	1
Temperature increase	°C	<3 ^d
Total coliform bacteria	100 ml	400
Total nitrogen	mg/l	10

Environmental Management Plan

Total phosphorus	mg/l	2
Total suspended solids	mg/l	50
Zinc	mg/l	2

a Nanometers

b 0-05 mg/l for total pesticides (organ phosphorus pesticides excluded); 0.10 mg/l for organo phosphorus pesticides

c Standard Unit

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

2.2.2.2. Air emission levels

Parameter	Unit	Guideline Value
Ammonia	mg/Nm ^{3a}	30
Carbon disulfide	mg/Nm ³	150
Chlorine	mg/Nm ³	5
Formaldehyde	mg/Nm ³	20
Hydrogen sulfide	mg/Nm ³	5
Particulates	mg/Nm ³	50 ^b
Volatile organic compounds	mg/Nm ³	2/20/50/75/100/1 150 ^{c, d}

a Milligrams per normal cubic meter at specified temperature and pressure

b as the 30-minute mean for stack emissions

c Calculate as Total carbon

d As the 30-minute mean for stack emissions; 2 mg/Nm³ for volatile organic compounds classified as carcinogenic or mutagenic with mass flow greater than or equal to 10 g/hr; 20 mg/Nm³ for discharges of halogenated volatile organic compounds with a mass flow equal or greater than 100 g/hr; 50 mg/ Nm³ for waste gases from drying of large installations (solvent consumption > 15 tons/year); 75 mg/Nm³ for coating application processes for large installations (solvent consumption > 15 tons/year); 100 mg/Nm³ for small installations (solvent consumption < 15 tons/year); if solvent is recovered from emissions and reused, the guideline value is 150 mg/Nm³

2.2.3. IFC EHS Guidelines

The EHS Guidelines¹ by International Finance Cooperation (IFC) are technical reference documents with general and industry-specific examples of Good International Industry practice (GIIP), as defined in IFC’s Performance Standard 3: Resources Efficiency and Pollution Prevention. The EHS Guidelines contain the performance levels and measures that are normally acceptable to IFC, and that are generally considered to be achievable in new facilities at reasonable costs by existing technology.

There are two kinds of guidelines, General EHS Guidelines and Industry Sector Guidelines. The General EHS Guidelines contain information on cross-cutting environmental, health, and safety issues potentially applicable to all industry sectors in the following section: (1) Environment, (2) Occupational Health and Safety, (3) Community Health and Safety and (4) Construction and Decommissioning. Table 2-5 shows the contents of the section of Community Health and Safety.

Table 2-5 Community health and safety contents

Contents	Brief Description
Water Quality and Availability	Drinking water sources should at all times be protected so that they meet or exceed applicable national acceptability standards or in their absence the current edition of WHO Guidelines for Drinking-Water Quality. Project activities should not compromise the availability of water for personal hygiene needs

Environmental Management Plan

Contents	Brief Description
	and should take account of potential future increases in demand. The overall target should be the availability of 100 liters per person per day.
Structural Safety of Project Infrastructure	Reduction of potential hazards is best accomplished during the design phase when the structural design, layout and site modifications can be adapted more easily. The following issues should be considered and incorporated as appropriate into the planning, siting, and design phases of a project (1) inclusion of buffer strips or other methods of physical separation around project sites to protect the public from major hazards associated with hazardous materials incidents or process failure (2) incorporation of siting and safety engineering criteria to prevent failures due to natural risks posed by earthquakes, tsunamis, wind, flooding, landslides and fire, and (3) application of locally regulated or internationally recognized building codes, standards and regulations, and mitigation measures.
Traffic Safety	Traffic safety should be promoted by all project personnel during displacement to and from the workplace, and during operation of project equipment on private or public roads. Prevention and control of traffic related injuries and fatalities should include the adoption of safety measures that are protective of project workers and of road users, including those who are most vulnerable to road traffic accidents.
Transport of Hazardous Materials	Projects should have procedures in place that ensure compliance with local laws and international requirements applicable to the transport of hazardous materials.
Disease Prevention	Recommended interventions against the communicable diseases at the project level include (1) providing surveillance and active screening and treatment of workers, (2) preventing illness among workers in local communities by undertaking health awareness and education initiatives, training health workers in disease treatment and conducting immunization programs for workers, and (3) providing treatment through standard case management in on-site or community health care facilities.
Emergency preparedness and Response	All projects should have an Emergency preparedness and Response Plan that is commensurate with the risks of the facility and that includes the following basic elements: (1) Administration (policy, purpose, distribution, definitions, etc.) (2) Organization of emergency areas (command centers, medical stations, etc. (3) Roles and responsibilities, (4) Communication systems, (5) Emergency response procedures, (6) Emergency resources, (7) Training and updating, (8) Checklists (role and action list and equipment checklist), and (9) Business Continuity and Contingency.

2.3. INSTITUTIONAL ARRANGEMENT

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

2.4. COMMITMENT OF WONDERFUL APPAREL COMPANY LIMITED

WONDERFUL APPAREL COMPANY LIMITED has made the commitments and responsible for the preservation of the environment at and around the area of project site. In addition to this, it shall

Environmental Management Plan

carry out as per instructions made by Ministry of MONREC in which to conduct an EMP which describe the measure to be taken for preventing, mitigation and monitoring significant environment impacts resulting from the implementation and operation of proposed project or business or activity has to be prepared and submitted and to perform activities in accordance with this EMP and be abided by the environment policy, Environmental Conservation Law and other environmental related rules and procedures.

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

WONDERFUL APPAREL 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 (EMoP)
- Submitting environmental monitoring reports to ECD
- Planning and implementation of CSR activities
- To set up welfare plan such as staff medical checkup, training program and Public talk for getting knowledge, risk prevention, bonus and social security service
- To carry out fire safety assessment and ensure adequate and appropriate fire safety measures for employees.

3. PROJECT DISCRIPTION

3.1. LOCATION OF PROPOSED PROJECT

The proposed project is located at Latitude 17°9'38.30"N and Longitude 95°58'13.28"E Plot No.294+295+296, Myay Taing Block No. Myaung Tagar Thanmani Industrial Zone, Hmawbi Township, Yangon. The location map of the proposed project site is shown in Figure 3-1.

3.2. OBJECTIVES OF PROPOSED PROJECT

The proposed project intends to manufacture garment on CMP basic and to export 100% of the finished products. Factory will be imported raw materials from China and finished the good products exported to China.

3.3. SITE DESCRIPTION OF PROPOSED PROJECT SITE

The proposed project locates at the coordinates of Latitude 17°9'38.30"N and Longitude 95°58'13.28"E. The total area of project site is 6.86 acres (27761.43 sqm). One storey building (80 × 152 m) is used for operation. Main structure is designed into office area and QC department, sewing department, cutting department and iron department for production building and transformer room, generator room are separated by main factory building structure. The factory layout plan can be seen in below.

3.4. ADJACENT MAP OF PROPOSED PROJECT

WONDERFUL APPAREL COMPANY LIMITED is located at Plot No.294+295+296, Myay Taing Block No. Myaung Tagar Thanmani Industrial Zone, Hmawbi Township, Yangon. The nearest water source is Hlaing River is located at the west side of the factory. The main road of the proposed project is Yangon-Pyay Road.

Environmental Management Plan

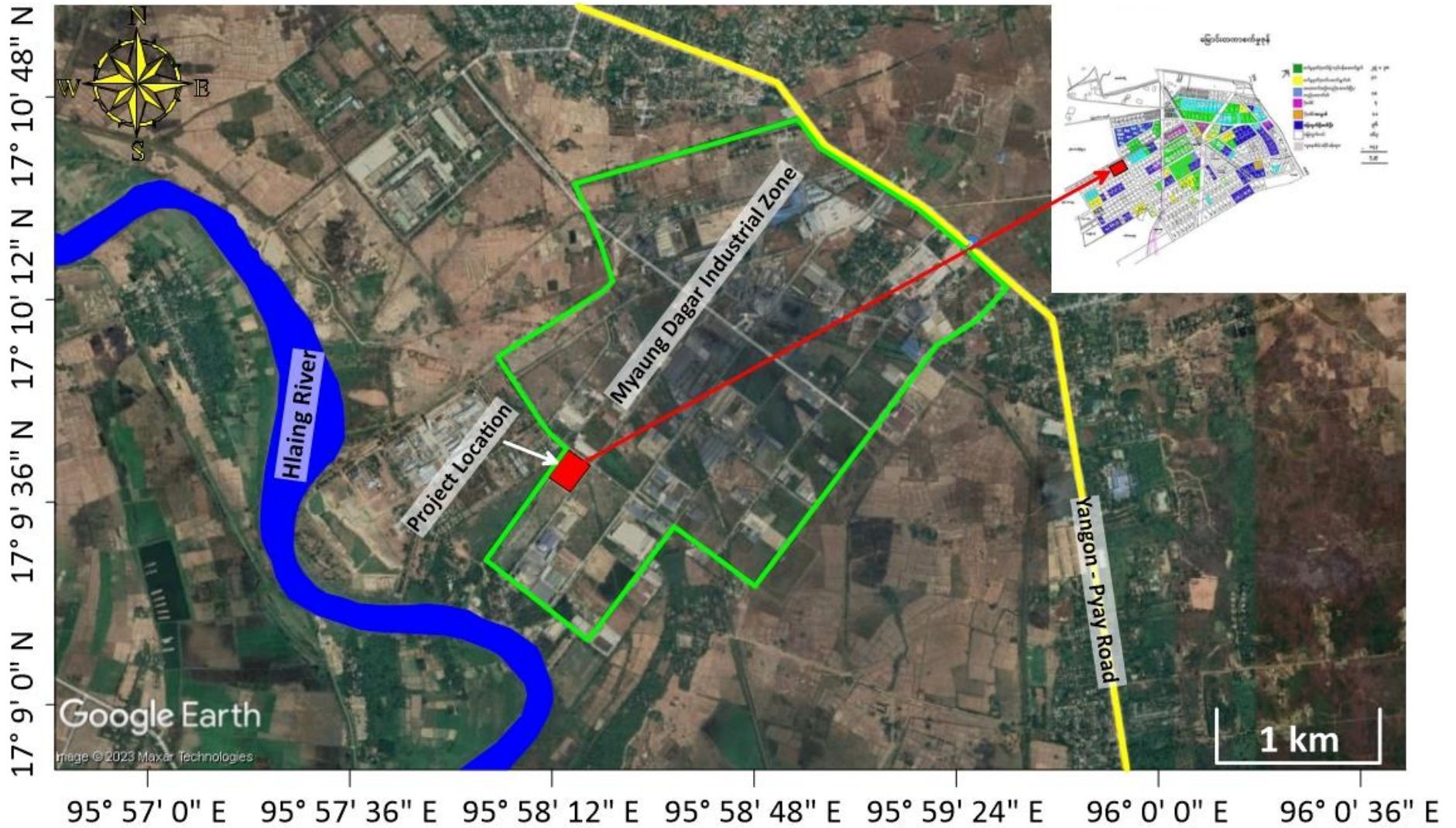


Figure 3-1 Location Map of WONDERFUL APPAREL COMPANY LIMITED

Environmental Management Plan

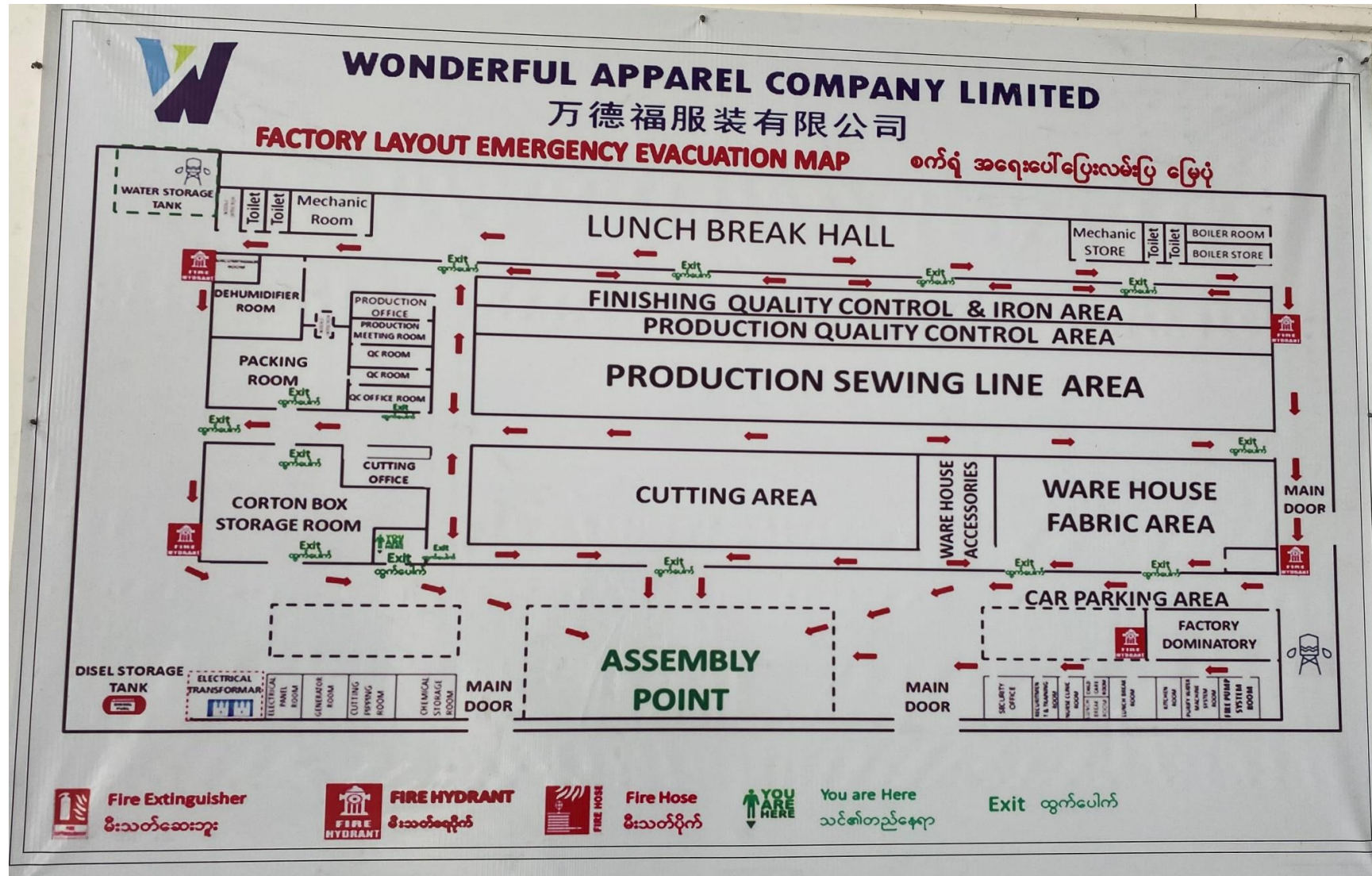


Figure 3-2 Factory Layout Drawing

Environmental Management Plan

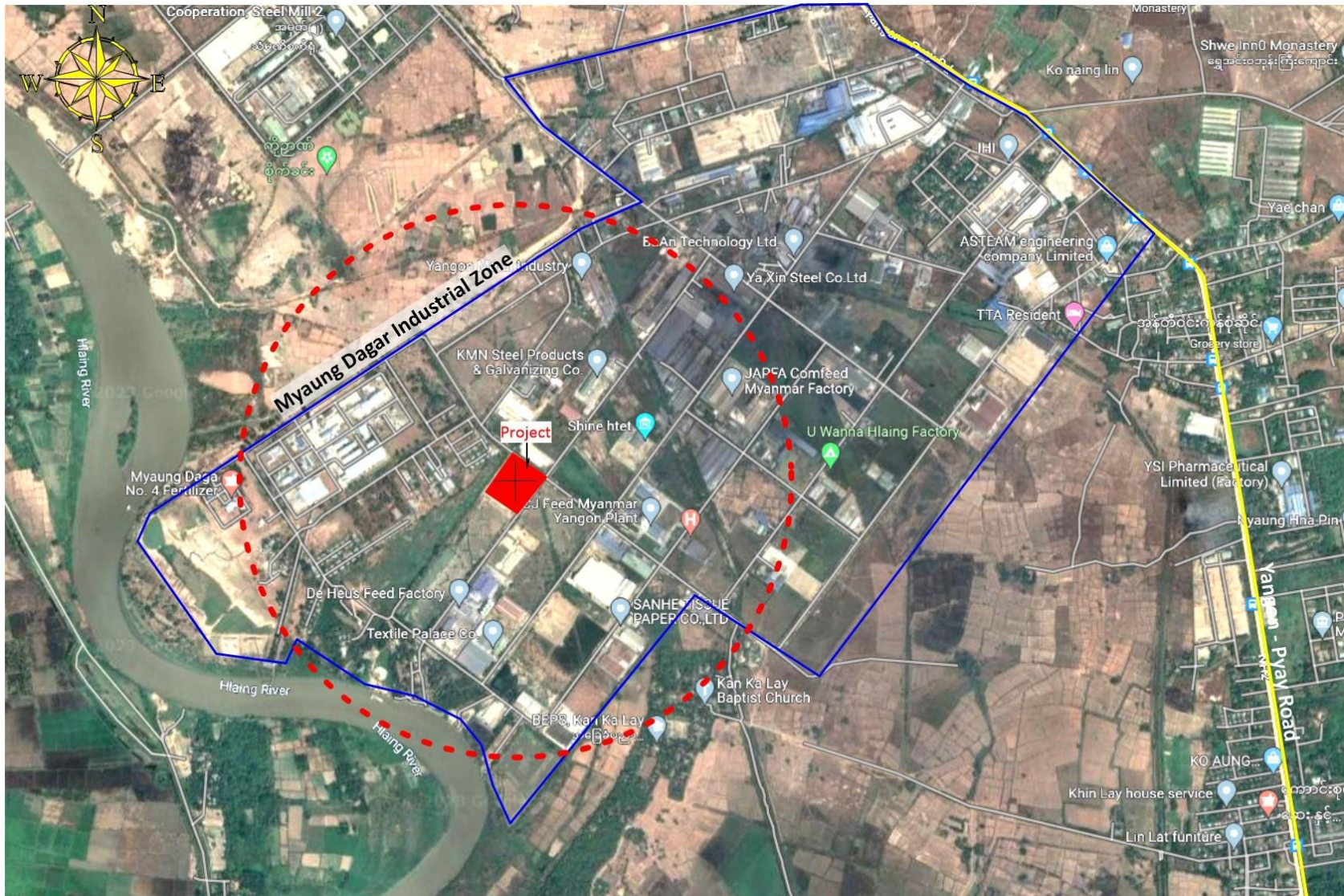


Figure 3-3 Adjacent Location Map of Proposed Project

Environmental Management Plan

3.5. PROJECT OPERATION

Construction phase of the factory is started in June 2020 according to the YRIC’s Endorsement. The operation phase of the factory is started from the first week of July 2021 and the validity of endorsement is 30 years. WONDERFUL APPAREL COMPANY LIMITED will close the factory as their MIC proposal.

Table 3-1 WONDERFUL APPAREL COMPANY LIMITED’s Project Life Span

Construction Phase	Operation Phase	Decommissioning Phase
2020 → 2021	2021 → 2050	2050 →

3.5.1. Production Process

The production process is based on CMP system in which the production on consignment in which the main raw materials are provided by overseas buyers and imported free of charge, then cut, sewn and packed in the domestic factories, after which all of the finished products are exported. The main operation of the proposed factory is sewing. The sewing was operated one and two-needle sewing machine and checked by quality control supervisor on each sewing line. The ironing process is completed after quality control process. Then garment packing is completed and prior to shipping to destinations. The process flow diagram for garment manufacturing is illustrated in Figure 3-4.



Figure 3-4 Production flow diagram of WONDERFUL APPAREL COMPANY LIMITED



Warehouse



Cutting Area

Environmental Management Plan



Sewing Area



Ironing Area



QC Area



Packing Area

Figure 3-5 Production Photos

3.5.1.1. Products

The product of factory is garments which are stored in the finished goods area and exported to China. Estimated production rate from year one to year thirty are expressed in Table 3-2.

Table 3-2 Annual Production Rate

No.	Description	Unit	Year 1 to Year 10	Year 11 to Year 20	Year 21 to Year 30
1	Santiago Dress	Pcs	250,000	250,000	250,000
2	Moa-linea lace dress	Pcs	200,000	200,000	200,000
3	Perfect Hood	Pcs	180,000	180,000	180,000
4	Irish Case Racer Jacket	Pcs	250,000	250,000	250,000
5	Robin Basic Fit hood	Pcs	100,000	100,000	100,000
6	Hendricks Regular Crew	Pcs	300,000	300,000	300,000

Environmental Management Plan

No.	Description	Unit	Year 1 to Year 10	Year 11 to Year 20	Year 21 to Year 30
7	Minja Top	Pcs	400,000	400,000	400,000
8	Nachon Regular Tee	Pcs	80,000	80,000	80,000
9	Malaga Fancy	Pcs	150,000	150,000	150,000
10	Legging Milano with elastic	Pcs	80,000	80,000	80,000
Total			1,990,000	1,990,000	1,990,000



Figure 3-6 Products Photo

3.6. UTILITIES

3.6.1. Raw Material

The main Raw Materials are fabrics, button, interlining, thread, zipper, label, price tag and other accessories are imported from China. These raw materials are imported by the permission of department of Trade with import license and stored in warehouse according to their various kinds of products. List of raw materials are described in Table 3-3.

Environmental Management Plan

Table 3-3 List of Raw Materials Requirement

Product	No.	Raw Name	Unit	Year-1	Year-2	Year-3	Year-4	Year-5	Year-6 to 10	Year-11 to 30
Robin Basic Fit hood	1	French terry	kg	50000	55000	65000	75000	90000	125000	130000
	2	Single jesey	kg	5000	5500	6500	7500	9000	12500	13000
	3	Rib	kg	20000	22000	26000	30000	36000	50000	52000
	4	Interlining	y	60000	66000	78000	90000	108000	150000	156000
	5	Thread	y	30000000	33000000	39000000	45000000	54000000	75000000	78000000
	6	Eylet	Sets	200000	220000	260000	300000	360000	500000	520000
	7	Drawstring	Pcs	100000	110000	130000	150000	180000	250000	260000
	8	Zipper	Pcs	100000	110000	130000	150000	180000	250000	260000
	9	Main & size label	Pcs	100000	110000	130000	150000	180000	250000	260000
	10	Care label	Pcs	200000	220000	260000	300000	360000	500000	520000
	11	Name label	Pcs	100000	110000	130000	150000	180000	250000	520000
	12	Tag pin	Pcs	100000	110000	130000	150000	180000	250000	520000
	13	Price tag	Pcs	100000	110000	130000	150000	180000	250000	520000
	14	Price sticker	Pcs	100000	110000	130000	150000	180000	250000	520000
	15	Carton sticker	Pcs	100000	110000	130000	150000	180000	250000	520000
	16	Polybag	Pcs	100000	110000	130000	150000	180000	250000	520000
	17	Hanger	Pcs	100000	110000	130000	150000	180000	250000	520000
	18	Dyer	Pcs	200000	220000	260000	300000	360000	500000	520000
	19	Carton	Ctn	100000	110000	130000	150000	180000	250000	260000
	20	opp	y	500000	550000	650000	750000	900000	1250000	1300000
Moa-Linnea lace dress	1	Lace	Kg	149600	157080	172040	194480	269280	314160	336600
	2	Single jersey	Kg	168000	176400	193200	218400	302400	352800	378000

Environmental Management Plan

Product	No.	Raw Name	Unit	Year-1	Year-2	Year-3	Year-4	Year-5	Year-6 to 10	Year-11 to 30	
	3	Thread	Y	43400000	45570000	49910000	56420000	78120000	91140000	97650000	
	4	Button	Pcs	400000	420000	460000	520000	720000	840000	900000	
	5	Interlining	Y	120000	126000	138000	156000	216000	252000	270000	
	6	Elastic	Y	100000	105000	115000	130000	180000	210000	225000	
	7	bowknot	Pcs	400000	420000	460000	520000	720000	840000	900000	
	8	Main & size label	Pcs	200000	210000	230000	260000	360000	420000	450000	
	9	Care label	Pcs	400000	420000	460000	520000	720000	840000	900000	
	10	Name label	Pcs	200000	210000	230000	260000	360000	420000	450000	
	11	Tag pin	Pcs	200000	210000	230000	260000	360000	420000	450000	
	12	Price tag	Set	200000	210000	230000	260000	360000	420000	450000	
	13	Price sticker	Pcs	200000	210000	230000	260000	360000	420000	450000	
	14	Carton sticker	Pcs	200000	210000	230000	260000	360000	420000	450000	
	15	Polybag	Pcs	200000	210000	230000	260000	360000	420000	450000	
	16	Hanger	Pcs	200000	210000	230000	260000	360000	420000	450000	
	17	Dyer	Pcs	400000	420000	460000	520000	720000	840000	900000	
	18	Carton	Ctn	200000	210000	230000	260000	360000	420000	450000	
	19	opp	y	1000000	1050000	1150000	1300000	1800000	2100000	2250000	
	Perfect Hood	1	Fleece	Kg	61200	64600	74800	85000	102000	136000	142800
		2	Rib	Kg	10080	10640	12320	14000	168000	22400	23520
3		Single jersey	Kg	360	380	440	500	600	800	840	
4		thread	Y	45000000	47500000	55000000	62500000	75000000	100000000	105000000	
5		eyelet	Set	360000	380000	440000	500000	600000	800000	840000	
6		interlining	Y	108000	114000	132000	150000	180000	240000	252000	

Environmental Management Plan

Product	No.	Raw Name	Unit	Year-1	Year-2	Year-3	Year-4	Year-5	Year-6 to 10	Year-11 to 30
	7	Main & size label	Pcs	180000	190000	220000	250000	300000	400000	420000
	8	Care label	Pcs	360000	380000	440000	500000	600000	800000	840000
	9	Name label	Pcs	180000	190000	220000	250000	300000	400000	420000
	10	Tag pin	Pcs	180000	190000	220000	250000	300000	400000	420000
	11	Price tag	Set	180000	190000	220000	250000	300000	400000	420000
	12	Price sticker	Set	180000	190000	220000	250000	300000	400000	420000
	13	Carton sticker	Pcs	180000	190000	220000	250000	300000	400000	420000
	14	Polybag	Pcs	180000	190000	220000	250000	300000	400000	420000
	15	Hanger	Pcs	180000	190000	220000	250000	300000	400000	420000
	16	Dyer	Pcs	360000	380000	440000	500000	600000	800000	840000
	17	Carton	Ctn	180000	190000	220000	250000	300000	400000	420000
	18	opp	y	900000	950000	1100000	1250000	1500000	2000000	2100000
Irish Café Racer Jacket	1	Jacquard	Kg	149600	157080	172040	194480	269280	314160	336600
	2	Single jesey	Kg	168000	176400	193200	218400	302400	352800	378000
	3	Rib	kg	102500	110770	123000	139400	164000	196800	205000
	4	Thread	y	10000	10800	12000	13600	16000	19200	20000
	5	Button	sets	22500	24300	27000	30600	36000	43200	45000
	6	Interlining	Y	150000	162000	180000	204000	240000	288000	300000
	7	zipper	Pcs	250000	270000	300000	340000	400000	480000	500000
	8	Main & size label	Pcs	250000	270000	300000	340000	400000	480000	500000
	9	Care label	Pcs	500000	540000	600000	680000	800000	960000	1000000
	10	Name label	Pcs	250000	270000	300000	340000	400000	480000	500000
	11	Tag pin	Pcs	250000	270000	300000	340000	400000	480000	500000

Environmental Management Plan

Product	No.	Raw Name	Unit	Year-1	Year-2	Year-3	Year-4	Year-5	Year-6 to 10	Year-11 to 30
	12	Price tag	Set	250000	270000	300000	340000	400000	480000	500000
	13	Price sticker	Pcs	250000	270000	300000	340000	400000	480000	500000
	14	Carton sticker	Pcs	250000	270000	300000	340000	400000	480000	500000
	15	Polybag	Pcs	250000	270000	300000	340000	400000	480000	500000
	16	Hanger	Pcs	250000	270000	300000	340000	400000	480000	500000
	17	Dyer	Pcs	500000	540000	600000	680000	800000	960000	1000000
	18	Carton	Ctn	250000	270000	300000	340000	400000	480000	500000
	19	opp	y	1250000	1350000	1500000	1700000	2000000	2400000	2500000
Hendricks Regular	1	Fleece	Kg	123000	135300	147600	164000	205000	246000	258300
	2	Single jesey	Kg	600	660	720	800	1000	1200	1260
	3	Rib	Kg	27600	30360	33120	36800	46000	55200	57960
	4	Thread	Y	45000000	49500000	54000000	60000000	75000000	90000000	94500000
	5	Herringbone tape	Y	60000	66000	72000	80000	100000	120000	126000
	6	Main label	Pcs	300000	330000	360000	400000	500000	600000	630000
	7	Size label	Pcs	300000	330000	360000	400000	500000	600000	630000
	8	Care label	Pcs	600000	660000	720000	800000	1000000	1200000	1260000
	9	Tag pin	Pcs	300000	330000	360000	400000	500000	600000	630000
	10	Price tag	set	300000	330000	360000	400000	500000	600000	630000
	11	Price sticker	Pcs	300000	330000	360000	400000	500000	600000	630000
	12	Carton sticker	Pcs	300000	330000	360000	400000	500000	600000	630000
	13	Polybag	Pcs	300000	330000	360000	400000	500000	600000	630000
	14	Dyer	Pcs	600000	660000	720000	800000	1000000	1200000	1260000
	15	Hanger	Pcs	300000	330000	360000	400000	500000	600000	630000

Environmental Management Plan

Product	No.	Raw Name	Unit	Year-1	Year-2	Year-3	Year-4	Year-5	Year-6 to 10	Year-11 to 30
	16	carton	Ctn	300000	330000	360000	400000	500000	600000	630000
	17	opp	y	1500000	1650000	1800000	2000000	2500000	3000000	3150000
Santiago Dress	1	Lace	Kg	137500	143000	154000	170500	209000	247500	264000
	2	Single jersey	Kg	225000	234000	252000	279000	342000	405000	432000
	3	Thread	Y	50000000	52000000	56000000	62000000	76000000	90000000	96000000
	4	Button	Sets	250000	260000	280000	310000	380000	450000	480000
	5	Interlining	Y	150000	156000	168000	186000	228000	270000	288000
	6	Elastic	Y	12500	13000	14000	15500	19000	22500	24000
	7	Bowknot	pcs	500000	520000	560000	620000	760000	900000	960000
	8	Main&size label	pcs	250000	260000	280000	310000	380000	450000	480000
	9	Care label	pcs	500000	520000	560000	620000	760000	900000	960000
	10	Name label	pcs	250000	260000	280000	310000	380000	450000	480000
	11	Tag pin	pcs	250000	260000	280000	310000	380000	450000	480000
	12	Price tag	Set	250000	260000	280000	310000	380000	450000	480000
	13	Price sticker	pcs	250000	260000	280000	310000	380000	450000	480000
	14	Carton sticker	pcs	250000	260000	280000	310000	380000	450000	480000
	15	Poly bag	pcs	250000	260000	280000	310000	380000	450000	480000
	16	Hanger	pcs	250000	260000	280000	310000	380000	450000	480000
	17	Dyer	pcs	500000	520000	560000	620000	760000	900000	960000
	18	Carton	ctn	250000	260000	280000	310000	380000	450000	480000
	19	Opp	y	1250000	1300000	1400000	1550000	1900000	2250000	2400000
Minja Top	1	Single jesey	Kg	88000	94600	105600	114400	132000	154000	160600
	2	Thread	Y	60000000	64500000	72000000	78000000	90000000	105000000	109500000

Environmental Management Plan

Product	No.	Raw Name	Unit	Year-1	Year-2	Year-3	Year-4	Year-5	Year-6 to 10	Year-11 to 30	
	3	Main label	pcs	400000	430000	480000	520000	600000	700000	730000	
	4	Size label	pcs	400000	430000	480000	520000	600000	700000	730000	
	5	Care label	pcs	800000	860000	960000	1040000	1200000	1400000	1460000	
	6	Tag pin	pcs	400000	430000	480000	520000	600000	700000	730000	
	7	Price tag	Set	400000	430000	480000	520000	600000	700000	730000	
	8	Price sticker	Pcs	400000	430000	480000	520000	600000	700000	730000	
	9	Carton sticker	Pcs	400000	430000	480000	520000	600000	700000	730000	
	10	Polybag	Pcs	400000	430000	480000	520000	600000	700000	730000	
	11	Dyer	Pcs	800000	860000	960000	1040000	1200000	1400000	1460000	
	12	Carton	Ctn	400000	430000	480000	520000	600000	700000	730000	
	13	opp	y	2000000	2150000	2400000	2600000	3000000	3500000	3650000	
	Nachon regular Tee	1	Waffle	Kg	22400	25200	30800	36400	56000	70000	75600
		2	Single jesej	Kg	168	189	231	273	420	525	567
3		Rib	Kg	10400	11700	14300	16900	26000	32500	35100	
4		Thread	Y	9600000	10800000	13200000	15600000	24000000	30000000	32400000	
5		Main label	pcs	80000	90000	110000	130000	200000	250000	270000	
6		Size label	pcs	80000	90000	110000	130000	200000	250000	270000	
7		Care label	pcs	160000	180000	220000	260000	400000	500000	540000	
8		Tag pin	pcs	80000	90000	110000	130000	200000	250000	270000	
9		Price tag	set	80000	90000	110000	130000	200000	250000	270000	
10		Price sticker	pcs	80000	90000	110000	130000	200000	250000	270000	
11		Carton sticker	pcs	80000	90000	110000	130000	200000	250000	270000	
12		Polybag	pcs	80000	90000	110000	130000	200000	250000	270000	

Environmental Management Plan

Product	No.	Raw Name	Unit	Year-1	Year-2	Year-3	Year-4	Year-5	Year-6 to 10	Year-11 to 30
	13	Dyer	pcs	160000	180000	220000	260000	400000	500000	540000
	14	Carton	ctn	80000	90000	110000	130000	200000	250000	270000
	15	Opp	y	400000	450000	550000	650000	1000000	1250000	1350000
Malaga Fancy	1	Single jesey	Kg	14400	15360	18240	23040	28800	36480	38400
	2	Thread	Y	18000000	19200000	22800000	28800000	36000000	45600000	48000000
	3	Elastic	Y	82500	88000	104500	132000	165000	209000	220000
	4	Main label	pcs	150000	160000	190000	240000	300000	380000	400000
	5	Size label	pcs	150000	160000	190000	240000	300000	380000	400000
	6	Care label	pcs	300000	320000	380000	480000	600000	760000	800000
	7	Name label	pcs	150000	160000	190000	240000	300000	380000	400000
	8	Tag pin	pcs	150000	160000	190000	240000	300000	380000	400000
	9	Price tag	Set	150000	160000	190000	240000	300000	380000	400000
	10	Price sticker	pcs	150000	160000	190000	240000	300000	380000	400000
	11	Carton sticker	pcs	150000	160000	190000	240000	300000	380000	400000
	12	Polybag	pcs	150000	160000	190000	240000	300000	380000	400000
	13	Hanger	pcs	150000	160000	190000	240000	300000	380000	400000
	14	Dyer	pcs	300000	320000	380000	480000	600000	760000	800000
	15	Carton	Ctn	150000	160000	190000	240000	300000	380000	400000
	16	opp	Y	750000	800000	950000	1200000	1500000	1900000	2000000
Malaga Fancy	1	Plaid fabric	Kg	20000	22500	27500	35000	50000	55000	60000
	2	Thread	Y	9600000	10800000	13200000	16800000	24000000	26400000	28800000
	3	Elastic	Y	57600	64800	79200	100800	144000	158400	172800
	4	Main label	pcs	80000	90000	110000	140000	200000	220000	240000

Environmental Management Plan

Product	No.	Raw Name	Unit	Year-1	Year-2	Year-3	Year-4	Year-5	Year-6 to 10	Year-11 to 30
	5	Size label	pcs	80000	90000	110000	140000	200000	220000	240000
	6	Care label	pcs	160000	180000	220000	280000	400000	440000	480000
	7	Name label	pcs	80000	90000	110000	140000	200000	220000	240000
	8	Tag pin	pcs	80000	90000	110000	140000	200000	220000	240000
	9	Price tag	Set	80000	90000	110000	140000	200000	220000	240000
	10	Price sticker	pcs	80000	90000	110000	140000	200000	220000	240000
	11	Carton sticker	pcs	80000	90000	110000	140000	200000	220000	240000
	12	Polybag	pcs	80000	90000	110000	140000	200000	220000	240000
	13	Hanger	pcs	80000	90000	110000	140000	200000	220000	240000
	14	Dyer	pcs	160000	180000	220000	280000	400000	440000	480000
	15	Carton	Ctn	80000	90000	110000	140000	200000	220000	240000
	16	opp	Y	400000	450000	550000	700000	1000000	1100000	1200000

Environmental Management Plan

3.6.2. Machinery and Equipment

List of machinery and equipment required for WONDERFUL APPAREL COMPANY LIMITED are import from China. List of machinery and equipment are following in Table 3-4.

Table 3-4 List of Machinery and Equipment

No	Description	Unit	Quantity
1	Diesel Generator	Set	1
2	New YUCHAI (Diesel Generator)	Set	1
3	Water Treatment	Set	1
4	Electric Boiler	Set	1
5	Air Compressor	Set	1
6	Dehumidifier	Set	6
7	3needle 5thread cylinder bed machine	Set	70
8	Conveyor type needle detector	Set	2
9	Computer Controlled Fabric Shtinking and Farmating Machine	Set	1
10	Knit Fabric Inspection and Fabric Loosening Machine	Set	1
11	Speed Adjustable Fabric Looseing Maching	Set	2
12	Fusing Machine	Set	2
13	D Double Location Dear Press Machine	Set	2
14	Upper Die Slide air Pressure Double Locaton Heat Pressure Machine	Set	4
15	Computer Full Automaric Cutting (Slitter Machine)	Set	1
16	Straight and Blas and Twill Fabric Rolling Maching with Auto Edge Alignment Function	Set	1
17	Computerized lockstitch sewing machine	Set	350

Environmental Management Plan

No	Description	Unit	Quantity
18	LS-8420DP-3 Direct-Drive double-needle sewing machine	Set	10
19	LS 3820DP Direct Drive chainstitch lockstitch sewing machine	Set	10
20	LS 9520DP Direct-Drive lockstitch sewing machine	Set	10
21	MQ-5210N Needle Feed Integratin Speed Sewing Machine	Set	52
22	XI-4-54/433 New model Direct-Drive Overlock sewing machine	Set	350
23	MQ-5214 Direct Drice 4 Cylinder Overlock Sewing Machine	Set	26
24	W1-01CB Direct-Drive Flat-Bed Interlock Sewing Machine	Set	26
25	LS 32026P-35AB/UT Cylinder-Bed Computerized Interlock Sewing Machine	Set	52
26	LS 32026P-02GB/UT/RP Cylinder Bed Computerized Interlock Sewing Machine	Set	104
27	17 Multi-needle Cylind Bed Double Chain Stitch Machine	Set	26
28	LS-T781E Direct-Drive lockstitch buttonholding sewing machine	Set	13
29	LS-T430G-01E-ZH Electronic bartacking sewing machine	Set	26
30	XL-908SServo Button Machine	Set	26
31	Bili automatic cloth spreading machine	Set	2
32	Bullmer computer cutting machine D8002	Set	1
33	H&M Standardised European Washing Machine	Set	1
34	H&M Standardised European Dryer Machine	Set	1
35	Clorfastness to Perspiration test package	Set	1
36	Standard Color Assement Cabinet	Set	2
37	Upper Exhaust Pipe Vacuum Ironing Table (Without Heater)	Set	42

Environmental Management Plan

No	Description	Unit	Quantity
38	Upper Exhaust Pipe Vacuum Ironing Table with 1 Buck (Without Heater)	Set	12
39	Full Steam Iron (56 Holes)	Set	54
40	Sponge Mat	pc	100
41	Flow sink with light stand	Set	27
42	Loose cloth cart	Set	30
43	Three layer Cutting cart	Set	100
44	Fence cart	Set	20
45	QC Table	Pcs	27
46	Packing Table	Pcs	16
47	Finished product tag split	pcs	39
48	Inspection Table	pcs	13
49	QC Table	Pcs	39
50	QC Table with stamp	pcs	26
51	Light Trolley	Set	4
52	Staff Stool	Pcs	1000
53	Flat table	Pcs	104
54	Cutting Frame	Set	20
55	Sweing Frame	set	26
56	Accessories Frame	Set	24
57	Workbench	Pcs	91

Environmental Management Plan

No	Description	Unit	Quantity
58	Nine corner grid cardboard	Pcs	500
59	Team Leader Desk	Pcs	40
60	Exhaust fan	Set	115
61	Cooling pad top frame	Pcs	120
62	Cooling pad bottom frame	pcs	120
63	Cooling pad frame water panel	pcs	100
64	Retaining plate	pcs	120
65	Outlet	pcs	150
66	Pipe and cap	pcs	400
67	Cooling pad	pcs	400
68	Air Floating melamine board cutting bed 1200*2130mm	pcs	146
69	Standard American made board cutting bed 1200*1830mm	pcs	30
70	Removable Table 1200*2310mm	pcs	1
71	Beijing CD HP45 Series wide format inkjet plotter	set	2
72	Transport shears ST-900	set	2
73	Taiwan Suli Cloth Knife ST 260H	set	12
74	Taiwan Suli Cutting Knife SES Seriea 10 inches	set	12
75	Cutting Clip Height 10 inches	Pcs	200
76	Power busbar slot (plastic steel)	Meter	486
77	Cutting Busbar (Plastic Steel)	Meter	216

Environmental Management Plan

No	Description	Unit	Quantity
78	Lighting Busbar (Plastic Steel)	Meter	432
79	Reinforcement of air pipe (Plastic steel)	Meter	34
80	Copper tie buckle	Pcs	650
81	Single phase rotary socket	pcs	864
82	Cutting Socket	pcs	84
83	Horizontal bending	set	48
84	Horizontal tee	set	24
85	Connection box	set	252
86	Capped end	Pcs	54
87	Suspension clamp	pcs	650
88	Lamp switch	pcs	78
89	Lamp hanger	pcs	576
90	Copper nose	pcs	230
91	Orbitor (ICI pilling tester)	set	1
92	Pilling Assessment Viewer	set	1
93	Crockmeter color fastness to rubbing tester	set	1

3.6.3. Human Resource

Human resource required by foreign experts/technicians and local persons for administrative and production process are about 400 to 500 persons from first year to thirty year which are also described in Table 3-5. Proposed project's operation running days are 265 days in a year. Working hour starts from 8:30 am to 5:00 pm. The lunch time is from 12:00 pm to 1:00 pm. Ferries are provided to all staff and employees by the company.

Environmental Management Plan

Table 3-5 Employment Schedule of WONDERFUL APPAREL COMPANY LIMITED

No.	Particulars (Local Staff)	No of Person (Year-1 to Year2)	No of Person (Year-3 to Year 4)	No of Person (Year-5 to Year 30)
1.	Production Manager	1	1	1
2.	HR Manager	2	2	2
3.	Accountant	1	1	1
4.	Office Staff	5	5	5
5.	Supervisor	3	3	5
6.	Leader	10	10	15
7.	Skill & Semi-Skill Worker	130	150	190
8.	Unskill Worker	200	200	200
9.	Quality Control	20	30	45
10.	Finishing Staff	20	20	25
11.	Mechanic/Electric	2	2	3
12.	Cleaner	1	1	2
13.	Nurse	1	1	2
14.	Security	2	2	2
15.	Driver	2	2	2
Total		400	430	500

No.	Particulars (Foreign Staff)	No of Person (Year 1 to Year 4)	No of Person (Year 5 to Year 30)
1.	Manager (HR Production)	2	2
2.	Assistant Manager (Production)	1	3
3.	Technical Staff	7	8
Total		10	13

3.6.4. Water Requirement

Myaung tagar industrial Zone has no centralized water supply system and the factory gets water from the tube wells installed inside the factory compound. Groundwater from this tube well is pumped into the tank and overhead tank 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. Main source of water supply will be provided by two tube well water in which tube well water is pumped by 3 inches PVC pipe and treated by oxidation tower, chlorine dosing system, de-iron filter (FRP), carbon filter, and cartridge filter. The groundwater stores in seven overhead tank with each capacity of (1,100 gal) for toilet and domestic use and underground tank with capacity of (100,000 gal) for firefighting. Drinking water for factory is provided by using water filtration process and daily drinking water requirement of propose project is about 1000 liter per day. The factory uses water about 180,000 gallons annually and 15,000 gallons per month for domestic and boiler.

Environmental Management Plan



Figure 3-7 Water storage tank and drinking water supply

3.6.5. Electricity and Fuel Requirement

The proposed project is intended to get required electricity supply from Yangon Electricity Supply Board and distributed by 800 kVA of Transformer. Another source of energy is 625 kVA and 125 kVA generators will also be kept as the emergency generator if normal electricity supply could not provide for the proposed project. Estimated electricity usage is about 7160 unit per month.

Required petrol and diesel for vehicles and generator are purchased from the nearest petrol station. Fuel requirement for proposed project is about 3600 gallons per month. To handle the leakage and spillage of the diesel, an interception with sand is kept under the tank.

Environmental Management Plan



Figure 3-8 Electricity Facilities

3.6.6. Steam Boiler

The steam boiler to be used in steam capacity for garment ironing process and used of fuel for steam boiler is wood. Wood was required for boiler operation at about 0.1 ton per day, this wood supply from local supplier These are stored properly in boiler room area. The steam boiler has no fly ash filter and boiler chimney high is about 80 ft. Specification of boiler and installed photo is shown in Figure 3-9. Specification of boiler is described in Table 3-6.

Table 3-6 Specification of Electric Boiler

Brand Name	Huisuzheng Brand Biomass-fuel steam boiler
Boiler Model	SH0.98-0.7-SCM
Rated Evaporation	0.98 ton/hr
Rated Working Pressure	0.7 MPa
Rated Steam temperature	170 °C
licence no	TS2110B03-2021
Manufacturing date	November 2020



Environmental Management Plan



Figure 3-9 Installed photo of boiler

3.7. FACILITIES

3.7.1. Status of the Factory

WONDERFUL APPAREL 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 and Purchased electricity. 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 i.e. air pollution by generator's effluent gas emission, noise pollution created during the operation of generator and other machines.

Solid waste (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.

3.7.2. Industrial Wastes facilities

Wastes generated from the garment factory are cloth scraps of 50% from cutting section, 35% from sewing section and 15% from finishing 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 120 kg per month are generated from operation process. These solid wastes disposal from each operation sectors are collected and disposed by connecting with the Municipal once a week. The recyclable waste will be sold to the local waste buyers.

Environmental Management Plan



Figure 3-10 Solid Waste Disposal System

3.7.3. Human wastes facilities

The number of staff and workers required in the day shift for the factory is maximum 424 persons during operation. Solid waste generated from maximum number of operators and office staffs with assumption of waste generation rate at 165.36 kg/day was calculated based on solid waste generation rate of 0.39 kg/person/day.

Domestic wastewater generated by maximum amount of 424 persons with assumption rate at 42.4 m³/day was calculated based on domestic wastewater generated rate of 0.1 m³/person/day¹. This water will be released in operation hour discharge to septic tank or factory drainage.



Figure 3-11 Drainage System of Factory

¹ The domestic wastewater generation was based on typical wastewater generation rate of 0.1 m³ per person per day (Metcalf & Eddy, 2004)

Environmental Management Plan

3.7.4. Fire hazards protect facility

Fire extinguishers, fire hose reels, fire hydrants and fire sprinkler system are installed in 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 with the dimension of 15,000 ft³ at the proposed area. The emergency contact numbers of township and district fire services department must be printed and tagged at easily visible places for fire emergency cases. The emergency fire alarms are installed at the factory for alerting the workers in case of fire. The main entrances and route for emergency cases of the factory must not be blocked with materials or machines for fire emergency cases. In addition, the project proponent has plans to provide trainings on firefighting for the workers by a professional or otherwise by sending to training courses. The plan to install fire alarm system and fire-frightening system are mentioned in Figure 3-12.

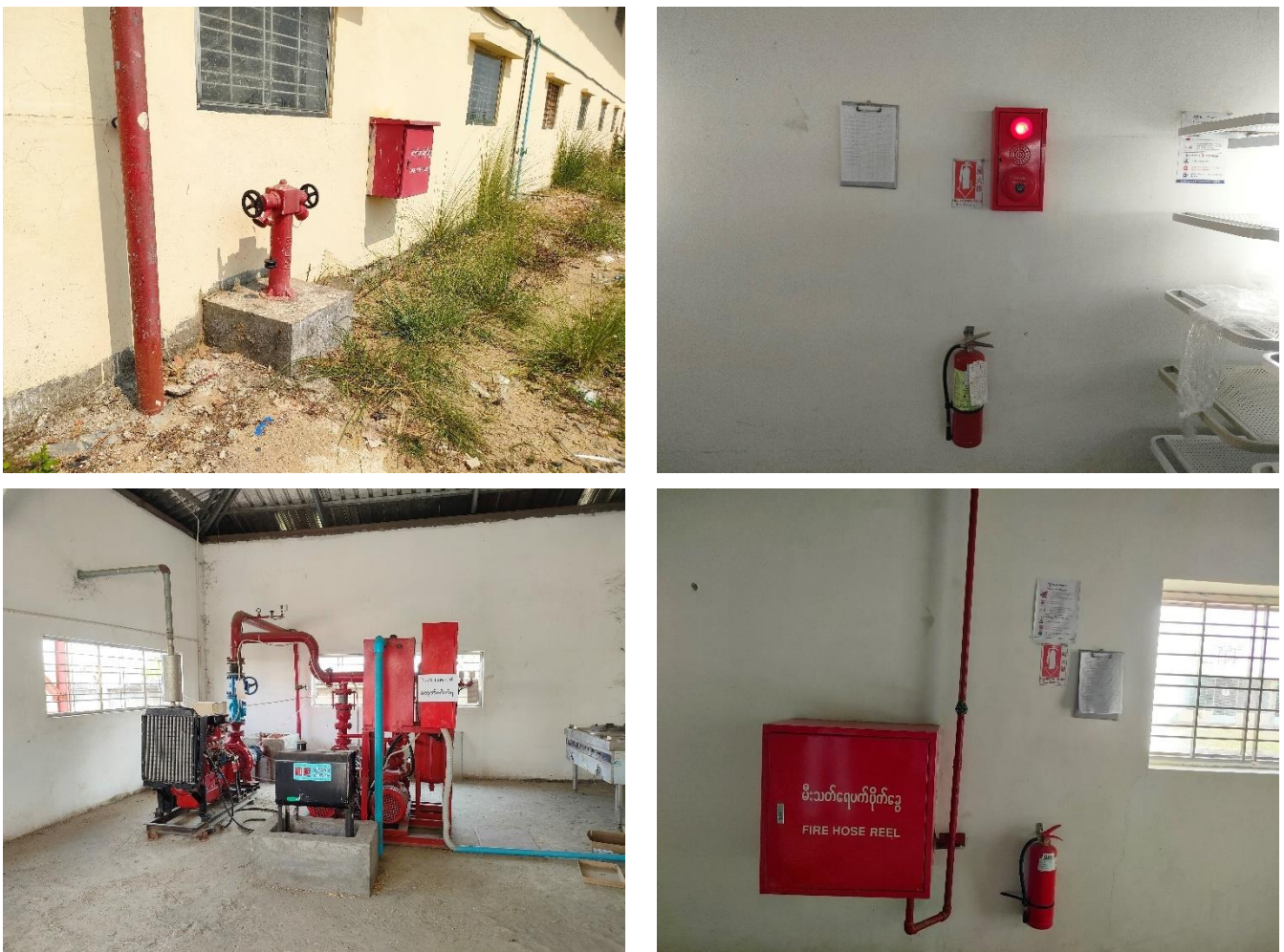


Figure 3-12 Emergency safety and fire management

3.7.5. Ventilation System

The factory ventilation systems consist of natural ventilation system and mechanical ventilation system. The mechanical ventilation system is provided in office room, production area, canteen and warehouse area.

Environmental Management Plan



Figure 3-13 Ventilation System

3.7.6. Toilet facilities

Currently toilet facilities have hygienic toilets already provided and categorized by gender, marked distinctly for men and women by signs and symbols. In addition, toilet areas will also be provided with water sinks, necessary toiletries, and hand washing soaps, hand drying facilities, and waste bins. Total numbers of toilet for male are 20 rooms and for female are 20 rooms.

Environmental Management Plan



Figure 3-14 Toilet Facilities Photos

3.7.7. Medical and Health facilities for employees

The factory has a clinic and full-time nurse-aid has been employed to treat employees for minor injuries, sickness and emergency medical care. Medicines and first aid kits are provided in this clinic. Moreover, these medicines and first aid kits 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 relevant department. To prevent electric shock hazards, electrical maintenance staff (handyman) is to be assigned to do regular inspections and take preventive measures.

Environmental Management Plan



3.8. DECOMMISSIONING PHASE

The proposed project investment duration is 30 years and they will close out the project according to their MIC proposal.

4. BRIEF DESCRIPTION OF SURROUNDING ENVIRONMENT

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

4.1. METHODOLOGY FOR DATA COLLECTION AND ANALYSIS

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

- Onsite Measurements and Analysis – Baseline parameters such as Indoor temperature, humidity, operation light conditions, noise, air 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 Hmawbi 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.

Table 4-1 Location of the Survey Point

Survey point	Coordinates	Type of survey point	Description of survey point
Air Quality Monitoring Point	17° 9'38.30"N 95°58'12.72"E	Project site (Outdoor area)	Outside the factory of the project site.
Light Level Point	17° 9'40.55"N 95°58'13.28"E	Project site (Indoor Area)	Inside the project site, operation area (Raw Material Storage Area, Cutting Area, Sewing Area, Ironing Area, QC, Packaging Area)
Noise Level Point	17° 9'40.11"N 95°58'12.85"E	Project site (Indoor Area)	Inside the project site, operation area (Sewing Area)



Figure 4-1 Baseline Study Map

4.3. PHYSICAL COMPONENT IN PROJECT AREA

4.3.1. Topography

The proposed project area is situated in Myaung Dagar Thanmani Industrial Zone, Hmawbi 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

The Yangon area is underlain by alluvial deposits (Pliocene to Recent), the non-marine fluvial sediments of Irrawady formation (Pliocene), and hard, massive sandstone of Pegu series (early-late Miocene). 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, limestone and conglomerate. Geological map of Yangon Regional area is shown in Figure 4-2. [2]

Environmental Management Plan

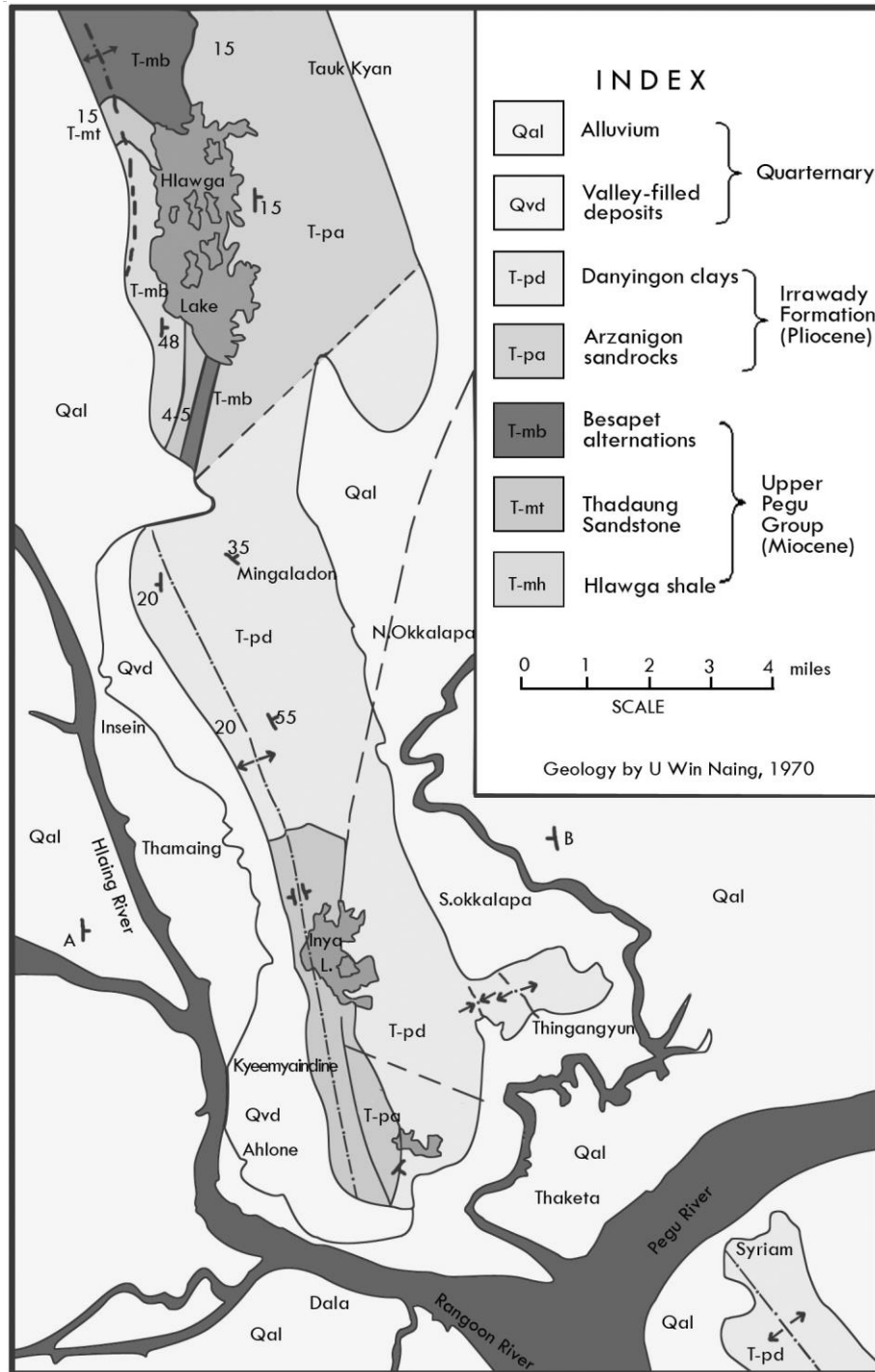


Figure 4-2 Geological Map of Yangon Region

4.3.1. 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]

Environmental Management Plan

4.3.2. Soil

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

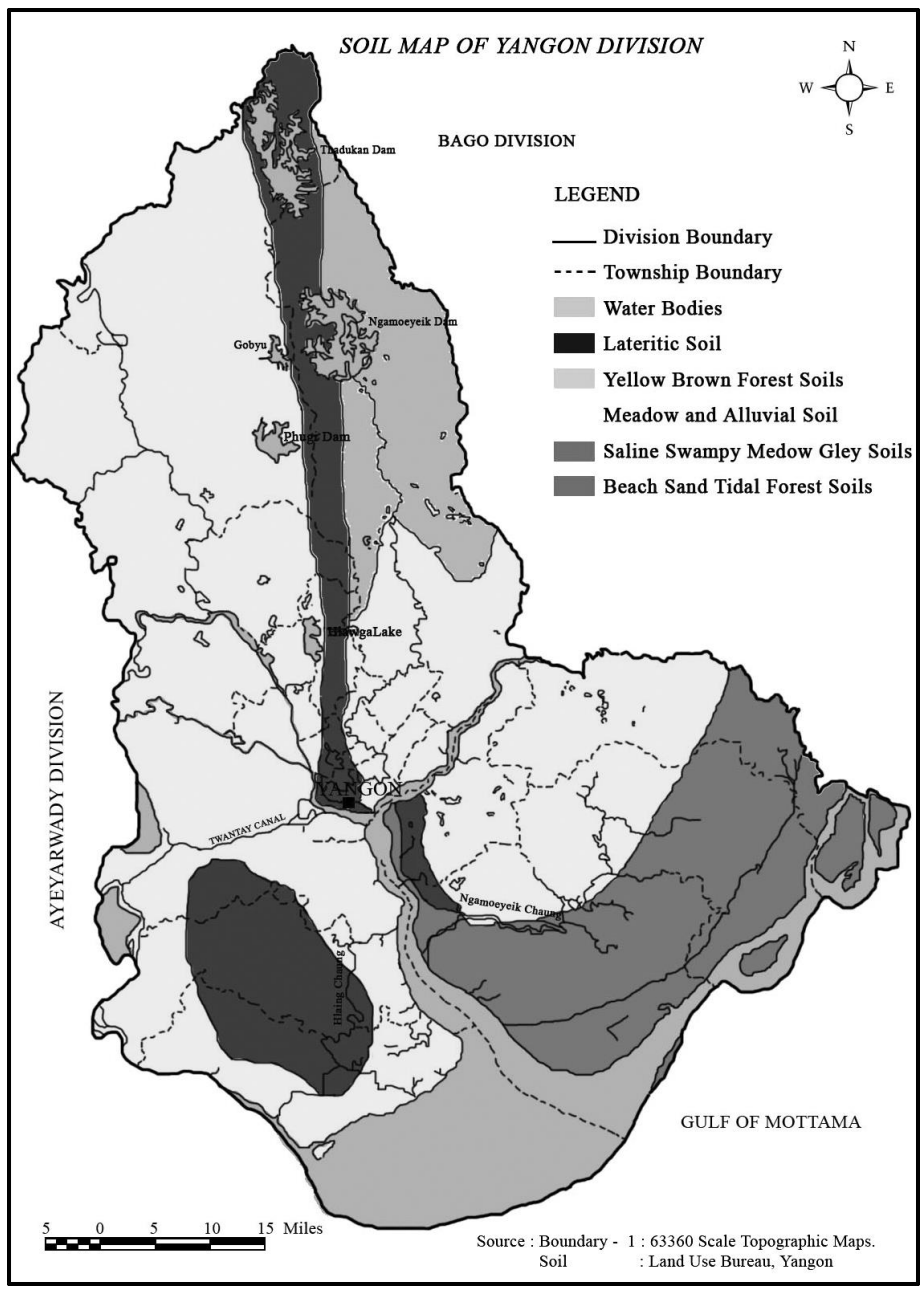


Figure 4-3 Soil map of Yangon (Source: Land use of Bureau of Yangon)

Environmental Management Plan

4.3.1. 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]

4.3.2. 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

Environmental Management Plan

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 122.5 mm with the annual average rainy days of 109.3 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 Myaung Dagar Thanmani Industrial Zone, Hmawbi Township and Yangon Region. The climate condition of Hmawbi Township in which the project lies is the dry season, starts in December and ends in March. The raining season starts in June and ends in September and the cold season follow with the cooler, drier months of October to January. The highest temperature is ranging 39.3°C and low range 10°C reference from Township Meteorology data, Regional Data of Hmawbi Township 2015 to 2018 Yearly data of rainfall and temperature is presented in Table 4-2.

Table 4-2 Annual Rainfall and Temperature

Year	Rainfall		Temperature	
	Raining Day	Rainfall Value	Summer Season Max (°C)	Winter Season Min (°C)
2018	11	12.26	39.3	10
2019	103	87.95	41.6	13.4

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

4.3.3. Indoor temperature and humidity

The indoor temperature and humidity condition during 25 February 2023 shows the average temperature of 38.1 °C while the average humidity is 40.5 % as shown in Table 4-3.

Table 4-3 Relative humidity and temperature measure at factory

Date and Time	Description	Result value	Environmental parameter air station guideline
25 February 2023 (9:00 am to 4:00 pm)	Relative Humidity RH %	40.5 (%)	Present condition
	Temperature	38.1 °C	Present condition

Environmental Management Plan



Figure 4-4 Humidity and Temperature Measurement Photo

4.3.4. Air Quality

To determine the existing baseline ambient air quality status within the project site on 25 February 2023, 8-hours of working period air pollutants level, which include dust PM₁₀ and PM_{2.5} and gases (SO₂, NO₂) were measured at the selected site using the AQM-09 air monitoring station. To reveal the existing status of baseline air quality, the average ambient air qualities measured were compared with National Environmental Quality (Emission). The measurement location point is situated at latitude 17° 9'38.30"N and longitude 95°58'12.72"E

It was observed that the air quality of particulate matter (PM₁₀ and PM_{2.5}) are within the National Environmental Quality (Emission) Guideline and gases level of Nitrogen Dioxide (NO₂) and Sulphur Dioxide are also within the NEQ Guideline.^[4]

Table 4-4 Observed air quality results

Parameters	Observed value	Guideline value	Unit	Organization	Working Period
PM ₁₀	16.3	50	µg/m ³	NEQG	8 hrs
PM _{2.5}	10.9	25	µg/m ³	NEQG	8 hrs
SO ₂	6.36	500	µg/m ³	NEQG	8 hrs
NO ₂	23.38	200	µg/m ³	NEQG	8 hrs
O ₃	33.4	100	µg/m ³	NEQG	8 hrs
CO	0.52	10	µg/m ³	NEQG	8 hrs

NEQ = National Environmental Quality (Emission) Guideline

Environmental Management Plan



Figure 4-5 Air Quality Measurement Photos

4.3.5. Wind Speed and Direction

4.3.5.1. Survey Results

Wind speed and direction are at 1.5 meter above ground level at also measured on same date and location as those selected for the air quality measurements. The results of wind speed and wind direction are described in Figure 4-6. The wind rose diagram and wind class frequency distribution are shown in Figure 4-6.

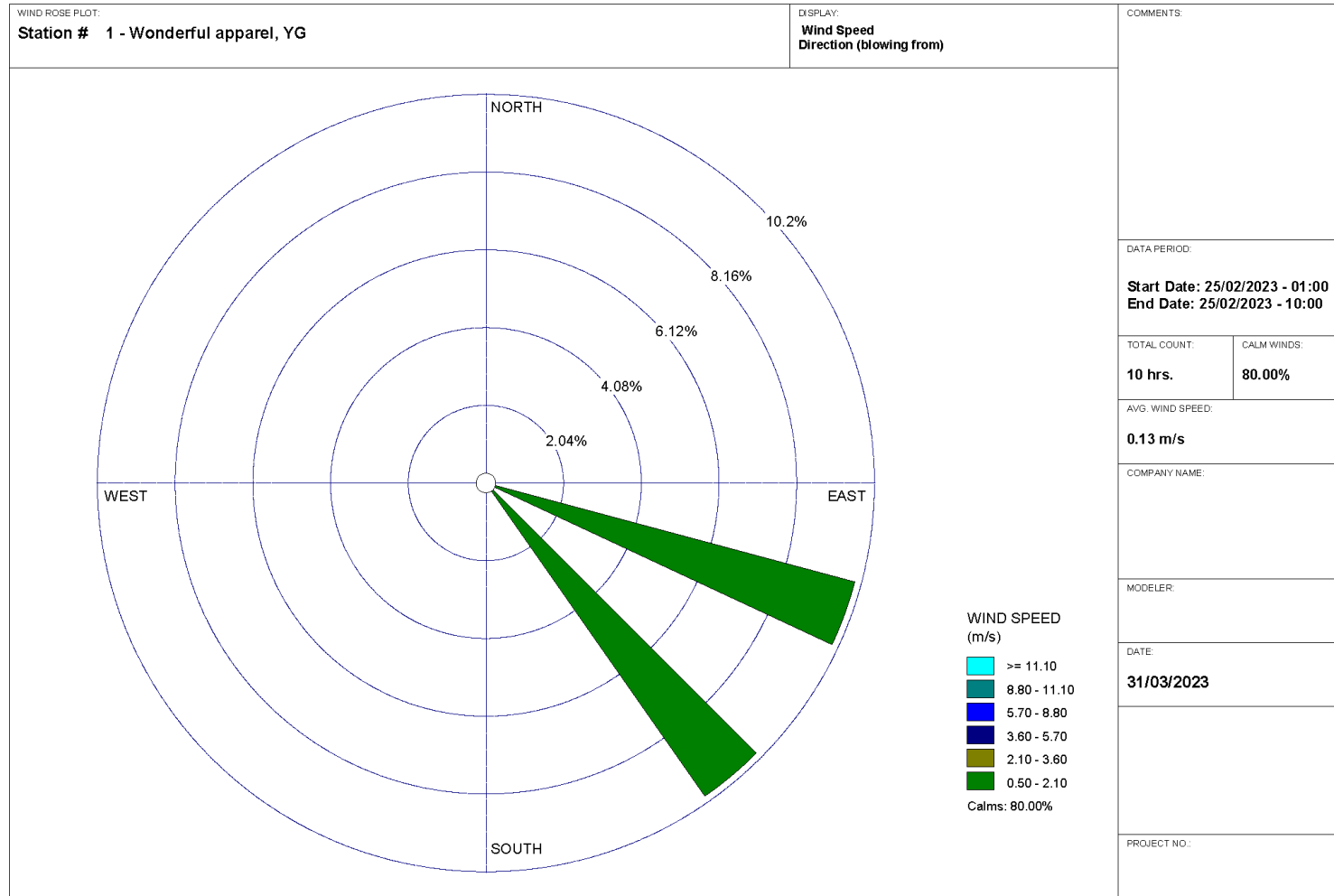
AQM-1

80% of wind are calm and wind in 10 hours is lower than 1.5 meter per second. The average wind speed is 0.13 m/s blows mostly from South East direction.

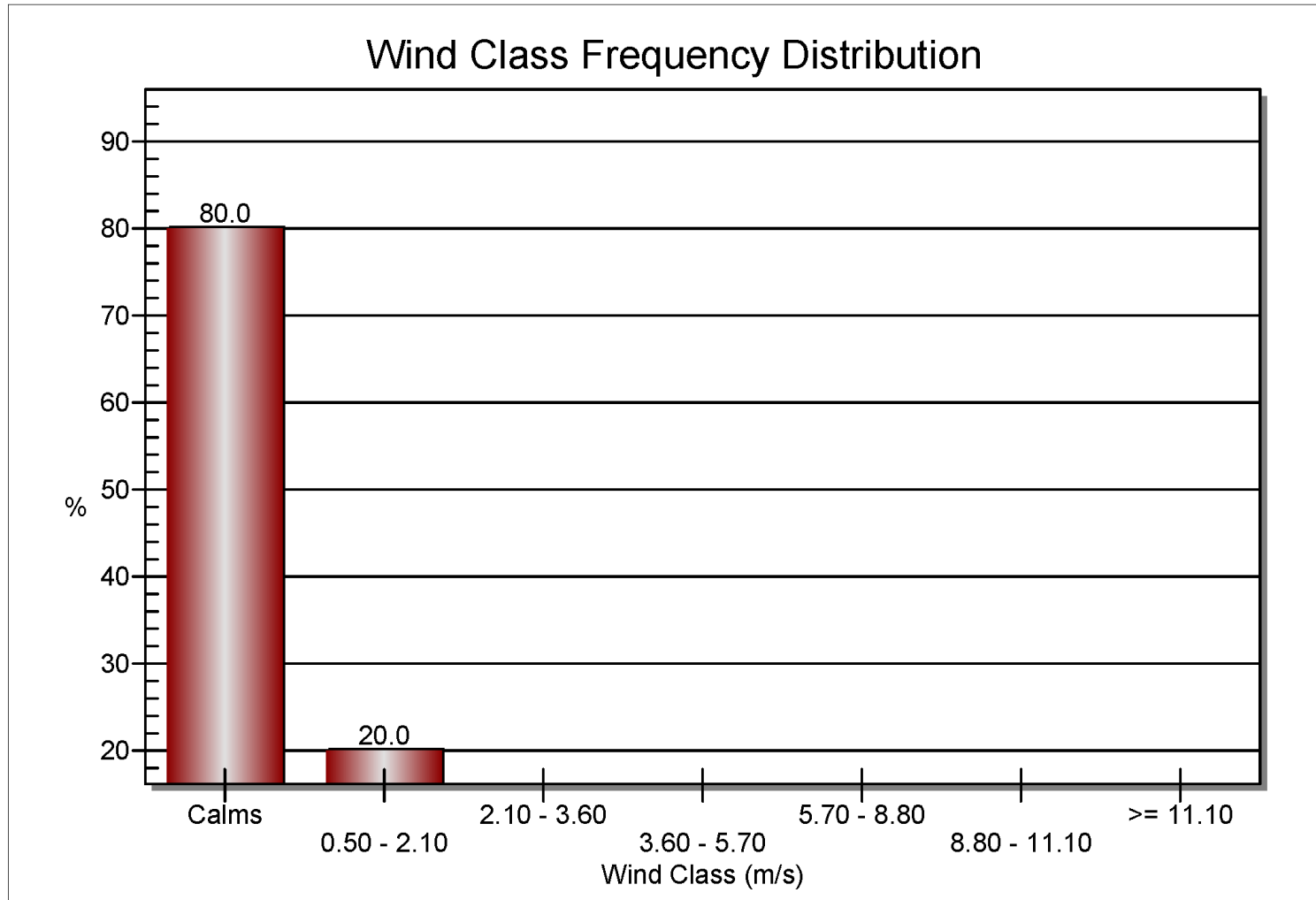
Table 4-5 Results of Wind Speed and Direction Measurement

Station	Measurement Date	Location	Wind Speed (m/s)	Wind Calm (%)	Prevailing Wind Direction
Station AQM 1	25 February 2023	17° 9'38.30"N 95°58'12.72"E	0.13	80	S-E

Environmental Management Plan



Environmental Management Plan



WRPLOT View Freeware 8.0.2 - Lakes Environmental Software



Figure 4-6 Wind Speed and Wind Direction

Environmental Management Plan

4.3.6. Noise

The Noise level was measured by using Digital Sound Level Meter for working hours on 25 February 2023. The average noise level in the project site area is presented in Table 4-6 compared with NEQ guideline. However, according to the Noise source monitoring at operation area (inside the production sector) of noise level is within the acceptable level of National Environmental Quality (Emission) Guideline. [4]

Table 4-6 Noise level measurement result

Date and Time	Location	GPS Value	Result Value	NEQ Guideline
25 February 2023 (9:00 AM to 4:00 PM)	Operation Area	17° 9'40.11"N 95°58'12.85"E	56.2 dBA	70 dBA

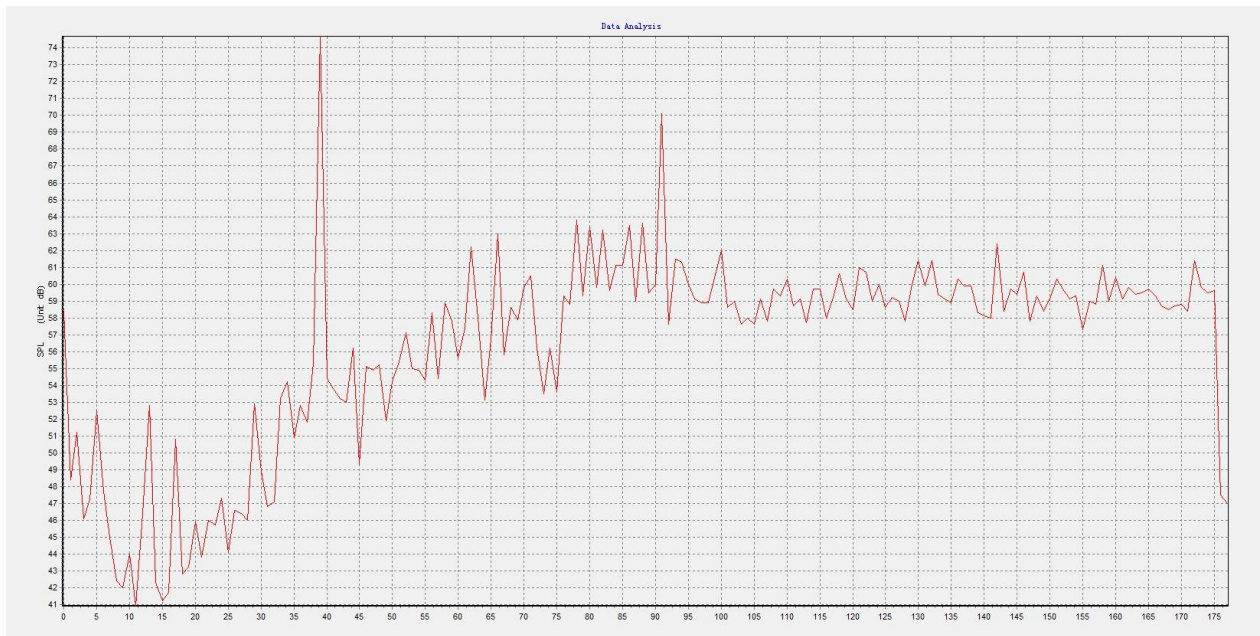


Figure 4-7 Noise level result graph



Figure 4-8 Sound level measurement photo

Environmental Management Plan

According to the monitoring results, WONDERFUL APPAREL COMPANY LIMITED’s noise level is within the NEQ guideline. However, in that factory ought to prepare and use the ear protection equipment to all labors.

4.3.7. 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 4-8. The illustrates the recommended illumination and limiting glare index applicable to typical works (fairly severe to very severe tasks) in garments factory is provided in Table 4-7.

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 4-9 Light quality measurement

Environmental Management Plan

Table 4-8 Result of light measurement in WONDERFUL APPAREL COMPANY LIMITED

No	Location	Measure value (Lux)	Standard*
1	Warehouse	675	1000
2	Cutting	835	900
3	Sewing Line	970	600
4	Ironing	840	600
5	Quality Control	1080	900`
6	Packing	820	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, factory's light level is normal condition 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 that is why which need to change like a more powerful light bulb in that light level lower places. In these ways is able to adjust the light pollution of this factory.

4.4. BIOLOGICAL COMPONENT

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

4.5. SOCIO-ECONOMIC COMPONENT

4.5.1. Population

WONDERFUL APPAREL COMPANY LIMITED is located across Hmawbi Township in Yangon Region. In 2019, the population of Hmawbi Township is about 202,904 people as present in Table 4-9. ^[1]

Table 4-9 Population of Males and Females at Hmawbi Township (2019)

Item	Older 18 year			Younger 18 year			Total		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Urban	10215	10092	20307	2832	3213	6045	13047	13305	26352
Rural	57410	65117	122527	26756	27269	54025	84166	92386	176552
Total	67625	75209	142834	29588	30482	60070	97213	105691	202904

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

4.5.2. Religion

The different kinds of religion present in Hmawbi Township are shown in Table 4-10. More than 95% of the people living in the township are Buddhists. ^[1]

Environmental Management Plan

Table 4-10 Religion in Hmawbi Township (2019)

Township	Buddhist	Christian	Hindu	Muslim	Other	Total
Hmawbi	185700	14247	656	2301	-	202904

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

4.5.3. Local Economy

Among regional towns, Hmawbi 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

4.5.4. Public Infrastructure and Access**4.5.4.1. Communication and Transportation**

Major transportation route in Hmawbi Township are railway, port, and car road as presented in Table 4-11. ^[1]

Table 4-11 Transportation route

Categories	Township		Miles
	From	to	
Inland water way (Hlaing River)	MyitKyo	YayPawTae	18
Bus line (41.41,37)	GTC	Sule	33.125
Car (Hmawbi – HtanTapin Road)	Hmawbi	HtanTapin	5.2
Car (ShweYinKwell- PhooGyi- YinKwellTaung Road)	ShweYinKwell	YinKwellTaung	7.1
Car (YayTwinKone- MyoChaung Road)	YayTwin Kone	MyoChaung	2.5

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

Environmental Management Plan

4.5.4.2. Electricity

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

4.5.4.3. 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 Hmawbi Township. The name and the located village tract/ ward of schools are described in Table 4-12. ^[1]

Table 4-12 List of major school in Hmawbi Township

No.	Name of School	Location
1	Hmawbi Technological University	Hlae Ngote Chaung
2	BEHS (1)	2 Ward
3	BEHS (2)	Sup Twar Taw
4	BEHS (Wanatchaung)	Wanatchaung
5	BEHS (Myaung Dagar)	Myaung Dagar
6	BEHS (Tharyar Gone)	Tharyar Gone
7	BEHS (Tat gyi Gone)	Tat gyi Gone
8	BEHS (Taday pin)	Taday pin
9	BEHS (Shwemyayar Gone)	Shwemyayar Gone
10	BEHS (Min Ywa)	Min Ywa
11	BEHS (Branch)- Shan Gone	Shan Gone
12	BEHS (Branch)- Myauk Chaw Gone	Myauk Chaw Gone
13	BEHS (Branch)- Naung Hnabin	Naung Hnabin
14	BEHS (Branch)- Hphoo Gyi	Hphoo Gyi
15	BEHS (Branch)- Gone kalay	Gone kalay
16	BEMS (Lay htee)	Lay htee
17	BEMS (Oakshik Gone)	Oakshik Gone
18	BEMS (Hnaw Gone)	Hnaw Gone
19	BEMS (Branch)- Nan U	Nan U
20	BEMS (Branch)- Ko Lone Kwin	Ko Lone Kwin
21	BEMS (Branch)- Let Pan Tan Su	Let Pan Tan Su
22	BEPS (124)	Hmawbi Township

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

4.5.4.4. Health Status

The diseases of high prevalence reported in 2019 are Tuberculosis (TB), followed by Dysentery, Diarrhea and TB. With reference to the Township Health Profile 2019 of Hmawbi Township,

Environmental Management Plan

no accidental work injuries reported to the township hospital in 2019. The common diseases are shown in Table 4-13.

Table 4-13 Common Diseases in the Hmawbi Township

Disease	Hmawbi Township	
	Morbidity	Mortality
Malaria (Per 100000P)	4	-
Dysentery	100	-
Diarrhea (Per 100000P)	1111	-
TB (Sputum+) (Per 10000P)	361	-

Table 4-14 Lists of hospital in the Hmawbi Township

Hospital Name	Beds/Services	Responsible
Hmawbi Township Hospital	50	Government
Phoo Gyi District Hospital	16	Government
Wa Nat Chaung District Hospital	16	Government

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

4.6. CULTURAL AND VISUAL COMPONENTS

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

5. ENVIRONMENTAL IMPACT AND MITIGATION MEASURES

5.1. METHODOLOGY FOR THE ASSESSMENTS

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

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

Table 5-1 Impact assessment parameters and its scale

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

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

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

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

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

5.2. IMPACT IDENTIFICATION

The development of infrastructure for the proposed project likely to happen changes in the local environment 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 Hmawbi 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.

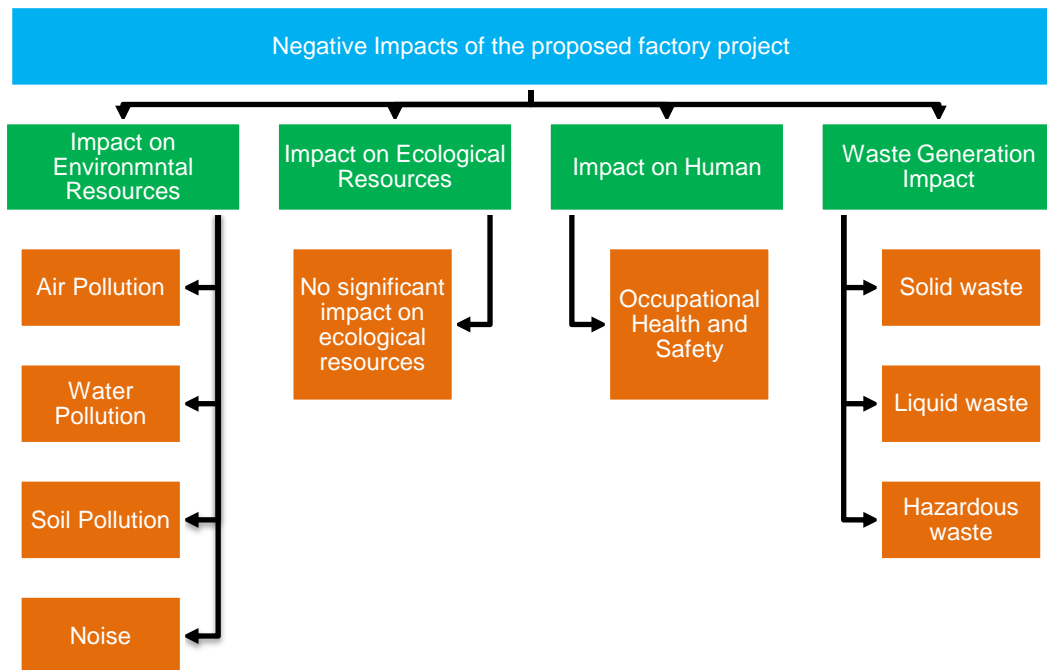


Figure 5-1 Potential negative impact affect from proposed factory project

5.3. ENVIRONMENTAL IMPACT DURING CONSTRUCTION & DECOMMISSIONING PHASE

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

Decommissioning phase: The proposed duration of the investment shall be 30 years. The term of the Lease shall be initial 30 years commencing from the date of signing of the Lease Agreement between Local owner and WONDERFUL APPAREL COMPANY LIMITED for proposed project site for 6.86 acres (27761.43 sqm) of land. The project of land and building will be restitution to land owner after close the operation. Therefore, the assessment study cannot be need for environmental impact assessment during decommission phase.

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

5.4. PROJECT ACTIVITIES AND ITS SIGNIFICANT IMPACTS

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

Environmental Management Plan

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

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

Categories	Source of Impact	Significant of Potential Impacts					Impact Significance	Reason	Mitigation Measure
		M	D	E	P	SP			
Impact on Environmental Resource									
Air	Dust and GHGs emission from vehicles used for transporting raw materials and final products Emission of smoke from emergency diesel generator and vehicle movement	2	4	1	3	21	Low	Air pollution in atmosphere. Inhaling them can increase the chance you'll have health problems. People with heart or lung disease, older adults and children are at greater risk from air pollution.	To control air pollution, the vehicles, generators and machineries have to check and maintain regularly. Ensuring vehicles, compressor and generator are well maintained. The factory has planted trees to reduce carbon emission and minimize air pollution.
Soil	Engine oil leaks, spills at diesel storage and during fuel refueling.	2	4	1	1	7	Very Low (Insignificant)	The factory compound area was paved with concrete and hence, contamination due to the oil spillage at this area is insignificant.	No Mitigation Measure
Water	Dormitory Cleaning and Kitchen	1	4	1	1	6	Very Low (Insignificant)	The factory not generated wastewater from production process on CMP basic	No Mitigation Measure
Noise and Vibration	Generating noise from the production machinery	3	4	1	3	24	Low	The factory not operate heavy machinery The major noise source of CMP basic operation activities such as cutting, sewing and packaging by respective machines. There is insignificant impact on surrounding environment.	Low noise equipment should be used Should be provided the noise covering equipment or personal protective equipment (PPE)

Environmental Management Plan

Categories	Source of Impact	Significant of Potential Impacts					Impact Significance	Reason	Mitigation Measure
		M	D	E	P	SP			
Impact on Ecological Resources									
Flora and fauna on terrestrial and aquatic life	Operation of the garment factory	1	4	1	1	6	Very Low Insignificant	Not Significant Impact on Ecological Resources	No Mitigation Measure
Impact on Human									
Fire	Poor electrical installations Waste disposed area, raw materials and fabric storage area	3	4	1	4	32	Moderate	Serious damage to property and even injury and death	To provide fire extinguishers, fire hose reels and fire hydrants on the walls of the factory for fire emergency cases. Regular inspection for existing firefighting equipment must be done. In case of fire emergency, water storage tank for fire frightening. The emergency fire alarms are installed at the factory for alerting the workers in case of fire. The main entrances and route for emergency cases of the factory must not be blocked with materials or machines for fire emergency cases.
Occupational Safety	Accidental cases cause by operating machines. Unloading, mixing, cutting, pressing and packaging activities. Accidental cases of thermic fluid heater	3	4	1	4	32	Moderate	Accident in workplace (physical injuries or even death) can occur during operation.	First aid training, safety training, firefighting training or other essential training for machinery handling must be provided for emergency cases of workers. According to the observed light intensity values, the proponent provides sufficient lighting for workers for safe working and reducing optical problems of the workers. Personal Protective Equipment (PPEs) like earmuffs, safety gloves, helmets and

Environmental Management Plan

Categories	Source of Impact	Significant of Potential Impacts					Impact Significance	Reason	Mitigation Measure
		M	D	E	P	SP			
								goggles are provided for each department. To prevent electric shock hazards, electrical maintenance staff (handyman) is to be assigned to do regular inspections and take preventive measures.	
Health	Influx of people Noise from the generating of the emergency generators	2	4	1	2	14	Very Low Insignificance	Change in demographic structure, new diseases form immigrant workers To cause a range of health problems ranging from stress, poor concentration, productivity losses in the workplace, and communication difficulties and fatigue from lack of sleep, to more serious issues	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.
Waste Generation Impact									
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	Surrounding environmental pollution and soil contamination	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 municipal service.
Liquid Waste	Septic system and sewage. Domestic liquid waste	3	4	2	2	18	Low	Contamination of soil, surface water, ground water	Regular inspection and cleaning, oil traps, septic tank and adequate covers for all storage and waste disposal areas

Environmental Management Plan

Categories	Source of Impact	Significant of Potential Impacts					Impact Significance	Reason	Mitigation Measure
		M	D	E	P	SP			
	disposal from office, kitchen and dormitory.								can decrease these contaminations.
Hazardous Waste	Used oil and lubricant discharged from the maintenance of vehicles and machines.	2	4	1	2	14	Very Low Insignificance	Reduce the risk of contamination from fuels, oils and hazardous wastes Response effectively to incident and accident	Proper inspection and maintenance in storage of hazardous waste. The hazardous wastes are transported by specially licensed carriers and disposed in a licensed faculty
Natural Disaster (Earthquakes, Floods, landsides and cyclone)									Preserve relevant records and equipment for the subsequent inquiry into the cause and circumstances of the emergency
Risk Assessment									
Electrical failures	Aging Equipment. According to the 2019 Plant Engineering Maintenance Study, aging equipment is the leading cause of equipment failure, accounting for 40 percent of unplanned downtime in plants. Operator Error. Lack of Preventive Maintenance. Over-Maintenance.	2	4	1	2	14	Very Low Insignificance	Equipment failures such as transformers and rotating machines, human errors and environmental conditions	Make regular inspection and electrical maintenance. Never touch a fallen power line. Avoid contact with overhead power lines during cleanup and other activities.
Equipment malfunctioning	Improper operation. Failure to perform preventive maintenance	3	4	1	3	24	Low	An asset doesn't operate as expected or stops working altogether. Equipment	Establish a maintenance schedule. When repairs and upkeep take place on machines at regular intervals, these

Environmental Management Plan

Categories	Source of Impact	Significant of Potential Impacts					Impact Significance	Reason	Mitigation Measure
		M	D	E	P	SP			
	Too much preventive maintenance. Failure to continuously monitor equipment.							failure, equipment malfunctions can cause production delays, safety issues, and missed milestones	efforts can significantly improve the equipment reliability of these systems. Eliminate potential defects. Utilize equipment monitoring.
Mechanical and structural failures	Industrial machine failure includes things like bearing failure, metal fatigue, corrosion, misalignment, and general surface degradation. Incorrect selection of materials. Errors in design calculation and detailing. Improper construction techniques and insufficient quality control and supervision. Chemical attacks on concrete structures. External mechanical factors.	3	4	1	3	24	Low	This loss of usefulness is broken down into three main categories: obsolescence, surface degradation and accidents Random factors (random causes), such as wind, snow, storms, etc., and those caused by man (resulting from human error)	Make regular inspection, reactive maintenance, preventative maintenance, predictive maintenance Reducing failures of buildings and other structures requires competent design; clear communication of that design to the contractor by means of engineering drawings, etc.; careful and competent construction; and effective construction supervision.

Table 5-3 Evaluation and Predication of Significant Impacts and Mitigation Measure on Decommissioning Phase

Categories	Source of Impact	Significant of Potential Impacts					Impact Significance	Reason	Mitigation Measure
		M	D	E	P	S			
Air	Demolish of buildings and related materials	3	1	1	4	20	Low	Emissions of particulate matters and carbon dioxide	Spray water twice a day Cover mesh trap around the

Environmental Management Plan

Categories	Source of Impact	Significant of Potential Impacts					Impact Significance	Reason	Mitigation Measure
		M	D	E	P	S			
	Transportation of demolished materials							gases into the air	decommission area Install shading net about 2 meters above temporary fence of decommission area Carry broken material with cover by canvas.
Water pollution	Sewage form decommissioning workers Demolition machinery equipment	3	1	1	3	15	Low	Contamination of surface water and ground water	Systematically demolish the septic tanks.
Soil	Demolish of buildings and related materials Transportation of demolished materials	3	1	1	3	15	Low	Contamination of soil	Manage the spillage of oil and diesel and sewage.
Noise and Vibration	Decommission activities Transportation of demolished materials	3	1	1	3	15	Low	Noise pollution to the surrounding	Carry out the activities during day time. Maintain the machines and vehicles to reduce noise pollution. Provide the ear plugs to the workers.
Waste disposal	Demolished debris such as bricks, concrete materials	2	1	1	3	12	Very Low	Dumping to the surrounding environment	Recyclable materials and dispose to the define areas.
Hazardous waste	Used lubricants from decommissioning vehicles and machines	2	1	1	3	12	Very Low	Spillage of lubricant	Manage the disposal way of hazardous waste.
Occupational Health and Safety (Accidents, Injuries)	Decommissioning activities Transportation of demolished materials	3	1	2	3	18	Low	Injuries and accidents	Provide protective fencing or demarcation with tape at the boundaries of dangerous / hazardous zone and the appropriate warning signs, marking and safety signs and installation of the lost time injury notice board.

Environmental Management Plan

Categories	Source of Impact	Significant of Potential Impacts					Impact Significance	Reason	Mitigation Measure
		M	D	E	P	S			
									Clean up excessive waste debris and liquid spills regularly. Use the third-party expert assisted by trained personnel to identify and remove hazardous materials.

The assessment of each impact is based on consideration of the magnitude, duration, extent and probability of activities, which are going to be carried out during operation phases. In operation phase, there are 3 moderate significance impact on human and waste generation (Fire, occupational safety and solid waste). 5 low significant impacts on environmental resources, waste and risk assessment (air, noise, vibration, liquid waste, Equipment malfunctioning, Mechanical and structural failures). 6 very low significant impact on environmental resources, ecological resources, human, waste generation and risk assessment (soil, water pollution, flora, fauna, health, hazardous waste and Electrical failures). In decommissioning phase 2 very low significant impact on environment and human (waste disposal and hazardous waste). 5 low significant impacts on environmental and human (air, water pollution, soil contamination, noise and vibration and occupational health and safety). Significance impacts on environmental and human and detail impact assessment for operation phases and decommissioning can be seen in above tables. All of the impacts during operation phases and decommissioning phase can be minimized by using mitigation measures and implementing Environmental Management Plan.

Environmental Management Plan

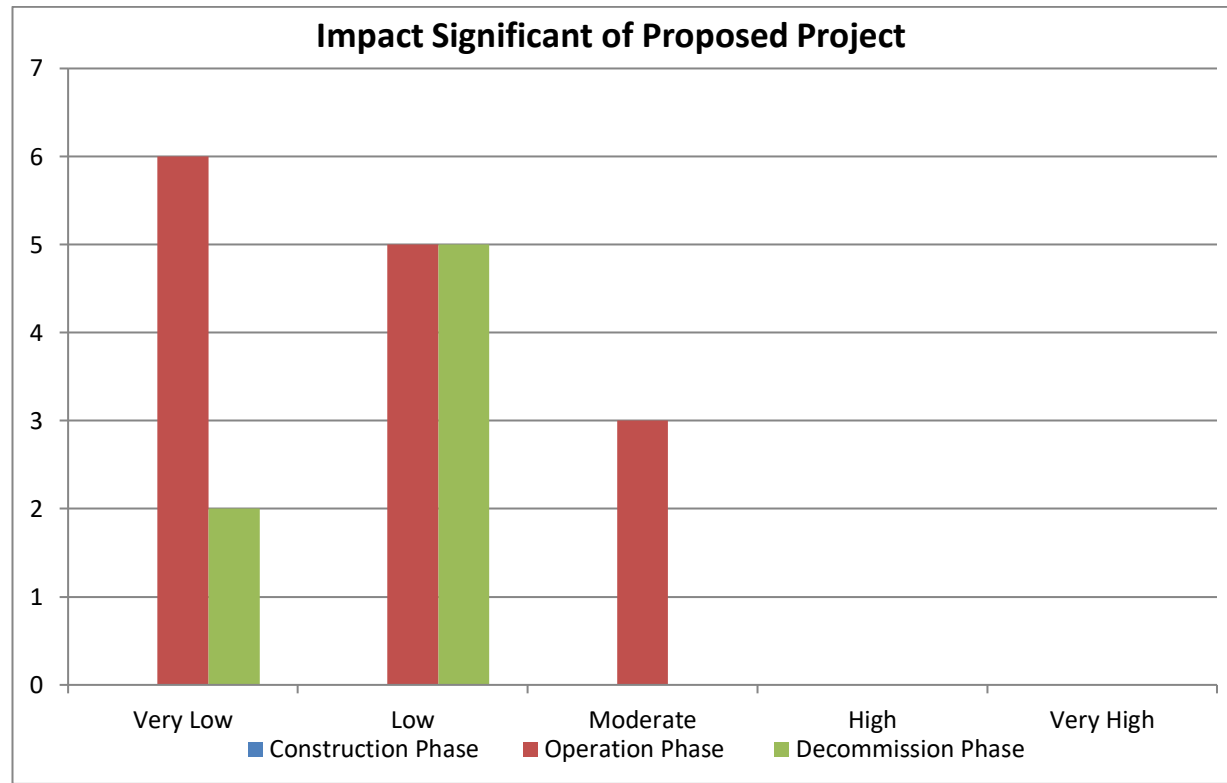


Figure 5-2 Comparison of Impact Significant of Proposed Project

6. ENVIRONMENTAL MANAGEMENT ACTION

The EMP for WONDERFUL APPAREL COMPANY LIMITED has been prepared to address potential issues based upon discussion with factory management, workers, local community view, stakeholder consultation and the site visit. The EMP is additional to and complements the factory's safety management system. The following environmental impact issues which require environmental management plans based upon the potential impacts activities of WONDERFUL APPAREL COMPANY LIMITED are as follows:

6.1. AIR POLLUTION/ DUST MANAGEMENT PLAN

Objective	<ul style="list-style-type: none"> ➤ To minimize the adverse impact to air quality caused by stack gas emission from generator and also dust management generated from vehicular movement. ➤ To comply with relevant government rules 	
Relevant Government Law and Rule	<ul style="list-style-type: none"> ➤ National Environmental Quality (Emission) Guideline 2015, ➤ Motor Vehicles Act (2015), ➤ Boiler Law (2015) 	
Time Frame	➤ Entire life spans of proposed project operation	
Management Action	<ul style="list-style-type: none"> ➤ Must be plant around the proposed project to reduce carbon emission ➤ Should be prohibited burning of waste material at the proposed project site ➤ Must be control air pollution, the vehicles, generators and machineries have to check and maintain regularly. ➤ The factory should use chimney for generator through which the flue gas is emitted for reducing the impact of stack emission on environment. ➤ Must be ensuring vehicles, compressor and generator are well maintained. 	
Monitoring and Reporting	Frequency	Biannually
	Monitoring Point	Indoor and Outdoor of proposed project
	Parameters	PM _{2.5} , PM ₁₀ , SO ₂ , NO ₂ , O ₃ , CO
Estimated Cost	700,000 Kyats per year	
Responsible Person	Management of the proposed factory; <ul style="list-style-type: none"> ▪ Head of maintenance: Total implementation of above of air pollution management plan ▪ Production manager: Air quality in the production area is good 	

Environmental Management Plan

	<p>enough</p> <ul style="list-style-type: none"> ▪ Manager: To hire organization/ independent third-party testing air quality ▪ EHS officer: Monitor the hygiene of ambient air quality in surrounding of the factory
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6.2. NOISE MANAGEMENT PLAN

Objective	<ul style="list-style-type: none"> ➢ To maintain low noise exposures, such that human health and well-being are protected. The specific objectives of noise management are to develop criteria for the maximum safe noise exposure levels, and to promote noise assessment and control as part of environmental health programmes. 	
Relevant Government Law and Rule	<ul style="list-style-type: none"> ➢ National Environmental Quality (Emission) Guideline 2015 	
Time Frame	<ul style="list-style-type: none"> ➢ Throughout the project life 	
Management Action	<ul style="list-style-type: none"> ➢ Building noise insulated generator room and ensure satisfactory maintenance of relevant equipment ➢ Impose speed limit to track and vehicles at the transportation route. ➢ Provide sufficient personal protective equipment (PPE) at the work place ➢ All the related personnel will be provided proper training about the relevant issues and ensure PPE wear during working in noisy area. 	
Monitoring and Reporting	Frequency	Biannually
	Monitoring Point	Two points in operation area (especially cutting and sewing)
	Parameters	Sound Decibel
Estimated Cost	500,000 Kyats per year	
Responsible Person	HSE Manager or Environmental Management Team of WONDERFUL APPAREL COMPANY LIMITED.	

6.3. FIRE MANAGEMENT PLAN

Objective	<ul style="list-style-type: none"> ➢ 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	<ul style="list-style-type: none"> ➢ Myanmar Fire Brigade Law 2015

Environmental Management Plan

Rule	
Time Frame	➤ Entire life spans of proposed project operation
Management Action	<ul style="list-style-type: none"> ➤ 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 and Reporting	To check monthly Visual inspection, Firefighting equipment (fire extinguish, firefighting hose, portable fire pumps, fire hose reels, fire monitor and firefighting nozzles)
Estimated Cost	1,200,000 Kyats per year
Responsible Person	HSE Manager, Operation Manager or Environmental Management Team of WONDERFUL APPAREL COMPANY LIMITED

6.4. 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	<ul style="list-style-type: none"> ➤ First aid training, safety training, firefighting training or other essential training for machinery handling must be provided for emergency cases of workers. ➤ According to the observed light intensity values, the proponent provides sufficient lighting for workers for safe working and reducing optical problems of the workers. ➤ Personal Protective Equipment (PPE) like earmuffs, safety gloves, helmets and goggles are provided for each department. ➤ To prevent electric shock hazards, electrical maintenance staff

Environmental Management Plan

	<p>(handyman) is to be assigned to do regular inspections and take preventive measures.</p> <ul style="list-style-type: none"> ➤ Manage the drainage systems of the factory to prevent health risk of the workers. ➤ The maximum allowable noise level for workers is 90dB(A) for 8hours exposure a day. Thus, adequate protective noise impact measures in the form of ear muffs/ear plugs to the workers working in high noise areas.
Monitoring and Reporting	<ul style="list-style-type: none"> ➤ Weekly check fire extinguishers and water hydrant in position ➤ Daily inspect that all fire exist are open ➤ Servicing fire extinguisher and records accidents
Estimated Cost	1,000,000 Kyats per year
Responsible Person	HSE Manager, Operation Manager or Environmental Management Team of WONDERFUL APPAREL COMPANY LIMITED.

6.5. SOLID WASTE MANAGEMENT PLAN

Objective	<ul style="list-style-type: none"> ➤ To assess the activities involved for the proposed and determine the type, nature and estimated volumes of waste to be generated ➤ To identify any potential environmental impacts from the generation of waste at the site
Relevant Government Law and Rule	<ul style="list-style-type: none"> ➤ Yangon City Development Committee Law (2018), National Waste Management Strategy and Action Plan (Draft 2018)
Time Frame	<ul style="list-style-type: none"> ➤ Entire life spans of proposed project
Management Action	<ul style="list-style-type: none"> ➤ Must be provides separate garbage bins at each building. ➤ All of the solid wastes will be collected separately in garbage based on their types and stored in relevant separated waste storage area ➤ Final wastes should be disposed by using YCDC's service.
Monitoring and Reporting	<ul style="list-style-type: none"> ➤ Daily waste has to be collected and handover to YCDC waste collector ➤ The inventory record of waste disposal will be maintained as proof for proper management as designed
Estimated Cost	50,000 Kyats per month
Responsible Person	<p>Manager (HR)</p> <ul style="list-style-type: none"> ▪ Responsible for overall site cleanliness and waste management

Environmental Management Plan

	<ul style="list-style-type: none"> ▪ Regular waste collection to minimize excessive waste storage
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6.6. LIQUID WASTE MANAGEMENT PLAN (WASTEWATER)

Objective	<ul style="list-style-type: none"> ➤ To implementation plan for the management of liquid waste from collection, through treatment and resource recovery, to residual disposal
Relevant Government Law and Rule	<ul style="list-style-type: none"> ➤ Yangon City Development Committee Law (2018), National Environmental Quality (Emission) Guidelines (2015), Underground Water Act
Time Frame	<ul style="list-style-type: none"> ➤ Entire life spans of proposed project
Management Action	<ul style="list-style-type: none"> ➤ Regular inspection and cleaning, oil traps, septic tank and adequate covers for all storage and waste disposal areas can decrease these contaminations.
Monitoring and Reporting	Frequency Biannually
	Parameters pH, Turbidity, Conductivity, Iron, Sulphaete, TSS, TDS, Manganese, COD, BOD, Cyanide, Copper, Zinc, Carbonate
	Proper maintenance of drainage and sewerage system will be conducted periodically
Estimated Cost	500,000 Kyats per year
Responsible Person	<p>Manager: To hire organization/ Independent third-party testing wastewater quality</p> <p>EHS officer: Monitor the condition of factory's drainage and sewerage system</p>

6.7. HAZARDOUS WASTE MANAGEMENT PLAN

Objective	<ul style="list-style-type: none"> ➤ To avoid environmental pollution and adverse health effects due to its improper handling & disposal.
Relevant Government Law and Rule	<ul style="list-style-type: none"> ➤ Yangon City Development Committee Law (2018), Explosive Ordnance Disposal Law (2018)
Time Frame	<ul style="list-style-type: none"> ➤ Entire life spans of proposed project
Management Action	<ul style="list-style-type: none"> ➤ Proper inspection and maintenance in storage of hazardous waste. ➤ Dispose of hazardous chemicals and containers in accordance with occupational health, safety and environmental requirements.

Environmental Management Plan

	<ul style="list-style-type: none"> ➤ The empty chemical containers will hand over to suppliers for recycle or appropriate disposal ➤ The hazardous wastes are transported by specially licensed carriers and disposed in a licensed faculty (e.g. DOWA and YCDC)
Monitoring and Reporting	Any hazardous materials purchased should include a Material Safety Data Sheet (MSDS), otherwise known as a Safety Data Sheet (SDS) or Product Safety Data Sheet (PSDS). By mandate of the World Health Organization's Inter-Organization Program for the Sound Management of Chemicals (IOMC), all manufacturers of hazardous materials are required to provide a MSDS so that end users can treat the materials properly.
Estimated Cost	1,000,000 Kyats per year
Responsible Person	HSE Manager or Environmental Management Team of WONDERFUL APPAREL COMPANY LIMITED

6.8. ENERGY MANAGEMENT PLAN

Objectives:	<ul style="list-style-type: none"> ➤ To improve energy efficiency, reduce cost, optimize capital investment, reduce environmental and greenhouse gas emissions, and conserve natural resources
Relevant government law and rule	<ul style="list-style-type: none"> ➤ National Energy Management Committee (Myanmar Energy Master Plan 2015)
Time Frame	Once in a year throughout the factory life
Management Action	<ul style="list-style-type: none"> ➤ Installation of timers and thermostats to control heating and cooling ➤ Energy saving light installed in different area of the factory for saving energy ➤ Used of energy saving devices must be installed ➤ Ensure that good housekeeping measures such as turning off equipment and lights when not in use
Monitoring & Reporting	Conduct annual energy efficiency of adult to find out the scope for energy saving
Estimated cost	Approximately 1,000,000 Kyats per year
Responsibility	<p>Manager</p> <ul style="list-style-type: none"> ➤ To arrange energy, audit technical personnel ➤ To monitor and record electricity consumption, other related energy issues and take necessary actions if any problem arises

6.9. EMERGENCY RESPONSE AND DISASTER MANAGEMENT PLAN

Objectives:	<ul style="list-style-type: none"> ➤ To reduce the harmful effects of all hazards, including disasters. The World Health Organization defines an emergency as the state in which normal procedures are interrupted, and immediate measures (management) need to be taken to prevent it from becoming a disaster, which is even harder to recover from.
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Environmental Management Plan

Relevant government law and rule	<ul style="list-style-type: none"> ➤ The Employment and Skill Development Law (August 2013), ILO guide to Myanmar Labour Law (2017)
Time Frame	<ul style="list-style-type: none"> ➤ Entire life spans of the factory operation
Management Action	<ul style="list-style-type: none"> ➤ The factory management has taken proper measures to handle any emergency situation like fire, earthquake, flood and storm ➤ Provision and inspection of firefighting equipment and fire hydrant system in all the sections ➤ A detail evaluation plan (fire exist, emergency exit door, etc.) is established and communicated with workers ➤ Periodic inspection of safety relief valve provided with pressure vessels and equipment, preventive maintenance; aware the workers about electric shock by necessary training. ➤ Regular fire drill operation is conducted ➤ Workers are informed about what to do in earthquake like stay in a safe place such as under table of desk, not to try move outside during earthquake, workers who will be outside during earthquake shall remain stay out of the building, trees, lump post, etc. Other relevant safety instruction of emergency situation it informed to workers by training ➤ Workers are aware of dangers from physical hazards such as obstacles covered by floodwater (storm debris, drainage opening, ground erosion) and from displaced reptiles (Snake) or other animals. ➤ A medical team has been prepared for primary treatment (First Aid) ➤ Prepare an emergency contact directory consisting contact numbers of nearest fire service, local police station, hospitals, etc. and display it in a place that everybody can see it easy. ➤ Build a safety committee which from firefighting team, rescue team. The committee arrange a meeting every month to discuss about safety management ➤ Ensure proper training of the employees about the disaster management, fire safety as well as occupational health and safety
Monitoring & Reporting	<p>Weekly check fire extinguishers and water hydrant in position</p> <p>Daily inspect that all fire exist are open</p> <p>Servicing fire extinguisher and records accidents,</p>
Estimated cost	Approximately 1,500,000 Kyats per year
Responsibility	<p>Manager and EHS officer</p> <ul style="list-style-type: none"> ➤ Arrange firefighting training after every 3 months ➤ Responsible for fire control and response ➤ Monitoring daily danger warning and bans

6.10. ENVIRONMENTAL MONITORING SCHEDULE AND REPORTING

The EMoP cell members responsible may conduct daily, weekly or monthly general inspections of the project are and facilities. The objective is to identify non-compliance to EMoP is provided the environmental monitoring schedule for WONDERFUL APPAREL COMPANY LIMITED. The proposed factory submits monitoring report to the Ministry not less frequently than every six (6) months, as provided in a schedule in the EMP,

Environmental Management Plan

Table 6-1 Environmental Monitoring Process

Issues	Parameter	Frequency	Area to be monitored	Monitoring cost	Responsible Organization
Operation Phase					
Air quality	SO ₂ , NO ₂ , CO, CO ₂ , PM _{2.5} , PM ₁₀	Biannually monitoring and reporting to ECD	17° 9'38.30"N 95°58'12.72"E	700,000 Kyats	Environmental Management Team's WONDERFUL APPAREL COMPANY LIMITED
Solid Waste Generation	Fabric scrap, Kitchen waste and office waste	Weekly	Recycle house and waste house and at the factory office	50,000 Kyats	Environmental Management Team's WONDERFUL APPAREL COMPANY LIMITED
Liquid Waste Generation	pH	Weekly	Factory Drainage	50,000 Kyats	Environmental Management Team's WONDERFUL APPAREL COMPANY LIMITED
Hazardous Waste Generation	Hazard Waste	Weekly	Recycle house and waste house and at the factory office	50,000 Kyats	Environmental Management Team's WONDERFUL APPAREL COMPANY LIMITED
Fire Hazardous	Visual inspection, firefighting equipment	Monthly	At the factory	500,000 Kyats	Environmental Management Team's WONDERFUL APPAREL COMPANY LIMITED
Noise	dBA	Biannually monitoring and reporting to ECD	17° 9'40.11"N 95°58'12.85"E	500,000 Kyats	Environmental Management Team's WONDERFUL APPAREL COMPANY LIMITED
Water Quality	pH, Turbidity, Conductivity, Iron, Sulphate, TSS, TDS, Manganese, COD, BOD, Cyanide, Copper, Zinc, Carbonate	Biannually	At the factory	500,000 Kyats	Environmental Management Team's WONDERFUL APPAREL COMPANY LIMITED

Environmental Management Plan

Issues	Parameter	Frequency	Area to be monitored	Monitoring cost	Responsible Organization
Light intensity	Illuminance	Monthly	At the production line (especially cutting and QC)	500,000 Kyats	Environmental Management Team's WONDERFUL APPAREL COMPANY LIMITED
Decommissioning Phase					
Air quality	SO ₂ , NO ₂ , CO, CO ₂ , PM _{2.5} , PM ₁₀	One time during this phase	One point in the demolishing area	1,000,000 Kyats	Land Owner
Noise	Noise level in decibel (dBA)	One time during this phase	One points in demolishing area	500,000 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

Environmental Management Plan

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 spread 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

Environmental Management Plan

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

- 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

Environmental Management Plan

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

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

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

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

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

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

Fire Safety Training – Employee assigned fire-fighting duties shall be trained 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
6. 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

Environmental Management Plan

- 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 WONDERFUL APPAREL 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 WONDERFUL APPAREL 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

6.12. CORPORATE SOCIAL RESPONSIBILITY (CSR) PLAN

The CSR activities have the objective to uplift quality of life and gain favorable relations from all communities in the operation area. The CSR program for 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.

WONDERFUL APPAREL 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.

Environmental Management Plan

Table 6-4 CSR plan at WONDERFUL APPAREL COMPANY LIMITED

Area	Priority item	Contribution (%)	Estimated Cost (Kyats)	Detail targets
Health	Healthcare for employees and their family	0.5 %	1,500,000	One of our main concerns is the well-being of our employees. We will contribute 0.5 % of our net profit for the healthcare which includes medical checkup for the employees and providing health education to our workers.
Education	Raising awareness education level and human right	0.5 %	1,500,000	We will contribute 0.5 % of our net profit to the public school near the factory to be a part of creating the better community. We will also work together with the school to understand more about the needs and we will also ensure that our contributions will be used in the most effective and efficient way for the society.
Community Development	Donation to local community	1%	2,500,000	<ul style="list-style-type: none"> • Donate to local charities with a worthy cause • Actively participate in community events • Encourage staff to participate, and to form a community engagement team to actively support community events • Embedding understanding and consciousness about human rights issues among the employees • Development of sexual harassment and power harassment (workplace bullying & harassment) prevention efforts

6.13. GRIEVANCE REDRESS MECHANISM (GRM)

People who live near the project affected area or stakeholders can complain about the problems and impacts that they suffer; they can complain through Grievance Committee, which includes the responsible persons of WONDERFUL APPAREL COMPANY LIMITED representative from Myaungtagar Thanmani Industrial Zone and representative from General Administration Department (Hmawbi 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 6-1) show steps of Grievance Redress Mechanism of Proposed Factory Project.

Environmental Management Plan

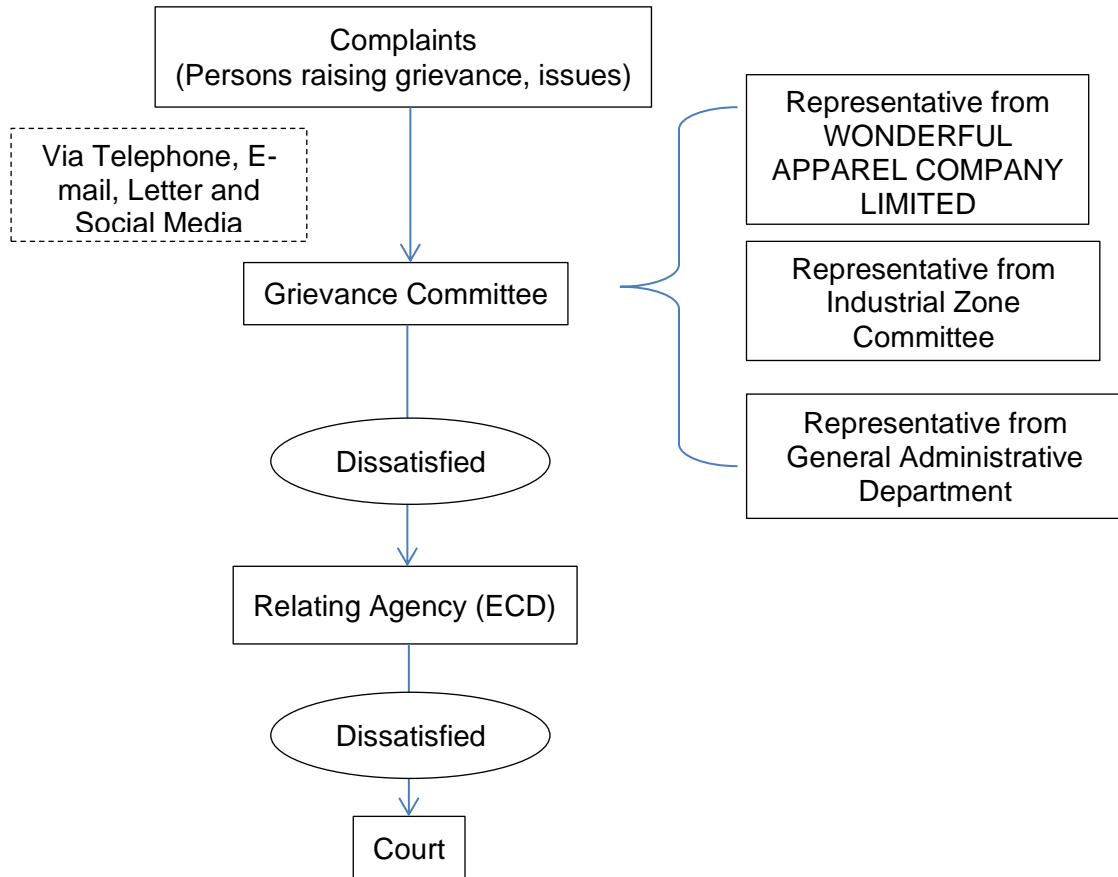


Figure 6-1 Grievance Redress Mechanism flow diagram

7. PUBLIC CONSULTATION

7.1. PUBLIC CONSULTATION PROCESS

This chapter presents public consultation and information disclosures during the remaining period of the Environmental Management Plan (EMP). Public consultation is the activities for gathering opinions and suggestions from related stakeholders. It will help to improve the implementation of the project, set the scope for the environmental impact assessment and development mitigation measures, which will be reported in the project's EMP report.

Public consultation conducted as part of this EMP project has three purposes:

- 1) Information the stakeholders about the Project, environmental and social issues related to project construction and operation, and mitigation measures to minimize environmental and social impacts;
- 2) Considering the views, concerns, and perceptions of stakeholders, communities and individuals that could be affected by the project or who otherwise have an interest in the project;
- 3) Participation and partnership where issues and needs are jointly discussed and assessed.

7.2. PUBLIC CONSULTATION MEETING

Public consultation meeting was conducted on 17th May 2023, 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 company, relevant key offices at the national level are Environmental Conservation Department (ECD). Relevant key office at the regional level is General Administrative Department, Fire Department, General Labor Law Inspection Department, Public Health Department, Township Municipal Committee and Industrial Zone Committee.

Public consultation carried out after the presentation on the project, followed by questions, answers and discussion. U Htun Lynn Kyaw presented EMP study and findings from Myanwei, after the presentation following questions and answer section. Summary of public consultation meeting is presented in Table 7-1. The detailed of the meeting, including the meeting time, venue and names of participated attended the consultation meeting are listed in **APPENDIX G and APPENDIX H**.

Table 7-1 Summary of Public Consultation Meeting


Time and Date	Thursday, 17 th May 2023 10:30 AM – 11:45 PM
Venue	Meeting Room of Wonderful Apparel Company Limited, (Myaung Tagar Industrial Zone, Hmawbi Township.)
Agenda	Introduction of Wonderful Apparel Company Limited. Project Activities and its Significant Impacts Environmental Baseline Study of the proposed project Risk Assessment and Mitigation Measures Environmental Management Plan Environmental Monitoring Plan and Budget Plan

Environmental Management Plan


	Corporate Social Responsibilities and factory's activities
Organized by	Myanwei Environmental Solutions Company Limited.

Environmental Management Plan


7.3. RECOMMENDATION SUGGESTION AND COMMENT

Name	Description	Photos
<p>ဦးထွန်းလင်းကျော် (Environmental Specialist) Myanwei Environmental Solutions Company Limited</p>	<p>Myanwei Environmental Solutions Company Limited မှ Environmental Specialist ဦးထွန်းလင်းကျော်မှ Wonderful Apparel Company Limited ၏ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်အား Power Point Presentation ဖြင့် ဆွေးနွေးတင်ပြခဲ့ပါသည်။ ရှင်းလင်းဆွေးနွေးတင်ပြခဲ့သော အကြောင်းအရာများ မှာ Wonderful Apparel Company Limited ၏ လုပ်ငန်းဆောင်ရွက်မှု အခြေအနေများ၊ စီမံကိန်း၏ ပတ်ဝန်းကျင်အပေါ် သက်ရောက်မှုဆန်းစစ်ခြင်းနှင့် ထိခိုက်မှုအဆင့်သတ်မှတ်ချက်များ၊ ၎င်းပတ်ဝန်းကျင်အပေါ်သက်ရောက်မှုများအား ဖြေလျော့ရေးနည်းလမ်းများ၊ စီမံကိန်း၏ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်များ အကျဉ်းချုပ်၊ ပတ်ဝန်းကျင်ဆိုင်ရာ စောင့်ကြပ်ကြည့်ရှုမှုအစီအစဉ် နှင့် ခန့်မှန်းကုန်ကျစရိတ်နှင့် စက်ရုံ၏ လူထုအကျိုးတူပူးပေါင်းဆောင်ရွက်မှုများ၊ စက်ရုံ၏ ဆောင်ရွက်ထားရှိမှုများ ဖြစ်ပါသည်။</p>	


Environmental Management Plan

<p>ဦးကျော်စိုး (လက်ထောက်ညွှန်ကြားရေးမှူး) ရန်ကုန်တိုင်းဒေသကြီး၊ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန၊ (ရန်ကုန်မြောက်ပိုင်းခရိုင်)</p>	<p>ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန၊ ရန်ကုန်မြောက်ပိုင်း ခရိုင်မှ လက်ထောက်ဦးစီးမှူး ဦးကျော်စိုးမှ-ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှုအားလုပ်ဆောင်ခိုင်းရခြင်းမှာ နိုင်ငံခြားမှဝင်ရောက်လာသော ရင်းနှီးမြုပ်နှံသည့်စက်ရုံများကြောင့် ပတ်ဝန်းကျင်ညစ်ညမ်းမှု လျော့ပါးစေရန် 3rd party မှ လေ့လာတွေ့ရှိချက်များကို အစိုးရလူကြီးများ နှင့် ဘေးပတ်ဝန်းကျင်ပြည်သူများမှ သုံးသပ်အကြံပြုပေးပါရန်လည်းကောင်း၊ သုံးသပ်အကြံပြုချက်များ ကို စက်ရုံမှလက်တွေ့အကောင်အထည်ဖော်ရန်လိုအပ်ပါကြောင်း၊ ဘျိုင်လာမှထွက်ရှိလာသောအမှုန်အမွှားများကြောင့် ပတ်ဝန်းကျင် ညစ်ညမ်းမှုမဖြစ်စေရန် နှင့် အစိုးရ guideline ထက်မကျော် လွန်စေရန် သတိပြုသင့်ကြောင်း အကြံပြုဆွေးနွေး ခဲ့ပါသည်။</p>	
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Environmental Management Plan

<p>ဦးတင်ထွန်းအောင် (ဦးစီးအရာရှိ) မှော်ဘီမြို့နယ်၊ စည်ပင်သာယာရေးဦးစီးဌာန၊</p>	<p>မှော်ဘီမြို့နယ်၊ စည်ပင်သာယာရေးဦးစီးဌာန၊ ဦးစီးအရာရှိ ဦးတင်ထွန်းအောင် မှ စက်ရုံ၏ လုပ်သားဦးရေနှင့် ကိုက်ညီသော အမှိုက်ပုံး အရေအတွက် ထားရှိရန်လိုအပ်ကြောင်း၊ အမှိုက်စို အမှိုက် ခြောက်ခွဲ၍ အမှိုက်စိုစားကြွင်းစားကျန်များကို လုံလုံခြုံခြုံ သိမ်းစည်း၍ နေ့စဉ်စွန့်ပစ်ရန် လိုအပ်ပါကြောင်း၊ စက်ရုံအတွင်း အထွေထွေအသုံးပြုသော ရေများအား စွန့်ပစ်ရာတွင် (Septic tank) ဆောက်လုပ်၍ အနည်ထိုင်ကန် မှ တဆင့် အနည်ကျကာ ရေများအား စက်မှုဇုန်မြောင်းအတွင်းသို့ စနစ်တကျစွန့်ထုတ်စေလိုကြောင်း၊ အကြံပြုဆွေးနွေးခဲ့ပါ သည်။</p>	
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Environmental Management Plan

<p>ဒေါ်ဝင်းကလျာထွန်း (ဦးစီးအရာရှိ) ကျန်းမာရေးဦးစီးဌာန</p>	<p>ဒေါ်ဝင်းကလျာထွန်း (ဦးစီးအရာရှိ)မှ ဝန်ထမ်းများအား Covid ကာကွယ်ဆေးအကြိမ်ပြည့်ထိုးထား စေလိုကြောင်း၊ ဝန်ထမ်းအရေအတွက်နှင့်ကိုက်ညီသော အိမ်သာအရေအတွက် ထားရှိရန် နှင့် လက်ဆေးဘေဆင် များအလုံအလောက်ထားရှိစေလိုကြောင်း၊ ဆေးပေးခန်းတွင် ကျွမ်းကျင်သော လက်မှတ်ရ ကျန်းမာရေးဝန်ထမ်းများထား ရှိစေလိုကြောင်း အကြံပြုဆွေးနွေးခဲ့ပါ သည်။</p>	
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Environmental Management Plan

<p>ဦးထွန်းလင်းကျော် (Environmental Specialist) Myanwei Environmental Solutions Company Limited</p>	<p>Myanwei Environmental Solutions Company Limited မှ Environmental Specialist ဦးထွန်းလင်းကျော်မှ လူကြီးမင်းတို့၏ အကြံပြုတင်ပြချက်များအား စက်ရုံနှင့် ပူးပေါင်း၍ လိုက်နာဆောင်ရွက်သွားမည်ဖြစ်ပါကြောင်းနှင့် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် အစီရင်ခံစာအား ပြည့်စုံစွာ ပြုစုရေးသားသွားမည် ဖြစ်ပါကြောင်း ပြောကြားခဲ့ပါသည်။</p>	
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8. CONCLUSION & RECOMMANTATION

8.1. CONCLUSION

Environmental Management Plan (EMP) has been prepared for WONDERFUL APPAREL COMPANY LIMITED factory is located at Plot No.294+295+296, Myay Taing Block No. Myaung Tagar Thanmani Industrial Zone, Hmawbi Township, Yangon. 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 garment product 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. RECOMMANTATION

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.

Environmental Management Plan

- 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 Project Proponent shall submit monitoring report to the Ministry every six (6) months, as provided in a schedule in the EMP. The proponent should abide environmental policy, laws, rules and instructions of the Republic of the Union of Myanmar.


9. REFERENCE

- [1] General Administrative Department (Hmawbi Township), Hmawbi Township Data (2019).
- [2] Ministry of Natural Resources and Environmental Conservation (MONREC), “Environmental Impact Assessment Procedure” December 2015.
- [3] Ministry of Natural Resources and Environmental Conservation (MONREC), “National Environmental Quality (Emission) Guidelines” December 2015.

APPENDIX A

Company Document's WONDERFUL APPAREL COMPANY LIMITED

Form (5-B)




THE REPUBLIC OF THE UNION OF MYANMAR
Yangon Region Investment Committee


ENDORSEMENT

Endorsement No. YGN 389/2020 Date **11** June 2020

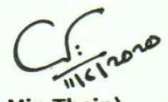
This endorsement is issued by Yangon Region Investment Committee accordance with Section 25 (d) of the Myanmar Investment Law-

- (1) **Investor Name** MR. XU, LIANGSHENG
- (2) **Citizenship** CHINESE
- (3) **Residence Address** ROOM-1801, 18 FLOOR, BUILDING-A, CFC, 300 EAST ZHONGSHAN ROAD, NANJING, JIANGSU PROVINCE, PEOPLE'S REPUBLIC OF CHINA
- (4) **Name and Address of Principal Organization** WONDERFUL APPAREL COMPANY LIMITED, PLOT NO. 294+295+296, MYAY TAING BLOCK NO. MYAUNG TAKAR INDUSTRIAL ZONE, HMAWBI TOWNSHIP, YANGON REGION
- (5) **Place of Incorporation** MYANMAR
- (6) **Type of business** MANUFACTURING OF GARMENT ON CMP BASIS
- (7) **Place(s) of investment** PROJECT PLOT NO. 294+295+296, MYAY TAING BLOCK NO. MYAUNG TAGAR THANMANI INDUSTRIAL ZONE, HMAWBI TOWNSHIP, YANGON REGION
- (8) **Foreign Capital Amount** US\$ 1.707 MILLION
- (9) **Period for Foreign Capital to be brought in** WITHIN 1 YEAR FROM THE DATE OF ISSUANCE OF ENDORSEMENT
- (10) **Total Amount of Capital (Kyat)** EQUIVALENT IN KYAT OF US\$ 1.897 MILLION (INCLUDING US\$ 1.707 MILLION)
- (11) **Construction/ Preparation Period** 1 YEAR
- (12) **Validity of Endorsement** 30 YEARS
- (13) **Form of Investment** JOINT VENTURE
- (14) **Name of Company Incorporated in Myanmar** WONDERFUL APPAREL COMPANY LIMITED





YRIC 389/2020



(Phyto Min Thein)
Chairman

Environmental Management Plan



ပုံစံ (၅-ခ)

ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်
ရန်ကုန်တိုင်းဒေသကြီးရင်းနှီးမြှုပ်နှံမှုကော်မတီ
အတည်ပြုမိန့်

- အတည်ပြုမိန့်အမှတ် ရကတ- ၃၈၉/၂၀၂၀ ၂၀၂၀ ပြည့်နှစ် ဇွန်လ ၁၁ ရက်
ရန်ကုန်တိုင်းဒေသကြီး ရင်းနှီးမြှုပ်နှံမှု ကော်မတီသည် မြန်မာနိုင်ငံ ရင်းနှီးမြှုပ်နှံမှု ဥပဒေ
ပုဒ်မ-၂၅(ဃ) အရ ဤအတည်ပြုမိန့်ကိုထုတ်ပေးလိုက်သည် -
- (၁) ရင်းနှီးမြှုပ်နှံသူ/ကမကထပြုသူ အမည် ----- MR. XU, LIANGSHENG
 - (၂) နိုင်ငံသား ----- CHINESE
 - (၃) နေရပ်လိပ်စာ ROOM-1801, 18 FLOOR, BUILDING-A, CFC, 300 EAST ZHONGSHAN ROAD, NANJING, JIANGSU PROVINCE, PEOPLE'S REPUBLIC OF CHINA
 - (၄) ပင်မအဖွဲ့အစည်းအမည်နှင့်လိပ်စာ WONDERFUL APPAREL COMPANY LIMITED, မြေကွက်အမှတ်-၂၉၄+၂၉၅+၂၉၆၊ မြေတိုင်းရပ်ကွက်အမှတ်-မြောင်းတကာသံမဏိ စက်မှုဇုန်၊ မော်ဘီမြို့နယ်၊ ရန်ကုန်မြို့
 - (၅) ဖွဲ့စည်းရာအရပ် ----- မြန်မာ
 - (၆) ရင်းနှီးမြှုပ်နှံသည့်လုပ်ငန်းအမျိုးအစား CMP စနစ်ဖြင့်အဝတ်အထည်အမျိုးမျိုးချုပ်လုပ်ခြင်းလုပ်ငန်း
 - (၇) ရင်းနှီးမြှုပ်နှံသည့်အရပ်ဒေသ(များ) မြေကွက်အမှတ်-၂၉၄+၂၉၅+၂၉၆၊ မြေတိုင်းရပ်ကွက်အမှတ် -မြောင်းတကာသံမဏိစက်မှုဇုန်၊ မော်ဘီမြို့နယ်၊ ရန်ကုန်တိုင်းဒေသကြီး
 - (၈) ဦးနှင်းငြားမတည်ငွေရင်း ပမာဏ အမေရိကန်ဒေါ်လာ ၁.၇၀၇ သန်း
 - (၉) နိုင်ငံခြားမတည်ငွေရင်းယူဆောင်လာရမည့်ကာလ အတည်ပြုမိန့် ရရှိသည့်နေ့မှ ၁ နှစ်အတွင်း
 - (၁၀) စုစုပေါင်း မတည်ငွေရင်းပမာဏ(ကျပ်) အမေရိကန်ဒေါ်လာ ၁.၈၉၇ သန်း (အမေရိကန်ဒေါ်လာ ၁.၇၀၇ သန်း အပါအဝင်)
 - (၁၁) တည်ဆောက်မှုကာလ ၁ နှစ်
 - (၁၂) ရင်းနှီးမြှုပ်နှံမှုခွင့်ပြုသည့် သက်တမ်း ၃၀ နှစ်
 - (၁၃) ရင်းနှီးမြှုပ်နှံမှုပုံစံ ဖက်စပ်နိုင်ငံခြားရင်းနှီးမြှုပ်နှံမှု
 - (၁၄) မြန်မာနိုင်ငံတွင် ဖွဲ့စည်းမည့် ကုမ္ပဏီအမည် WONDERFUL APPAREL COMPANY LIMITED



(ဖြိုးမင်းသိန်း)
ဥက္ကဋ္ဌ

APPENDIX B Transitional Consultant Registration Certificate



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



CERTIFICATE FOR TRANSITIONAL CONSULTANT REGISTRATION
(ကြားကာလအကြံပေးလုပ်ကိုင်သူမှတ်ပုံတင်ခြင်းအထောက်အထားလက်မှတ်)

No. 10068 Date 24 MAY 2019

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

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

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



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

Environmental Management Plan

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



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

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

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

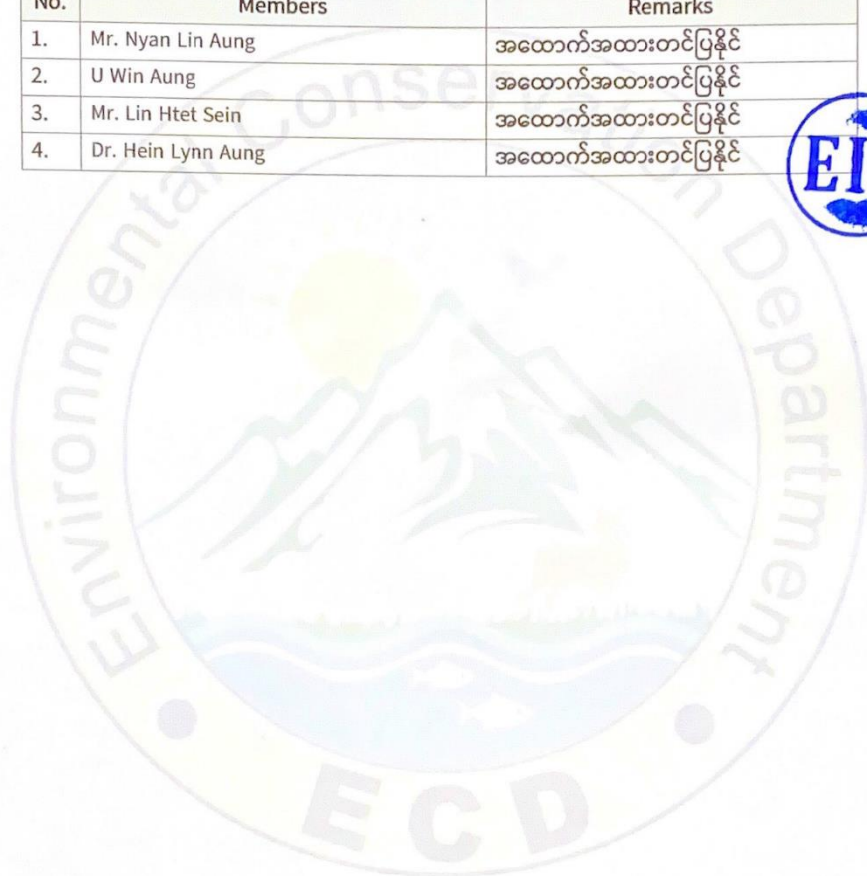
EXTENSION (သက်တမ်းတိုးမြှင့်ခြင်း)
The VALIDITY of this certificate is extended for one year from (1.1.2022) to (31.12.2022)
ဤလက်မှတ်အား (၁-၁-၂၀၂၂) ရက်နေ့မှ (၃၁-၁၂-၂၀၂၂) ရက်နေ့အထိ (၆)လသက်တမ်းတိုးမြှင့်သည်။
Soe Naing
For Director General
(Soe Naing, Director)
Environmental Conservation Department

EXTENSION (သက်တမ်းတိုးမြှင့်ခြင်း)
The VALIDITY of this certificate is extended for six months from (1.1.2023) to (30.6.2023)
ဤလက်မှတ်အား (၁-၁-၂၀၂၃) ရက်နေ့မှ (၃၀-၆-၂၀၂၃) ရက်နေ့အထိ (၆)လသက်တမ်းတိုးမြှင့်သည်။
Sa Aung Thu
For Director General
(Sa Aung Thu, Director)
Environmental Conservation Department

Environmental Management Plan

(၁၁.၂၀၂၃) မှ (၃၀.၆.၂၀၂၃) အထိ သက်တမ်းတိုးရာ၌ ပါဝင်သည့် Myanwei Consulting Company Limited အဖွဲ့တွင် ပါဝင်သည့် အဖွဲ့ဝင်စာရင်း
 သက်တမ်းတိုးထုတ်ပေးသည့် ရက်စွဲ။ ၃၁-၁-၂၀၂၃

No.	Members	Remarks
1.	Mr. Nyan Lin Aung	အထောက်အထားတင်ပြနိုင်
2.	U Win Aung	အထောက်အထားတင်ပြနိုင်
3.	Mr. Lin Htet Sein	အထောက်အထားတင်ပြနိုင်
4.	Dr. Hein Lynn Aung	အထောက်အထားတင်ပြနိုင်



Environmental Management Plan



REPUBLIC OF THE UNION OF MYANMAR
Ministry of Natural Resources and Environmental Conservation
CERTIFICATE FOR TRANSITIONAL CONSULTANT REGISTRATION



(ကြားကာလအကြိမ်ပေးလုပ်ကိုင်သူမှတ်ပုံတင်ခြင်းအထောက်အထားလက်မှတ်)

No. 0048 Date 31.03.2018

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

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

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



EXTENSION
သက်တမ်းတိုးမြှင့်ခြင်း
The **VALIDITY** of this certificate is extended for one year from (1.4.2018) to (31.3.2019)
ဤလက်မှတ်အား (၀-၄-၂၀၁၈) ရက်နေ့မှ (၃၁-၃-၂၀၁၉) ရက်နေ့အထိ တစ်နှစ်သက်တမ်း တိုးမြှင့်သည်။
For Director General (Soe Naing, Director) Environmental Conservation Department

Handwritten signature in blue ink.

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

Environmental Management Plan

Areas of Expertise Permitted
(ခွင့်ပြုသည့် ကျွမ်းကျင်မှုနယ်ပယ်များ)

1. Geology and Soil

EXTENSION
သက်တမ်းတိုးမြှင့်ခြင်း

The VALIDITY of this certificate is extended for six month from (1.1.2021) to (30.6.2021)
ဤလက်မှတ်အား (၁-၁-၂၀၂၁) ရက်နေ့မှ (၃၀-၆-၂၀၂၁) ရက်နေ့အထိ (၆)လ သက်တမ်းတိုးမြှင့်သည်။

Soe Naing
For Director General
(Soe Naing, Director)
Environmental Conservation Department

EXTENSION
သက်တမ်းတိုးမြှင့်ခြင်း

The VALIDITY of this certificate is extended for nine months from (1.4.2019) to (31.12.2019)
ဤလက်မှတ်အား (၁-၄-၂၀၁၉) ရက်နေ့မှ (၃၁.၁၂.၂၀၁၉) ရက်နေ့အထိ (၉)လ သက်တမ်းတိုးမြှင့်သည်။

Soe Naing
10.6.2019
For Director General
(Soe Naing, Director)
Environmental Conservation Department

EXTENSION
သက်တမ်းတိုးမြှင့်ခြင်း

The VALIDITY of this certificate is extended for six months from (1.7.2021) to (31.12.2021)
ဤလက်မှတ်အား (၁-၇-၂၀၂၁) ရက်နေ့မှ (၃၁-၁၂-၂၀၂၁) ရက်နေ့အထိ (၆)လ သက်တမ်းတိုးမြှင့်သည်။

Soe Naing
For Director General
(Soe Naing, Director)
Environmental Conservation Department

EXTENSION
သက်တမ်းတိုးမြှင့်ခြင်း

The VALIDITY of this certificate is extended for one year from (1.1.2020) to (31.12.2020)
ဤလက်မှတ်အား (၁-၁-၂၀၂၀) ရက်နေ့မှ (၃၁-၁၂-၂၀၂၀) ရက်နေ့အထိ တစ်နှစ် သက်တမ်းတိုးမြှင့်သည်။

Soe Naing
16.1.2020
For Director General
(Soe Naing, Director)
Environmental Conservation Department

EXTENSION (သက်တမ်းတိုးမြှင့်ခြင်း)

The VALIDITY of this certificate is extended for one year from (1.1.2022) to (31.12.2022)
ဤလက်မှတ်အား (၁-၁-၂၀၂၂) ရက်နေ့မှ (၃၁-၁၂-၂၀၂၂) ရက်နေ့အထိ တစ်နှစ် သက်တမ်းတိုးမြှင့်သည်။

Soe Naing
25.3.2022
For Director General
(Soe Naing, Director)
Environmental Conservation Department

EXTENSION (သက်တမ်းတိုးမြှင့်ခြင်း)

The VALIDITY of this certificate is extended for six months from (1.1.2023) to (30.6.2023)
ဤလက်မှတ်အား (၁-၁-၂၀၂၃) ရက်နေ့မှ (၃၀-၆-၂၀၂၃) ရက်နေ့အထိ (၆)လ သက်တမ်းတိုးမြှင့်သည်။

Sa Aung Thu
For Director General
(Sa Aung Thu, Director)
Environmental Conservation Department

Appendix C Drinking Water Certificate



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

WTL-RE-001
 Issue Date - 01-12-2012
 Effective Date - 01-12-2012
 Issue No - 1.0/Page 2 of 2

W0223 253

WATER QUALITY TEST RESULTS FORM

Client _____	Wonderful Apparel Company
Nature of Water _____	Drinking Water
Location _____	Hmawbi Township
Date and Time of collection _____	13.2.2023
Date and Time of arrival at Laboratory _____	14.2.2023
Date and Time of commencing examination _____	15.2.2023
Date and Time of completing _____	17.2.2023

Results of Water Analysis

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

Parameter	Unit	Value
Temperature (°C)	°C	
Fluoride (F)	mg/l	1.5 mg/l
Lead (as Pb)	mg/l	0.01 mg/l
Arsenic (As)	mg/l	Nil
Nitrate (N.NO ₃)	mg/l	50 mg/l
Chlorine (Residual)	mg/l	
Ammonia Nitrogen (NH ₃)	mg/l	
Ammonium Nitrogen (NH ₄)	mg/l	
Dissolved Oxygen (DO)	mg/l	
Chemical Oxygen Demand (COD)	mg/l	
Biochemical Oxygen Demand (BOD) (5 days at 20 °C)	mg/l	
Cyanide (CN)	mg/l	0.07 mg/l
Zinc (Zn)	mg/l	3 mg/l
Copper (Cu)	mg/l	2 mg/l
Silica (SiO ₂)	mg/l	

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

Tested by

Signature: _____

Name: _____

Heiny
Zaw Hein Oo
 B.Sc (Chemistry)
 Sr.Chemist
 ISO Tech Laboratory

Approved by

Signature: _____

Name: _____

Soe Thit
Soe Thit
 B.E (Civil)1986
 Technical Officer
 ISO TECH Laboratory

Environmental Management Plan



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



WTL-RE-001
 Issue Date - 01-12-2012
 Effective Date - 01-12-2012
 Issue No - 1.0/Page 1 of 2

W0223 253

WATER QUALITY TEST RESULTS FORM

Client Wonderful Apparel Company
 Nature of Water Drinking Water
 Location Hmawbi Township
 Date and Time of collection 13.2.2023
 Date and Time of arrival at Laboratory 14.2.2023
 Date and Time of commencing examination 15.2.2023
 Date and Time of completing 17.2.2023

Results of Water Analysis

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

pH		6.5 - 8.5
Colour (True)	TCU	15 TCU
Turbidity	NTU	5 NTU
Conductivity	micro S/cm	
Total Hardness	mg/l as CaCO ₃	500 mg/l as CaCO ₃
Calcium Hardness	mg/l as CaCO ₃	
Magnesium Hardness	mg/l as CaCO ₃	
Total Alkalinity	14 mg/l as CaCO ₃	
Phenolphthalein Alkalinity	mg/l as CaCO ₃	
Carbonate (CaCO ₃)	mg/l as CaCO ₃	
Bicarbonate (HCO ₃)	mg/l as CaCO ₃	
Iron	mg/l	0.3 mg/l
Chloride (as CL)	mg/l	250 mg/l
Sodium Chloride (as NaCL)	mg/l	
Sulphate (as SO ₄)	mg/l	500 mg/l
Total Solids	mg/l	1500 mg/l
Total Suspended Solids	mg/l	
Total Dissolved Solids	mg/l	1000 mg/l
Manganese	mg/l	0.05 mg/l
Phosphate	mg/l	
Phenolphthalein Acidity	mg/l	
Methyl Orange Acidity	mg/l	
Salinity	ppt	

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

Tested by
 Signature: Hein
 Name: Zaw Hein Oo
B.Sc (Chemistry)
Sr.Chemist

Approved by
 Signature: Soe Thit
 Name: Soe Thit
B.E (Civil) 1980

Environmental Management Plan

APPENDIX D

Monitoring Result

Light Result



No. 49 (B), Inya Yeik Thar Street, Mayangone Township, Yangon Region, The Republic of the Union of Myanmar.
Office: (+95) 95185776, Mobile: (+95) 9421137569; Website: www.myanweiconsulting .com

Project Name:	WONDERFUL APPAREL COMPANY LIMITED
Project Location:	Plot No. (294+295+296), Myaung Tagar Thanmani Industrial Zone, Hmawbi Township, Yangon.
Sampling Date:	February 25, 2023
Sampling Time:	9:00 am to 4:00 pm
Sampling Condition:	
Sampling By:	Environmental Team Represented by Myanwei Environmental Solutions Company Limited

Instrument	Type	Sampling Rate	Location
Uni-T (Luminometer)	UT380 Series	100 times/second	Operation Area (Sewing, Cutting, Ironing, QC, Packing)

No.	Measured Area	Unit	Result	Standard	Remark
1.	Fabric Warehouse	Lux	675	1000	Under
2.	Cutting Area	Lux	835	900	Under
3.	Sewing Area	Lux	970	600	Above
5.	Ironing	Lux	840	600	Above
	Quality Control	Lux	1080	900	Slightly Above
6.	Packaging Area	Lux	820	600	Above

IEESNA Lighting Handbook

Department	Type of Light	Wattage of Light	Lux Level
Warehouse	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
DIRECTOR
MYANWEI ENVIRONMENTAL SOLUTIONS
COMPANY LIMITED.

Environmental Management Plan

Noise result



No. 49 (B), Inya Yeik Thar Street, Mayangone Township, Yangon Region, The Republic of the Union of Myanmar.
Office: (+95) 95185776, Mobile: (+95) 9421137569; Website: www.myanweiconsulting .com

Project Name:	WONDERFUL APPAREL COMPANY LIMITED
Project Location:	Plot No. (294+295+296), Myaung Tagar Thanmani Industrial Zone, Hmawbi Township, Yangon.
Sampling Date:	February 25, 2023
Sampling Time:	9:00 am to 4:00 pm
Sampling Condition:	
Sampling By:	Environmental Team Represented by Myanwei Environmental Solutions Company Limited

Instrument	Type	Sampling Rate	Location
Uni-T (Luminometer)	UT380 Series	100 times/second	Operaion Area (Sewing, Cutting, Ironing, QC, Packing)

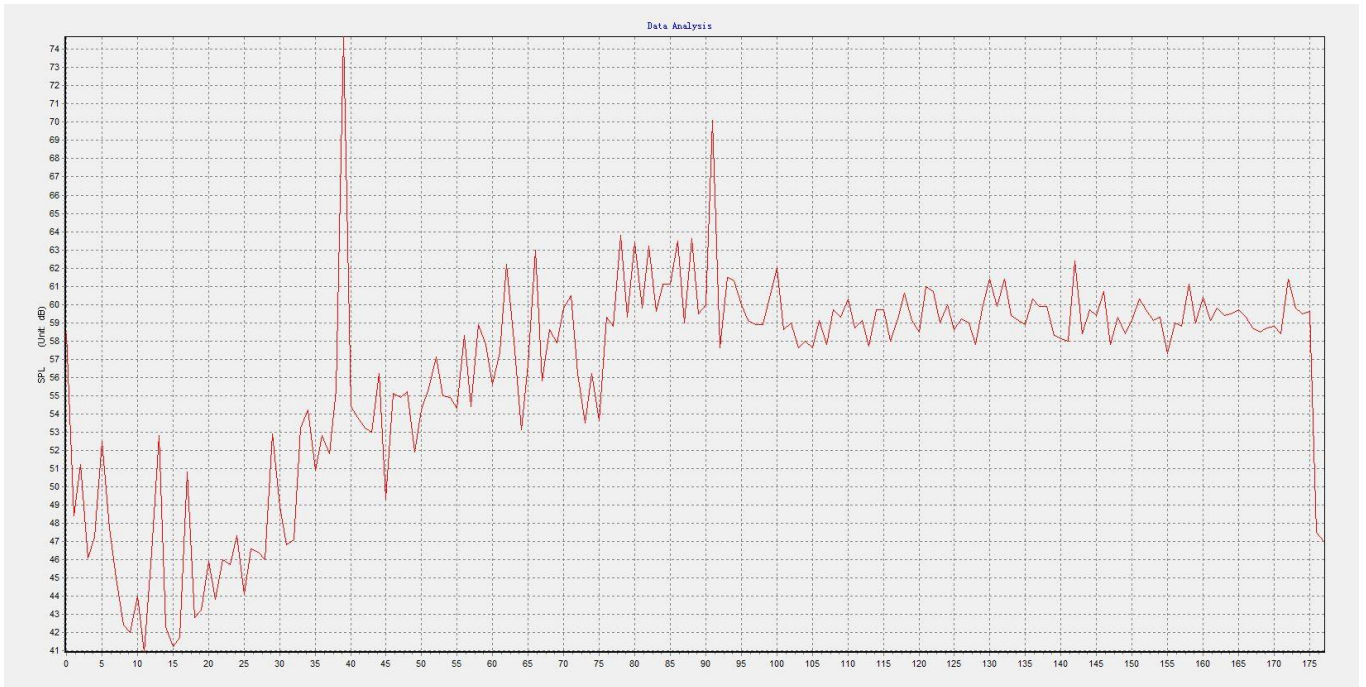
No.	Measured Area	Unit	Result	Standard	Remark
1.	Fabric Warehouse	Lux	675	1000	Under
2.	Cutting Area	Lux	835	900	Under
3.	Sewing Area	Lux	970	600	Above
5.	Ironing	Lux	840	600	Above
	Quality Control	Lux	1080	900	Slightly Above
6.	Packaging Area	Lux	820	600	Above

IEESNA Lighting Handbook

Department	Type of Light	Wattage of Light	Lux Level
Warehouse	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
DIRECTOR
MYANWEI ENVIRONMENTAL SOLUTIONS
COMPANY LIMITED.

Environmental Management Plan



Environmental Management Plan

Air Quality results



No. 49 (B), Inya Yeik Thar Street, Mayangone Township, Yangon Region, The Republic of the Union of Myanmar.
Office: (+95) 95185776, Mobile: (+95) 9421137569; Website: www.myanweiconsulting.com

Project Name:	CHINDWIN BANNER COMPANY LIMITED
Project Location:	Plot No. (294+295+296), Myaung Tagar Thanmani Industrial Zone, Hmawbi Township, Yangon.
Sampling Date:	February 25, 2023
Sampling Time:	9:00 AM to 4:00 PM
Sampling Condition:	
Sampling By:	Environmental Team Represented by Myanwei Environmental Solutions Company Limited

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

National Environmental Quality (Emission) Guideline

Parameter	Averaging Period	Guideline Value	Unit
PM ₁₀ ^a	1-year	20	(µg/m ³)
	24-hour	50	
PM _{2.5} ^a	1-year	10	(µg/m ³)
	24-hour	25	
O ₃ ^a	8-hour	100	(µg/m ³)
NO ₂ ^a	1-year	40	(µg/m ³)
	1-hour	200	
SO ₂ ^a	24-hour	20	(µg/m ³)
	10-min	500	

a. Values from air quality guidelines-global update 2005: particulate matter, ozone, nitrogen dioxide and sulfur dioxide.

Monitoring Result

Parameters	Observed Value	Guideline Value	Unit	Organization	Period
PM ₁₀	16.3	50	µg/m ³	NEQG	8 hours
PM _{2.5}	10.9	25	µg/m ³	NEQG	8 hours
SO ₂	6.36	500	µg/m ³	NEQG	8 hours

Environmental Management Plan

NO ₂	23.38	200	µg/m ³	NEQG	8 hours
O ₃	33.4	100	µg/m ³	NEQG	8 hours
CO	0.52	10	µg/m ³	NEQG	8 hours





LIN HTET SEIN
DIRECTOR
MYANWEI ENVIRONMENTAL SOLUTIONS
COMPANY LIMITED.

APPENDIX E Fire Certificate & Fire Safety Training

ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော် 消防証

ပြည်ထဲရေးဝန်ကြီးဌာန
မီးသတ်ဦးစီးဌာန

မီးဘေးလုံခြုံရေးစစ်ဆေးထောက်ခံချက်

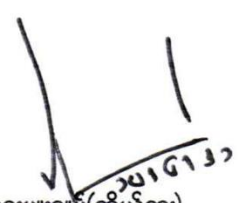
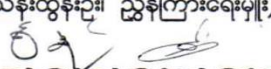
အမှတ်စဉ်(၁၄၀)

၁။ ရန်ကင်းတိုင်းဒေသကြီး/ပြည်နယ်၊ မှော်ဘီမြို့နယ်၊ မြောင်းတကာသံမဏိနှင့်သံရည်ကျိုစက်မှုဇုန်
ရပ်ကွက်/ကျေးရွာ၊ ကုန်းကလေးလမ်းနှင့်ဓာတ်မြေညှိစာစက်ရုံလမ်းထောင့် အမှတ်-(၂၉၄+၂၉၅+၂၉၆) ရှိ
ပိုင်ရှင်ဦး/ဒေါ် Wonderful Apparel Co.,Ltd. ၏ Steel Structure()ထပ်(အထည်ချုပ်စက်ရုံ)
RCC(၂)ထပ်(Dormitory) အဆောက်အဦအတွက် ဤဌာန၏(၂၁-၉-၂၀၂၀) ရက်စွဲပါစာအမှတ်
၂၆၀၆ / ၁၀၀ / ၅၂ / ဦး ၁ ဖြင့် သတ်မှတ်ပေးထားသည့် မီးဘေးလုံခြုံရေးဆိုင်ရာပြဌာန်းချက်များအား
(၃၀-၅-၂၀၂၁)ရက်နေ့တွင် စစ်ဆေးသည့်အခါ ပြည့်စုံစွာဆောင်ရွက်ထားကြောင်း စစ်ဆေးတွေ့ရှိရသည်။

၂။ ဤထောက်ခံချက်သည် စစ်ဆေးသည့်နေ့မှစ၍ (၃)နှစ်အထိသာ အကျိုးဝင်သည်။

၃။ ထို့ပြင် မီးသတ်ဦးစီးဌာနမှ အခါအားလျော်စွာ ထပ်မံစစ်ဆေးချိန်တွင် မီးဘေးလုံခြုံရေးဆိုင်ရာ
ပြဌာန်းချက်များကို လိုက်နာဆောင်ရွက်ခြင်းမရှိပါက ဤထောက်ခံချက်ကို ပြန်လည်ရုတ်သိမ်းသွားမည်ဖြစ်ပြီး
အဆောက်အဦအားအသုံးပြုသူ(သို့မဟုတ်)ပိုင်ရှင်သည် မြန်မာနိုင်ငံမီးသတ်တပ်ဖွဲ့ဥပဒေအရအရေးယူခြင်းခံရမည်။

မှတ်ချက်။ ဤထောက်ခံချက်အား လွှဲပြောင်းသုံးစွဲခြင်းမပြုရ။ အဆောက်အဦအား မူလရည်ရွယ်ချက်မှ
ပြောင်းလဲအသုံးပြုပါက ထောက်ခံချက်အသစ် ထပ်မံလျှောက်ထားရမည်။


 ညွှန်ကြားရေးမှူးချုပ်(ကိုယ်စား)
 (သိန်းထွန်းဦး၊ ညွှန်ကြားရေးမှူး)


F.S.C(Waylin)

Environmental Management Plan



Environmental Management Plan



Environmental Management Plan



Environmental Management Plan



Environmental Management Plan



APPENDIX F Boiler Certificate



Boiler

ဘွိုင်လာယာယီအသုံးပြုခွင့်လက်မှတ်

{ လုပ်ထုံးလုပ်နည်း အပိုဒ် ၆ အပိုဒ်ခွဲ (ဆ) }

စာအမှတ်... ၅၀၂/၂၀၂၂-၂၃/မသ/မ-၃၀

..... Mr. XU Liangsheng, Wonderful Apparel Co., Ltd.

..... ဒီဂျစ်လျှပ်စစ်ဓာတ်အားအသုံးပြုစနစ် (၂၆၄.၂၆၅.၂၆၆) မြေအောက်ကား

..... သံမဏိရက်မှုရုံနှင့် မြေအောက်မြေအောက် ရေနံကုန်တိုင်းဒေသကြီး။"

..... အား.....

..... ကုမ္ပဏီ..... နိုင်ငံမှ

ထုတ်လုပ်သည့်ဘွိုင်လာအမှတ်..... ၃၀၄.၀.၂၆ ပါသော

သို့မဟုတ်ဘွိုင်လာမှတ်ပုံတင်အမှတ် မ.စ.မှတ်ပုံတင်..... ဖြစ်သော မှတ်ပုံတင်ဘွိုင်လာကို

ခွင့်ပြုအား..... ဖြင့်လက်မှတ်ထုတ်ပေးသည့်နေ့မှ (၆)လ အသုံးပြုခွင့်ရှိသည်။

ယင်းကာလအပိုင်းအခြားကျော်လွန်သည့်အခါ ထုတ်ပေးထားသည့် ဤယာယီအသုံးပြုခွင့်လက်မှတ်

ပျက်ပြယ်စေရမည်။

(Signature)
ဒုတိယညွှန်ကြားရေးမှူး (ကစ)
(ဘွိုင်လာစစ်ဆေးရေး)
ရန်ကုန်တိုင်းဒေသကြီး

(Signature)
ဘွိုင်လာစစ်ဆေးရေးမှူး
လက်ထောက်ညွှန်ကြားရေးမှူး
(ဘွိုင်လာစစ်ဆေးရေး)
ရန်ကုန်တိုင်းဒေသကြီး

ရက်စွဲ။ ၁၀.၇.၂၀၂၂

မှတ်ချက်။ ။ ဘွိုင်လာဥပဒေပုဒ်မ ၁၅ပါ ပြဌာန်းထားသည့် သက်ဆိုင်ရာအစိုးရဌာနအဖွဲ့အစည်းက
လိုအပ်၍ တောင်းဆိုသည့်အခါ ဤလက်မှတ်ကို တင်ပြရမည်။

Environmental Management Plan

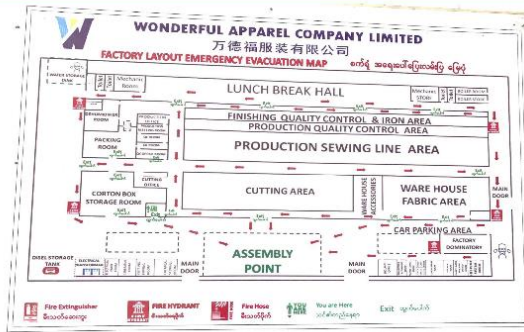
Wonderful Apparel Company Limited ၏ စီမံကိန်း တည်နေရာမြေပုံ



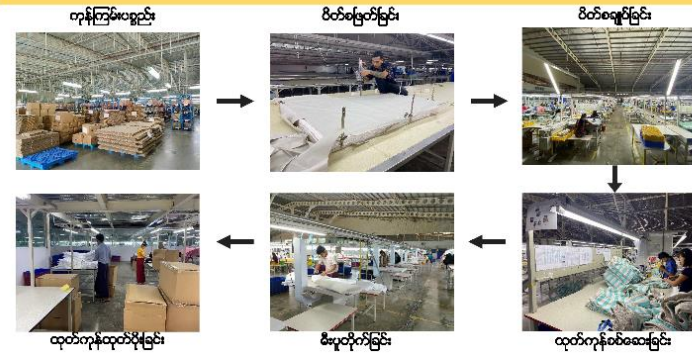
Wonderful Apparel Company Limited ၏ စီမံကိန်းအနီးပတ်ဝန်းကျင်မြေပုံ



Wonderful Apparel Company Limited ၏ စီမံကိန်းတည်ဆောက်ပုံမြေပုံ



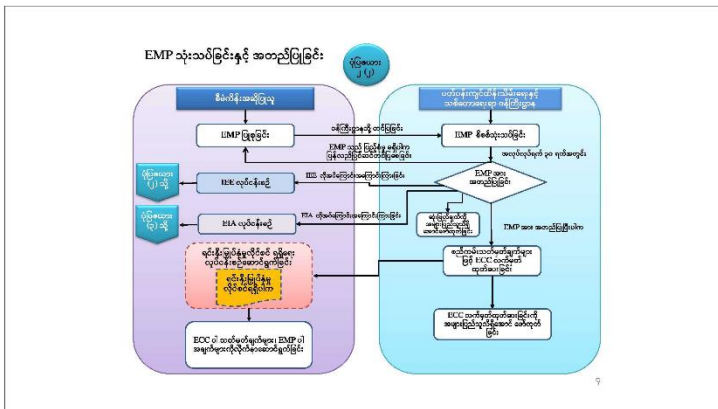
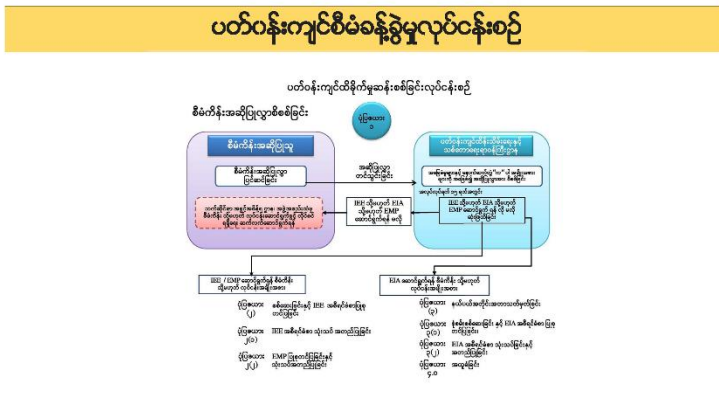
Wonderful Apparel Company Limited ၏ ကုန်ထုတ်လုပ်ပုံအဆင့်ဆင့်



Environmental Management Plan



ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်အား မိတ်ဆက်ခြင်း



Environmental Management Plan



သက်ရောက်မှုဆန်းစစ်ခြင်းရလဒ်များနှင့် ထိခိုက်မှုအဆင့်သတ်မှတ်ချက်များ

စီမံကိန်းပတ်ဝန်းကျင်အခြေအထား

စဉ်	အခြေအနေအရာ	ဖော်ပြချက်
၁။	ကိုဩဒိနိတ်အမှတ်	မြောက်လတ္တီကျု ၁၇°၄၂'၃၈.၃၀" နှင့် အရှေ့လောင်ဂျီကျု ၉၅°၅၈'၀၃.၂၈"
၂။	ရာသီဥတုအခြေအနေ	မှော်ဘီမြို့နယ်၏ နှစ်စဉ်ပျမ်းမျှအမြင့်ဆုံးအပူချိန် ၄၀.၆ °C၊ အနိမ့်ဆုံးအပူချိန် ၁၃.၄ °C
၃။	စက်ရုံနေရာတွင်မြေအသုံးချမှု	စက်ရုံလုပ်ငန်းနှင့်သက်ဆိုင်သောမြေအသုံးချမှုပုံစံ (စက်ရုံရန်)
၄။	လမ်းပန်းဆက်သွယ်ရေး	ရန်ကင်း-ပြည် လမ်းမကြီး
၅။	အနီးဆုံးရေအရင်းအမြစ်	လှိုင်မြစ်
၆။	သစ်တောဧရိယာ	မရှိ
၇။	ကန့်သတ်ကာကွယ်ထားသော ဧရိယာ	မရှိ
၈။	တိုင်းတာမှုရလဒ်	<input type="checkbox"/> ဆူညံသံ တိုင်းတာခြင်း <input type="checkbox"/> လေထုအရည်အသွေး တိုင်းတာခြင်း <input type="checkbox"/> အပူချိန် နှင့် နိုက်ထရိုဂျင် အရည်အသွေး တိုင်းတာခြင်း <input type="checkbox"/> အလင်းရောင်ပြင်းထန်မှုတိုင်းတာခြင်း

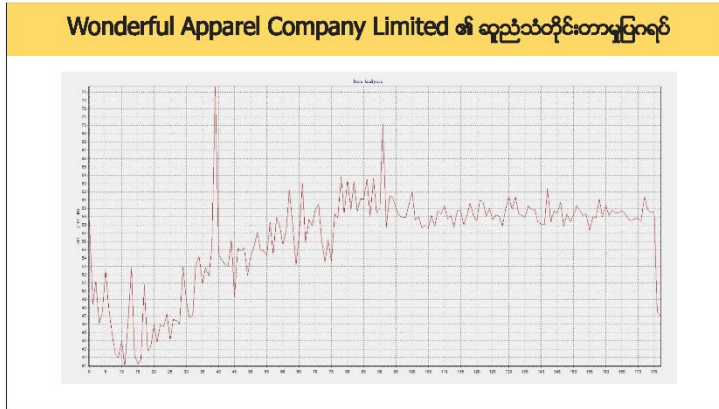
Wonderful Apparel Company Limited ၏ ဆူညံသံတိုင်းတာမှု

Date & Time	Location	GPS Location	Noise Result	NEQ Guideline
25.February. 2023	Operation Area	17° 9'40.11"N 95°58'12.85"E	56.2 dBA	70 dBA

အထက်ဖော်ပြပါ ဆူညံသံတိုင်းတာမှုရလဒ်များအရ Wonderful Apparel Company Limited ၏ဆူညံသံမှာ National Environmental Quality (Emission) Guideline အတွင်းတည်ရှိနေသည်ကို ဆန်းစစ်တွေ့ရှိရပါသည်။





Environmental Management Plan




Wonderful Apparel Company Limited ၏ လေထုတိုင်းတာမှု

Parameters	Observed Value	Guideline Value	Unit	Organization	Working Period
PM10	16.3	50	μg/m ³	NEQG	8 hrs
PM2.5	10.9	25	μg/m ³	NEQG	8 hrs
SO2	6.36	20	μg/m ³	NEQG	8 hrs
NO2	23.38	200	μg/m ³	NEQG	8 hrs
O3	33.4	100	μg/m ³	NEQG	8 hrs
CO	0.52	NG	μg/m ³	-	8 hrs



လေထုတိုင်းတာမှုဗြူဂရပ်



Wonderful Apparel Company Limited ၏ အလင်းရောင်တိုင်းတာမှု

No.	Location	Measured Value (Lux)	Standard*	Remark
1.	Warehouse Area	675	1000	Normal
2.	Cutting Area	835	900	Normal
3.	Sewing Area	970	600	Above
4.	Quality Control Area	1080	600	Above
5.	Ironing Area	840	900	Normal
6.	Packaging Area	820	600	Above

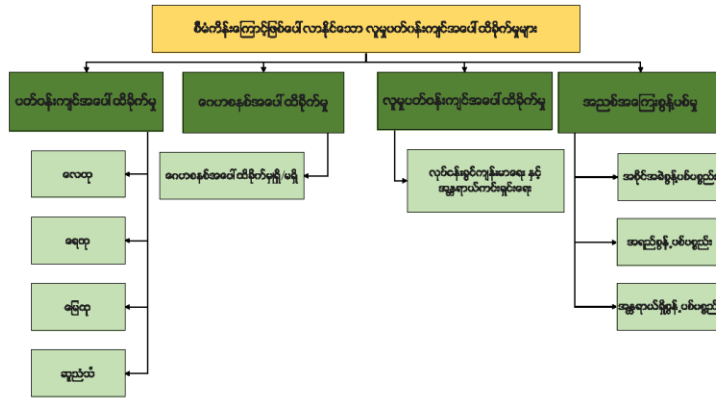


အလင်းရောင်တိုင်းတာမှုဗြူဂရပ်



ပတ်ဝန်းကျင်အပေါ် သက်ရောက်မှုများနှင့် ဖြေလျှော့ရေးနည်းလမ်းများ

Environmental Management Plan



သတ်မှတ်ချက်	စီမံကိန်းအန္တရာယ်များ	လျော့နည်းစေရန် အရေးယူစဉ်ကိစ္စများ
စီမံကိန်းလုပ်ငန်းစဉ်		
ခလထု	ပိတ်ဆို့ပိတ်ထားသော အန္တရာယ်များ ဖြစ်ပေါ်စေခြင်း	ပိတ်ဆို့ပိတ်ထားသော အန္တရာယ်များ ဖြစ်ပေါ်စေခြင်း မဟုတ်ဘဲ ပိတ်ဆို့ပိတ်ထားသော အန္တရာယ်များ ဖြစ်ပေါ်စေခြင်း
ထုတ်လုပ်မှု	ပိတ်ဆို့ပိတ်ထားသော အန္တရာယ်များ ဖြစ်ပေါ်စေခြင်း	ထုတ်လုပ်မှုအစဉ်ကိစ္စများကို အကာအကွယ်ပေး ထားခြင်း၊ ပိတ်ဆို့ပိတ်ထားသော အန္တရာယ်များ ဖြစ်ပေါ်စေခြင်း
စီမံခန့်ခွဲမှု	ကုန်ကြမ်းတင်ယူမှုနှင့် လူမှုပတ်ဝန်းကျင်ဆိုင်ရာ အန္တရာယ်များ	ကုန်ကြမ်းတင်ယူမှုအစဉ်ကိစ္စများကို လျော့နည်းစေခြင်း၊ လူမှုပတ်ဝန်းကျင်ဆိုင်ရာ အန္တရာယ်များ ဖြစ်ပေါ်စေခြင်း
ကုန်ပစ္စည်းထုတ်လုပ်မှု	လူမှုပတ်ဝန်းကျင်ဆိုင်ရာ အန္တရာယ်များ ဖြစ်ပေါ်စေခြင်း	အထူးအန္တရာယ်များအတွက် ပစ္စည်းထုတ်လုပ်မှု အစဉ်ကိစ္စများကို လျော့နည်းစေခြင်း၊ လူမှုပတ်ဝန်းကျင်ဆိုင်ရာ အန္တရာယ်များ ဖြစ်ပေါ်စေခြင်း
စွန့်ပစ်ပစ္စည်း (အစိုင်အခဲ အစဉ်)	လူမှုပတ်ဝန်းကျင်ဆိုင်ရာ အန္တရာယ်များ ဖြစ်ပေါ်စေခြင်း၊ အန္တရာယ်များ ဖြစ်ပေါ်စေခြင်း	စွန့်ပစ်ပစ္စည်းများကို လျော့နည်းစေခြင်း၊ ပြန်လည်ထုတ်လုပ်မှု နှင့် စွန့်ပစ်ပစ္စည်း အစဉ်ကိစ္စများကို လျော့နည်းစေခြင်း၊ အန္တရာယ်များ ဖြစ်ပေါ်စေခြင်း
အန္တရာယ်ရှိစွန့်ပစ်ပစ္စည်းများ	စက်မှုအန္တရာယ်ရှိစွန့်ပစ်ပစ္စည်းများ ဖြစ်ပေါ်စေခြင်း	စက်မှုအန္တရာယ်ရှိစွန့်ပစ်ပစ္စည်းများ အန္တရာယ်များ ဖြစ်ပေါ်စေခြင်း၊ စက်မှုအန္တရာယ်ရှိစွန့်ပစ်ပစ္စည်းများ ဖြစ်ပေါ်စေခြင်း

သတ်မှတ်ချက်	စီမံကိန်းအန္တရာယ်များ	လျော့နည်းစေရန် အရေးယူစဉ်ကိစ္စများ
စီမံကိန်းလုပ်ငန်းစဉ်		
ခလထု	အထူးအန္တရာယ်များ ဖြစ်ပေါ်စေခြင်း	လျော့နည်းစေခြင်း
ခရထု	မြေပေါ် မြေအောက်အန္တရာယ်များ ဖြစ်ပေါ်စေခြင်း	လျော့နည်းစေခြင်း
ထုတ်လုပ်မှု	ထုတ်လုပ်မှုအစဉ်ကိစ္စများ ဖြစ်ပေါ်စေခြင်း	လျော့နည်းစေခြင်း
လုပ်ငန်းစဉ် အစဉ်အဆက်	လုပ်ငန်းစဉ်အစဉ်အဆက် အန္တရာယ်များ ဖြစ်ပေါ်စေခြင်း	လုပ်ငန်းစဉ်အစဉ်အဆက် အန္တရာယ်များ ဖြစ်ပေါ်စေခြင်း
စွန့်ပစ်ပစ္စည်း (အစိုင်အခဲ အစဉ်)	စီမံကိန်းအန္တရာယ်များ ဖြစ်ပေါ်စေခြင်း၊ အန္တရာယ်များ ဖြစ်ပေါ်စေခြင်း	အန္တရာယ်များ ဖြစ်ပေါ်စေခြင်း၊ လူမှုပတ်ဝန်းကျင်ဆိုင်ရာ အန္တရာယ်များ ဖြစ်ပေါ်စေခြင်း
အန္တရာယ်ရှိစွန့်ပစ်ပစ္စည်းများ	စက်မှု အန္တရာယ်များ	စက်မှုအန္တရာယ်ရှိစွန့်ပစ်ပစ္စည်းများ အန္တရာယ်များ ဖြစ်ပေါ်စေခြင်း၊ စက်မှုအန္တရာယ်ရှိစွန့်ပစ်ပစ္စည်းများ ဖြစ်ပေါ်စေခြင်း

ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်

Environmental Management Plan

လေထုညစ်ညမ်းမှုလျော့ချရေး	
ရည်ရွယ်ချက်	စီမံကိန်းကြောင့် စက်ရုံမှ ထွက်သော ဓာတ်ငွေ့များနှင့် မီးစက်များမှ ထွက်ရှိသော ဓာတ်ငွေ့များကြောင့် လေထုညစ်ညမ်းမှုကို လျော့ချရန်
လိုက်နာရမည့် စည်းကမ်း	အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာအစည်းအဝေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များ (၂၀၁၅)
စီမံခန့်ခွဲမှုအစီအစဉ်	<ul style="list-style-type: none"> စက်ရုံအတွင်းနှင့် အနီးပတ်ဝန်းကျင်တွင် သစ်ပင်ပန်းပွင့်စိုက်ပျိုးခြင်း စက်ရုံအတွင်း မည်သည့်စွန့်ပစ်ပစ္စည်းများအား မီးရှို့ချက်စီမံခြင်း မပြုလုပ်ခြင်း လုပ်သားများအား Personal Protective Equipment (PPE) ဟုခေါ်သော အကာအကွယ်ပစ္စည်းများဖြစ်သည့် လေကာ/နေကာမျက်မှန်များ၊ နှာခေါင်းစည်း၊ စသည်တို့အားထောက်ပံ့ခြင်း၊ အသိပညာပေး သင်တန်းများ ပေးခြင်း
တာဝန်ယူရမည့် ပုဂ္ဂိုလ်	<ul style="list-style-type: none"> ပြုပြင်ထိန်းသိမ်းရေးအရာရှိ - လေထုညစ်ညမ်းမှုလျော့ချရေးနည်းလမ်းများ ထုတ်လုပ်ရေးမန်နေဂျာ - လုပ်ငန်းစဉ်လေထုညစ်ညမ်းမှု မန်နေဂျာ - ပတ်ဝန်းကျင်လေထုညစ်ညမ်းမှုအသွေးတိုင်းတာရန် (Third-Party) နှင့် ညှိနှိုင်းဆောင်ရွက်ရန်

ဆူညံသံလျော့ချရေး	
ရည်ရွယ်ချက်	ဘေးပတ်ဝန်းကျင်ဆူညံမှုမဖြစ်ပေါ်စေရန် နှင့် စက်ရုံရှိ မီးစက်နှင့် အခြားစက်ပစ္စည်းများ ကြောင့် လုပ်သားများအပေါ် ထိခိုက်မှု လျော့ချရန်
လိုက်နာရမည့် စည်းကမ်း	<ul style="list-style-type: none"> ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာလုပ်ထုံးလုပ်နည်း (၂၀၁၅) အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာအစည်းအဝေး(ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များ (၂၀၁၅)
စီမံခန့်ခွဲမှုအစီအစဉ်	<ul style="list-style-type: none"> မီးစက်/လေမှတ်စက်တို့ကို ဆူညံသံထိန်းချုပ်နိုင်သော အခန်းခွံ စည်းမှုပုံစံ တည်ဆောက် ထားခြင်း လုပ်ငန်းသုံးယာဉ်များကိုဆူညံသံလျော့ချရန်သတ်မှတ်အရှိန်ထက်ကျော်လွန်မမောင်းစေခြင်း လုပ်သားများအား Personal Protective Equipment (PPE) ဟုခေါ်သော အကာအကွယ်ပစ္စည်းများဖြစ်သည့် နှာအကာကွယ်ပစ္စည်းများ ထောက်ပံ့ခြင်း၊ အသိပညာပေး သင်တန်းများ ပေးခြင်း
တာဝန်ယူရမည့် ပုဂ္ဂိုလ်	မန်နေဂျာ - ဆူညံသံတိုင်းတာရန် (Third-Party) နှင့် ညှိနှိုင်းဆောင်ရွက်ရန်

အစိုင်အခဲစွန့်ပစ်မှု ထိန်းသိမ်းရေး	
ရည်ရွယ်ချက်	စွန့်ပစ်အမှိုက်ထွက်ရှိမှုလျော့ချရေးနှင့် စွန့်ပစ်အမှိုက်ကြောင့် ပတ်ဝန်းကျင်ညစ်ညမ်းမှုကို လျော့ချရန်
လိုက်နာရမည့်စည်းကမ်း	<ul style="list-style-type: none"> ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာလုပ်ထုံးလုပ်နည်း (၂၀၁၅) National Waste Management Strategy and Action Plan (Draft 2018)
စီမံခန့်ခွဲမှုအစီအစဉ်	<ul style="list-style-type: none"> စက်ရုံထွက်သော မည်သည့်စွန့်ပစ်ပစ္စည်းမှ မြစ်၊ ဧရာဝတီ၊ အင်း၊ နှစ် အတွင်းသို့ မစွန့်ပစ်ရ စက်ရုံတွင် စွန့်ပစ်ပစ္စည်းများကို ပြန်လည်အသုံးပြုနိုင်သောပစ္စည်း(ဆီ၊ ဓာတ်ဆီ၊ စက္ကနာ၊ ပလတ်စတစ်၊ စသည်ဖြင့်) များကို ပြင်ဆင်ထိန်းသိမ်းပေးရန်၊ ပြန်လည်ရောင်းချခြင်း စွန့်ပစ်ရန်ပစ္စည်း(လုပ်သားများမှစွန့်ပစ်ပစ္စည်းနှင့်မိမိရောင်းထွက်ပစ္စည်းများ)ကို မြို့တော်တည်ပင်သာယာရေးအဖွဲ့အစည်း ကို စနစ်တကျ ယူပြီး ထိန်းဆည်းပေးခြင်း အန္တရာယ်ရှိပစ္စည်း (စက်ဆီအဟောင်းများ၊ လျှပ်စစ်ပစ္စည်းအပျက်များ၊ သံထည်ပစ္စည်း) များကို ဝယ်ယူသူထံမှပြန်လည် ထိန်းဆည်းပေးခြင်း စက်ရုံတွင် အမှိုက်စွန့်ပစ်ရန် အတွက် အမှိုက်ပုံများကို စီမံထားခြင်း စက်ရုံထိန်းသိမ်းရေးအဖွဲ့ကို စနစ်တကျ အမှိုက်စွန့်ပစ်ရန် တိုက်တွန်းနှိုးဆော်ထားခြင်း
တာဝန်ယူရမည့်ပုဂ္ဂိုလ်	<ul style="list-style-type: none"> မန်နေဂျာ - စက်ရုံအတွင်းသန့်ရှင်းရေးအတွက်စီမံခန့်ခွဲရန်တာဝန်ရှိသူ အမှိုက်စွန့်ပစ်မှု ပုံမှန်ပြုလုပ်ရန်နှင့် စွန့်ပစ်ပစ္စည်းသယ်ယူသူများကို ပုံမှန်ပြုလုပ်ရန် တာဝန်ယူဆောင်ရွက်ရန်

စွန့်ပစ်အရည်ထိန်းသိမ်းရေး	
ရည်ရွယ်ချက်	မြေပေါ်ရေနှင့် မြေအောက်ရေ ညစ်ညမ်းမှုမဖြစ်ပေါ်စေရေး
လိုက်နာရမည့်စည်းကမ်း	<ul style="list-style-type: none"> ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာလုပ်ထုံးလုပ်နည်း (၂၀၁၅) အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာအစည်းအဝေး(ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များ (၂၀၁၅)
စီမံခန့်ခွဲမှုအစီအစဉ်	<ul style="list-style-type: none"> စက်ရုံရေမြောင်းများနှင့်မိလ္လာစနစ်ကို စနစ်တကျ သန့်ရှင်းအောင်ထားရှိခြင်း လုံလောက်သည့်အတိုင်းအတာ ပမာဏရှိခြင်း မိလ္လာစနစ်ကို ပုံမှန်စစ်ဆေးပြီး လိုအပ်သကဲ့သို့ ထိန်းသိမ်းပြုပြင်ခြင်း စက်ရုံရေမြောင်းအတွင်းတွင် ပိတ်ဆို့မှုမရှိစေရန်နှင့် အနံ့ဓိုင်းများမထွက်စေရန်စီမံခြင်း
တာဝန်ယူရမည့်ပုဂ္ဂိုလ်	မန်နေဂျာ - စွန့်ထုတ်ရေအရည်အသွေးတိုင်းတာရန် (Third-Party) နှင့် ညှိနှိုင်းဆောင်ရွက်ရန်

Environmental Management Plan

စွမ်းအင်သုံးစွဲမှု ထိန်းသိမ်းရေး	
ရည်ရွယ်ချက်	လျှပ်စစ်သုံးစွဲမှုလျော့ချစေရန်နှင့် လုပ်ငန်းခွင်အတွင်း လျှပ်စစ်သုံးစွဲမှုကြောင့် အန္တရာယ်မရှိစေရန်
စီမံခန့်ခွဲမှုအစီအစဉ်	<ul style="list-style-type: none"> စက်ရုံတွင်း လျှပ်စစ်သုံးစွဲမှုများအတွက် စွမ်းအင်လျော့ချနိုင်သည့် စက်ကိရိယာများတပ်ဆင်ခြင်း အသုံးမပြုလျှင် စက်ကိရိယာများပိတ်ထားခြင်း စွမ်းအင်အသုံးနည်းသော Lighting စနစ်တပ်ဆင်ခြင်း စက်ပစ္စည်းနှင့် Lighting အသုံးပြုမှုကို စောင့်ကြည့်ထိန်းသိမ်းရေးစနစ်ထားရှိခြင်း (ဥပမာ-အသုံးမပြုပီမီဖွင့်ထားခြင်း၊ စက်ဖွင့်ထားခြင်းမျိုး မရှိစေရန်)
တာဝန်ယူရမည့်ပုဂ္ဂိုလ်	မန်နေဂျာ

မြေအောက်ရေသုံးစွဲမှု	
ရည်ရွယ်ချက်	ရေသုံးစွဲမှုလျော့ချရေး
လိုက်နာရမည့်စည်းကမ်း	The Underground Water Act (1930)
စီမံခန့်ခွဲမှုအစီအစဉ်	<ul style="list-style-type: none"> ရေအသုံးပြုမှု သိရှိနိုင်သော မီတာတပ်ဆင်ခြင်း ဝန်ထမ်းများအားအသိပညာပေးခြင်းနှင့် လိုက်နာဆောင်ရွက်ရန် တိုက်တွန်းခြင်း စက်ရုံရှိတာဝန်ရှိပုဂ္ဂိုလ်များအား (Third-Party) အနေဖြင့်မြေအောက်ရေအကျိုးရှိရှိအသုံးချရန်စည်းကမ်းချက်နဲ့အညီ လမ်းညွှန်ထားခြင်း။
တာဝန်ယူရမည့် ပုဂ္ဂိုလ်	မန်နေဂျာ <ul style="list-style-type: none"> ရေ အသုံးပြုမှုစာရင်း စစ်ဆေးခြင်း ဝန်ထမ်းများလိုက်နာဆောင်ရွက်မှု စစ်ဆေးခြင်း

အရေးပေါ် အခြေအနေတုံ့ပြန်မှု	
ရည်ရွယ်ချက်	စက်ရုံတွင်းမတော်တဆထိခိုက်မှု လျော့ချရေး
လိုက်နာရမည့်စည်းကမ်း	အလုပ်အကိုင်နှင့် ကျွမ်းကျင်မှု ဦးတော်တော်ဧည့်ပဒေ (၂၀၁၃)၊ ILO guide to Myanmar Labour Law (2017)
စီမံခန့်ခွဲမှုအစီအစဉ်	<ul style="list-style-type: none"> အရေးပေါ် အခြေအနေဖြစ်သော (ဦး၊ ငလျင်၊ ရေကြီးရေလျှံမှု) တို့အတွက် စက်ရုံတွင် စီမံခန့်ခွဲမှုရှိခြင်း စက်ရုံ၏မီးသတ်စနစ်များကို ပုံမှန်စစ်ဆေးခြင်း ရေးရာထားသော အရေးပေါ် တုံ့ပြန်ရေး အစီအစဉ်များကို ဝန်ထမ်းများ အကျွမ်းတတ်ဖြစ်စေရန် စီမံထားခြင်း လောင်စာသိုလှောင်နေရာများ၊ လျှပ်စစ်ကြိုးကြွေးရေနေရာများကို အဓိကထားပြီး စောင့်ကြည့်စစ်ဆေးခြင်း၊ ပြုပြင်မှုများရှိခြင်း ပုံမှန်အကာကွယ်ရေး၊ ငလျင်လှုပ်တော်လျှင် ပြုလုပ်ရမည့်ပုံစံများ ရေကြီးရေလျှံမှု အခြေအနေထိန်းသိမ်းရေး အစီအစဉ်များ ရေညှိပြုပြင်ခြင်းသင်တန်းများကို ပုံမှန်လေ့ကျင့်မှုများ သင်ကြားမှုများ ပြုလုပ်ခြင်း အရေးပေါ် ဆက်သွယ်ရန် ဝန်ထမ်းတို့၏ လိပ်စာများ၊ အများသွင်ပြင်သာစေသောနေရာများတွင် ကပ်ထားခြင်း စက်ရုံတွင်း မီးသတ်အဖွဲ့ ငယ်၊ အန္တရာယ်ကင်းရှင်းရေး စောင့်ကြည့်ရေးအဖွဲ့ငယ်များထားရှိပြီး လစဉ် စော့စော့ကိုင်ပစ်ခြင်း၊ လေ့ကျင့်ခြင်းများ ပြုလုပ်ခြင်း
တာဝန်ယူရမည့်ပုဂ္ဂိုလ်	<ul style="list-style-type: none"> Manager and EHS officer မီးသတ်သင်တန်းများ ၃ လတာစီကြိုပြုလုပ်ရန်စီမံဆောင်ရွက်ခြင်း အရေးပေါ် အခြေအနေနှင့် မတော်တဆထိခိုက်မှုမရှိစေရေး စောင့်ကြည့်စစ်ဆေးခြင်း

ပတ်ဝန်းကျင်ဆိုင်ရာစောင့်ကြည့်မှု					
ကဏ္ဍ	ဆိုးရွားဆုံး	ကြိုတင်ဆန်းစစ်ခြင်း	အနာ	ခန့်မှန်းသုံးစွဲမှု (တစ်နှစ်)	တာဝန်ရှိသူ
စီမံခန့်ခွဲမှုလုပ်ငန်း					
လေထု	SO2, NO2, CO, CO2, PM2.5, PM10, TSP, VOC, O3	တစ်နှစ် ၂ကြိမ်	စီမံခန့်ခွဲရေး	၇၀၀၀၀၀ တွက် တစ်နှစ်	Environmental Management Team of Wonderful Apparel Co., Ltd. and Third-Party
ရေညစ်ညမ်းမှု	ရေညစ်ညမ်းမှု (BIA)	တစ်နှစ် ၂ကြိမ်	တုံ့ပြန်လုပ်ငန်းများ (စက်ရုံတွင်း)	၅၀၀၀၀ တွက် တစ်နှစ်	Environmental Management Team of Wonderful Apparel Co., Ltd. and Third-Party
အလုပ်ရပ်ခြင်း/ပိတ်ပင်မှု	အလုပ်ရပ်ခြင်း	တစ်လ တစ်ကြိမ်	ရုတ်တရက် ခြေလှမ်းမှု (ပိတ်ပင်ခြင်း) နှင့် အညစ်အကြေး စစ်ဆေးခြင်း	၅၀၀၀၀ တွက် တစ်လ	Environmental Management Team of Wonderful Apparel Co., Ltd. and Third-Party
မီးဘေး	မီးဘေးအန္တရာယ်ဖြစ်ပွားခြင်း/ရန်ပုံငယ်	တစ်လ တစ်ကြိမ်	စီမံခန့်ခွဲရေး	၅၀၀၀၀ တွက် တစ်လ	Environmental Management Team of Wonderful Apparel Co., Ltd. and Third-Party
ဆိုင်ခန်းစနစ်	ဆိုင်ခန်းစနစ် အညစ်အကြေး နှင့် အန္တရာယ်ရှိမှု	အပတ်စဉ်	စီမံခန့်ခွဲရေး/အန္တရာယ်ရှိ ဆိုင်ခန်းစနစ်များ စီမံခန့်ခွဲရေး	၅၀၀၀၀ တွက် တစ်ပတ်	Environmental Management Team of Wonderful Apparel Co., Ltd. and Third-Party

Environmental Management Plan

ပတ်ဝန်းကျင်ဆိုင်ရာစောင့်ကြည့်မှု

ကဏ္ဍ	အမျိုးအစား	ကြိမ်နှုန်း	နေရာ	မီနိုက်ကွန်ကရီတိုင် (ကုတ်)	တာဝန်ရှိသူ
လေထု	SO ₂ , NO ₂ , CO, CO ₂ , PM _{2.5} , PM ₁₀ , TSP, VOC, O ₃	ဇူလိုင်လအတွင်း တစ်ကြိမ်	ဇူလိုင်လအတွင်း	၀၀၀၀၀၀ ကုတ်	Land Owner
ရေညစ်ညမ်းမှု	ရေညစ်ညမ်းမှု (BIA)	ဇူလိုင်လအတွင်း တစ်ကြိမ်	ဇူလိုင်လအတွင်း	၅၀၀၀၀၀ ကုတ်	Land Owner
မြေလှည့်ရှုပ်ထွေးမှု	သစ်တောဖျက်ဆီးမှု	ဇူလိုင်လအတွင်း တစ်ကြိမ်	ဇူလိုင်လအတွင်း	၀၀၀၀၀၀ ကုတ်	Land Owner

လူမှုအကျိုးတူပူးပေါင်း ပါဝင်မှု

Wonderful Apparel Co., Ltd တွင် CSR အတွက် အမြတ်ပုံစံ၏ ၂% ကို ကျန်းမာရေး၊ ပညာရေးနှင့် နယ်မြေဖွံ့ဖြိုးတိုးတက်ရေးတို့ အတွက် အသုံးပြုသွားမည် ဖြစ်ပါသည်။

ကျန်းမာရေး	ဝန်ထမ်းများ ကျန်းမာရေး စောင့်ရှောက်မှု	၀.၅ %
ပညာရေး	ပညာရေးကဏ္ဍ မြှင့်တင်ရေးနှင့် လူ့အရင်းအရင်း အသိပညာပေးခြင်း	၀.၅ %
နယ်မြေဖွံ့ဖြိုးတိုးတက်ရေး	ဒေသတွင်း လိုအပ်သကဲ့သို့ လှူဒါန်းခြင်း	၁ %

စက်ရုံ၏ဆောင်ရွက်ချက်များ



Wonderful Apparel Co., Ltd ၏ ဝန်ထမ်းများအတွက်သောက်စေရန်ဆောင်ရွက်ထားရှိမှု

Environmental Management Plan



*Thank You for Your Patient
Attention!*

APPENDIX H Attendant List of Public Consultation Meeting

Wonderful Apparel Company Limited
 လူထုထုတ်ဖော်ဆွေးနွေးခွဲဝက်ရောက်အကြံပြုချက်များစာရင်း

နေ့စွဲ - ၁၇ရက်၊ မေလ၊ ၂၀၂၃ ခုနှစ်

စဉ်	အမည်	ရာထူး	ဌာန/အဖွဲ့အစည်း	ဆက်သွယ်ရန်နံပါတ်	လက်မှတ်
၁	ဦးစာဝင်းထွန်းအောင်	ဦးစီးအရာရှိ	ရွှေဝိတိစည်ဝင်း	Ph. ၀၇-၂၅၄၂၇၂၁၁၂	
၂	ဒေါ်ရှင်ရှင်ဦး	လ/လ. အဖွဲ့ဝင်	"	Ph: ၀၇-၇၇၀၄၆၈၂၇၈	
၃	ဦးစိုးမိုးလွင်	Packing	Wonderful Apparel	Ph-၀၇-၆၉၀၇၅၀၃၈၀	
၄	ဦးအောင်	Packing	Wonderful Apparel	Ph-၀၇-၆၇၂၄၄၂၆၆၂	
၅	ဒေါ်အေးလှစန်း	ဦးစီးအရာရှိ	ဌာနအေးလှစန်း	Ph-၀၇-၄၆၅၀၇၈၇၇၇	
၆	ဒေါ်မိုးမိုး	A D	"	၀၇-၄၅၇၇၇၇	
၇	ဒေါ်အေးလှစန်း	Accountant	Wonderful Apparel	၀၇-၆၈၄၄၈၄၀၀၀၇	
၈	Dr Myat Hlaing	Environmental Engineer	Myanwei	၀၇-၇၆၅၂၅၀၈၄	
၉	Uym Than Thawng	Environmental Specialist	Myanwei	၀၇-၇၆၆၅၇၆၅၅	

Environmental Management Plan

Wonderful Apparel Company Limited
လှထုထွေဆုံးရွေးနှေးပွဲတက်ရောက်အကြံပြုသူများစာရင်း

ခန့်အပ် - ၁၇ရက်၊ ဖေဖော်ဝါရီ ၂၀၂၃ ခုနှစ်

စဉ်	အမည်	ရာထူး	ဌာန/အဖွဲ့အစည်း	ဆက်သွယ်ရန်နံပါတ်	လက်မှတ်
၁၁	Maung Maung O	HR / Admin	Wonderful Apparel	၀၇-၇၇၅၅၉၆၆၅	Maung
၁၂	Maung Htet	HR / Admin	"	၀၇-၇၆၆၁၄၇၇၈	Maung
၁၃	Maung Yae Yint	OP	"	၀၇-၈၇၇၇၃၅၅၇	Maung
၁၄	Phye Maung Maung	OP	"	"	Phye
၁၅	Htet Htet Aun	OP	"	"	Htet
၁၆	Maung Htet O	OP	"	"	Maung
၁၇	Maung Maung Ngwe	စာရေး	စီမံခန့်ခွဲရေးဌာန	၀၇၇၇၈၄၂၁၅၉၀	Maung
၁၈	Maung Maung Htet	စာရေး	စီမံခန့်ခွဲရေးဌာန	၀၇၇၇၈၄၂၁၅၉၀	Maung