# WIDE VISION ENTERPRISE COMPANY LIMITED

# **Environmental Management Plan**

Manufacturing of Various Kinds of Bags on CMP Basis



Myanwei Environmental Solutions Company Limited

06-Dec-24



No. (001),17 Residence, Min Ye Kyaw Swar Street, Yankin Township, Yangon Region, The Republic of the Union of Myanmar.

Office: (+95) 9777929885, 9777922169, Mobile: (+95) 9421137569; Website: www.myanweiconsulting.com

Date: 6, 12, 2024

#### COMMITMENT OF MYANWEI ENVIRONMENTAL SOLUTIONS COMPANY LIMITED

Environmental Management Plan (EMP) describes the environmental condition of a project, including potential 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 is accurate and complete, and it was prepared in strict compliance with the relevant Laws, Rules and Regulations, including the Environmental Impact Assessment Procedure.

LIN HTET SEIN
DIRECTOR
MYANWEI ENVIRONMENTAL SOLUTIONS
COMPANY LIMITED.

#### **Wide Vision Enterprise Company Limited**

 $Sethmu-19, 20, 21, 81,\ Plot\ No.\ (1),\ Kan\ Gyi\ Kone\ Kwin,\ Ward\ No.\ (4),\ Htantabin\ Township,\ Yangon$ 

Phone: +95 9762509001

Company Registration No: 113954140

Date: 6, 12, 2024

#### COMMITMENT OF WIDE VISION ENTERPRISE COMPANY LIMITED

Wide Vision Enterprise Company Limited 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.

Wide Vision Enterprise Company Limited will at all times comply fully with all commitment and obligations in the EMP report, and also environmental conservation law, environmental conservation rules, environmental impact assessment procedure, national environmental quality (emission) guidelines and instructions to be issued from time to time, including business-related law, rules and procedures. If Wide Vision Enterprise Company Limited fails to comply with the law and regulations, we promise to accept actions in accordance with the existing law and rules.

We acknowledge and understand that



强强

Mr. Tsai, Wen-Wei
Director
Wide Vision Enterprise Co., Ltd.

#### **LIST OF CONTENTS**

| LIST OF CONTENTS  | l    |
|---|------|
| LIST OF TABLES  | VI   |
| LIST OF FIGURES   | VIII |
| LIST OF APPENDICES  | X    |
| ABBREVIATION  | XI   |
| အစီရင်ခံစာအကျဉ်းချုပ်   | XIII |
| EXECUTIVE SUMMARY   | XLI  |
| 1. INTRODUCTION   |      |
| 1.1. OBJECTIVE OF ENVIRONMENTAL MANAGEMENT PLAN                                 |      |
| 1.2. PROJECT BACKGROUND   |      |
| 1.2.1. Project Proponent Profile  |      |
|   |      |
| 1.2.2. Investment Plan and Salient Features of the Project                      | 63   |
| 1.3. SCOPE OF EMP STUDY   |      |
| 1.4. EMP STUDY TEAM   |      |
| 1.5. EMP REPORT STRUCTURE   |      |
| 2. POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK                                    | 68   |
| 2.1. MYANMAR REGULATORY FRAMWORK  |      |
| 2.1.1. Laws and Regulations Related to Environmental and Social Considerations. | 68   |
| 2.2. NATIONAL ENVIRONMENTAL QUALITY (EMISSION) GUIDELINES                       |      |
| 2.2.1. General Guidelines   | 108  |
| 2.3. အမျိုးသားမြေပေါ်ရေအရည်အသွေးစံချိန်စံညွှန်း                                 | 111  |
| 2.3.1. လူသားတို့၏ ကျန်းမာရေးအတွက်သတ်မှတ်ချက်များ                                | 111  |
| 2.3.2. ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးအတွက်သတ်မှတ်ချက်များ                             | 112  |
| 2.4. MYANMAR NATIONAL DRINKING WATER QUALITY STANDARD                           | 113  |
| 2.5. IFC EHS GUIDELINES   |      |
| 2.6. THAILAND AMBIENT AIR QUALITY STANDARDS                                     |      |
| 2.7. COMMITMENT OF WIDE VISION ENTERPRISE COMPANY LIMITED                       |      |
| 3. PROJECT DESCRIPTION  | 117  |
| 3.1. PROJECT BACKGROUND   |      |
| 3.1.1. Location of Proposed Project   | 117  |
| 3.1.2. Adjacent Location of Proposed Project                                    | 117  |

| 3.2. PRE- | CONSTRUCTION AND CONSTRUCTION PHASE       | 117 |
|-----------|---|-----|
|           | RATION PHASE                              |     |
| 3.3.1.    | Site Description of Proposed Project Site | 118 |
| 3.3.2.    | Production Process                        | 122 |
| 3.3.3.    | Product                                   | 128 |
| 3.3.4.    | Raw Material                              | 131 |
| 3.3.5.    | Chemical Usage                            | 133 |
| 3.3.6.    | Machinery and Equipment                   | 134 |
| 3.3.7.    | Human Resource                            | 137 |
| 3.3.8.    | Water Requirement                         | 138 |
| 3.3.9.    | Electricity and Fuel Requirement          | 139 |
| 3.3.10.   | Facilities                                | 140 |
| 3.4. DEC  | OMMISSIONING PHASE                        | 153 |
| 4. BRIEF  | DESCRIPTION OF SURROUNDING ENVIRONMENT    | 154 |
| 4.1. METI | HODOLOGY FOR DATA COLLECTION AND ANALYSIS | 154 |
|           | SICAL COMPONENT                           |     |
| 4.2.1.    | Topography                                | 155 |
| 4.2.2.    | Climate Conditions                        | 155 |
| 4.2.3.    | Geology                                   | 156 |
| 4.2.4.    | Hydrogeology                              | 158 |
| 4.2.5.    | Environmental Baseline Study              | 158 |
| 4.2.6.    | Air Quality                               | 160 |
| 4.2.7.    | Wind Speed and Wind Direction             | 161 |
| 4.2.8.    | Weather Condition                         | 163 |
| 4.2.9.    | Noise                                     | 163 |
| 4.2.10.   | Light Intensity                           | 165 |
| 4.2.11.   | Water Quality                             | 167 |
| 4.3. SOCI | IO-ECONOMIC ENVIRONMENT (SECONDARY DATA)  | 168 |
| 4.3.1.    | Population                                |     |
| 4.3.2.    | Local Economy                             | 169 |

|      | 1.3.3.  | Public Infrastructure and Access   | 169  |
|------|---------|--|------|
| 4.4. |         | LOGICAL COMPONENT (SECONDARY DATA)   |      |
| 4.5. |         | TURAL AND VISUAL COMPONENTS (SECONDARY DATA)   |      |
|      | 1.5.1.  | Cultural and Religious Sites   |      |
| 5.   | ENVII   | RONMENTAL IMPACT AND MITIGATION MEASURES   | 174  |
| 5.1. |         | HODOLOGY FOR THE ASSESSMENTS   |      |
| 5.2. |         | ACT IDENTIFICATION   |      |
|      | 5.2.1.  | Positive Impact  |      |
| ţ    | 5.2.2.  | Negative Impact  |      |
| 5.3. |         | JECT ACTIVITIES AND ITS SIGNIFICANT IMPACTS DURING CONSTRUCT RATION & DECOMMISSIONING PHASES |      |
| Ę    | 5.3.1.  | Environmental Impact for Pre-Construction and Construction Phase                             |      |
| Ę    | 5.3.2.  | Environmental Impact for Operation and Decommission Phase                                    | 176  |
| 5.4. | ENV     | IRONMENTAL IMPACT AND MITIGATION MEASURES FOR OPERATION P                                    | HASE |
| Ę    | 5.4.1.  | Air Quality  | 180  |
| Ę    | 5.4.2.  | Water Quality  | 181  |
| Ę    | 5.4.3.  | Soil Quality   | 182  |
| Ę    | 5.4.4.  | Noise  | 183  |
| Ę    | 5.4.5.  | Odor Emission  | 183  |
| Ę    | 5.4.6.  | Biodiversity   | 183  |
| Ę    | 5.4.7.  | Impact on Human  | 184  |
| Ę    | 5.4.8.  | Fire Hazard  | 184  |
| ţ    | 5.4.9.  | Occupational Health and Safety   | 185  |
| ţ    | 5.4.10. | Waste Generation   | 186  |
| 5.5. |         | IRONMENTAL IMPACT AND MITIGATION MEASURE FOR DECOMMISSION SE 187                             | IING |
| į    | 5.5.1.  | Air Quality  | 187  |
| Ę    | 5.5.2.  | Water Quality  | 187  |
| Ę    | 5.5.3.  | Soil Quality   | 188  |
| į    | 5.5.4.  | Noise  | 188  |
| Ę    | 5.5.5.  | Biodiversity   | 188  |

| 5  | .5.6.                | Occupational Health and Safety  | 189 |
|--|----------------------|---|-----|
| 5  | .5.7.                | Solid Waste Generation  | 189 |
| 6.   | ENVIF                | RONMENTAL MANAGEMENT PLAN   | 190 |
| <ul><li>6.1.</li><li>6.2.</li><li>6.3.</li></ul> | INST<br>STRU         | ECTIVE ITUTIONAL REQUIREMENT JCTURE AND RESPONSIBILITIES FOR THE EMP DEVELOPMENT AND EMENTATION | 191 |
| <b>6.4</b> .                                     | <b>ENVI</b><br>.4.1. | RONMENTAL MANAGEMENT SUB-PLAN   |     |
|  | .4.2.                | Noise Management Plan   |     |
|  | .4.3.                | Energy Management Plan  |     |
|  | .4.4.                | Solid Waste Management Plan   |     |
|  | .4.5.                | Liquid Waste Management Plan (Wastewater)   |     |
|  | .4.6.                | Hazardous Waste Management Plan   |     |
|  | .4.7.                | Fire Management Plan  |     |
|  | .4.8.                | Water Consumption Management Plan   |     |
|  | .4.9.                | Occupational Safety and Health Management Plan  |     |
|  | .4.10.               | Emergency Response and Disaster Management Plan   |     |
| <b>6.5.</b>                                      | <b>ENVI</b><br>.5.1. | RONMENTAL MONITORING AND REPORTING PROCESS  |     |
| 6  | .5.2.                | Reporting Plan  | 209 |
| <b>6.6.</b>                                      | <b>CAP</b><br>.6.1.  | ACITY BUILDING AND TRAINING PLAN  |     |
| 6  | .6.2.                | Emergency Procedures  | 210 |
| 6  | .6.3.                | Training for Emergencies  | 210 |
| 6  | .6.4.                | Fire Prevention and Protection  | 210 |
| 6  | .6.5.                | Fire Protection Equipment   | 211 |
| 6  | .6.6.                | Fire Safety and Evacuation Plan   | 211 |
| 6  | .6.7.                | Site Fire Control   | 213 |
| 6  | .6.8.                | Employee Information and Training   | 213 |
| 6  | .6.9.                | Health and Safety Training Plan for Worker  | 213 |

| 6.7.               | GRIEVANCE REDRESS MECHANISM (GRM)                             | 214               |
|--------------------|---|-------------------|
| 6.8.               | CORPORATE SOCIAL RESPONSIBILITY (CSR) PLAN                    | 215               |
| 7.                 | PUBLIC CONSULTATION   | 217               |
| 7.1.               | METHODOLOGY AND APPROACH                                      | 217               |
| 7                  | 7.1.1. Participant List                                       | 218               |
|                    |   |                   |
| 7.2.               | RECOMMEND SUGGESTION AND COMMENT                              | 218               |
|                    | RECOMMEND SUGGESTION AND COMMENTCONCLUSION AND RECOMMENDATION |                   |
|                    | CONCLUSION AND RECOMMENDATION                                 | 221               |
| 8.                 | CONCLUSION AND RECOMMENDATION                                 | 221               |
| 8.<br>8.1.<br>8.2. | CONCLUSION AND RECOMMENDATION                                 | 221<br>221<br>221 |

#### **LIST OF TABLES**

| Table 1-1  | Information of project proponent  | 63  |
|------------|---|-----|
| Table 1-2  | Salient features of the project   | 63  |
| Table 1-3  | Member of EMP Study Team  | 65  |
| Table 2-1  | List of Myanmar's Law Relating to Environmental Management  | 68  |
| Table 2-2  | NEQEGs's Air Quality Guidelines   | 109 |
| Table 2-3  | National Environmental Quality (Emission) Guidelines  | 109 |
| Table 2-4  | Standard Value for Light Intensity  | 109 |
| Table 2-5  | Wastewater, Storm Water Runoff, Effluent and Sanitary Discharges (general application) <sup>1</sup> | 110 |
| Table 2-6  | လူသားတို့၏ကျန်းမာရေးအတွက်သတ်မှတ်ချက်များ၏ စံတန်ဖိုးများ   | 112 |
| Table 2-7  | ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးအတွက်သတ်မှတ်ချက်များ၏စံတန်ဖိုးများ  | 112 |
| Table 2-8  | Standard Value of Drinking Water Quality  | 113 |
| Table 2-9  | Community Health and Safety Contents  | 114 |
| Table 2-10 | Ambient Air Quality Standard  | 115 |
| Table 3-1  | Annual Production Rate  | 129 |
| Table 3-2  | List of Raw Materials Requirement   | 132 |
| Table 3-3  | Chemical List   | 133 |
| Table 3-4  | List of Machinery and Equipment   | 134 |
| Table 3-5  | Employment Schedule of Wide Vision Enterprise Company Limited                                       | 137 |
| Table 3-6  | Monthly Discharged Amount of Solid Waste  | 141 |
| Table 3-7  | Monthly Cans Waste List   | 144 |
| Table 3-8  | Fire Safety Equipment Lists   | 148 |
| Table 3-9  | List of Air-Conditioners  | 152 |
| Table 4-1  | Yearly Status of Rainfall and Temperature (2019-2023)   | 155 |
| Table 4-2  | Location of the Survey Point  | 158 |
| Table 4-3  | Air Quality Measurement Result  | 160 |
| Table 4-4  | Wind Speed and Direction Measurement Result   | 161 |

| Table 4-5  | Meteorological Measurement at Proposed Project                                       | 163 |
|------------|--|-----|
| Table 4-6  | Technical Features of GM – 1356  | 164 |
| Table 4-7  | Noise Level Measurement Result   | 165 |
| Table 4-8  | UT-382 Specification   | 166 |
| Table 4-9  | Light Intensity Measurement Result   | 166 |
| Table 4-10 | Wastewater (Treated) Quality Result  | 168 |
| Table 4-11 | Population of Males and Females at Htantabin Township (2023)                         | 169 |
| Table 4-12 | Transportation Route   | 169 |
| Table 4-13 | List of Major School in Htantabin Township   | 170 |
| Table 4-14 | Common Diseases in the Htantabin Township  | 171 |
| Table 4-15 | Lists of hospital in the Htantabin Township  | 171 |
| Table 4-16 | Religion in Htantabin Township (2023)  | 172 |
| Table 4-17 | Prominent Pagodas and Monastery  | 172 |
| Table 5-1  | Impact Assessment Parameters and its Scale   | 174 |
| Table 5-2  | Evaluation and Perdition of Significant Impacts for Operation and Decommission Phase | 176 |
| Table 5-3  | Category of GHGs Assessment  | 180 |
| Table 5-4  | CO <sub>2</sub> Emission by the Uses of Fuel   | 181 |
| Table 5-5  | Permissible Exposure of Noise Limits   | 186 |
| Table 6-1  | Responsibilities of HSE members  | 192 |
| Table 6-2  | Environmental Monitoring Schedule  | 207 |
| Table 6-3  | American National Fire Fighting Association (NFFA) Standards                         | 212 |
| Table 6-4  | Training Plan Used in Wide Vision Enterprise Co., Ltd.                               | 213 |
| Table 6-5  | CSR Plan at Wide Vision Enterprise Co., Ltd.   | 215 |
| Table 7-1  | Summary of Public Consultation Meeting   | 217 |
| Table 7-2  | Suggestion and Comment of Public Consultation Meeting                                | 219 |

#### **LIST OF FIGURES**

| Figure 1.1 Organization Chart of Wide Vision Enterprise Company Limited          | 64   |
|--|------|
| Figure 3.1 Adjacent Location Map of Proposed Project                             | 119  |
| Figure 3.2 Location Map  | 120  |
| Figure 3.3 Factory Layout Map  | 121  |
| Figure 3.4 Process Flow for Materials Receiving                                  | 122  |
| Figure 3.5 Process Flow for Cutting  | 123  |
| Figure 3.6 Process Flow for Printing   | 125  |
| Figure 3.7 Process Flow for Sewing   | 126  |
| Figure 3.8 Process Flow for Quality Inspection and Finishing                     | 127  |
| Figure 3.9 Process Flow for Packing and Shipping                                 | 128  |
| Figure 3.10 Final Products Storage Area  | 128  |
| Figure 3.11 Products Photo   | 131  |
| Figure 3.12 Raw Materials Storage Area   | 131  |
| Figure 3.13 Chemical Storage Photo   | 134  |
| Figure 3.14 Machinery and Equipment Photo  | 137  |
| Figure 3.15 Water Storage Tank, Water Supply for Drinking Water and Firefighting | 139  |
| Figure 3.16 Electricity Facilities and Fuel Storage                              | 140  |
| Figure 3.17 Solid Waste Disposal System  | 142  |
| Figure 3.18 Flow Pattern of Sedimentation Tank                                   | 146  |
| Figure 3.19 Used Mold Washing Area in Printing Department and Sedimentation Tan  | k147 |
| Figure 3.20 Drainage System and Hand Washing Basin                               | 147  |
| Figure 3.21 Emergency Safety and Fire Management System                          | 150  |
| Figure 3.22 Toilet Facility Photo  | 150  |
| Figure 3.23 First Aid Box, Clinic and First Aid Room Photo                       | 151  |
| Figure 3.24 Ventilation and Cooling System                                       | 153  |
| Figure 4.1 1km Radius Map  | 154  |
| Figure 4.2 HtantabinTownship Map   | 155  |

| Figure 4.3  | Geological Map of Yangon Region                                | 156 |
|-------------|--|-----|
| Figure 4.4  | Soil Map of Yangon (Source: Land use of Bureau of Yangon)      | 157 |
| Figure 4.5  | Baseline Study Map of Wide Vision Enterprise Company Limited   | 159 |
| Figure 4.6  | Indoor and Outdoor Air Quality Measurement Photos              | 161 |
| Figure 4.7  | Wind Speed and Wind direction                                  | 163 |
| Figure 4.8  | Sound Level Measurement Photo                                  | 165 |
| Figure 4.9  | Light Intensity Measurement Photo                              | 167 |
| Figure 4.10 | Wastewater Sample Collecting Photo                             | 168 |
| Figure 5.1  | Potential negative impact affect from proposed factory project | 175 |
| Figure 5.2  | Ventilation System   | 181 |
| Figure 5.3  | Drainage System and Sedimentation Tank in the project area     | 182 |
| Figure 5.4  | Firefighting System  | 185 |
| Figure 5.5  | Waste Management System  | 187 |
| Figure 6.1  | Continuous Improvement Circle                                  | 190 |
| Figure 6.2  | Organization Structure of EMP Implementation                   | 192 |
| Figure 6.3  | Air Quality Monitoring Point                                   | 194 |
| Figure 6.4  | Noise Level Measurement Point                                  | 196 |
| Figure 6.5  | Light Intensity Monitoring Points                              | 197 |
| Figure 6.6  | Temporary Waste Storage Area                                   | 198 |
| Figure 6.7  | Factory Drainage and Outlet Point of the Factory Drainage      | 200 |
| Figure 6.8  | Temporary Hazardous Waste Storage Area                         | 201 |
| Figure 6.9  | Fire Fighting Equipment Location Points                        | 202 |
| Figure 6.10 | Water Consumption Monitoring Point                             | 204 |
| Figure 6.11 | Grievance Redress Mechanism Flow Diagram                       | 215 |
| Figure 7.1  | Public Consultation Meeting Photo                              | 218 |

#### LIST OF APPENDICES

APPENDIX A Company Document of Wide Vision Enterprise Company Limited

APPENDIX B ECD Recommendation Letter

APPENDIX C Environmental Impact Assessment License

APPENDIX D Environmental Quality Mornitoring Results

APPENDIX E Land Lease Agreement

APPENDIX F Electrical Systems and Instrumentation (EI) Certificate

APPENDIX G Waste Disposal Records

APPENDIX H Industrial License

APPENDIX I YCDC License

APPENDIX J Fire Certificate, Safety Training and Fire Hazard Prevention Group

APPENDIX K Nurse, First Aid Certificate and Training Photos

APPENDIX L Chemical Voucher and Material Safety Data Sheet

APPENDIX M Social Security Board

APPENDIX N Diesel Voucher

APPENDIX O Corporate Social Responsibility

APPENDIX P Workplace Coordination Committee

APPENDIX Q Public Consultation Meeting

#### **ABBREVIATION**

| 1. am                 | <ul><li>Ante Meridiem (before midday)</li></ul> | 29. MOECAF          | <ul><li>Ministry of<br/>Environmental</li></ul> |
|-----------------------|---|---------------------|---|
| 2. AQM                | = Air Quality Monitor                           |                     | Conservation and                                |
| 3. BOD                | = Biological Oxygen                             |                     | Forestry  |
| 0. 202                | Demand  | 30. mg/L            | = milligrams per liters                         |
| 4. COD                | = Chemical Oxygen                               | 31. ml              | = milliliters                                   |
| 1. 000                | Demand  | 32. MONREC          | = Ministry of Natural                           |
| 5. CO                 | = Carbon Monoxide                               | OZ. WOTTILO         | Resources and                                   |
| 6. CO <sub>2</sub>    | = Carbon Dioxide                                |                     | Environmental                                   |
| 7. CSR                | = Corporate Social                              |                     | Conservation                                    |
| 7. OOK                | Responsibility                                  | 33. MSDS            | = Material Safety Data                          |
| 8. CMP                | = Costing, Manufacturing                        | 33. W3D3            | Sheet   |
| O. CIVIF              | and Production                                  | 34. MSL             | = Mean Sea Level                                |
| 9. dB(A)              | = Decibel Unit                                  | 35. NEQEGs          | = National Environmental                        |
| 9. db(A)<br>10. DO    |   | 33. NEQEGS          |   |
|                       | = Dissolved Oxygen                              |                     | Quality (Emission)                              |
| 11. D.O.C<br>12. ECC  | = Day Old Chick                                 | 36. NL              | Guidelines                                      |
| 12. ECC               | = Environmental                                 |                     | = Noise Level                                   |
| 40 500                | Compliance Certificate                          | 37. NO              | = Nitric Oxide                                  |
| 13. ECD               | = Environmental                                 | 38. NOx             | = Nitrogen Oxide                                |
|                       | Conservation                                    | 39. NO <sub>2</sub> | = Nitrogen Dioxide                              |
| =                     | Department                                      | 40. O <sub>3</sub>  | = Ozone   |
| 14. EIA               | = Environmental Impact                          | 41. OSHA            | = Occupational Safety                           |
|                       | Assessment                                      |                     | and Health                                      |
| 15. EMOP              | = Environmental                                 |                     | Administration                                  |
|                       | Monitoring Plan                                 | 42. PCU             | = Passenger car Unit                            |
| 16. EMP               | = Environmental                                 | 43. pH              | = Potential of Hydrogen                         |
|                       | Management Plan                                 | 44. pm              | = Post Meridiem (after                          |
| 17. EMS               | = Environmental                                 |                     | midday)   |
|                       | Management System                               | 45. PPE             | = Personal Protective                           |
| 18. GHGs              | = Greenhouse Gases                              |                     | Equipment                                       |
| 19. GIIP              | = Good International                            | 46. PM              | = Particulate Matter                            |
|                       | Industry Practices                              | 47. QC              | = Quality Control                               |
| 20. HR                | = Human Resources                               | 48. SEZ             | = Special Economic                              |
| 21. HSE               | = Health, Safety and                            |                     | Zone  |
|                       | Environment                                     | 49. SO <sub>2</sub> | = Sulfur Dioxide                                |
| 22. IEE               | = Initial Environmental                         | 50. SP              | = Significant Point                             |
|                       | Examination                                     | 51. TC              | = Traffic Counting                              |
| 23. IFC               | = International Finance                         | 52. TDS             | = Total Dissolved Solids                        |
|                       | Corporation                                     | 53. TSP             | = Total Suspended                               |
| 24. kg                | = kilogram                                      |                     | Particulate                                     |
| 25. KMnO <sub>4</sub> | = Potassium                                     | 54. TSS             | = Total Suspended                               |
|                       | Permanganate                                    |                     | Solids  |
| 26. kVA               | = Kilo-volt-amperes                             | 55. USD             | = United States dollar                          |
| 27. kWh               | = Kilowatt-hour                                 | 56. WHO             | = World Health                                  |
| 28. L                 | = Liter   |                     | Organization                                    |
|                       |   |                     |   |

| 57. YCDC | = Yangon City        |
|----------|----------------------|
|          | Development          |
|          | Committee            |
| 58. YRIC | = Yangon Region      |
|          | Investment Committee |
| 59. %    | = Percentage         |
| 60. °C   | = Degree Celsius     |
|          |                      |

## အစီရင်ခံစာအကျဉ်းချုပ်

#### နိုဒါန်<u>း</u>

ရန်ကုန်တိုင်းဒေသကြီး၊ ထန်းတပင်မြို့နယ်တွင် တည်ရှိသော Wide Vision Enterprise Company Limited ၏ CMP စနစ်ဖြင့် အိတ်အမျိုးမျိုး ချုပ်လုပ်ခြင်းလုပ်ငန်းသည် သယံဧာတနှင့် သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာန၊ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာနမှ ၂၆ ရက်၊ ဇူလိုင်လ၊ ၂၀၂၄ ခုနှစ်တွင် စာအမှတ်၊ ရက/EIA/၂(၂၄၀၃/၂၀၂၄) ဖြင့် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်အစီရင်ခံစာအား ရေးဆွဲရန် သဘောထားမှတ်ချက် ရရှိထားပါသည်။ ၎င်းသဘောထား မှတ်ချက်သည် စီမံကိန်းတည်နေရာ တစ်ဝိုက်တွင် ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးလုပ်ငန်းများ ဆောင်ရွက်ရန် နှင့် MONREC နှင့် ECD ၏ ညွှန်ကြားချက်များအား လိုက်နာရန် ပတ်ဝန်းကျင် စီမံခန့်ခွဲမှုအစီအစဉ်အစီရင်ခံစာအား လျော့ပါးစေရေး အစီအမံများ၊ စောင့်ကြပ်ကြည့်ရှုခြင်း အစီအစဉ်များအပါအဝင် သတ်မှတ်ထားသော လုပ်ထုံးလုပ်နည်း၊ လမ်းညွှန်ချက်များအတိုင်း ရေးဆွဲ ဆောင်ရွက်ရန် ညွှန်ကြားထားပါသည်။

စီမံကိန်း၏ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် အစီရင်ခံစာသည် လက်ရှိစီမံကိန်း၏ အခြေအနေများကို ခွဲခြမ်းစိတ်ဖြာ၍ သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာ ရေရှည်တည်တံ့မှုနှင့် စည်းမျဉ်း စည်းကမ်းများကို လိုက်နာမှုရှိစေရန် လျော့ပါးစေရေး အစီအမံများအား ဆောင်ရွက်ခြင်းဖြင့် စီမံကိန်း၏ ဖြစ်နိုင်ချေရှိသော ပတ်ဝန်းကျင်ဆိုင်ရာ သက်ရောက်မှုများအား အကဲဖြတ်ဆန်းစစ်ခြင်း ဖြစ်ပါသည်။ Myanwei Environmental Solutions Company Limited မှ အဆိုပြုစီမံကိန်းအတွက် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် အစီရင်ခံစာအား ရေးဆွဲပြုစုထားပါသည်။

### စီမံကိန်းအဆိုပြုသူဆိုင်ရာ အချက်အလက်များ

| စီမံကိန်းအဆိုပြုသူ၏အမည်                        | MR. TSAI, WEN-WEI  |
|--|--|
| ကိုင်ဆောင်သည့်မှတ်ပုံတင်အမှတ်/<br>Passport No. | 307277729  |
| နိုင်ငံသား                                     | ထိုင်ဝမ်နိုင်ငံသား   |
| လိပ်စာ   | No. 85, SEC. 1, Chang An Road, Situn District, Tai Chung City,<br>Taiwan, Republic of China. |

#### အဆိုပြုစီမံကိန်းဆိုင်ရာ အချက်အလက်များ

| လုပ်ငန်းအမျိုးအစား             | CMP စနစ်ဖြင့် အိတ်အမျိုးမျိုး ချုပ်လုပ်ခြင်းလုပ်ငန်း          |  |
|--------------------------------|---|--|
| YRIC အတည်ပြုမိန့်              | အတည်ပြုမိန့်အမှတ်၊ ရကတ - ၁၆၉/၂၀၁၉ (၁၂ ရက်၊ မတ်လ၊ ၂၀၁၉ ခုနှစ်) |  |
| YRIC အတည်ပြုမိန့် သက်တမ်း      | ၁၀ နှစ်   |  |
| ရင်းနှီးမြှုပ်နှံမှုအမျိုးအစား | ၁၀၀ ရာခိုင်နှုန်း နိုင်ငံခြားသားရင်းနှီးမြှုပ်နှံမှု          |  |

| ရင်းနှီးမြှုပ်နှံမှု ပမာဏ                 | အမေရိကန် ဒေါ်လာ (၅.၀၉၄) သန်း   |
|---|--|
| မြေအမျိုးအစား                             | စက်မှုမြေ  |
| အကျယ်အဝန်း                                | ၂.၆၈၆ ဧက   |
| အဆောက်အဦ အရေအတွက်                         | (၂၂၇ ပေ x ၉၆ ပေ x ၃၂ ပေ ၉ လက်မ) ရုံးခန်းအဆောက်အဦ၊ (၅၉၀ ပေ x ၁၀၅ ပေ x ၂၆ ပေ ၈ လက်မ) စက်ရုံအဆောက်အဦ၊ (၁၆၈ ပေ ၈ လက်မ x ၆၆ ပေ ၈ လက်မ) စတိုခန်း၊ (၁၁၃ ပေ x ၂၀ ပေ x ၃၈ ပေ ၈ လက်မ) ဝန်ထမ်းအိမ်ယာ အဆောက်အဦ၊ (၄၆ ပေ x ၁၆.၅ ပေ) အခန်း (၄) ခန်းပါ ဝန်ထမ်းအိမ်ယာ၊ (၃၃ ပေ x ၁၆.၅ ပေ) အမှိုက် ဂိုဒေါင်၊ (၄၉ ပေ ၂ လက်မ x ၁၁.၅ ပေ) ဂျင်နရေတာ နှင့် လျှပ်စစ် ဓာတ်အား အဆောက်အဦ၊ (၅၉ ပေ ၁ လက်မ x ၁၆.၅ ပေ) သူနာပြုခန်း + အင်တာဗျူးခန်း + ဘုရားခန်း၊ (၃၃ ပေ x ၁၆.၅) ဓာတု ပစ္စည်းအခန်း |
| တည်ဆောက်ရေးလုပ်ငန်း များ<br>စတင်သည့်နေ့   | ၁၅ ရက်၊ ဩဂုတ်လ၊ ၂၀၂၂ ခုနှစ်  |
| စီပွားဖြစ် လုပ်ငန်း စတင်<br>လည်ပတ်သည့်နေ့ | ၂၁ ရက်၊ မတ်လ၊ ၂၀၂၄ ခုနှစ်  |
| စက်ရုံလိပ်စာ                              | ရန်ကုန်တိုင်းဒေသကြီး၊ ထန်းတပင်မြို့နယ်၊ အမှတ် (၄) ရပ်ကွက်၊ အကွက် အမှတ် (၁)<br>ကံကြီးကုန်းကွင်း၊ စက်မှု - (၁၉၊ ၂၀၊ ၂၁၊ ၈၁)  |
| ဆက်သွယ်ရန်                                | ခေါ် လှသိင်္ဂီဦး<br>Admin Manager<br>09 752 318 177  |

# မူဝါဒ၊ ဥပဒေနှင့် အဖွဲ့ အစည်းဆိုင်ရာ မူဘောင်

# စီမံကိန်းအဆိုပြုသူမှ ကတိကဝတ်ပြုထားသော ဥပဒေနှင့် စည်းမျဉ်းစည်းကမ်းများ

| စဉ် | ဥပဒေနှင့် စည်းမျဉ်းစည်းကမ်းများ<br>ပတ်ဝန်းကျင်ထိန်းသိမ်          | ထုတ်ပြန်သည့် နှစ်<br>ခဲးရေး | ကတိကဝတ်ပြုထားသော<br>ပုဒ်မ/နည်းဥပဒေ |
|-----|--|-----------------------------|------------------------------------|
| Э   | ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော် ဖွဲ့ စည်းပုံ အခြေခံ ဥပဒေ       | ၂၀၀၈                        | <u></u>                            |
| J   | ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဥပဒေ                                     | ၂၀၁၂                        | გ, ე, o <b></b> , o၅, o6           |
| 5   | ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးနည်းဥပဒေ                                 | Jood                        | ၆၉ (က)(ခ)                          |
| 9   | ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ<br>လုပ်ထုံးလုပ်နည်းများ | ეიაე                        | ၆၃ (ဇ), ၈၇, ၈၈                     |

| စဉ်   | ဥပဒေနှင့် စည်းမျဉ်းစည်းကမ်းများ   | ထုတ်ပြန်သည့် နှစ်           | ကတိကဝတ်ပြုထားသော<br>ပုဒ်မ/နည်းဥပဒေ                        |
|---|---|-----------------------------|---|
| ၅   | မြန်မာနိုင်ငံအမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာ မူဝါဒ                            | ၂၀၁၉                        | ၁, ၂, ၃, ၄, ၅, ၆, ၈, ၁၀, ၁၁,<br>၁၃                        |
| ઉ   | အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု)<br>လမ်းညွှန်ချက်များ | ၂၀၁၅                        | အထွေထွေ<br>လမ်းညွှန်ချက်များ                              |
|   | သစ်တော၊ ဇီဝမျိုးစုံမျိုးကွဲနှင့် သဘ                                       | ာဝသယံဧာတများ                |   |
| ?   | ရေအရင်းအမြစ်နှင့် မြစ်ချောင်းများထိန်းသိမ်းရေးဥပဒေ                        | ၂၀၁၆ (၂၀၁၇တွင်<br>ပြင်ဆင်)  | ၈ (က)(ခ), ၁၁ (က), ၁၉,<br>၂၂, ၂၉                           |
| െ   | ယဉ်ကျေးမှု အမွေအနှစ်ဒေသများ<br>ကာကွယ်ထိန်းသိမ်းရေးဥပဒေ                    | ၂၀၁၉                        | Jo  |
| 9   | မြေအောက်ရေအက်ဥပဒေ   | ၁၉၃၀                        | ۶, ၅  |
| ၁၀ အမျိုးသားမြေပေါ် ရေအရည်အသွေး စံချိန်စံညွှန်း |   | JoJè                        | -   |
|   | အများပြည်သူကျန်းမ   | ၁ရေး                        |   |
| ၁၁  | ပြည်သူ့ကျန်းမာရေးဥပဒေ   | ၁၉၇၂                        | 5   |
| ၁၂  | ကူးစက်ရောဂါကာကွယ်ထိန်းချုပ်ရေးဥပဒေ  | ၁၉၉၅ (၂၀၁၁ တွင်<br>ပြန်ဆင်) | ၈, ၉, ၁၁, ၁၄  |
|   | မြို့ပြဖွံ့ဖြိုးတိုးတက်   | ရေး                         |   |
| ၁၃  | ရန်ကုန်မြို့တော် စည်ပင်သာယာရေးဥပဒေ  | ၂၀၁၈ (၂၀၂၁ တွင်<br>ပြင်ဆင်) | ၃၁၇, ၃၁၈, ၃၂၂   |
| ၁၄  | စံချိန်စံညွှန်းသတ်မှတ်ခြင်းဆိုင်ရာဥပဒေ                                    | Jood                        | <b>ა</b> ე,   |
| ၁၅  | လျှပ်စစ်ဥပဒေ  | Jood                        | <i>၄</i> ၄, <i>၄</i> ၅, <i>၄</i> ၆, <i>၄</i> , <i>၄</i> ၈ |
|   | စီးပွားရေးနှင့် ရင်းနှီး <u>ဖြ</u>  | <del>ှ</del> ြင်နှံမှု      |   |
| ၁၆  | မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုဥပဒေ                                     | ၂၀၁၆ (၂၀၁၉ တွင်<br>ပြင်ဆင်) | ეი, ე၁,   |
| ၁၇  | မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုနည်းဥပဒေ                                 | ၂၀၁၇ (၂၀၁၈ တွင်<br>ပြင်ဆင်) | JoJ, Jos  |
| ၁၈  | မြန်မာနိုင်ငံအာမခံဥပဒေ  | <b>၁</b> ၉၉၃                | ၁၅, ၁၆  |
| ၁၉  | ကုန်သွယ်လုပ်ငန်းခွန်ဥပဒေ  | ၁၉၉၀ (၂၀၁၄ တွင်<br>ပြင်ဆင်) | ၁၁, ၁၂  |

| စဉ်        | ဥပဒေနှင့် စည်းမျဉ်းစည်းကမ်းများ                                      | ထုတ်ပြန်သည့် နှစ်                               | ကတိကဝတ်ပြုထားသော<br>ပုဒ်မ/နည်းဥပဒေ                                       |
|------------|--|---|--|
| Jo         | အလုပ်ရုံများ အက်ဥပဒေ   | ၁၉၅၁ (၂၀၁၆ တွင်<br>ပြင်ဆင်)                     | ეგ, ემ, ეც, ეი, ეე,<br>ეგ, გი, გე  |
| ၂၁         | ပုဂ္ဂလိကစက်မှုလုပ်ငန်းဥပဒေ   | აცცი  | ၄, ၅, ၁၃, ၁၅, ၂၆, ၂၇, ၂၈,<br>J@  |
| JJ         | ပို့ကုန် သွင်းကုန် ဥပဒေ  | ၂၀၁၂  | ე,   |
|            | အလုပ်သမားများနှင့် လု  | ပ်ငန်းခွင်                                      |  |
| 75         | အလုပ်သမားအဖွဲ့ အစည်းဥပဒေ   | ၂၀၁၁  | /৪, ২০, ২০, ২৭, <i>५</i> २, <i>५</i> ५,                                  |
| J9         | အလုပ်သမားလျော်ကြေးဥပဒေ   | ၁၉၂၃ (၁၉၅၅, ၁၉၅၇,<br>၂၀၀၅ တွင် ပြင်ဆင်)         | ۶, ۶, ۵  |
| JO         | အလုပ်အကိုင်နှင့် ကျွမ်းကျင်မှု ဖွံ့ဖြိုးတိုးတက်ရေး ဥပဒေ              | ၂၀၁၃  | ე, ၁၄, ၁၅  |
| JG         | ဓာတုပစ္စည်းနှင့် ဆက်စပ်စ္စည်းများ အန္တရာယ်မှ<br>တားဆီးကာကွယ်ရေး ဥပဒေ | ၂၀၁၃  | ეგ, ეე, ეი, ეი, ეე,<br>ეგ, ეგ, ეე, ე၆, ეე, ეი,<br>ეც, გგ, გგ, გე, გც, გე |
| J?         | အနည်းဆုံးအခကြေးငွေဥပဒေ   | ၂၀၁၃  | ၁၂, ၂၃, ၁၆, ၂၂, ၂၄   |
| ၂၈         | အနည်းဆုံးအခကြေးငွေနည်းဥပဒေ   | ၂၀၁၃  | 99   |
| JG         | လုပ်ခပေးချေမှုဥပဒေ   | ၂၀၁၆  | ၃, ၄, ၅, ၇, ၈, ၉, ၁၀, ၁၁   |
| 90         | ခွင့်နှင့် အလုပ်ပိတ်ရက်နည်းဥပဒေ                                      | ၁၉၅၁ (၂၀၁၈ တွင်<br>တစ်စိတ်တစ်ပိုင်း<br>ပြင်ဆင်) | ეი, ეე, ეც, გგ <b>ç</b> ე,   |
| ၃၁         | လူမှုဖူလုံရေးနည်းဥပဒေ  | ါ၀၁၄  | ၄၂, ၄၃, ၅၄, ၅၇, ၅၉, ၆၁,<br>၆၄, ၆၅, ၆၆, ၁၇၄, ၁၇၅,<br>၁၇၆                  |
| <b>5</b> J | လူမှုဖူလုံရေးဥပဒေ  | ၂၀၁၂ (၂၀၁၄ တွင်<br>ပြင်ဆင်)                     | ç๑, ç၉, ၅၀, ၅၁, ၅၃, ၅၄,<br>Ͼ၅, ϾϾ, Ͼη, Ͼ၉, qο, ης,<br>ໆ၅, qq             |
| 22         | အလုပ်သမားရေးရာအငြင်းပွားမှု ဖြေရှင်းရေး ဥပဒေ                         | ၂၀၁၂ (၂၀၁၄ နှင့်<br>၂၀၁၉ တွင် ပြင်ဆင်)          | 99, 99, 99, 96, 99, 99, 99, 99, 99, 99,                                  |

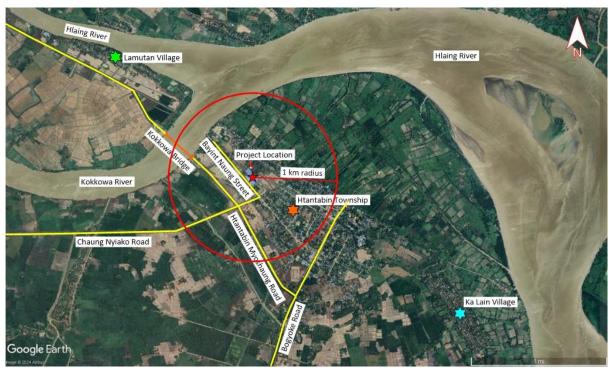
| စဉ်        | ဥပဒေနှင့် စည်းမျဉ်းစည်းကမ်းများ  | ထုတ်ပြန်သည့် နှစ် | ကတိကဝတ်ပြုထားသော<br>ပုဒ်မ/နည်းဥပဒေ                         |  |  |
|------------|--|-------------------|--|--|--|
| २५         | လုပ်ငန်းခွင်ဘေးအန္တရာယ်ကင်းရှင်းရေးနှင့် ကျန်းမာရေး ဆိုင်ရာ<br>ဥပဒေ        | ၂၀၁၉              | ე, ე6, ეე, ეი, ეც, გ <u>ა,</u><br>გი, გც                   |  |  |
| <b>२</b> ၅ | လုပ်ငန်းခွင်သုံး ပေါက်ကွဲစေတတ်သော ဝတ္တုပစ္စည်းများ ဆိုင်ရာ<br>ဥပဒေ         | ၂၀၁၈              | <b>ც</b> , ၁၃, ၁၅, ၁၆, ၂၁                                  |  |  |
| રૃઉ        | လုပ်ငန်းခွင်သုံး ပေါက်ကွဲစေတတ်သော ဝတ္တုပစ္စည်းများ ဆိုင်ရာ<br>နည်းဥပဒေများ | JoJJ              | ၄၈, ၆၇   |  |  |
|            | သယ်ယူပို့ဆောင်ဓ  | ရး                |  |  |  |
| ર૧         | ယာဉ်အန္တရာယ်ကင်းရှင်းရေးနှင့် မော်တော်ယာဉ်<br>စီမံခန့်ခွဲမှုဥပဒေ           | ၂၀၂၀              | ეც, ეც, ეც, ეც, ეც, ეც, ეც,                                |  |  |
| ၃၈         | ယာဉ်အန္တရာယ်ကင်းရှင်းရေးနှင့် မော်တော်ယာဉ်<br>စီမံခန့်ခွဲမှုနည်းဥပဒေ       | JoJJ              | ემე, ემგ, ემგ, ემე, ემ <sup>ც</sup> ,<br>ემე, ემგ, ემტ, ეგ |  |  |
|            | အရေးပေါ် အခြေအနေ   |                   |  |  |  |
| 99         | မြန်မာနိုင်ငံမီးသတ်တပ်ဖွဲ့ဥပဒေ   | ၂၀၁၅              | ၁၆, ၁၇, ၂၄, ၂၅, ၃၀, ၃၂                                     |  |  |

#### စီမံကိန်းအကြောင်းအရာဖော်ပြချက်

Wide Vision Enterprise Company Limited သည် မြောက်လတ္တီကျု ၁၇°၁'၁၂.၃၉" နှင့် အရှေ့လောင်ဂျီကျု ၉၅°၅၈'၃၂.၇၉"၊ ရန်ကုန်တိုင်းဒေသကြီး၊ ထန်းတပင်မြို့နယ်၊ အမှတ် (၄) ရပ်ကွက်၊ အကွက် အမှတ် (၁) ကံကြီးကုန်းကွင်း၊ ဦးပိုင်အမှတ် (စက်မှု - ၁၉၊ ၂၀၊ ၂၁၊ ၈၁) တွင် တည်ရှိပြီး မြေဧရိယာ စုစုပေါင်း ၂.၆၈၆ ဧက ကျယ်ဝန်းပါသည်။ အနီးဆုံးရေအရင်းအမြစ်အနေဖြင့် စီမံကိန်းမှ ၀.၉၄ ကီလိုမီတာအကွာတွင် လှိုင်မြစ် တည်ရှိပြီး အနီးဆုံးလမ်းမမှာ ဘုရင့်နောင်လမ်း ဖြစ်ပါသည်။



စီမံကိန်းတည်နေရာပြ မြေပုံ



အနီးအနားတည်နေရာပြမြေပုံ



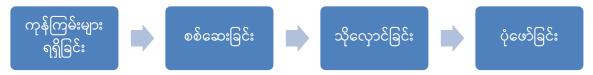
1 - Final Product Packing Storage Area, 2 - Final Product Storage Area, 3 - Packing Area, 4 - Sewing Area, 5 - Assemble Area, 6 - Printing Area, 7 - Cutting Area, 8 - Office Area, 9 - Clinic Room, 10 - Interview Room, 11 - Chemical Storage Room, 12 - Security Room, 13 - Dormitory (1), 14 - Dormitory (2), 15 - Firefighting Equipment, 16 - Waste House, 17 - Toilet, 18 - Canteen, 19 - Water Purify Room, 20 - Store Room, 21 - Generator & Transformer, 22 - Store Department, 23 - Warehouse

#### စက်ရုံအဆောက်အဦ ပုံစံပြ မြေပုံ

စီမံကိန်းတွင် အဆောက်အဦများ တည်ဆောက်ခြင်းအား သြဂုတ်လ၊ ၂၀၂၂ ခုနှစ်တွင် စတင်ခဲ့ပြီး ဧပြီလ၊ ၂၀၂၄ ခုနှစ်တွင် ပြီးဆုံးခဲ့ပြီး စက်ပစ္စည်းကိရိယာများ တပ်ဆင်ခြင်းအား မတ်လ၊ ၂၀၂၄ ခုနှစ်တွင် ဆောင်ရွက်ခဲ့ပြီး ၂၁ ရက်၊ မတ်လ၊ ၂၀၂၄ ခုနှစ်တွင် လုပ်ငန်းစတင်လည်ပတ်ခဲ့ပါ သည်။ စီမံကိန်းဧရိယာအတွင်း ရုံးခန်းအဆောက်အဦ၊ စက်ရုံအဆောက်အဦ၊ စတိုခန်း၊ ဝန်ထမ်းအိမ် ယာ၊ အမှိုက်သိုလှောင်ခန်း၊ ဂျင်နရေတာနှင့် လျှပ်စစ်ဓာတ်အားပေး အဆောက်အဦ၊ အရေးပေါ် ဆေးပေးခန်း၊ အင်တာဗျူးခန်း၊ ဘုရားခန်းနှင့် ဓာတုပစ္စည်းသိုလှောင်ခန်းများ တည်ဆောက်ထားပါ သည်။

စီမံကိန်းသည် နိုင်ငံခြားမှ ဝယ်သူများ၏ ကုန်ကြမ်းများကို တင်သွင်းအသုံးပြု၍ ကုန်ကြမ်းများ ဖြတ်တောက်ခြင်း၊ ပန်းရိုက်ခြင်း၊ ချုပ်လုပ်ခြင်း၊ အရည်အသွေးစစ်ဆေးခြင်းနှင့် ထုပ်ပိုးခြင်းများ ဆောင်ရွက်၍ နိုင်ငံခြားမှ ဝယ်ယူသူများထံ ပြန်လည်ပို့ဆောင်ပေးသည့် လုပ်ငန်း ဖြစ်ပါသည်။

#### ကုန်ကြမ်းရရှိခြင်း

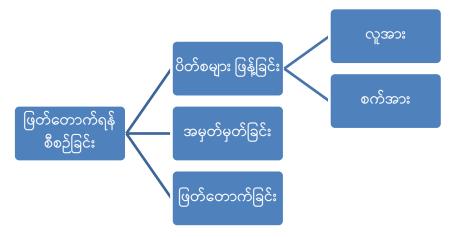






ကုန်ကြမ်းရယူခြင်း လုပ်ငန်းစဉ်

ကုန်ကြမ်းများ ဖြတ်တောက်ခြင်း

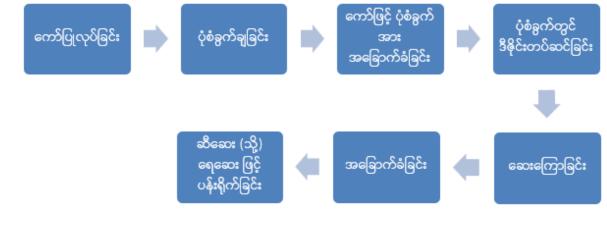






ဖြတ်တောက်ခြင်း လုပ်ငန်းစဉ်

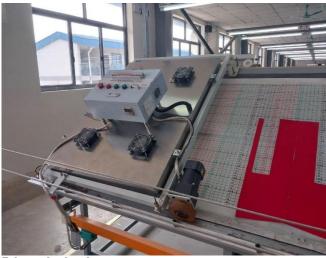
## ပန်းရိုက်ခြင်း





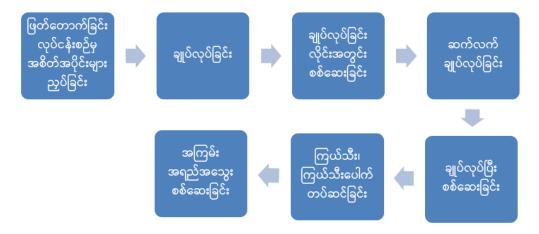






ပန်းရိုက်ခြင်း လုပ်ငန်းစဉ်

#### ချုပ်လုပ်ခြင်း

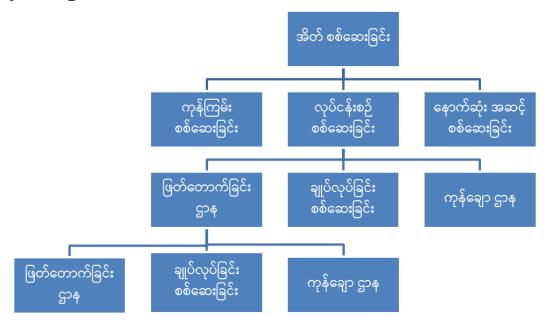


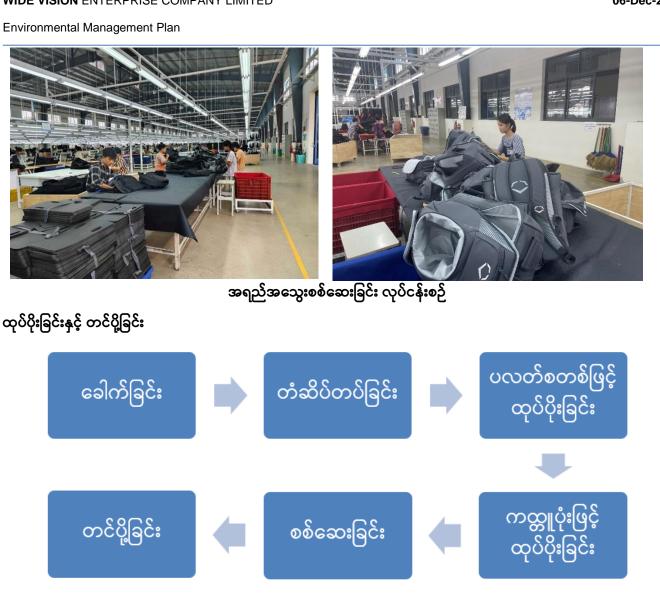




ချုပ်လုပ်ခြင်း လုပ်ငန်းစဉ်

#### အရည်အသွေးစစ်ဆေးခြင်း













ထုပ်ပိုးခြင်းနှင့် တင်ပို့ခြင်း လုပ်ငန်းစဉ်

အသုံးပြုသည့် စက်ပစ္စည်းများအား တရုတ်နိုင်ငံ၊ ဟောင်ကောင်နိုင်ငံနှင့် ထိုင်ဝမ်နိုင်ငံများမှ တင်သွင်း အသုံးပြုပြီး လိုအပ်သော ကုန်ကြမ်းများဖြစ်သည့် PVC Netting Cloth, PU Fabric, Aluminum Foil, Zipper အစရှိသည်တို့အား တရုတ်နိုင်ငံမှ တင်သွင်းပါသည်။ စီမံကိန်းတွင် ဓာတုပစ္စည်းကုန်ကြမ်းများအနေဖြင့် Glue, Cross Linking Agent, Water-based three-dimensional goal oil, Solvent-based screen printing ink ဟူ၍ ဓာတုပစ္စည်း (၄) မျိုးအား အသုံးပြုပါသည်။ ၎င်း ဓာတုပစ္စည်းများအား ပြည်တွင်းရှိ Dong Ying Ink Printing Materials Co., Ltd. နှင့် Dajia Myanmar Co., Ltd. တို့မှ ဝယ်ယူ အသုံးပြုပြီး အနာဂတ်တွင် စီမံကိန်းကိုယ်တိုင် တရုတ်နိုင်ငံမှ တင်သွင်း အသုံးပြုသွားမည် ဖြစ်ပါသည်။

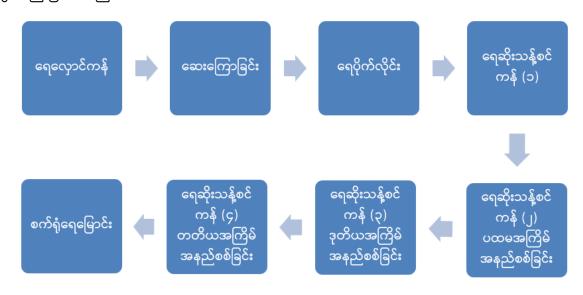
ဝန်ထမ်းဦးရေ စုစုပေါင်း (၆၂၅) ဦးအထိ ခန့်အပ်၍ လုပ်ငန်းဆောင်ရွက်သွားမည် ဖြစ်ပြီး လက်ရှိအချိန်တွင် ပြည်တွင်း ဝန်ထမ်း မ (၂၆၂) ဦးနှင့် ကျား (၆၀) ဦး၊ နိုင်ငံခြားသား ဝန်ထမ်း မ (၃) ဦး နှင့် ကျား (၈) ဦး တို့ဖြင့် တစ်ရက်လျှင် အလုပ်ချိန် ၈ နာရီ နှင့် အပိုအလုပ်ချိန် (၂) နာရီ သတ်မှတ်၍ တစ်ပတ်လျှင် ၆ ရက် လုပ်ငန်းဆောင်ရွက်လျက်ရှိပြီး တစ်လလျှင် ၂၄ ရက် နှင့် တစ်နှစ်လျှင် ၂၈၈ ရက် လုပ်ငန်းဆောင်ရွက်သွားမည် ဖြစ်ပါသည်။

စီမံကိန်း၏ ရေသုံးစွဲမှုအတွက် ၂၅၀ ပေ အနက်ရှိ ရေတွင်း (၂) တွင်းမှ ထုတ်ယူသုံးစွဲလျက်ရှိ ပြီး ၅ ပေ ၇ လက်မ x ၅ ပေ ၇ လက်မ x ၁၃၇ ပေ ရှိ ရေ ၈ တန်ဆန့် ရေလှောင်ကန် (၂) လုံးအား အထွေထွေ သုံးရေနှင့် သောက်သုံးရေအတွက် အသုံးပြုပြီး ၉၁ ပေ x ၁၁.၅ ပေ x ၇.၂ ပေ ရှိ ရေ ၁၈၀ တန်ဆန့် မြေအောက်ရေလှောင်ကန် (၁) လုံးအား မီးသတ်ရေကန်အဖြစ် အသုံးပြုပါသည်။ အထွေထွေသုံးရေနှင့် သောက်ရေအတွက် တစ်ရက်လျှင် ရေ ၂.၇ တန်ခန့် အသုံးပြုပါသည်။

လျှပ်စစ်ဓာတ်အား ရရှိရန် ၈၀၀ ကေဗွီအေ ထရန်စဖော်မာ (၁) လုံး အား တပ်ဆင် အသုံးပြု လျက်ရှိပြီး အရေးပေါ် လျှပ်စစ်ဓာတ်အား ပြတ်တောက်ပါက အသုံးပြုရန် ၄၄၀ ကေဗွီအေ ဂျန်နရေတာ (၁) လုံးနှင့် ၉၄ ကေဗွီအေ ဂျန်နရေတာ (၁) လုံးတို့အား ထားရှိပြီး တစ်လလျှင် လောင်စာဆီ ၁,၂၀၀ ဂါလံခန့် အသုံးပြုပါသည်။ တစ်လလျှင် လျှပ်စစ်သုံးစွဲမှု ၃၀,၀၀၀ ယူနစ်ခန့် ရှိပြီး ဂျင်နရေတာများအတွက် လိုအပ်သည့် လောင်စာဆီအား Myan Oil Terminal Company Limited မှ တစ်လလျှင် ၁,၂၇၁ ဂါလံ ခန့် ဝယ်ယူပါသည်။

စီမံကိန်းမှ စွန့်ပစ်ပစ္စည်းများအနေဖြင့် ပလတ်စတစ်နှင့် ချည်ထည် အမှိုက်များ၊ စက္ကူပုံးများ၊ ချည်ထည် ပိုက်များနှင့် ချည်လုံးပိုက်များ၊ အစားအစာအကြွင်းအကျန်များနှင့် အန္တရာယ်ရှိ စွန့်ပစ် ပစ္စည်းများ ထွက်ရှိပါသည်။ ပလတ်စတစ်နှင့် ချည်ထည် အမှိုက်များ၊ အစားအစာအကြွင်းအကျန်များအား သတ်မှတ်ထားသည့် အမှိုက်ပုံးများဖြင့် စွန့်ပစ်ပြီး ပန်းရိုက်ခြင်းလုပ်ငန်းစဉ်မှ အန္တရာယ်ရှိအမှိုက်များအား ဓာတုပစ္စည်းသိုလှောင်ခန်းတွင် သီးသန့်ယာယီ သိမ်းဆည်းထားပါသည်။ ပလတ်စတစ်နှင့် ချည်ထည်အမှိုက်များနှင့် အစားအစာအကြွင်းအကျန်များ အနေဖြင့် တစ်ပတ်လျှင် ၂၇၂၁.၅၅ ကီလို ဂရမ်၊ အန္တရာယ်ရှိ အမှိုက်များအနေဖြင့် တစ်ပတ်လျှင် ၁၄၀ ကီလိုဂရမ်ခန့်အား ရန်ကုန်မြို့တော် စည်ပင်သာယာရေးကော်မတီ၏ ဝန်ဆောင်မှုအား ရယူ၍ တစ်ပတ်လျှင် တစ်ကြိမ် စွန့်ပစ်ပါသည်။ ဓာတုပစ္စည်းပုံးခွံများအနေဖြင့် တစ်လလျှင် ၁၀၂ ပုံးခွံခန့် ထွက်ရှိပြီး ရန်ကုန် မြို့တော် စည်ပင်သာယာရေး ကော်မတီမှ တစ်လလျှင် တစ်ကြိမ် လာရောက်သိမ်းဆည်းပေးပါသည်။

စားဖိုဆောင်၊ ထမင်းစားဆောင်နှင့် သန့်စင်ခန်းအသုံးပြုမှုများမှ ဝန်ထမ်းများ၏ အထွေထွေ သုံးစွန့်ပစ်ရည်များအနေဖြင့် တစ်ရက်လျှင် ၂,၀၆၈ ဂါလံခန့် ထွက်ရှိပါသည်။ ၎င်းအထွေထွေသုံး စွန့်ပစ်ရည်များအား စက်ရုံရေမြောင်းမှ တစ်ဆင့် စွန့်ပစ်ပြီး ရေမြောင်းများ ရေစီးရေလာကောင်းမွန်စေရေး ပုံမှန်ဆောင်ရွက်လျက်ရှိပါသည်။ သန့်ရှင်းရေးဆောင်ရွက်ခြင်းနှင့် ပန်းရိုက်ခြင်းလုပ်ငန်းစဉ်၏ ပုံစံခွက်ဆေးကြောခြင်းမှ စွန့်ပစ်ရည်များ ထွက်ရှိပြီး ၎င်းစွန့်ပစ်ရည်များအား ၅ ပေ x ၅ ပေ x ၅ ပေ aရွယ်အစားရှိ အဆင့် (၄) ဆင့်ပါ အနည်စစ်ကန်တွင် သန့်စင်၍ သန့်စင်ပြီး စွန့်ပစ်ရည်များအား စက်ရုံရေမြောင်းများမှတစ်ဆင့် စွန့်ထုတ်ပါသည်။ လက်ရှိအချိန်တွင် အနည်ပမာဏ အနည်းငယ်သာ ရှိသေးသည့်အတွက် စွန့်ပစ် အနည်များအား စွန့်ပစ်ရန် အစီအစဉ် မရှိသေးပါ။ သို့သော် စွန့်ပစ်ရမည့် ပမာဏ ရောက်ရှိပါက ရန်ကုန်မြို့တော် စည်ပင်သာယာရေးကော်မတီ (သို့) လိုင်စင်ရ စွန့်ပစ်ပစ္စည်း စီမံသည့်ကုမ္ပဏီများနှင့် ချိတ်ဆက်



အနည်စစ်ကန်စနစ် လှည့်ပတ်မှု

စီမံကိန်းတွင် မီးသတ်ဆေးဘူး (၇၈) လုံး၊ မီးသတ်အချက်ပေးစနစ် (၂၈) ခု၊ မီးသတ်ပိုက် (၃၃) ခု၊ မီးသတ်ပိုက် (၃၃) ခု၊ မီးသတ်ရေပိုက်ခေါင်း (၆) ခု၊ မီးခိုးအာရုံခံစနစ် (၃၆) ခု၊ ရေဖြန်းစနစ် (၁,၂၅၉) ခု၊ အလိုအလျောက်အပူအာရုံခံစနစ် (၂) ခု၊ အရေးပေါ် အချက်ပြမီး (၂၆) ခု၊ အရေးပေါ် သူနာပြုဆေးပုံး (၁၀) ပုံးနှင့် အရေးပေါ် ထွက်ပေါက် (၃၂) ပေါက် အား ထားရှိပါသည်။ ဝန်ထမ်းအိမ်ယာတွင် မီးသတ် ဆေးဘူး (၆) လုံး၊ မီးသတ်အချက်ပေးစနစ် (၆) ခု၊ မီးသတ်ပိုက် (၆) ခု၊ မီးသတ်ဝရပိုက်ခေါင်း (၆) ခု၊ မီးခိုးအာရုံခံစနစ် (၃၆) ခု၊ အလိုအလျောက်အပူအာရုံခံစနစ် (၂) ခု၊ အရေးပေါ် အချက်ပြမီး (၆) ခု၊ ရှေးဦးသူနာပြုသေတ္တာ (၂) ပုံးနှင့် အရေးပေါ် ထွက်ပေါက် (၆) ပေါက်အား ထားရှိပါသည်။ အရေးပေါ် အခြအနေဖြစ်ပွားပါက ဆက်သွယ်ရမည့် ဖုန်းနံပါတ်များအား စီမံကိန်း၏ မြင်သာသော နေရာတွင် ပြသထားပါသည်။

အရေးပေါ် ကျန်းမာရေးအခြေအနေများအတွက် ရှေးဦးသူနာပြုဆေးခန်းနှင့် ရှေးဦးသူနာပြုဆေးသေတ္တာများ ထားရှိပါသည်။ သန့်စင်ခန်းစနစ်အနေဖြင့် စုစုပေါင်း (၄၄) ခန်း ထားရှိပြီး ကျား (၁၁) ခန်း၊ မ (၃၃) ခန်း ထားရှိပါသည်။ သဘာဝအအေးပေးစနစ်အား ထမင်းစားဆောင်၊ ကုန်ကြမ်းသိုလှောင်သည့်ဧရိယာ နှင့် လျှပ်စစ်ဓာတ်အားပေး အဆောက်အဦတို့တွင် တပ်ဆင်ထားပြီး စက်ပစ္စည်း အအေးပေးစနစ်များနှင့် အဲကွန်းစနစ်များအား စားဖိုဆောင်နှင့် စားသောက်ခန်း၊ ရုံးခန်းများ၊ ထုတ်လုပ်မှုဧရိယာ၊ ဝန်ထမ်းအိမ်ယာ၊ အင်တာဗျူးအခန်း၊ ရှေးဦးသူနာပြုဆေးခန်းနှင့် ဆာဗာအခန်း တွင် ထားရှိပါသည်။

#### ပတ်ဝန်းကျင်အခြေအနေများအား လေ့လာခြင်း

လက်ရှိစီမံကိန်း၏ ပတ်ဝန်းကျင်ဆိုင်ရာ အချက်အလက်၊ ပတ်ဝန်းကျင်အရည်အသွေး တိုင်းတာခြင်းများနှင့် သက်ရောက်မှုများကို ၂၀၂၄ ခုနှစ်၊ ဩဂုတ်လ၊ ၂၃ ရက်နေ့ မှ ၂၄ ရက်နေ့ထိ ပြုလုပ်ခဲ့ပါသည်။ ထို့အပြင် စက်ရုံ တည်နေရာနှင့် သက်ဆိုင်သည့် အချက်အလက်များဖြစ်သော လူမှုစီးပွားအခြေအနေ၊ ရူပပတ်ဝန်းကျင်ဆိုင်ရာ အချက်အလက်များ၊ ဧဝပတ်ဝန်းကျင်ဆိုင်ရာ အချက်အလက်များ၊ ရာသီဥတုဆိုင်ရာ အချက်အလက်များ အစရှိသည်များကို ရန်ကုန်တိုင်းဒေသကြီး၊ ထန်းတပင်မြို့နယ်မှ တရားဝင်ပြဋ္ဌာန်းထားသော မြို့နယ်ဆိုင်ရာ အချက်အလက်များမှ ကိုးကား ဖော်ပြထားပါသည်။

| <b>အ</b> ကြော      | ာင်းအရာ | ပါရာမီတာများ  |  |
|--------------------|---------|---|--|
| လေအရည်             | Indoor  | PM <sub>10</sub> (Particulate Matter), PM <sub>2.5</sub> (Particulate Matter), SO <sub>2</sub> (Sulfur dioxide), NO <sub>2</sub> (Nitrogen Dioxide), O <sub>3</sub> (Ozone), Carbon Monoxide (CO), Nitric Oxide (NO), Total |  |
| အသွေး<br>Outdoor   |         | Volatile Organic Compound (TVOC), Total Suspended Particulate (TSP),<br>Temperature, Humidity, Air Pressure, Wind Speed & Wind Direction  |  |
| 00.0303            | Indoor  |   |  |
| ဆူညံသံ<br>Outdoor  |         | Sound level (LAeq)  |  |
| အလင်းရောင် ရရှိမှု |         | Illuminance (Lux)   |  |
| ရေအရည်အသွေး        |         | စွန့်ပစ်ရေ (သန့်စင်ပြီး)  |  |

| အကြောင်းအရာ | ပါရာမီတာများ  |  |  |
|-------------|---|--|--|
|             | pH, Temperature, Colour, TSS, BOD, COD, Total Phosphorus, Copper, Chromium (Hexavalent), Oil & Grease, Total Nitrogen |  |  |

#### လေအရည်သွေးတိုင်းတာမှု

စီမံကိန်းတည်နေရာရှိ လေထုအရည်အသွေးအား အကဲဖြတ်နိုင်ရန်အတွက် OCEANUS AQM-09 လေအရည်အသွေးစောင့်ကြပ်ကြည့်ရှုရေးစက်အား အသုံးပြု၍ ၂၀၂၄ ခုနှစ်၊ ဩဂုတ်လ၊ ၂၃ ရက်နေ့ မှ ၂၄ ရက်နေ့ထိ ၂၄ နာရီ တိုင်းတာမှုများ ပြုလုပ်ခဲ့ပါသည်။ ဖုန်မှုန့် (PM<sub>2.5</sub>, PM<sub>10</sub>, TSP) နှင့် ဓာတ်ငွေ့များ (SO<sub>2</sub>, NO<sub>2</sub>, O<sub>3</sub>, CO, NO, TVOC) အပါအဝင် စီမံကိန်း တည်ရှိရာ နေရာ၏ အပူချိန်၊ စိုထိုင်းဆ၊ လေထုဖိအား၊ လေတိုက်နှုန်းနှင့် လေတိုက်ခတ်ရာ အရပ်တို့အား တိုင်းတာဆောင်ရွက် ခဲ့ပါသည်။ လေအရည်အသွေး စောင့်ကြပ်ကြည့်ရှုရေးစက်အား မြောက်လတ္တီတွဒ် ၁ဂု° ၁' ၁၀.၆၁" နှင့် အရှေ့လောင်ဂျီတွဒ် ၉၅° ၅၈' ၃၂.၉၉" တွင် စက်ရုံအဆောက်အဦရှေ့၌ တိုင်းတာခဲ့ပြီး မြောက် လတ္တီတွဒ် ၁ဂု° ၁' ၁၂.၈၂" နှင့် အရှေ့ လောင်ဂျီတွဒ် ၉၅° ၅၈' ၃၃.၅၅" တွင် စက်ရုံအတွင်း ထုတ်လုပ်မှု လုပ်ငန်းစဉ်၌ တိုင်းတာထားရှိခဲ့ပြီး ရရှိလာသော ရလဒ်များအား အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များဖြင့် နှိုင်းယှဉ်ခဲ့ပြီး သတ်မှတ်စံနှုန်းများအတွင်း ရှိသည်ကို တွေ့ရှိရပါသည်။

## အသံဆူညံမှုတိုင်းတာခြင်း

စီမံကိန်း၏ ထုတ်လုပ်မှုလုပ်ငန်းစဉ်အတွင်း ဆူညံသံတိုင်းတာရန်အတွက် Digital Sound Level Meter (BENTECH, GM 1356) အား အသုံးပြု၍ ၂၀၂၄ ခုနှစ်၊ ဩဂုတ်လ၊ ၂၃ ရက်နေ့ မှ ၂၄ ရက်နေ့ထိ ၂၄ နာရီ တိုင်းတာမှုများ ပြုလုပ်ခဲ့ပါသည်။ ဖြတ်တောက်ခြင်းလုပ်ငန်းစဉ်တွင် ဆူညံသံ တိုင်းတာခြင်းအား မြောက်လတ္တီတွဒ် ၁ဂု° ၁' ၁၂.၁၈" နှင့် အရှေ့လောင်ဂျီတွဒ် ၉၅° ၅၈' ၃၂.၀၈" တွင် ဆောင်ရွက်ခဲ့ပြီး ချုပ်လုပ်ခြင်းလုပ်ငန်းစဉ်၌ မြောက်လတ္တီတွဒ် ၁ဂု° ၁' ၁၃.၁၄" နှင့် အရှေ့လောင်ဂျီတွဒ် ၉၅°၅၈'၃၃.၅၂" တွင် ဆောင်ရွက်ခဲ့ပြီး ရရှိလာသော ရလဒ်များအား အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များဖြင့် နှိုင်းယှဉ်ခဲ့ပြီး သတ်မှတ်စံနှုန်းများအတွင်း ရှိသည်ကို တွေ့ရှိရပါသည်။

#### အလင်းရောင်ရရှိမှု

စီမံကိန်း၏ ထုတ်လုပ်မှုဧရိယာများအတွင်း အလင်းရောင် ရရှိမှုအခြေအနေအား တိုင်းတာ ရန် Unit – T Luminometer (UT-382 Light Meter) အားအသုံးပြု၍ ၂၀၂၄ ခုနှစ်၊ ဩဂုတ်လ၊ ၂၃ ရက်နေ့တွင် စီမံကိန်း၏ ကုန်ကြမ်းသိုလှောင်ရုံ၊ ဖြတ်တောက်ခြင်း ဌာန၊ ချုပ်လုပ်ခြင်းဌာန၊ ပန်းရိုက်ခြင်းဌာန၊ အရည်အသွေးစစ်ဆေးခြင်းဌာန၊ ကုန်ချောသိုလှောင်ရုံနှင့် ထုပ်ပိုးခြင်းဌာနများတွင် တိုင်းတာခဲ့ပါသည်။ ရရှိလာသော ရလဒ်များအား The Lighting Handbook ပါ စံနှုန်းများဖြင့် နှိုင်းယှဉ်ခဲ့ပြီး သတ်မှတ်စံနှုန်းများအတွင်း ရှိသည်ကို တွေ့ရှိရပါသည်။

#### ရေအရည်အသွေးတိုင်းတာခြင်း

စွန့်ပစ်ရေ အရည်အသွေး အခြေခံအကဲဖြတ်ရန်အတွက် နမူနာ ကောက်ယူခြင်းအား ၂၀၂၄ ခုနှစ်၊ ဩဂုတ်လ၊ ၂၄ ရက်နေ့တွင် စီမံကိန်း၏ ရေဆိုးအနည်စစ်သန့်စင်ကန်မှ ကောက်ယူခဲ့ပါသည်။ စွန့်ပစ်ရေ (သန့်စင်ပြီး) အရည်အသွေးအား မြောက်လတ္တီတွဒ် ၁၆°၃၂'၁၆.၀၃" နှင့် အရှေ့လောင်ဂျီတွဒ် ၉၄°၁၅'၅၆.၀"တွင် ကောက်ယူခဲ့ပြီး အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး(ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များဖြင့် နှိုင်းယှဉ်ခဲ့ပြီး သတ်မှတ်စံနှုန်းများအတွင်း ရှိသည်ကို တွေ့ရှိရပါသည်။

#### ပတ်ဝန်းကျင်ဆိုင်ရာအရည်အသွေးတိုင်းတာခြင်း ရလဒ်များ

| m (Quemons                               | ရင   | 0200250258                           |                                    |  |  |  |
|--|--|--------------------------------------|------------------------------------|--|--|--|
| အမျိုးအစား                               | Indoor   | Outdoor                              | – လမ်းညွှန်တန်ဖိုး                 |  |  |  |
|  | လေထုအရည်အသွေး  |                                      |                                    |  |  |  |
| <b>အမှု</b> န်ိ <sub>(၁၀)</sub>          | ၈.၀၇ မိုက်ခရိုဂရမ် ပါ ၁၁.၆၂ မိုက်ခရိုဂရမ် ပါ<br>အမှုန် <sub>(၁၀)</sub> ကျုဗစ်မီတာ ကျုဗစ်မီတာ |                                      | ၅၀ မိုက်ခရိုဂရမ် ပါ<br>ကျုဗစ်မီတာ  |  |  |  |
| အမှုန် <sub>(၂.၅)</sub>                  | ၃.၂၆ မိုက်ခရိုဂရမ် ပါ<br>ကျုဗစ်မီတာ  | ၁၀.၀၃ မိုက်ခရိုဂရမ် ပါ<br>ကျုဗစ်မီတာ | ၂၅ မိုက်ခရိုဂရမ် ပါ<br>ကျုဗစ်မီတာ  |  |  |  |
| နိုင်ထရိုဂျင်ခိုင်<br>အောက်ဆိုဒ်         | ၃.၈၁ မိုက်ခရိုဂရမ် ပါ<br>ကျုဗစ်မီတာ  | ၅.၂၁ မိုက်ခရိုဂရမ် ပါ<br>ကျုဗစ်မီတာ  | ၂၀၀ မိုက်ခရိုဂရမ် ပါ<br>ကျုဗစ်မီတာ |  |  |  |
| ဆာလဖာဒိုင်<br>အောက်ဆိုဒ်                 | ၁၅.ဂု၁ မိုက်ခရိုဂရမ် ပါ<br>ကျုဗစ်မီတာ  | ၁၈.၉၉ မိုက်ခရိုဂရမ် ပါ<br>ကျုဗစ်မီတာ | ၂၀ မိုက်ခရိုဂရမ် ပါ<br>ကျုဗစ်မီတာ  |  |  |  |
|  | ၀.၁၁ မိုက်ခရိုဂရမ် ပါ<br>ကျုဗစ်မီတာ  | ၀.၁၃ မိုက်ခရိုဂရမ် ပါ<br>ကျုဗစ်မီတာ  | ၅၀၀ မိုက်ခရိုဂရမ် ပါ<br>ကျုဗစ်မီတာ |  |  |  |
| <b>အို</b> ဇုန်း                         | ၄.၁၇ မိုက်ခရိုဂရမ် ပါ<br>ကျုဗစ်မီတာ  | ၂.၈၇ မိုက်ခရိုဂရမ် ပါ<br>ကျုဗစ်မီတာ  | ၁၀၀ မိုက်ခရိုဂရမ် ပါ<br>ကျုဗစ်မီတာ |  |  |  |
| ကာဗွန်မို နောက်ဆိုဒ်                     | ၄.၁၇ ပီပီအမ်   | ၂.၈၇ ပီပီအမ်                         | ල ပီပီအမ်                          |  |  |  |
| နိုက်ထရစ်<br>အောက်ဆိုဒ်                  | ၉.၃၈ ပီပီဘီ  | ၃.၆၅ ပီပီဘီ                          | -                                  |  |  |  |
| အငွေ့ပျံ<br>ဓာတ်ပေါင်းများ<br>စုစုပေါင်း | ဓာတ်ပေါင်းများ ၀.၀၀၄ ပီပီအမ် ၀.၀၀၃ ပီပီအမ်   |                                      | -                                  |  |  |  |
| အမှုန် စုစုပေါင်း                        | ၁.ဝ၁၈၇၅ မီလီဂရမ် ပါ ဝ.ဝ၁၂၇၉ မီလီဂရမ် ပါ<br>အမှုန် စုစုပေါင်း ကျူဗစ်မီတာ ကျူဗစ်မီတာ           |                                      | ၀.၃၃ မီလီဂရမ် ပါ ကျုဗစ်မီတာ        |  |  |  |
|  | <u> </u>   | <u>ဒီ</u> သံတိုင်းတာမှု              |                                    |  |  |  |
| ဆူညံသံ                                   | ၅၅.၉၂ ဒီဘီအေ   | ၆၂.၉၄ ဒီဘီအေ                         | <b>ე</b> ၀ కిన <mark>ో</mark> ణ    |  |  |  |

| အလင်းရောင်ရရှိမှု                             |                |             |  |  |  |
|---|----------------|-------------|--|--|--|
| တည်နေရာ တိုင်းတာမှုရလဒ် (Lux) လမ်းညွှန်တန်ဖို |                |             |  |  |  |
| ကုန်ကြမ်းသိုလှောင်ရုံ                         | 909            | Joo         |  |  |  |
| ဖြတ်တောက်ခြင်းဌာန                             | ၁၁၈၇           | 500         |  |  |  |
| ပန်းရိုက်ခြင်းဌာန                             | ၈၀၅            | ეიი         |  |  |  |
| ချုပ်လုပ်ခြင်းဌာန                             | ၇၆၁            | <b>ე</b> ე0 |  |  |  |
| အရည်အသွေးစစ်ဆေးခြင်းဌာန                       | <b>ා</b> ලිලිට | 2000        |  |  |  |
| ကုန်ချောသိုလှောင်ဧရိယာ                        | ઠીગ            | 500         |  |  |  |
| ထုပ်ပိုးခြင်း ဌာန                             | ၁၄၆၈           | ეიი         |  |  |  |

စီမံကိန်း၏ စွန့်ပစ်ရေ (သန့်စင်ပြီး) အရည်အသွေးအား ၂၀၂၄ ခုနှစ်၊ ဩဂုတ်လ၊ ၂၄ ရက်နေ့ တွင် စီမံကိန်း၏ ရေဆိုးအနည်စစ်သန့်စင်ကန်မှ ကောက်ယူခဲ့ပြီး Alarm Ecological Laboratory တွင် တိုင်းတာစစ်ဆေးခဲ့ပြီး အမျိုးသားပတ်ဝန်းကျင်ဆိုင်ရာ အရည်အသွေး (ထုတ်လွှတ်မှု) လမ်းညွှန်ချက်များဖြင့် နှိုင်းယှဉ်ခဲ့ပြီး သတ်မှတ်စံနှုန်းများအတွင်းရှိသည်ကို တွေ့ရှိရပါသည်။ စီမံကိန်း၏ သောက်သုံး ရေ အရည်အသွေးအား စီမံကိန်း အဆိုပြုသူမှ နမူနာကောက်ယူ၍ ISO TECH Laboratory တွင် တိုင်းတာခဲ့ပြီး ရလဒ်များအား နောက်ဆက်တွဲ (D) တွင် ဖော်ပြထားရှိပါသည်။

#### ပတ်ဝန်းကျင်အပေါ် သက်ရောက်မှုများနှင့် လျော့ပါးစေရေးနည်းလမ်းများ

အဆိုပြု စီမံကိန်း၏ အဓိကဖြစ်ပေါ် စေနိုင်သော ပတ်ဝန်းကျင်ထိခိုက်မှုကို အခြေခံ စစ်တမ်းများ ပေါ် မူတည်၍ လျှော့ချမှုများ ပြုလုပ်သွားပါမည်။ ပတ်ဝန်းကျင်ထိခိုက်မှုကို လေ့လာ ဆန်းစစ်ရာတွင် စီမံကိန်း ကာလအတွင်း ထိခိုက်မှု တစ်ခုချင်းစီ၏ ပမာဏ၊ ကြာမြင့်ချိန်၊ ကျယ်ပြန့်မှု နှင့် ဖြစ်နိုင်ချေတို့အပေါ် မူတည်၍ တွက်ချက်ဆောင်ရွက်သွားမည် ဖြစ်ပါသည်။

#### သက်ရောက်မှု၊ အကဲဖြတ်မှု၊ သတ်မှတ်ချက်များ နှင့် ၎င်း၏ အတိုင်းအတာ

| ~~``````````` |              | အတိုင်းအတာ  |   |  |  |
|---------------|--------------|---|---|--|--|
| အကဲဖြတ်ခြင်း  | ၁            | J   | 9   | 9  | ၅  |
| ഠഴാന്ത        | မလုံလောက်သော | အနည်းငယ် နှင့်<br>လုပ်ငန်း ခွင်<br>ပြောင်းလဲ မှု<br>ဖြစ်စေနိုင် သော | အသင့်အတင့်နှင့်<br>အနည်းငယ်<br>လုပ်ငန်းခွင်<br>ပြောင်းလဲမှု<br>ဖြစ်စေနိုင်သော | မြင့်မားနှင့် သိသာစွာ<br>လုပ်ငန်းခွင် ပြောင်းလဲမှု<br>ဖြစ်စေနိုင်သော | အလွန်မြင့်မားနှင့်<br>အမြဲတမ်း<br>လုပ်ငန်းခွင်<br>ပြောင်းလဲမှု<br>ဖြစ်စေနိုင်သော |

| အကဲဖြတ်ခြင် <u>း</u> |                    | အတိုင်းအတာ    |                |                                      |                                  |
|----------------------|--------------------|---------------|----------------|--------------------------------------|----------------------------------|
| အကြေပာချင်း          | o                  | J             | 9              | 9                                    | ၅                                |
| အချိန်               | ၀-၁ နှစ်           | ၂-၅ နှစ်      | ၆-၁၅ နှစ်      | လုပ်ငန်းလည်ပတ် စဉ်<br>ကာလ တစ်လျှောက် | လုပ်ငန်းပိတ်သိမ်း<br>ခြင်းကာလအထိ |
| ကျယ်ပြန့်မှု         | လုပ်ငန်းခွင်အတွင်း | ဒေသအတွင်း     | မြို့နယ်အတွင်း | နိုင်ငံအတွင်း                        | နိုင်ငံတကာအတွင်း                 |
| ဖြစ်နိုင်ချေ         | လုံးဝမဖြစ်နိုင်သော | မဖြစ်နိုင်သော | ဖြစ်နိုင်သော   | ဖြစ်နိုင်ခြေ မြင့်သော                | အတိအကျ                           |

#### သတ်မှတ်ချက် = ( ပမာဏ + အချိန် + ကျယ်ပြန့်မှု ) x ဖြစ်နိုင်ချေ

ပတ်ဝန်းကျင်ထိခိုက်မှုကို အောက်ပါအတိုင်း ခွဲခြားနိုင်သည်။

| သတ်မှတ်ချက်                    | ထိခိုက်မှုအဆင့်        |
|--------------------------------|------------------------|
| <၁၅                            | အလွန်နိမ့်             |
| <u>ე</u> - ეც                  | <b>ဇ္ဇင့်</b><br>နိမ့် |
| <del>20 - </del> <del>99</del> | အလယ်အလတ်               |
| 99 <sup>-</sup> 90             | မြင့်                  |
| Go                             | အလွန်မြင့်             |

**စီမံကိန်းတည်ဆောက်စဉ်ကာလ:** စီမံကိန်းသည် ပတ်ဝန်းကျင်ဆိုင်ရာ ကွင်းဆင်း လေ့လာမှု များ ဆောင်ရွက်ချိန်တွင် တည်ဆောက်ပြီးစီးနေပြီး ဖြစ်ပါသည်။ ထို့ကြောင့် စီမံကိန်း တည်ဆောက် စဉ်ကာလ ပတ်ဝန်းကျင်အပေါ် သက်ရောက်မှုများအား ထည့်သွင်းဖော်ပြခြင်း မပြုတော့ပါ။

## စီမံကိန်းလည်ပတ်ချိန်တွင် ပတ်ဝန်းကျင်အကျိုးသက်ရောက်မှုများ နှင့် ၎င်းတို့၏ လျော့ချရေး နည်းလမ်းများ

| အမျိုးအမည်  | သက်ရောက်မှု အရင်းအမြစ်  | သက်ရောက်မှု<br>သက်မှတ်ချက် | လျှော့ချရေးအစီအစဉ်များ   |
|-------------|---|----------------------------|--|
| လေအရည်အသွေး | <ul> <li>ပန်းရိုက်ခြင်းလုပ်ငန်းစဉ်</li> <li>ဆောင်ရွက်ခြင်း၊</li> <li>ကုန်ပစ္စည်းသယ်ဆောင်သည့်</li> <li>ယာဉ်များမှ ဖုန်နှင့် အမှုန်များ၊</li> <li>GHGs များ ထွက်ရှိခြင်း၊</li> <li>အရေးပေါ် မီးစက်များမှ အခိုး</li> <li>အငွေ့ ထွက်ရှိခြင်း</li> </ul> | රයි.<br>රම්                | <ul> <li>လေဝင်လေထွက် ကောင်းမွန်</li> <li>အောင် ဆောင်ရွက်ထားခြင်း၊</li> <li>ယာဉ်များ၊ ဂျင်နနေရတာများ၊</li> <li>စက်ပစ္စည်းများအား ပုံမှန်</li> <li>စစ်ဆေးပြုပြင်ခြင်း၊</li> <li>ထုတ်လုပ်မှုလုပ်ငန်းစဉ်တွင်</li> <li>ကောင်းမွန်သော လေသန့်စင်</li> <li>စနစ်များ တပ်ဆင်ထားခြင်း၊</li> </ul> |

| အမျိုး                        | အမည်          | သက်ရောက်မှု အရင်းအမြစ်  | သက်ရောက်မှု<br>သက်မှတ်ချက် | လျှော့ချရေးအစီအစဉ်များ  |
|-------------------------------|---------------|---|----------------------------|---|
| ဆူညံသံ                        |               | <ul> <li>ချုပ်လုပ်ခြင်းနှင့် ဖြတ်</li> <li>တောက်ခြင်း စက်ပစ္စည်းများ မှ</li> <li>ဆူညံသံများ ထွက်ရှိခြင်း</li> <li>ဂျင်နရေတာနှင့် လေအေးပေး</li> <li>စနစ်၏ စက်ပစ္စည်းများမှ</li> <li>ဆူညံသံများ ထွက်ရှိခြင်း</li> </ul>   | နိုမ့်                     | <ul> <li>ဂျင်နရေတာအခန်းအား သီး သန့်<br/>အသံလုံခြုံအောင် ထားရှိ ခြင်း၊</li> <li>စက်ပစ္စည်းများအား ပုံမှန်<br/>ပြုပြင်ထိန်းသိမ်းခြင်း၊</li> </ul>   |
| ရေအရည်အသွေ                    | <b>3</b> °    | <ul> <li>ပန်းရိုက်ခြင်းလုပ်ငန်းစဉ်မှ         გန့်ပစ်ရည်များ ထွက်ရှိခြင်း၊</li> <li>ဘေစင်၊ စားဖိုဆောင်၊         သန့်စင်ခန်းနှင့် စက်ပစ္စည်း များ         ဆေးကြောခြင်းမှ စွန့်ပစ်         ရည်များ ထွက်ရှိခြင်း၊</li> <li>ယာဉ်များနှင့် စက်ပစ္စည်း များမှ         ဆီဖိတ်စင်ခြင်း နှင့် ဆီအနှစ်များ         ယိုဖိတ်ခြင်း</li> </ul> | အလယ်အလတ်                   | <ul> <li>စွန့်ပစ်ရည်များအား ရေဆိုး         အနည်စစ်သန့်စင်ကန်မှ</li></ul>  |
| မြေဆီလွှာအရည                  | ်<br>ခဲ့အသွေး | <ul> <li>ယာဉ်များမှ ဆီများ မတော် တဆ</li> <li>ဖိတ်စင်ခြင်း၊</li> <li>ဆီဖြည့်ခြင်း၊ အင်ဂျင်ဆီများ၊</li> <li>ဒီဇယ်ဆီများ သိုလှောင်ရာမှ</li> <li>ဖိတ်စင်ခြင်း</li> </ul>  | အလွန်နိမ့်                 | <ul> <li>ဆေးကြောခြင်း လုပ်ငန်းစဉ်</li> <li>ဆောင်ရွက်သည့် နေရာအား</li> <li>ကွန်ကရစ် ခင်းကျင်းထားခြင်း</li> <li>ဆီဖြည့်ရာတွင် စနစ်တကျ ဂရုပြု</li> <li>ဆောင်ရွက်ခြင်း၊</li> </ul>                        |
| စွန့်ပစ်ပစ္စည်း<br>ထွက်ရှိမှု | အစိုင်အခဲ     | <ul> <li>ထုတ်လုပ်မှုဌာနများမှ ပြန် လည်</li> <li>အသုံးပြု၍ ရသော အမှိုက်များ၊</li> <li>စားဖိုဆောင်၊ ဝန်ထမ်း ဆောင်</li> <li>နှင့် ရုံးခန်းမှ ပြန် လည်</li> <li>အသုံးပြု၍ မရသော အမှိုက်များ၊</li> </ul>   | အလယ်အလတ်                   | <ul> <li>စွန့်ပစ်ပစ္စည်းများအား မစွန့် ပစ်မှီ</li> <li>စနစ်တကျ သိုလှောင် ထားရှိခြင်း၊</li> <li>ပြန်လည်အသုံးပြု၍ ရသော</li> <li>အမှိုက်များအား ဝယ်ယူသူများ ထံ</li> <li>ပြန်လည်ရောင်းချခြင်း၊</li> </ul> |
| စွန့်ပစ်ပစ္စည်း<br>ထွက်ရှိမှု | အန္တရာယ်ရှိ   | <ul> <li>ထုတ်လုပ်မှု လုပ်ငန်းစဉ်မှ         ခာတုအန္တရာယ်ရှိ စွန့်ပစ်         ပစ္စည်းများ၊</li> <li>ယာဉ်များနှင့် စက်ပစ္စည်းများ         ပြင်ဆင်ရာမှ အသုံးပြုပြီး သော         ဆီနှင့် စက်ချောဆီများ</li> <li>မီးချောင်း၊ မီးသီး၊ ဘထ္ထရီများ၊         စက်ဆီပုံးခွံများ၊</li> <li>ဓာတုပစ္စည်း ပုံးခွံများ</li> </ul>                | ဇ္ဇ မို့                   | • ဓာတုပစ္စည်းပုံးခွံများ နှင့် အခြား<br>အန္တရာယ်ရှိ စွန့်ပစ်<br>ပစ္စည်းများအား YCDC နှင့်<br>ချိတ်ဆက်၍ တစ်လလျှင်<br>တစ်ကြိမ် စွန့်ပစ်ခြင်း၊   |

| အမျိုးအမည်                           | သက်ရောက်မှု အရင်းအမြစ်  | သက်ရောက်မှု<br>သက်မှတ်ချက် | လျှော့ချရေးအစီအစဉ်များ  |
|--------------------------------------|---|----------------------------|---|
| ဂေဟစနစ်အရင်းအမြစ်များ                | <ul> <li>စီမံကိန်းလည်ပတ်စဉ် ဆူညံ သံများ (သို့) လူသားများ ကြောင့် အပင်နှင့် သတ္တဝါ များ အနှောက်အယှက် ဖြစ်စေခြင်း၊</li> <li>ယာဉ်သွားလာမှုများ၊ ရေ/လေ ညစ်ညမ်းခြင်း တို့ ကြောင့် ဂေဟစနစ်အား သက်ရောက်ခြင်း၊</li> </ul>   | အလွန်နိမ့်                 | <ul> <li>စီမံကိန်းအနီးတစ်ဝိုက်</li> <li>သစ်ပင်များ စိုက်ပျိုးထားခြင်း၊</li> <li>ဂေဟနစ် ထိခိုက်မှု ဖြစ်စေ မည့်</li> <li>သက်ရောက်မှုများအား</li> <li>လျော့ချခြင်း၊</li> </ul>   |
| ကျန်းမာရေးနှင့်<br>ဘေးကင်းလုံခြုံရေး | <ul> <li>လုပ်ငန်းခွင်သုံး စက်ပစ္စည်း များကြောင့် မတော်တဆမှု များ ဖြစ်ပွားခြင်း၊</li> <li>လျှပ်စစ်ပစ္စည်းများ၊ အရေး ပေါ် မီးစက်များ ချွတ်ယွင်း ခြင်း၊</li> <li>ကုန်ပစ္စည်းများ အတင်အချ ပြုလုပ်ခြင်း၊</li> <li>ဓာတုပစ္စည်းပုံးများ ကိုင်တွယ်ခြင်း၊</li> </ul> | <b>ဇ</b> ုမ့်              | <ul> <li>အရေးပေါ် အခြေအနေများ</li> <li>အတွက် လိုအပ်သော ဆေးဝါး</li> <li>များ ထားရှိပေးခြင်း၊</li> <li>ရှေးဦးသူနာပြု သင်တန်း၊</li> <li>လုံခြုံရေးသင်တန်း၊ မီးသတ်</li> <li>သင်တန်းများနှင့် စက်ပစ္စည်း</li> <li>ကိုင်တွယ်ခြင်းဆိုင်ရာ</li> <li>သင်တန်းများ ပေးခြင်း၊</li> <li>ဝန်ထမ်းများအတွက် လိုအပ်</li> <li>သော PPE များ ထောက်ပံ့ပေး</li> <li>ခြင်း၊</li> </ul> |
| မီးဘေးအန္တရာယ်                       | <ul> <li>လျှပ်စစ်ပစ္စည်းများ တပ်ဆင်<br/>ခြင်း၊</li> <li>စက်ပစ္စည်း ကိရိယာများ<br/>ချွတ်ယွင်းခြင်း၊</li> <li>အမှိုက်စွန့်ပစ်သည့် ဧရိယာ၊<br/>ကုန်ကြမ်းသိုလှောင်ရုံနှင့်<br/>ဓာတုပစ္စည်း/စက်သုံးဆီ<br/>သိုလှောင်မှု ဧရိယာများ</li> </ul>                       | အလယ်အလတ်                   | <ul> <li>စီမံကိန်းအတွင်း လုံလောက် သော မီးဘေးအန္တရာယ်လုံခြုံ ရေးဆိုင်ရာ ပစ္စည်းကိရိယာ များ ထားရှိပေးခြင်း၊</li> <li>ရေ ၁၈၀ တန်ဆန့် မီးသတ် ရေကန် တည်ဆောက်ထားရှိ ခြင်း၊</li> <li>အရေးပေါ် ဆက်သွယ်ရမည့် ဖုန်းနံပါတ်များအား မြင်သာ သော နေရာတွင် ထားရှိခြင်း၊</li> </ul>  |
| အနံ့ထွက်ရှိမှု                       | <ul> <li>ပန်းရိုက်လုပ်ငန်းစဉ်မှ ဓာတု</li> <li>ပစ္စည်းအနံ့များ၊</li> <li>ဝန်ထမ်းများ၏ စားကြွင်းစား</li> <li>ကျန်များမှ အနံ့ထွက်ရှိမှုများ</li> </ul>   | ဇူမွ်                      | <ul> <li>ပန်းရိုက်လုပ်ငန်းစဉ်တွင် အသုံးပြုသည့် ပစ္စည်းများအား ပုံမှန်ဆေးကြောခြင်း၊</li> <li>လေဝင်လေထွက်စနစ်များ ကောင်းမွန်အောင် ဆောင် ရွက်ထားခြင်း၊</li> </ul>  |

| အမျိုးအမည်   | သက်ရောက်မှု အရင်းအမြစ်                      | သက်ရောက်မှု<br>သက်မှတ်ချက်   | လျှော့ချရေးအစီအစဉ်များ   |
|--------------|---|------------------------------|--|
|              |   |                              | ■ ဝန်ထမ်းများအား PPE (Mask)<br>တပ်ဆင်၍ လုပ်ငန်း<br>ဆောင်ရွက်စေခြင်း၊ |
| လူမှုစီးပွား | အလုပ် အကိုင် အခွင့် အလမ်း များ<br>ရရှိခြင်း | ကောင်းမွန်သော<br>သက်ရောက်မှု | -  |

# စီမံကိန်းပိတ်သိမ်းပါက ဖြစ်ပေါ်နိုင်သည့် ပတ်ဝန်းကျင်အကျိုးသက်ရောက်မှုများ နှင့် ၎င်းတို့၏ လျော့ချရေး နည်းလမ်းများ

စီမံကိန်းအဆိုပြုသူသည် စီမံကိန်းအား ပိတ်သိမ်းပြီး ဖျက်သိမ်းမှုများ ဆောင်ရွက်မည် ဆိုပါက ဖော်ပြပါ ပတ်ဝန်းကျင်ဆိုင်ရာ ထိခိုက်နိုင်မှုများ ဖြစ်ပေါ်နိုင်ပါသည်။ စီမံကိန်း ဖျက်သိမ်းခြင်း ဖြင့် လေထုနှင့် ရေထုညစ်ညမ်းမှု၊ ဆူညံသံ အနှောင့်အယှက်များနှင့် စွန့်ပစ်ပစ္စည်း ထွက်ရှိခြင်း ကဲ့သို့ ပတ်ဝန်းကျင်ဆိုင်ရာ အန္တရာယ်များ ဖြစ်ပေါ် စေနိုင်ပါသည်။ လျော့ပါးစေရေး အစီအမံများတွင် စေ့စေ့စပ်စပ်စစ်ဆေးခြင်း၊ အဆင့်မြင့် ထုတ်လွှတ် အခိုးအငွေ့ ထိန်းချုပ်ခြင်း၊ ဆူညံသံလျော့ချသည့် စက်ကိရိယာများ အသုံးပြုခြင်း၊ မြေဆီလွှာနှင့် ရေအရည်အသွေးအတွက် ကောင်းမွန်သော စီမံခန့်ခွဲမှုများ ဆောင်ရွက်ခြင်း၊ ပြန်လည်သုံးစွဲ၍ရသည့် အမှိုက်များအား ပြန်လည် အသုံးပြုခြင်း၊ ဂေဟစနစ်ဆိုင်ရာ ကာကွယ်ပေးခြင်း၊ ကျန်းမာရေးနှင့် လုံခြုံရေးဆိုင်ရာ အစီအမံများ၊ ရပ်ရွာနှင့် ပူးပေါင်းဆောင်ရွက်ခြင်း နှင့် ထိခိုက်ခံစားရသော ရပ်ရွာများအတွက် လူမှုစီးပွားအထောက်အပံ့ ပေးခြင်းများ ဆောင်ရွက်သွားရမည် ဖြစ်ပါသည်။

#### ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု လုပ်ငန်းစဉ်

စီမံကိန်း၏ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု လုပ်ငန်းစဉ်သည် Continuous Improvement Circle ကို လိုက်နာဆောင်ရွက်ခြင်းဖြင့် ဥပဒေများနှင့် လိုက်လျောညီထွေစွာ ဆောင်ရွက်နိုင်မည် ဖြစ်ပါ သည်။ ၎င်းတွင် လျော့ပါးသက်သာစေရေး အစီအမံများ ရေးဆွဲခြင်း၊ အကောင်အထည်ဖော်ခြင်း၊ ရလဒ်များကို စောင့်ကြည့်ခြင်း နှင့် ပတ်ဝန်းကျင်ဆိုင်ရာ သက်ရောက်မှုများ မြှင့်တင်ရန် လိုအပ်ပါက မှန်ကန်သော အရေးယူမှုများ ပြုလုပ်ခြင်း တို့ ပါဝင်ပါသည်။ Wide Vision Enterprise Co., Ltd. ၏ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်ခွဲများနှင့် စောင့်ကြပ်ကြည့်ရှုခြင်း အစီအစဉ်များအား စီမံကိန်း၏ ပတ်ဝန်းကျင်ဆိုင်ရာ အဖွဲ့မှ တာဝန်ယူဆောင်ရွက်သွားမည် ဖြစ်ပါသည်။

#### ၁. လေထုညစ်ညမ်းမှု/အမှုန် ဆိုင်ရာ စီမံခန့်ခွဲမှု

- ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် အစီရင်ခံစာအား အတည်ပြုပြီးနောက် လေအရည်အသွေး စောင့်ကြပ်ကြည့်ရှုခြင်းအား ခြောက်လတစ်ကြိမ် ဆောင်ရွက်ခြင်း၊
- စွန့်ပစ်ပစ္စည်းများ မီးရှို့ခြင်းအား တားမြစ်ထားခြင်း၊
- ဂျင်နရေတာအား ပုံမှန် ပြုပြင်ထိန်းသိမ်းခြင်း၊

- လေဝင်လေထွက်စနစ်များအား ပုံမှန် စစ်ဆေးထိန်းသိမ်းခြင်း၊
- ခန့်မှန်းကုန်ကျစရိတ် တစ်နှစ်လျှင် ၂,၀၀၀,၀၀၀ ကျပ်

# ၂. ဆူညံသံဆိုင်ရာ စီမံခန့်ခွဲမှု

- ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် အစီရင်ခံစာအား အတည်ပြုပြီးနောက် ဆူညံသံ ထွက်ရှိမှု စောင့်ကြပ်ကြည့်ရှုခြင်းအား ခြောက်လတစ်ကြိမ် ဆောင်ရွက်ခြင်း၊
- ဂျင်နရေတာအား အသံလုံအခန်းဖြင့် သီးသန့်ထားရှိခြင်း၊
- လုံလောက်သော အရေးပေါ် ကာကွယ်ရေး ပစ္စည်းများ ထားရှိပေးခြင်း၊
- ခန့်မှန်းကုန်ကျစရိတ် တစ်နှစ်လျှင် ၈၀၀,၀၀၀ ကျပ်

# ၃. ရေသုံးစွဲမှုဆိုင်ရာ စီမံခန့်ခွဲမှု

- ရေသုံးစွဲမှုအား ထိန်းချုပ်နိုင်ရန် ရေမီတာ တပ်ဆင်၍ စောင့်ကြပ်ကြည့်ရှုခြင်း၊
- ဝန်ထမ်းများအား ရေသုံးစွဲမှုအလေ့အကျင့်ကောင်းများနှင့် စနစ်တကျ သုံးစွဲရေး နည်းစနစ်များအား
   သင်တန်းပေးပြီး ရေသုံးစွဲမှုဆိုင်ရာ လမ်းညွှန်မှုများအား သန့်စင်ခန်း နှင့် အခြားရေသုံးစွဲသည့် နေရာများတွင်
   ထားရှိခြင်း၊
- ခန့်မှန်းကုန်ကျစရိတ် တစ်နှစ်လျှင် ၅၀၀,၀၀၀ ကျပ်

# ၄. စွန့်ပစ်အစိုင်အခဲဆိုင်ရာ စီမံခန့်ခွဲမှု

- အဆောက်အဦတစ်ခုချင်းဆီတွင် လုံလောက်သော အမှိုက်ပုံးများ ထားရှိပေးခြင်း၊
- စွန့်ပစ်အမှိုက်များအား အမျိုးအစားခွဲခြား၍ စွန့်ပစ်ခြင်း၊
- လုပ်ငန်းစဉ်မှ ထွက်ရှိသည့် နောက်ဆုံးစွန့်ပစ်ပစ္စည်းများအား YCDC နှင့် ချိတ်ဆက်၍ စွန့်ပစ်ခြင်း၊
- ခန့်မှန်းကုန်ကျစရိတ် တစ်နှစ်လျှင် ၆၀၀,၀၀၀ ကျပ်

# ၅. စွန့်ပစ်အရည်ဆိုင်ရာ စီမံခန့်ခွဲမှု

- ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် အစီရင်ခံစာအား အတည်ပြုပြီးနောက် စွန့်ပစ်ရည် အရည်အသွေး
   စောင့်ကြပ်ကြည့်ရှုခြင်းအား ခြောက်လတစ်ကြိမ် ဆောင်ရွက်ခြင်း၊
- ရေဆိုးအနည်ကျသန့်စင်ကန်အား ပုံမှန်စစ်ဆေး ထိန်းသိမ်းခြင်း၊
- စက်ရုံရေမြောင်းများ သန့်ရှင်းရေး ပုံမှန်ဆောင်ရွက်ခြင်း၊
- မိလ္လာစနစ်များအား လုံခြုံစွာ ထားရှိခြင်း၊

• ခန့်မှန်းကုန်ကျစရိတ် - တစ်နှစ်လျှင် ၈၀၀,၀၀၀ ကျပ်

# ၆. အန္တရာယ်ရှိ စွန့်ပစ်ပစ္စည်းဆိုင်ရာ စီမံခန့်ခွဲမှု

- ဓာတုပစ္စည်းများ ယိုဖိတ်မှု၊ ဖိတ်စင်မှု မရှိစေရေး စနစ်တကျ ကိုင်တွယ် သိုလှောင် အသုံး ပြုခြင်း၊
- မီးသီး/မီးချောင်းများအား ပုံမှန် ပြုပြင်ထိန်းသိမ်း၍ လဲလှယ်ခြင်းများ ဆောင်ရွက်ခြင်း၊
- ဝန်ထမ်းများအား ဓာတုပစ္စည်း ကိုင်တွယ် အသုံးပြုပုံနှင့်စပ်လျဉ်း၍ သင်တန်းများ ပေးခြင်း၊
- ခန့်မှန်းကုန်ကျစရိတ် တစ်နှစ်လျှင် ၃၀၀,၀၀၀ ကျပ်

# ၇. မီးဘေးဆိုင်ရာ စီမံခန့်ခွဲမှု

- စီမံကိန်းဧရိယာအတွင်း အရေးပေါ် မီးသတ်ပစ္စည်းများအား စနစ်တကျ ထားရှိခြင်း၊
- အရေးပေါ် ထွက်ပေါက်များနှင့် စုရပ်များအား လမ်းညွှန်ပြသထားခြင်း၊
- မီးသတ်ပစ္စည်းများအား ပုံမှန် စစ်ဆေး ကြည့်ရှု၍ လဲလှယ်ခြင်းများ ဆောင်ရွက်ခြင်း၊
- စက်ရုံဝင်ပေါက်နှင့် အရေးပေါ် ထွက်ပေါက်များတွင် ကုန်ပစ္စည်းများ ပိတ်ဆို့ခြင်းမရှိစေရေး
   ဆောင်ရွက်ထားရှိခြင်း၊
- ခန့်မှန်းကုန်ကျစရိတ် တစ်နှစ်လျှင် ၁,၂၀၀,၀၀၀ ကျပ်

# ၈. လုပ်ငန်းခွင်ဘေးကင်းလုံခြုံရေးနှင့် ကျန်းမာရေးဆိုင်ရာ စီမံခန့်ခွဲမှု

- ဝန်ထမ်းများအား ရှေးဦးသူနာပြုသင်တန်း၊ လုံခြုံရေးသင်တန်း၊ မီးသတ်သင်တန်းနှင့် အခြား လိုအပ်သော စက်ပစ္စည်းကိုင်တွယ် အသုံးပြခြင်း သင်တန်းများ ပေးခြင်း၊
- လုံလောက်သော တစ်ကိုယ်ရေသုံး ကာကွယ်ရေးပစ္စည်းများ ထောက်ပံ့ပေးထားခြင်း၊
- လျှပ်စစ် ချွတ်ယွင်းမှုများ မဖြစ်ပေါ် စေရေး ပုံမှန် စောင့်ကြပ်ကြည့်ရှုခြင်း၊
- ဝန်ထမ်းများအား ဓာတုပစ္စည်း ကိုင်တွယ် အသုံးပြုခြင်းဆိုင်ရာ သင်တန်းများ ပေးခြင်း၊
- ခန့်မှန်းကုန်ကျစရိတ် တစ်နှစ်လျှင် ၁,၀၀၀,၀၀၀ ကျပ်

# ၉. စွမ်းအင်ဆိုင်ရာ စီမံခန့်ခွဲမှု

- စွမ်းအင်ချွေတာရေးမီးလုံး/မီးချောင်းများ အသုံးပြုထားခြင်း၊
- အသုံးမပြုသည့်အခါ လျှပ်စစ်မီးများ ပိတ်ထားခြင်း၊
- 🔹 ခန့်မှန်းကုန်ကျစရိတ် တစ်နှစ်လျှင် ၁,၀၀၀,၀၀၀ ကျပ်

# ၁၀. အရေးပေါ် တုံ့ပြန်ရေးနှင့် သဘာဝဘေးအန္တရာယ်ဆိုင်ရာ စီမံခန့်ခွဲမှု

- ဖြစ်ပေါ် လာနိုင်သော သဘာဝဘေးအန္တရာယ်များအား ကိုင်တွယ်ဖြေရှင်းနိုင်ရန် သင့် လျော်သော လျော့ပါးစေရေး နည်းလမ်းများ ဆောင်ရွက်ထားခြင်း၊
- အဆောက်အဦများအား သဘာဝဘေးဒဏ် ခံနိုင်အောင် တည်ဆောက်ထားရှိခြင်း၊
- မီးသတ်လေ့ကျင့်ခန်းများ ပုံမှန် ပြလုပ်ခြင်း၊
- ရေးဦးသူနာပြုဆေးခန်း ထားရှိပေးခြင်း၊
- အရေးပေါ် အခြေအနေများတွင် ဆက်သွယ်ရမည့် ဖုန်းနံပါတ်များ၊ လိပ်စာများအား မြင်သာသောနေရာများတွင် ကပ်ထားခြင်း၊
- ခန့်မှန်းကုန်ကျစရိတ် တစ်နှစ်လျှင် ၁,၅၀၀,၀၀၀ ကျပ်

# ပတ်ဝန်းကျင်ဆိုင်ရာ စောင့်ကြပ်ကြည့်ရှုခြင်းနှင့် အစီရင်ခံခြင်း

| အမျိုးအမည်  | ပါရာမီတာ  | အကြိမ်ရေ            | စောင့်ကြပ်ကြည့်ရှု မည့်<br>နေရာ   | ခန့်မှန်းကုန်ကျ စရိတ်<br>(ကျပ်) |
|-------------|---|---------------------|---|---------------------------------|
|             | စီမံ  | ကိန်းလည်ပတ်စဉ်ကာ    | လ   |                                 |
| လေအရည်အသွေး | PM <sub>2.5</sub> , PM <sub>10</sub> , SO <sub>2</sub> ,<br>NO <sub>2</sub> , O <sub>3</sub> , TSP, TVOC,<br>CO, NO | ခြောက်လ<br>တစ်ကြိမ် | စက်ရုံအဆောက် အဦရေ့<br>မြောက်လတ္တီတွဒ်<br>၁၇° ၁' ၁၀.၆၁"<br>အရှေ့လောင်ဂျီတွဒ်<br>၉၅° ၅၈' ၃၂.၉၉"   | တစ်နှစ်လျှင်<br>၂,၀၀၀,၀၀၀       |
| ဆူညံသံ      | ဆူညံသံထွက်ရှိမှု<br>အဆင့်   | ခြောက်လ<br>တစ်ကြိမ် | ထုတ်လုပ်မှု ဧရိယာ (ချုပ်လုပ်ခြင်း ဌာန) မြောက်လတ္တီတွဒ် ၁၇° ၁' ၁၃.၁၄" အရှေ့လောင်ဂျီတွဒ် ၉၅° ၅၈' ၃၃.၅၂" စက်ရုံအဆောက် အဦရှေ့ မြောက်လတ္တီတွဒ် ၁၇° ၁' ၁၁.၃၈" အရှေ့လောင်ဂျီတွဒ် | တစ်နှစ်လျှင်<br>၈၀၀,၀၀၀         |

| အမျိုးအမည်  | ပါရာမီတာ  | အကြိမ်ရေ            | စောင့်ကြပ်ကြည့်ရှု မည့်<br>နေရာ  | ခန့်မှန်းကုန်ကျ စရိတ်<br>(ကျပ်) |
|---|---|---------------------|--|---------------------------------|
| အလင်းရောင်ရရှိမှု   | Illuminance   | ခြောက်လ<br>တစ်ကြိမ် | စီမံကိန်းဧရိယာ အတွင်း<br>မြောက်လတ္တီတွဒ်<br>၁၇° ၁' ၁၂.၀၃"<br>အရှေ့လောင်ဂျီတွဒ်<br>၉၅° ၅၈' ၃၂.၉၈" | တစ်နှစ်လျှင်<br>၈၀၀,၀၀၀         |
| pH, Colour, Turbidity, Conductivity, Total Hardness, Calcium Hardness, Magnesium Hardness, Total Alkalinity, Phenolphthalein Alkalinity, Carbonate, Bicarbonate, Iron, Chloride, Sodium Chloride, Sulphate, Total Solids, TSS, TDS, Manganese, Phosphate, Phenolphthalein Acidity, Methyl Orange Acidity, |   | နှစ်စဉ်             | သောက်ရေသန့်စက်<br>မြောက်လတ္တီတွဒ်<br>၁၇° ၁' ၁၂.၄၁"<br>အရှေ့လောင်ဂျီတွဒ်<br>၉၅° ၅၈' ၃၀.၅၈"        | တစ်နှစ်လျှင်<br>၅၀၀,၀၀၀         |
|   | စွန့်ပစ်အစိုင်အခဲ   | အပတ်စဉ်             | ယာယီအမှိုက်<br>သိုလှောင်သည့်နေရာ   | တစ်နှစ်လျှင်<br>၆၀၀,၀၀၀         |
| စွန့်ပစ်ပစ္စည်း ထွက်ရှိမှု<br>(စစ်ဆေးကြည့်ရှုခြင်း၊<br>စွန့်ပစ်ခြင်း နှင့်<br>မှတ်တမ်းထားရှိခြင်း)  | စွန့်ပစ်အရည်<br>pH, Temperature,<br>Colour, TSS, BOD5,<br>COD, Total<br>Phosphorous,<br>Copper, Chromium<br>(Hexavalent), Oil & | ခြောက်လ<br>တစ်ကြိမ် | ရေဆိုးအနည်ကျ<br>သန့်စင်ကန်   | တစ်နှစ်လျှင်<br>၁,၂၀၀,၀၀၀       |

| အမျိုးအမည်   | ပါရာမီတာ   | အကြိမ်ရေ | စောင့်ကြပ်ကြည့်ရှု မည့်<br>နေရာ   | ခန့်မှန်းကုန်ကျ စရိတ်<br>(ကျပ်) |  |
|--|--|----------|---|---------------------------------|--|
|  | Grease, Total<br>Nitrogen  |          |   |                                 |  |
|  | အန္တရာယ်ရှိ<br>စွန့်ပစ်ပစ္စည်း   | အပတ်စဉ်  | ယာယီအမှိုက်<br>သိုလှောင်သည့် နေရာ   | တစ်နှစ်လျှင်<br>၃၀၀,၀၀၀         |  |
| မီးဘေးအန္တရာယ်                                       | မီးသတ်ပစ္စည်းများ<br>စစ်ဆေး ကြည့်ရှု<br>လဲလှယ်ခြင်း  | လစဉ်     | စီမံကိန်းဧရိယာအတွင်း<br>မြောက်လတ္တီတွဒ်<br>၁၇° ၁' ၁၂.၀၃"<br>အရှေ့လောင်ဂျီတွဒ်<br>၉၅° ၅၈' ၃၂.၉၈" | တစ်နှစ်လျှင်<br>၁,၂၀၀,၀၀၀       |  |
| လုပ်ငန်းခွင်<br>ကျန်းမာရေးနှင့်<br>ဘေးကင်းလုံခြုံရေး | PPE နှင့် အခြား<br>လုပ်ငန်းခွင်<br>ကျန်းမာရေးနှင့်<br>ဘေးကင်း လုံခြုံရေး<br>ပစ္စည်းများ စစ်ဆေး<br>ကြည့်ရှုခြင်း၊<br>မှတ်တမ်းထားရှိ ခြင်း | လစဉ်     | စီမံကိန်းဧရိယာအတွင်း<br>မြောက်လတ္တီတွဒ်<br>၁၇° ၁' ၁၂.၀၃"<br>အရှေ့လောင်ဂျီတွဒ်<br>၉၅° ၅၈' ၃၂.၉၈" | တစ်နှစ်လျှင်<br>၁,၀၀၀,၀၀၀       |  |
| အရေးပေါ် တုံပြန်မှု                                  | အရေးပေါ် အခြေ အနေ<br>အတွက်<br>ပြင်ဆင်ထားမှုများ၊<br>အစီအစဉ်ရေးဆွဲထားမှု<br>များ  | အပတ်စဉ်  | စီမံကိန်းဧရိယာအတွင်း<br>မြောက်လတ္တီတွဒ်<br>၁၇° ၁' ၁၂.၀၃"<br>အရှေ့လောင်ဂျီတွဒ်<br>၉၅° ၅၈' ၃၂.၉၈" | တစ်နှစ်လျှင်<br>၁,၅၀၀,၀၀၀       |  |
|  | စီမံကိန်းဖျက်သိမ်းစဉ်ကာလ   |          |   |                                 |  |
| လေအရည်အသွေး  | PM <sub>2.5</sub> , PM <sub>10</sub> , SO <sub>2</sub> ,<br>NO <sub>2</sub> , O <sub>3</sub> , TSP, TVOC,<br>CO, NO                      | တစ်ကြိမ် | စီမံကိန်းဖျက်သိမ်းသည့်<br>ဧရိယာအတွင်း   | 0,000,000                       |  |
| ဆူညံသံ   | ဆူညံသံထွက်ရှိမှု<br>အဆင့်  | တစ်ကြိမ် | စီမံကိန်းဖျက်သိမ်းသည့်<br>ဧရိယာအတွင်း   | 600,000                         |  |
| စွန့်ပစ်အစိုင်အခဲ                                    | ဖျက်သိမ်းခြင်းလုပ်ငန်း<br>စဉ်မှ ထွက်ရှိမည့်<br>စွန့်ပစ်ပစ္စည်းများ   | တစ်ကြိမ် | စီမံကိန်းဖျက်သိမ်းသည့်<br>ဧရိယာ   | ეი,იიი                          |  |

| အမျိုးအမည်   | ပါရာမီတာ                             | အကြိမ်ရေ   | စောင့်ကြပ်ကြည့်ရှု မည့်<br>နေရာ       | ခန့်မှန်းကုန်ကျ စရိတ်<br>(ကျပ်) |
|--|--------------------------------------|--|---------------------------------------|---------------------------------|
| လုပ်ငန်းခွင်<br>ကျန်းမာရေးနှင့်<br>ဘေးကင်းလုံခြုံရေး   | PPE, First Aid Kit,<br>warning signs | တစ်ကြိမ်   | စီမံကိန်းဖျက်သိမ်းသည့်<br>ဧရိယာ       | ၅၀၀,၀၀၀                         |
| ပြန်လည်ထူထောင်ရေး<br>ပြန်လည်ထူထောင်ရေး<br>နှင့်<br>လုပ်ငန်းများ ပြန်လည်ပျိုးထောင်ရေး<br>လုပ်ငန်းများ |                                      | ဖျက်သိမ်းခြင်း<br>လုပ်ငန်းများ<br>ပြီးစီးပါက<br>တစ်ကြိမ် | စီမံကိန်းဖျက်သိမ်းသည့်<br>ဧရိယာအတွင်း | 2,000,000                       |

# စောင့်ကြပ်ကြည့်ရှုခြင်းအစီရင်ခံစာ တင်ပြမည့် အစီအစဉ်

စီမံကိန်း၏ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်အား အတည်ပြုပြီး ပတ်ဝန်းကျင်ဆိုင်ရာ လိုက်နာ ဆောင်ရွက်မှု သက်သေခံလက်မှတ် ရရှိပြီးပါက ပတ်ဝန်းကျင်ဆိုင်ရာ စောင့်ကြပ်ကြည့်ရှုမှု အစီအစဉ် အစီရင်ခံစာအား ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာနသို့ ခြောက်လတစ်ကြိမ် တင်ပြ အစီရင်ခံ သွားမည် ဖြစ်ပါသည်။

# လူထုအကျိုးပြုလုပ်ငန်းများဆောင်ရွက်မည့် အစီအစဉ်

လူထုအကျိုးပြုလုပ်ငန်းလှုပ်ရှားဆောင်ရွက်မှုများသည် ဒေသခံပြည်သူများ၏ လူနေမှုဘဝ မြှင့်တင် ရန်နှင့် စီမံကိန်းဧရိယာရှိ ရပ်ရွာဒေသခံများနှင့် ကောင်းမွန်သော ဆက်ဆံရေးများ ရရှိရန် ရည်ရွယ်ပါသည်။ စီမံကိန်း၏ လူထုအကျိုးပြုလုပ်ငန်းအစီအစဉ်တွင် အဓိကအားဖြင့် ကဏ္ဍ (၃) ရပ် ပါဝင်ပါသည် - ကျန်းမာရေး၊ ပညာရေး နှင့် ဒေသတွင်း ဖွံ့ဖြိုးတိုးတက်မှု တို့ ဖြစ်ကြပါသည်။ လူထုအကျိုးပြုလုပ်ငန်းများကို မြန်မာနိုင်ငံ ရင်းနှီးမြှုပ်နှံမှုကော်မရှင်၏ လမ်းညွှန်ချက်များနှင့်အညီ ဆောင်ရွက်သွားမည် ဖြစ်ပါသည်။ စီမံကိန်းသည် ဝန်ထမ်းများနှင့် ဒေသခံလူထုအား အထောက်အကူ ပေးနိုင်မည့် လူမှုဖူလုံရေးလုပ်ငန်းများတွင် အသားတင်အမြတ်၏ ၂ ရာခိုင်နှုန်းအား ပံ့ပိုးပေးမည် ဖြစ်ပါသည်။

| အကြောင်းအရာ   | ဆောင်ရွက်မည့် လုပ်ငန်း   | ထည့်ဝင်နှုန်း (%) |
|---|--|-------------------|
| ဝန်ထမ်းများ နှင့် ၎င်းတို့၏ မိသားစုများ အတွက်<br>ကျန်းမာရေး<br>ကျန်းမာရေး စောင့်ရှောက်မှု |  | ი.ე %             |
| ပညာရေး  | ပညာရေးနှင့် လူ့အခွင့်အရေး အသိပညာ များ<br>မြှင့်တင်ပေးခြင်း         | ი.ე %             |
| ဒေသတွင်း ဖွံ့ဖြိုးတိုးတက်မှု  | ဒေသခံအာဏာပိုင်များနှင့် ဒေသခံ အဖွဲ့ အစည်းများသို့<br>လှူဒါန်းခြင်း | э%                |

# <u>အများပြည်သူနှင့်တွေ့ဆုံဆွေးနွေးခြင်း</u>

အများပြည်သူနှင့် တွေ့ဆုံဆွေးနွေးခြင်း အစီအစဉ်တွင် စီမံကိန်း၏ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်အစီရင်ခံစာ အကြောင်းအား ရှင်းလင်းတင်ပြခြင်း ဖြစ်သည်။ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်အစီရင်ခံစာ အတွက် အများပြည်သူနှင့်တွေ့ဆုံဆွေးနွေးခြင်းအား ပတ်ဝန်းကျင်ထိခိုက်မှု ဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်းအရ ၇ ရက်၊ နိုဝင်ဘာလ၊ ၂၀၂၄ ခုနှစ်တွင် ပြုလုပ်ခဲ့ပြီး အစိုးရဌာနများနှင့် ဒေသခံပြည်သူ စုစုပေါင်း ၁၇ ဦး တက်ရောက်ခဲ့ပါသည်။

| 20002000          | ကြာသပတေးနေ့၊ ၇ ရက်၊ နိုဝင်ဘာလ၊ ၂၀၂၄ ခုနှစ်  |  |  |
|-------------------|---|--|--|
| အချိန်နှင့်နေ့ရက် | မနက် ၁၁:၀၀ နာရီ မှ နေ့လည် ၁၂:၀၀ နာရီ အထိ  |  |  |
| ကျင်းပသည့်နေရာ    | Wie Vision Enterprise Co., Ltd. အစည်းအဝေးခန်းမ  |  |  |
|                   | • Wide Vision Enterprise Co., Ltd. ၏ CMP စနစ်ဖြင့် အိတ်အမျိုးမျိုး ချုပ်လုပ်ခြင်း လုပ်ငန်းအား<br>မိတ်ဆက်ခြင်း |  |  |
|                   | • ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်အား မိတ်ဆက်ခြင်း  |  |  |
| အစည်းအဝေး         | • သက်ရောက်မှုဆန်းစစ်ခြင်းရလဒ်များနှင့် ထိခိုက်မှုအဆင့် သတ်မှတ်ချက်များ  |  |  |
| အကြောင်းအရာ       | • ပတ်ဝန်းကျင်အပေါ် သက်ရောက်မှုများနှင့် ဖြေလျှော့ရေးနည်းလမ်းများ  |  |  |
|                   | • ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်ခွဲများနှင့်  |  |  |
|                   | • စီမံကိန်း၏ ဆောင်ရွက်မှုများ   |  |  |

# နိဂုံးနှင့် အကြံပြုချက်

Wide Vision Enterprise Co., Ltd.၏ CMP စနစ်ဖြင့် အိတ်အမျိုးမျိုးချုပ်လုပ်ခြင်း စီမံကိန်း၏ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်အစီရင်ခံစာသည် စီမံကိန်းနှင့် စီမံကိန်းဝန်းကျင် ရေရှည်တည်တံ့ ခိုင်မြဲမှုရှိစေရန်၊ ပတ်ဝန်းကျင်ထိခိုက်မှုများကို လျှော့ချရန်နှင့် ပတ်ဝန်းကျင်ဂေဟစနစ်၏ သဘာဝအလှအား ထိန်းသိမ်းရန်အတွက် အရေးကြီးသော အခန်းကဏ္ဍတစ်ခု ဖြစ်ပါသည်။ စွန့်ပစ်ပစ္စည်းများ လျှော့ချရေး၊ စွမ်းအင်သုံးစွဲခြင်း ထိန်းသိမ်းမှု၊ ရေအသုံးပြုမှုဆိုင်ရာ စီမံခန့်ခွဲမှုများ နှင့် ဂေဟစနစ်နှင့် သဟဇာတဖြစ်သော ထုတ်ကုန်များအသုံးပြုစေခြင်း စသည့် အလေ့အကျင့်များကို အကောင်အထည်ဖော်ခြင်းဖြင့် စီမံကိန်းသည် လာရောက်တည်းခိုသော ဧည့်သည်များအား ကောင်းမွန်မြင့်မားသော အဆင့်အတန်းအား ဝန်ဆောင်မှု ပေးနိုင်သည့် အပြင် စီမံကိန်းကြောင့် ဖြစ်ပေါ်နိုင်သည့် ပတ်ဝန်းကျင် ဆိုင်ရာ ထိခိုက်မှုများလည်း လျှော့ချပြီး ဖြစ်ပါသည်။

ထို့ကြောင့် ရေရှည်တည်တံ့ခိုင်မြဲသော စီးပွားရေးလုပ်ငန်းအား မြှင့်တင်ဆောင်ရွက်နိုင်ခြင်း၊ ဝန်ထမ်းများအား သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာ အသိအမြင်များနှင့် ထိန်းသိမ်းရေး လုပ်ငန်းများတွင် ပါဝင်ဆောင်ရွက်ခြင်းတို့သည် အနာဂတ်မျိုးဆက်သစ်များအတွက် သယံဧာတများ အား ကာကွယ်ရန် အထောက်အကူ ဖြစ်စေမည် ဖြစ်ပါသည်။

### **EXECUTIVE SUMMARY**

#### Introduction

Wide Vision Enterprise Company Limited, located in Htantabin Township, Yangon Region, is engaged in the production of various types of bags using the CMP system. On July 26, 2024, the company received a letter of approval from the Ministry of Natural Resources and Environmental Conservation (MONREC), and the Environmental Conservation Department (ECD) with the reference number, Yaka/EIA/2(2403/2024), to prepare an Environmental Management Plan (EMP). This approval outlines the conditions for conducting environmental conservation activities in the project area and mandates adherence to the instructions provided by MONREC and ECD. The EMP must include plans for reducing environmental impacts, monitoring and supervision programs, and must be drafted and implemented in accordance with the specified procedures and guidelines.

The Environmental Management Plan (EMP) report for the project analyzes the current status of the project and evaluates its potential environmental impacts. It aims to ensure long-term sustainability and compliance with environmental regulations by implementing mitigation measures. This assessment involves identifying and addressing possible environmental effects through various plans and actions. The EMP for the proposed project has been prepared by Myanwei Environmental Solutions Company Limited.

### **Information of Project Proponent**

| Investor Name:      | MR. TSAI, WEN-WEI   |
|---------------------|---|
| NRC / Passport No.: | 307277729   |
| Citizenship:        | Taiwanese   |
| Address:            | No. 85, SEC. 1, Chang An Road, Situn District, Tai Chung City, Taiwan, Republic of China. |

#### Salient Features of the Project

| Type of Proposed Business          | Manufacturing of Various Kinds of Bags on CMP Basis  |
|------------------------------------|--|
| YRIC Endorsement                   | Endorsement No. YGN – 169/2019 (12.3.2019)   |
| Validity of YRIC Endorsement       | 10 years   |
| Type of investment                 | 100% Foreign Investment  |
| Amount of Investment               | US\$ 5.094 millions  |
| Type of land                       | Industrial land  |
| Total land area                    | 2.686 acres  |
| Total building area                | (277ft x 96ft x 32ft-9in) Office Building, (590ft-7in x 105ft x 26ft-8in) Factory Building, (168ft-8in x 66ft-8in) Store Room, (113ft-4in x 20ft x 38ft-8in) Dormitory Building, (46ft x 16.5ft) Dormitory Area (4 rooms), (33ft x 16.5ft) Garbage Room, (49ft-2in x 11.5ft) Generator & Electrical Room, (59ft-1in x 16.5ft) First Aid & Interview & Prayer Room, (33ft x 16.5ft) Chemical Room |
| Construction starting date         | 15 August 2022   |
| Commercial operation starting date | 21 March 2024  |
| Address                            | Sethmu – (19, 20, 21, 81), Plot No. (1), Kan Gyi Kone Kwin, Ward No. (4), Htantabin Township, Yangon Region.   |

| Contact person | Hla Theingi Oo<br>Admin manger |
|----------------|--------------------------------|
|                | 09 752318177                   |

# Policy, Legal and Institutional Framework

# **Commitment of the Laws and Regulations by project proponent**

| Sr | Laws and regulations  | Enacted Year           | Committed<br>Section/Rule/Article    |  |  |  |
|----|---|------------------------|--------------------------------------|--|--|--|
|    | Environmental Conservation                                      |                        |                                      |  |  |  |
| 1  | Constitution of the Republic of the Union of Myanmar            | 2008                   | 45, 350, 390                         |  |  |  |
| 2  | Environmental Conservation Law                                  | 2012                   | 3, 7, 14, 15, 16                     |  |  |  |
| 3  | Environmental Conservation Rules                                | 2014                   | 69 (a), (b)                          |  |  |  |
| 4  | Environmental Impact Assessment Procedure                       | 2015                   | 63 (h), 87, 88                       |  |  |  |
| 5  | Myanmar National Environmental Policy                           | 2019                   | 1, 2, 3, 4, 5, 6, 8, 10,<br>11, 13   |  |  |  |
| 6  | National Environmental Quality (Emission) Guidelines            | 2015                   | General Guidelines                   |  |  |  |
|    | Forest, Biodiversity and Natu                                   | ural Resources         |                                      |  |  |  |
| 7  | The Conservation of Water Resources and River Law               | 2016 (Amended in 2017) | 8 (a), (b), 11 (a), 19,<br>22, 29    |  |  |  |
| 8  | Protection and Preservation of Ancient Monument Law             | 2015                   | 21                                   |  |  |  |
| 9  | Underground Water Act   | 1930                   | 3, 5                                 |  |  |  |
| 10 | National Surface Water Quality Guidelines                       | 2024                   | -                                    |  |  |  |
|    | Public Health   |                        |                                      |  |  |  |
| 11 | Public Health Law   | 1972                   | 3                                    |  |  |  |
| 12 | Prevention and Control of Communicable Diseases Law             | 1995 (Amended<br>2011) | 8, 9, 11, 14                         |  |  |  |
|    | Land Use  |                        |                                      |  |  |  |
|    | Urban Development   |                        |                                      |  |  |  |
| 13 | 13 Yangon City Development Committee Law 2018 (Amended 2021) 31 |                        | 317, 318, 322                        |  |  |  |
| 14 | The Standardization Law   | 2014                   | 17, 19                               |  |  |  |
| 15 | Electricity Law   | 2014                   | 44, 45, 46, 47, 48                   |  |  |  |
|    | Economic and Inves  | stment                 |                                      |  |  |  |
| 16 | 6 Myanmar Investment Law 2016 (Amended 2019) 50, 51, 65         |                        | 50, 51, 65, 73                       |  |  |  |
| 17 | 7 Myanmar Investment Rules 2017 (Amended 2018)                  |                        | 202, 203                             |  |  |  |
| 18 | Myanmar Insurance Law   | 1993                   | 15, 16                               |  |  |  |
| 19 | Commercial Tax Law 1990 (Amended 2014)                          |                        | 11, 12                               |  |  |  |
| 20 | The Factories Act   | 1951 (Amended 2016)    | 13, 15, 16, 19, 20, 21,<br>23, 40 47 |  |  |  |

| Sr | Laws and regulations  | Enacted Year                       | Committed<br>Section/Rule/Article                               |  |  |
|----|---|------------------------------------|---|--|--|
| 21 | Private Industries Enterprise Law                             | 1990                               | 4, 5, 13, 15, 26, 27, 28,<br>29                                 |  |  |
| 22 | Export & Import Law   | 2012                               | 5, 6, 7   |  |  |
|    | Workers and Work  | place                              |   |  |  |
| 23 | Labour Organization Law                                       | 2011                               | 29, 30, 31, 37, 43, 44,<br>49                                   |  |  |
| 24 | Workmen's Compensation Act                                    | 1923 (Amended<br>1955, 1957, 2005) | 3, 4, 8   |  |  |
| 25 | Employment and Skill Development Law                          | 2013                               | 5, 14, 15   |  |  |
| 26 | Prevention of Hazard from Chemical and Related Substances Law | 2013                               | 3, 5, 14, 30  |  |  |
| 27 | Minimum Wage Law  | 2013                               | 12, 13, 16, 22, 24  |  |  |
| 28 | Minimum Wages Rules   | 2013                               | 43  |  |  |
| 29 | Payment of Wages Law  | 2016                               | 3, 4, 5, 6, 7, 9, 10, 11  |  |  |
| 30 | Leave and Holiday Rules                                       | 1951 (Partially<br>Amended 2018)   | 15, 20, 21, 29, 33, 41, 50, 51, 52                              |  |  |
| 31 | Social Security Rules   | 2014                               | 42, 43, 54, 57, 59, 61,<br>64, 65, 66, 174, 175,<br>176         |  |  |
| 32 | Social Security Law   | 2012 (Amended<br>2014)             | 48, 49, 50, 51, 53, 54,<br>65, 66, 67, 69, 70, 74,<br>75, 77    |  |  |
| 33 | Labor Dispute Settlement Law                                  | 2012 (Amended<br>2019)             | 23, 28, 34, 35, 36, 37<br>38, 39, 40, 41, 42, 43,<br>44, 45, 51 |  |  |
| 34 | Occupational Safety and Health Law                            | 2019                               | 12, 26, 27, 28, 29, 34,<br>48, 49                               |  |  |
| 35 | The Industrial Explosive Materials Law                        | 2018                               | 9, 13, 15, 16, 21   |  |  |
| 36 | The Industrial Explosive Materials Rules                      | 2022                               | 48, 67  |  |  |
|    | Transportation  |                                    |   |  |  |
| 37 | Vehicle Safety and Vehicle Management Law                     | 2020                               | 17, 18, 19, 24, 26, 28,<br>27, 75                               |  |  |
| 38 | Vehicle Safety and Vehicle Management Rules                   | 2022                               | 252, 253, 254, 255,<br>256, 261, 262, 269,<br>271               |  |  |
|    | Emergency   |                                    |   |  |  |
| 39 | Myanmar Fire Force Law  | 2015                               | 17, 24, 25, 30, 32  |  |  |

## **Project Description**

Wide Vision Enterprise Company Limited is located at Latitude 17°1'12.39" N and Longitude 95°58'32.79" E, in at Sethmu – (19, 20, 21, 81), Plot No. (1), Kan Gyi Kone Kwin, Ward No. (4), Htantabin Township, Yangon Region. The total land area is 2.686 acres. The nearest water source is the Hlaing River, which is located 0.94 kilometers away from the project site. The nearest road is the Ba Yint Naung Road.



**Project Location Map** 



**Adjacent Location of the Project** 



1 - Final Product Packing Storage Area, 2 - Final Product Storage Area, 3 - Packing Area, 4 - Sewing Area, 5 - Assemble Area, 6 - Printing Area, 7 - Cutting Area, 8 - Office Area, 9 - Clinic Room, 10 - Interview Room, 11 - Chemical Storage Room, 12 - Security Room, 13 - Dormitory (1), 14 - Dormitory (2), 15 - Firefighting Equipment, 16 - Waste House, 17 - Toilet, 18 - Canteen, 19 - Water Purify Room, 20 - Store Room, 21 - Generator & Transformer, 22 - Store Department, 23 - Warehouse

#### **Project's Layout Plan**

The construction of buildings for the project began in August 2022 and was completed in April 2024. The installation of machinery and equipment was carried out in March 2024, and the business operations commenced on March 21, 2024. Within the project area, various buildings have been constructed, including office buildings, factory buildings, warehouses, dormitory, waste storage facilities, a generator room, an electrical power supply building, an emergency medical room, interview rooms, a prayer room, and a chemical storage room.

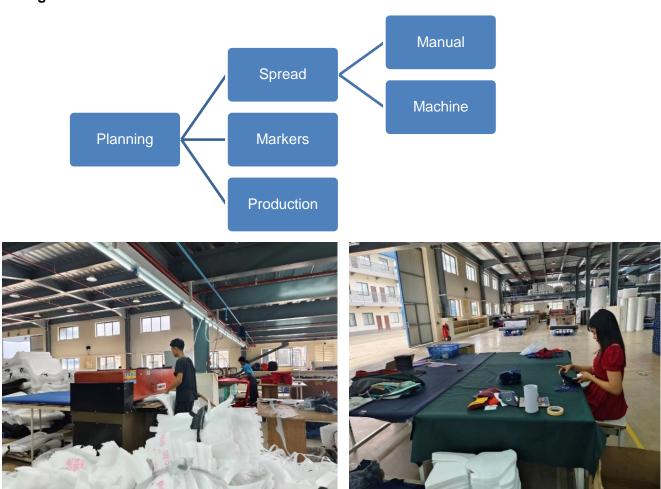
The project involves the importation of raw materials from foreign buyers, which are then processed through cutting, printing, sewing, quality inspection, and packaging. The finished products are subsequently exported back to the foreign buyers.

#### **Raw Materials Receiving**



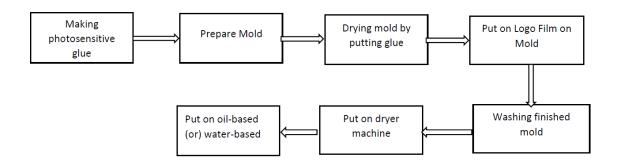
**Process of Raw Materials Receiving** 

## **Cutting**



**Cutting Process** 

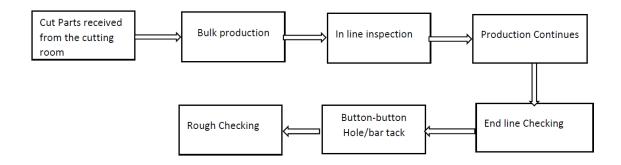
## **Printing**

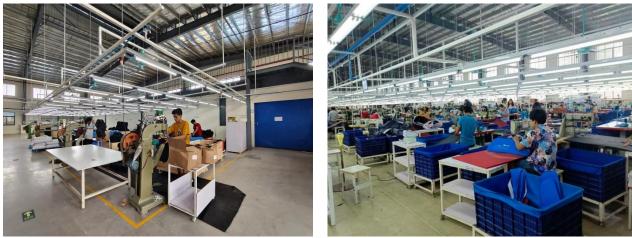




**Printing Process** 

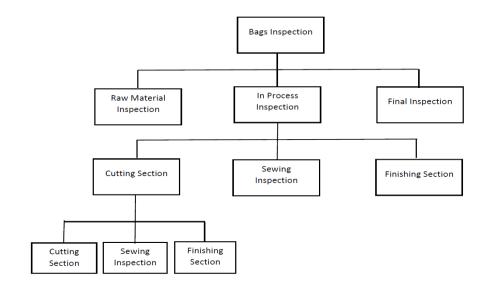
# Sewing





**Cutting Process** 

# **Quality Control**

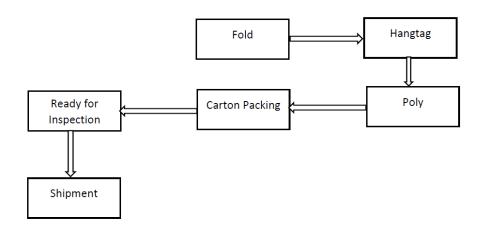






**Quality Control Process** 

### **Packing and Shipping**











**Packing and Shipping Process** 

The machinery used in the project is imported from China, Hong Kong, and Taiwan. The required raw materials, such as PVC Netting Cloth, PU Fabric, Aluminum Foil, and Zippers, are sourced from China. The project also uses four types of chemical raw materials, including Glue, Cross Linking Agent, Water-based Three-dimensional Goal Oil, and Solvent-based Screen-Printing Ink. These

chemicals are currently purchased domestically from Dong Ying Ink Printing Materials Co., Ltd. and Dajia Myanmar Co., Ltd. In the future, the project intends to import these chemicals directly from China for use.

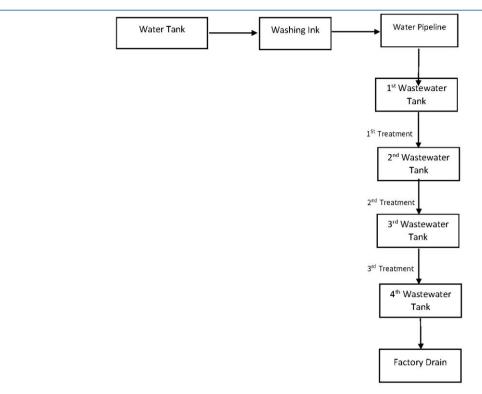
The total number of employees will reach 625, and the business will operate accordingly. Currently, the workforce consists of 262 female employees and 60 male employees from within local, as well as 3 female foreign employees and 8 male foreign employees. The work schedule is set for 8 hours per day, with an additional 2 hours for overtime, operating 6 days a week. This means the business will operate for 24 days per month and 288 days per year.

For the project's water usage, water is extracted from two wells located 250 feet apart. The project utilizes two domestic use and drinking water tanks, each with a capacity of 8 tons and dimensions of 5 feet 7 inches x 137 feet. Additionally, there is one underground water tank with a capacity of 180 tons and dimensions of 91 feet x 11.5 feet x 7.2 feet, which is used as a fire-fighting water tank. On average, approximately 2.7 tons of water are used daily for domestic and drinking purposes.

To obtain electrical power, an 800 kVA transformer is installed and in use. In case of power outages, two generators are available: a 440 kVA generator and a 94 kVA generator. The project uses approximately 1,200 gallons of fuel per month for the generators. The monthly electricity consumption is around 30,000 units, and the required fuel for the generators is purchased from Myan Oil Terminal Company Limited, with a monthly purchase of about 1,271 gallons.

The project generates various types of waste, including plastic and fabric waste, paper wrappers, fabric tubes, food leftovers, and hazardous waste materials. Plastic and fabric waste, along with food leftovers, are disposed of in designated waste bins. Hazardous waste from the printing process is temporarily stored in the chemical storage room. The plastic and fabric waste, as well as food leftovers, amount to approximately 2,721.55 kilograms per week, while the hazardous waste is around 140 kilograms per week. These are collected and disposed of weekly by the Yangon City Development Committee's services. The project also produces about 102 chemical waste containers per month, which are collected once a month by the Yangon City Development Committee for disposal.

The general waste from the staff's use of the kitchen, canteen, and cleaning facilities amounts to approximately 2,068 gallons per day. This general waste is disposed of through the factory's drainage system, ensuring proper flow and maintenance of the drains. Waste from the cleaning and printing process is collected, and these wastes are treated in 5 feet x 5 feet x 5 feet, 4-stage sedimentation tank. After treatment, the waste is discharged through the factory's drainage system. Currently, the amount of waste to be treated is still minimal, and no disposal plan is in place for large quantities of waste. However, once the amount reaches a significant level, the waste will be disposed of by coordinating with the Yangon City Development Committee or licensed waste management companies.



Flow Diagram of Sedimentation Tank

The project is equipped with the following fire safety and emergency equipment: 78 fire extinguishers, 28 fire alarm systems, 33 fire hoses, 6 fire hose nozzles, 36 smoke detectors, 1,259 water spray systems, 2 automatic heat detectors, 26 emergency indicator lights, 10 first aid kits, and 32 emergency exit points. In the dormitory area, the following equipment is available: 6 fire extinguishers, 6 fire alarm systems, 6 fire hoses, 6 fire hose nozzles, 36 smoke detectors, 2 automatic heat detectors, 6 emergency indicator lights, 2 medical first-aid kits, and 6 emergency exit points. In the event of an emergency, the emergency contact phone numbers are prominently displayed in visible areas of the project.

For emergency health situations, a first-aid room and first-aid kits are provided. The sanitation system consists of a total of 44 rooms, with 11 rooms designated for males and 33 rooms for females. The natural ventilation system is installed in the dining area, raw material storage area, and electrical power supply building. Additionally, cooling systems and exhaust systems are installed in the kitchen and dining areas, office rooms, production areas, staff housing, interview rooms, first-aid room, and server room.

#### **Description of Surrounding Environment**

The environmental data, environmental quality measurements, and impact assessments for the current project were conducted from August 23 to August 24, 2024. Additionally, information related to the factory's location, including socio-economic conditions, geographical environment, ecological data, and climate-related information, has been referenced from officially established township-level data provided by Htantabin Township, Yangon Region.

| Type of             | Survey   | Parameters  |  |
|---------------------|----------|---|--|
| A: 0 III            | Indoor   | PM <sub>10</sub> (Particulate Matter), PM <sub>2.5</sub> (Particulate Matter), SO <sub>2</sub> (Sulfur dioxide), NO <sub>2</sub> (Nitrogen Dioxide), O <sub>3</sub> (Ozone), Carbon Monoxide (CO), Nitric Oxide (NO), Total |  |
| Air Quality Outdoor |          | Volatile Organic Compound (TVOC), Total Suspended Particulate (TSP), Temperature, Humidity, Air Pressure, Wind Speed & Wind Direction   |  |
|                     | Indoor   |   |  |
| Noise               | Outdoor  | Sound level (LAeq)  |  |
| Light Ir            | ntensity | Illuminance (Lux)   |  |
|                     |          | Wastewater (Treated)  |  |
| Water Quality       |          | pH, Temperature, Colour, TSS, BOD, COD, Total Phosphorus, Copper, Chromium (Hexavalent), Oil & Grease, Total Nitrogen   |  |

#### **Air Quality**

To assess the air quality at the project site, an OCEANUS AQM-09 air quality monitoring device was used to perform 24-hour measurements from August 23 to August 24, 2024. The measurements included particulate matter (PM<sub>2.5</sub>, PM<sub>10</sub>, TSP) and gases (SO<sub>2</sub>, NO<sub>2</sub>, O<sub>3</sub>, CO, NO, TVOC), along with temperature, humidity, atmospheric pressure, wind speed, and wind direction at the project site.

The monitoring device was placed at two locations: one in front of the factory building at coordinates 17° 1' 10.61" N latitude and 95° 58' 32.99" E longitude, and another inside the factory's building at coordinates 17° 1' 12.82" N latitude and 95° 58' 33.55" E longitude. The results were compared with the National Environmental Quality (Emission) Guidelines and found to be within the established standards.

### **Noise Level**

To measure the noise levels during the production process of the project, a Digital Sound Level Meter (BENTECH, GM 1356) was used to conduct 24-hour measurements from August 23 to August 24, 2024. Noise monitoring was performed during the cutting process at coordinates 17° 1' 12.18" N latitude and 95° 58' 32.08" E longitude, and during the sewing process at coordinates 17° 1' 13.14" N latitude and 95° 58' 33.52" E longitude. The results were compared with the National Environmental Quality (Emission) Guidelines, and it was found that the noise levels were within the established standards.

### **Light Intensity**

To measure the lighting conditions within the production areas of the project, a Unit – T Luminometer (UT-382 Light Meter) was used on August 23, 2024. The measurements were conducted in various areas, including the raw material storage, cutting department, sewing department, printing department, quality control department, finished goods storage, and packaging department. The results were compared with the standards outlined in *The Lighting Handbook*, and it was found that the lighting levels were within the specified standards.

### **Water Quality**

To assess the quality of the wastewater, a sample was collected on August 24, 2024, from the wastewater treatment facility of the project. The sample was taken from the clarified effluent at the coordinates 16° 32′ 16.03″ N latitude and 94° 15′ 56.0″ E longitude. The quality of the treated wastewater

was then compared with the national environmental quality standards (Emission Guidelines), and it was found to be within the specified standards.

### **Environmental Quality Measurement Results**

| Turan             | Res                       | sult                      | Cuidalina Valuas       |
|-------------------|---------------------------|---------------------------|------------------------|
| Types             | Indoor                    | Outdoor                   | Guideline Values       |
|                   | Air Qu                    | ality                     |                        |
| PM <sub>10</sub>  | 8.07 µg/m³                | 11.62 μg/m³               | 50 μg/m³               |
| PM <sub>2.5</sub> | 3.26 µg/m³                | 10.03 μg/m³               | 25 μg/m³               |
| NO <sub>2</sub>   | 3.81 µg/m³                | 5.21 μg/m <sup>3</sup>    | 200 μg/m³              |
| 80                | 15.71 μg/m <sup>3</sup>   | 18.99 μg/m³               | 20 μg/m³               |
| SO <sub>2</sub>   | 0.11 μg/m <sup>3</sup>    | 0.13 μg/m <sup>3</sup>    | 500 μg/m³              |
| O <sub>3</sub>    | 4.17 μg/m³                | 2.87 μg/m <sup>3</sup>    | 100 μg/m³              |
| СО                | 4.17 ppm                  | 2.87 ppm                  | 9 ppm                  |
| NO                | 9.38 ppb                  | 3.65 ppb                  | -                      |
| TVOC              | 0.004 ppm                 | 0.003 ppm                 | -                      |
| TSP               | 0.00875 mg/m <sup>3</sup> | 0.01279 mg/m <sup>3</sup> | 0.33 mg/m <sup>3</sup> |
|                   | Noise I                   | _evel                     |                        |
| Noise             | 55.92 dBA                 | 62.94 dBA                 | 70 dBA                 |

| I                          | Light Intensity     |          |  |  |
|----------------------------|---------------------|----------|--|--|
| Location                   | Measure Value (Lux) | Standard |  |  |
| Warehouse                  | 494                 | 200      |  |  |
| Cutting Department         | 1187                | 300      |  |  |
| Printing Department        | 805                 | 500      |  |  |
| Sewing Department          | 761                 | 750      |  |  |
| Quality Control Department | 1661                | 1000     |  |  |
| Final Product Storage Area | 321                 | 300      |  |  |
| Packing Department         | 1468                | 500      |  |  |

On August 24, 2024, a sample of treated wastewater from the project was collected from the sedimentation tank and tested at Alarm Ecological Laboratory. The results were then compared with the National Environmental Quality Standards (Emission) Guidelines, and it was found that the wastewater quality was within the specified standards. Additionally, a sample of the project's drinking water was collected by the project proponent and tested at ISO TECH Laboratory. The results of this testing are detailed in the **APPENDIX (D)**.

### **Environmental Impact and Mitigation Measures**

The environmental impacts of the proposed project will be minimized based on the findings of baseline surveys. In assessing the potential environmental impacts, calculations will be made based on factors such as the magnitude, duration, extent, and probability of each impact that may occur during the project timeline. These factors will guide the development of measures to reduce or mitigate adverse effects on the environment.

Impact Assessment Parameter and Its Skill

| Assessment      | Scale               |   |  |  |   |  |
|-----------------|---------------------|---|--|--|---|--|
| Assessment      | 1                   | 2   | 3  | 4  | 5   |  |
| Magnitude (M)   | Insignificant       | small and will<br>have no effect<br>on working<br>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.

### Significant Point (SP) = (Magnitude + Duration + Extent) × 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           |

Construction phase: The project is already constructed during environmental assessment study and site visit. Therefore, environmental impact assessment on this phase is no longer considered as construction was completed during the project study period.

Source of Environmental Impacts During Operation Phase and its Mitigation Measures

| Categories  | Source of Impact   | Impact Significance | Mitigation Measure   |
|-------------|--|---------------------|--|
| Air Quality | <ul> <li>Conducting printing processes,</li> <li>Emissions of dust, fumes, and GHGs from vehicles transporting goods,</li> </ul> | Low                 | <ul> <li>Ensuring good<br/>ventilation,</li> <li>Regular inspection and<br/>maintenance of<br/>vehicles, generators,<br/>and machinery,</li> </ul> |

| Categories   |           | Source of Impact   | Impact Significance   | Mitigation Measure  |
|--|-----------|--|---|---|
|  |           | <ul> <li>Smoke and emissions<br/>from emergency<br/>generators.</li> </ul>   |   | <ul> <li>Installation of effective<br/>air purification systems<br/>in the production<br/>process.</li> </ul>   |
| Noise  |           | <ul> <li>Noise emissions from<br/>cutting and chopping<br/>machinery,</li> <li>Noise emissions from<br/>generator and air<br/>conditioning system<br/>equipment.</li> </ul>  | Low   | <ul> <li>Ensuring the generator room is soundproof for noise safety,</li> <li>Regular maintenance and upkeep of equipment.</li> </ul>                               |
| equipment.  Wastewater emissions from the printing process, Wastewater emissions from cleaning basins, kitchens, bathrooms, and equipment, Oil spills and leakage of oil residues from vehicles and machinery. |           | Moderate   | <ul> <li>Treating wastewater through filtration and cleaning processes before discharge,</li> <li>Maintenance and upkeep of drainage systems,</li> <li>Ensuring proper cleaning and maintenance of water channels to ensure good water flow.</li> </ul> |   |
| Soil C   | Quality   | <ul> <li>Unauthorized oil spills<br/>from vehicles,</li> <li>Spills during oil filling,<br/>and oil leaks from<br/>engine oil and diesel<br/>fuel storage.</li> </ul>  | Very Low  | <ul> <li>Paving the area where cleaning processes are carried out with concrete,</li> <li>Ensuring systematic and careful procedures during oil filling.</li> </ul> |
|  | Solid     | <ul> <li>Recyclable waste from production departments,</li> <li>Non-recyclable waste from the kitchen, staff quarters, and office areas.</li> </ul>  | Low   | <ul> <li>Systematic storage of<br/>waste materials before<br/>disposal,</li> <li>Selling recyclable waste<br/>materials to buyers for<br/>reuse.</li> </ul>         |
| Waste<br>Generation  | Hazardous | <ul> <li>Hazardous chemical waste from the production process,</li> <li>Used oil and machine lubricants from vehicles and machinery maintenance,</li> <li>Fire extinguishers, batteries, oil drums, Chemical</li> <li>containers.</li> </ul> | Low   | <ul> <li>Coordinating with<br/>YCDC to dispose of<br/>chemical containers and<br/>other hazardous waste<br/>materials once a month.</li> </ul>                      |
| Ecological Resources   |           | <ul> <li>Noise during project operations or human activities causing disruption to plants and animals,</li> <li>Impact on the ecosystem due to</li> </ul>  | Very Low  | <ul> <li>Planting trees around<br/>the project site,</li> <li>Reducing impacts that<br/>may cause harm to the<br/>ecosystem.</li> </ul>                             |

| Categories      | Source of Impact   | Impact Significance | Mitigation Measure   |
|-----------------|--|---------------------|--|
|                 | vehicle traffic and water/air pollution.   |                     |  |
| Health & Safety | <ul> <li>Accidents caused by machinery used in the workplace,</li> <li>Malfunctions of electrical equipment and emergency generators,</li> <li>Handling and storage of goods,</li> <li>Handling of chemical containers.</li> </ul> | Low                 | <ul> <li>Providing necessary medications for emergency situations,</li> <li>Offering training courses for first aid, security, firefighting, and equipment handling,</li> <li>Supplying required PPE (Personal Protective Equipment) for employees.</li> </ul> |
| Fire Hazard     | <ul> <li>Installation of electrical equipment,</li> <li>Repairing malfunctioning machinery,</li> <li>Waste disposal areas, raw material storage, and storage areas for chemicals/industrial oils.</li> </ul>                       | Moderate            | <ul> <li>Providing adequate fire safety equipment within the project,</li> <li>Constructing a 180-ton fire-fighting water tank,</li> <li>Displaying emergency contact phone numbers in visible locations.</li> </ul>   |
| Odor Emission   | <ul> <li>Odors from chemical<br/>substances in the<br/>painting process,</li> <li>Odors from food waste<br/>or leftovers of<br/>employees.</li> </ul>  | Low                 | <ul> <li>Regular cleaning of materials used in the painting process,</li> <li>Ensuring proper ventilation systems are in place,</li> <li>Ensuring employees wear PPE (masks) while performing their tasks.</li> </ul>  |
| Socio-economic  | Access to job opportunities  | Positive Impact     | -  |

#### **Potential Environmental Impacts During Decommissioning Phase**

If the project proposer decides to close the project and carry out demolition activities, the following environmental impacts may occur. The closure of the project may lead to environmental risks such as air and water pollution, noise disturbances, and waste emissions. Mitigation measures should include thorough inspections, the use of advanced emission control technologies, employing noise-reducing machinery, proper management of soil and water quality, recycling of reusable waste materials, implementing protective measures for ecosystems, health and safety plans, collaboration with local communities, and providing socio-economic support to affected local areas.

#### **Environmental Management Process**

The environmental management process of the project will be carried out in accordance with the laws and regulations through the Continuous Improvement Circle approach. This includes planning, implementing, monitoring results, and taking corrective actions if necessary to improve environmental

impacts. The environmental management plans and monitoring programs of Wide Vision Enterprise Co., Ltd. will be managed and executed by the environmental team of the project.

- 1. Air pollution/Dust Management Action
  - Air quality monitoring will be conducted once every six months after the environmental management plan report is approved,
  - Burning of waste materials is prohibited,
  - Regular maintenance of the generator will be carried out,
  - Ventilation systems will be regularly inspected and maintained,
  - Estimated Cost 2,000,000 kyats per year

#### 2. Noise Management Action

- Noise monitoring will be conducted once every six months after the environmental management plan report is approved,
- The generator will be housed in a soundproof enclosure,
- Adequate emergency protective equipment will be provided.
- Estimated Cost: 800,000 kyats per year

### 3. Water Consumption Management Action

- Install water meters to monitor and control water usage,
- Provide training to employees on good water usage practices and systematic consumption methods, and display water usage guidelines in the restroom and other areas where water is used.
- Estimated Cost: 500,000 kyats per month

#### 4. Solid Waste Management Action

- Provide sufficient waste bins in each building,
- Sort and dispose of waste materials by type,
- Coordinate with YCDC (Yangon City Development Committee) for the disposal of final waste materials generated from the processes.
- Estimated Cost: 600,000 kyats per year
- 5. Liquid Waste Management Action
  - Monitor the quality of wastewater once every six months after the approval of the environmental management plan report,
  - Regularly inspect and maintain the sewage treatment plant,
  - Regularly clean the factory drainage systems,
  - Ensure safe storage of hazardous materials.
  - Estimated Cost: 800,000 kyats per year
- 6. Hazardous Waste Management Action
  - Systematically handle, store, and use chemicals to prevent leakage or spillage,
  - Regularly maintain and replace fire extinguishers/fire hoses,
  - Provide training to employees on the proper handling and use of chemicals.
  - Estimated Cost: 300,000 kyats per year

#### 7. Fire Management Action

- Systematically store emergency firefighting equipment within the project area,
- Clearly mark emergency exits and assembly points,
- Regularly inspect and replace firefighting equipment,
- Ensure that there are no obstructions at factory entrances and emergency exits.
- Estimated Cost: 1,200,000 kyats per year
- 8. Occupational Safety and Health Management Action
  - Systematically store emergency firefighting equipment within the project area,
  - Clearly mark emergency exits and assembly points,
  - Regularly inspect and replace firefighting equipment,
  - Ensure that there are no obstructions at factory entrances and emergency exits.
  - Estimated Cost: 1,000,000 Kyats per year
- 9. Energy Management Action
  - Use energy-saving light bulbs/lamps,
  - Turn off electrical lights when not in use.
  - Estimated Cost: 1,000,000 kyats per year
- 10. Emergency Response and Natural Hazard Management Action
  - Implement appropriate mitigation measures to address potential natural disaster risks,
  - Construct buildings to withstand natural disaster impacts,
  - Regularly conduct fire drills,
  - Provide a first aid clinic,
  - Display emergency contact phone numbers and addresses in visible locations.
  - Estimated Cost 1,500,000 kyats per year

#### **Environmental Monitoring Schedule and Reporting**

| Issues               | Parameter   | Frequency        | Area to be monitored   | Estimated Cost           |  |
|----------------------|---|------------------|--|--------------------------|--|
|                      | Operation Phase   |                  |  |                          |  |
| Air Quality          | PM <sub>2.5</sub> , PM <sub>10</sub> , SO <sub>2</sub> ,<br>NO <sub>2</sub> , O <sub>3</sub> , TSP, TVOC,<br>CO, NO | Every six months | Outdoor Area of the<br>Factory Building<br>(17° 1'10.61"N<br>95°58'32.99"E)  | 2,000,000 Kyats/<br>Year |  |
| Noise                | Noise level in decibel<br>(dBA)   | Every six months | Operation Area (Sewing Department) (17°1'13.14"N 95°58'33.52"E) Outdoor Area of the Factory Building (17° 1'11.38"N 95°58'32.14"E) | 800,000 Kyats/ Year      |  |
| Light                | Illuminance   | Every six months | Operation Area<br>(17° 1'12.03"N<br>95°58'32.98"E)   | 800,000 kyats/ Year      |  |
| Water<br>Consumption | pH, Colour, Turbidity,<br>Conductivity, Total   | Yearly           | Drinking Water<br>Purification Tank  | 500,000 Kyats/Year       |  |

| Issues                               | Parameter   | Frequency          | Area to be monitored                               | Estimated Cost              |
|--------------------------------------|---|--------------------|--|-----------------------------|
| (Drinking Water)                     | Hardness, Calcium Hardness, Magnesium Hardness, Total Alkalinity, Phenolphthalein Alkalinity, Carbonate, Bicarbonate, Iron, Chloride, Sodium Chloride, Sulphate, Total Solids, TSS, TDS, Manganese, Phosphate, Phenolphthalein Acidity, Methyl Orange Acidity, Salinity |                    | (17° 1'12.41"N<br>95°58'30.58"E)                   |                             |
|                                      | Solid waste   | Weekly             | Recycle house and waste house                      | 600,000 Kyats/ Year         |
| Waste<br>Generation                  | Liquid waste (wastewater from printing section) pH, Temperature, Colour, TSS, BOD <sub>5</sub> , COD, Total Phosphorous, Copper, Chromium (Hexavalent), Oil & Grease, Total Nitrogen  | Every six months   | Sedimentation Tank                                 | 1,200,000 Kyats/<br>Year    |
|                                      | Hazardous Waste   | Weekly             | Waste bin  | 300,000 Kyats/ Year         |
| Fire Hazard                          | Visual inspection, firefighting equipment   | Monthly            | At the factory<br>(17° 1'12.03"N<br>95°58'32.98"E) | 1,200,000 Kyats/<br>Year    |
| Occupational<br>Safety and<br>Health | Fire extinguishers and water hydrant in position Inspect that all fire exist are open Servicing fire extinguisher and records of accidents  | Weekly             | At the factory<br>(17° 1'12.03"N<br>95°58'32.98"E) | 1,000,000 Kyats/<br>Year    |
| Emergency<br>Response                | Emergency<br>Preparedness and<br>Emergency Plan   | Weekly             | At the factory<br>(17° 1'12.03"N<br>95°58'32.98"E) | 1,500,000 Kyats<br>per year |
|                                      | Г   | Decommissioning Ph | ase  |                             |

| Issues                               | Parameter   | Frequency                     | Area to be monitored              | Estimated Cost  |
|--------------------------------------|---|-------------------------------|-----------------------------------|-----------------|
| Air quality                          | TSP, PM <sub>2.5</sub> , PM <sub>10</sub> ,<br>SO <sub>2</sub> , NO <sub>2</sub> , NO, O <sub>3</sub> ,<br>CO, TVOC | One time during this phase    | One point in decommissioning area | 1,000,000 Kyats |
| Noise                                | Noise level in decibel (dBA)  | One time during this phase    | One point in decommissioning area | 600,000 Kyats   |
| Solid Waste                          | Demolished solid wastes   | One time during this phase    | Decommissioning area              | 50,000 Kyats    |
| Occupational<br>Health and<br>Safety | Record of accidents, PPE, Training records, chemicals that used in the project.                                     | One time during<br>this phase | Decommissioning<br>area           | 500,000 Kyats   |
| Rehabilitation                       | Recovering and Revegetation   |                               | All decommissioning area          | 1,000,000 Kyats |

#### **Reporting Plan**

Once the environmental management plan of the project is approved and the Environmental Compliance Certificate (ECC) is obtained, the environmental monitoring report will be submitted to the Environmental Conservation Department every six months.

### Corporate Social Responsibility (CSR) Plan

The corporate social responsibility (CSR) plan of the project is aimed at improving the living standards of local residents and establishing good relationships with the communities in the project area. The community benefit program of the project primarily includes three sectors: Health, Education, and Community Development. These activities will be carried out in accordance with the guidelines of the Myanmar Investment Commission. The project will contribute 2% of its gross profit towards social welfare activities that can assist both employees and local communities.

| Sector                | Priority item                                     | Contribution (%) |
|-----------------------|---|------------------|
| Health                | Healthcare for employees and their family         | 0.5 %            |
| Education             | Raising awareness education level and human right | 0.5%             |
| Community development | Donation to local authorities and local community | 1 %              |

### **Public Consultation Meeting**

The public consultation meeting involves presenting the details of the project's environmental management plan report. The public consultation for the environmental management plan report was conducted on November 7, 2024, in accordance with environmental impact assessment procedures. A total of 17 participants attended, including government departments and local residents.

| Time and | Thursday, 7 <sup>th</sup> November 2024            |  |
|----------|--|--|
| Date     | (11:00 AM to 12:00 PM)                             |  |
| Venue    | Meeting room of Wide Vision Enterprise Co., Ltd.   |  |
| A I .    | > Introduction of Wide Vision Enterprise Co., Ltd. |  |
| Agenda   | > Introduction of Environmental Management Plan    |  |

- Impact Identification and Assessment
- > Environmental Impacts and Mitigation Measures
- > Environmental Management Plan & Project Activities

#### **Conclusion and Recommendation**

The Environmental Management Plan (EMP) Report for the Wide Vision Enterprise Co., Ltd. is a crucial component in ensuring the long-term sustainability of the project and its surrounding environment. Its objectives are to reduce environmental impacts and preserve the natural beauty of the surrounding ecosystem. By implementing practices such as waste reduction, energy conservation, water management, and the use of eco-friendly products, the project aims to provide high-quality services to guests while minimizing any environmental harm that could arise from the development.

Thus, promoting sustainable tourism, encouraging both guests and staff to participate in environmental awareness and conservation activities, will contribute to the protection of natural resources for future generations.

### 1. INTRODUCTION

Everyone wants to live in a place that's clean and healthy. That is why one of the world's primary concerns is the environment. As sad as it is, the world today is dying. The environment is slowly decaying, and it's all because of human negligence Environment Management Plan is required for ensuring sustainable development. It should not affect the surrounding environment adversely. The management plan presented which needs to be implemented by the proposed expansion of Wide Vision Enterprise Company Limited.

#### 1.1. OBJECTIVE OF ENVIRONMENTAL MANAGEMENT PLAN

Environmental Management Plan (EMP) is to ensure that the environmental impacts of a project or operation are effectively managed, minimized, and monitored throughout its lifecycle. An EMP outlines the strategies, practices, and responsibilities required to prevent or reduce adverse effects on the environment. Key objectives of an EMP include:

**Minimizing Environmental Impacts:** Identifying and reducing potential negative impacts such as air, water, and soil pollution, habitat destruction, and biodiversity loss.

**Compliance with Regulations:** Ensuring that the project or activity adheres to environmental laws, regulations, and standards set by local, national, and international authorities.

**Sustainable Resource Use:** Promoting the responsible use of natural resources, including water, energy, and raw materials, to reduce waste and promote sustainability.

**Enhancing Environmental Performance:** Setting targets and goals to improve environmental performance over time, often through measures like reducing emissions, conserving water, or improving waste management.

**Risk Management:** Identifying potential environmental risks (e.g., accidents, spills, or natural disasters) and establishing contingency plans to mitigate these risks.

**Monitoring and Reporting:** Establishing systems for monitoring environmental indicators (e.g., air and water quality, waste generation) and regularly reporting on compliance and performance.

**Continuous Improvement:** Ensuring the ongoing improvement of environmental practices by assessing the effectiveness of the EMP and implementing corrective actions where necessary.

**Stakeholder Engagement:** Ensuring effective communication with stakeholders, including local communities, authorities, and employees, to gather input and keep them informed about environmental impacts and mitigation efforts.

#### 1.2. PROJECT BACKGROUND

Wide Vision Enterprise Company Limited is the heavy industry and intends to manufacture of various kinds of Bags on CMP basis and to export 100% of the finished products. Wide Vision Enterprise Company Limited will be imported raw materials from China and finished the good products exported to US and Europe. This project is located at Sethmu – (19, 20, 21, 81), Plot No. (1), Kan Gyi Kone Kwin, Ward No. (4), Htantabin Township, Yangon Region and 100% foreign investment. Yangon Region Investment Committee (YRIC) issues the project on 12 March 2019 with the Endorsement No. YGN-169/2019. YRIC notified for the environmental approval and comments of the Ministry of the Natural

Resources and Environmental Conservation (MONREC) on the proposed project and had approved the proposal for investment in manufacturing of various kinds of Bags on Cutting, Making and Packaging (CMP) basis under the name of Wide Vision Enterprise 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. 900/EIA/2 (2403/2024) on 26 July 2024.

## 1.2.1. Project Proponent Profile

This is the information of project proponent from the Industrial License that is describing in below Table 1-1.

Table 1-1 Information of project proponent

| Investor Name:                | MR. TSAI, WEN-WEI   |  |
|-------------------------------|---|--|
| NRC / Passport No.: 307277729 |   |  |
| Citizenship:                  | Taiwanese   |  |
| Address:                      | No. 85, SEC. 1, Chang An Road, Situn District, Tai Chung City, Taiwan, Republic of China. |  |

#### 1.2.2. Investment Plan and Salient Features of the Project

The estimated authorized capital investment is US\$ 5.094 million according to YRIC endorsement (Table 1-2). Organization chart of Wide Vision Enterprise Company Limited is presented in Figure 1.1.

Table 1-2 Salient features of the project

| Type of Proposed Business          | Manufacturing of Various Kinds of Bags on CMP Basis  |  |
|------------------------------------|--|--|
| Type of investment                 | 100% Foreign Investment  |  |
| Type of land                       | Industrial land  |  |
| Total land area                    | 2.686 acres  |  |
| Total building area                | (277ft x 96ft x 32ft-9in) Office Building, (590ft-7in x 105ft x 26ft-8in) Factory Building, (168ft-8in x 66ft-8in) Store Room, (113ft-4in x 20ft x 38ft-8in) Dormitory Building, (46ft x 16.5ft) Dormitory Area (4 rooms), (33ft x 16.5ft) Garbage Room, (49ft-2in x 11.5ft) Generator & Electrical Room, (59ft-1in x 16.5ft) First Aid & Interview & Prayer Room, (33ft x 16.5ft) Chemical Room |  |
| Construction starting date         | 15 August 2022   |  |
| Commercial operation starting date | 21 March 2024  |  |
| Address                            | Sethmu – (19, 20, 21, 81), Plot No. (1), Kan Gyi Kone Kwin, Ward No. (4), Htantabin Township, Yangon Region.   |  |
| Contact person                     | Hla Theingi Oo<br>09 752318177   |  |

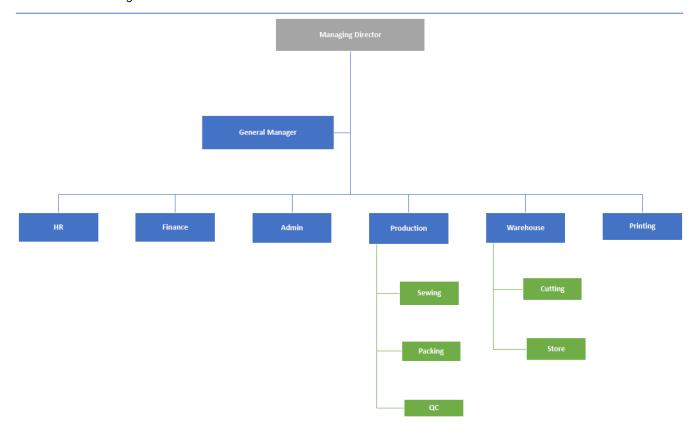


Figure 1.1 Organization Chart of Wide Vision Enterprise Company Limited

### 1.3. SCOPE OF EMP STUDY

The EMP study firstly established baseline environmental setting within 100 meters of the project area, including existing conditions of air quality, water quality, noise, weather and local climate, waste, landscape and social assessment.

A reconnaissance study performed on the proposed project site and baseline environmental data collected from possible sources using the appropriate measuring devices. Data interpretation and analysis based on those collected data for the present and potential future conditions. Suitable measures proposed for the impacts to reduce to acceptable ones.

The specific objectives of the EMP study are as follows:

- To conduct preliminary examination of the environmental consequences of the project
- To describe the existing environmental condition of the proposed project site
- To collect detailed information about used of process, technology, equipment and machinery for proposed project
- To assess the potential environmental impacts of the proposed project
- To develop environmental management plan (EMP) with site specific environmental mitigation measures and monitoring standards guidelines for the proposed project
- To carry our public consultants to address any issues in concern with implementation of this project.

#### 1.4. EMP STUDY TEAM

Myanwei Environmental Solutions Company Limited prepares the EMP for the proposed project. The environmental study was carried out by the following study team and the following is their expertise license and information of supporting member is shown in **APPENDIX C.** Member of EMP study team is shown in Table 1-3.

Table 1-3 Member of EMP Study Team

| No. | Name              | License<br>Number  | Expert Area                         | Responsibility   |
|-----|-------------------|--------------------|-------------------------------------|--|
| 1   | Mr. Lin Htet Sein | EIA-AC<br>053/2023 | General Environmental<br>Management | Chapter 6 (General Environmental Management — Project Leading: Communication, Discussion with Project Proponent for Environmental Management, Foundation and Consultancy for Environmental Management System)  Chapter 5, Chapter 6 (Risk Assessment and Hazard Management for Activities of the Project: Finding and Identification the Hazards, Evaluation the Affected Risks and Management for the Project's Environmental Prevention)  Executive for Environmental Policy and Objectives  Occupational Health & Community Health Impacts Assessment |
| 2   | Mr. Htun Lin Kyaw | EIA-AC<br>051/2023 | Social Study and Analysis           | Chapter 7 (Social Study and Analysis – Leading Public Consultation Meeting) Chapter 3 (Solid Waste and Hazardous Waste Management – Advise for Waste Disposal System, Management and Monitoring) Chapter 4 (Hydrology, Surface Water and Ground Water Conservation - Check and Review Hydrological and Hydrogeological Data and Report Writing) Chapter 5 (Soil Conservation - Evaluation of the Soil Quality Impacts and Mitigation Measures)   |
| 3   | Mr. Saw Yan Naung | EIA-AC<br>054/2023 | Social Study and Analysis           | Chapter 4 (Social Study and Analysis – Check and Review Social Data, Data Entry and Report Writing) Chapter 4 (Noise and Vibration - Baseline Survey and Monitoring, Data Analysis and Modelling, Data Entry and Report Writing)   |

|   |                     |                    |                                      | Chapter 2 ( <b>Legal Studies and Analysis</b> - Check and Review legal requirements related to project, Data Entry and Report Writing)   |
|---|---------------------|--------------------|--------------------------------------|--|
| 4 | Mr. Kaung Sett Lwin | EIA-AC<br>055/2023 | Geological Assessment                | Chapter 4 ( <b>Geological Assessment</b> - Check and Review Geological Data, Data Entry and Report Writing)  |
| 5 | Ms. Su Myat Hlaing  | EIA-AC<br>101/2024 | Air Pollution Monitoring             | Chapter 4 (Air Pollution Monitoring, Meteorology, Air Quality Assessment and Prediction – Baseline Survey and Monitoring, Data Analysis and Modelling, Check and Review Meteorological Data, Data Entry and Report Writing) Chapter 5, Chapter 6 (Air Pollution Prevention and Control – Evaluation of the Air Quality Impacts and Mitigation Measures, Adaptation for Air Pollution, Air Pollution Management, Control and Monitoring), Chapter 5, Chapter 6 (Solid Waste and Hazardous Waste Management – Identify and Analysis of Wastes, Management and Monitoring) Chapter 4, Chapter 5 (Water Pollution, Prevention, Control, Monitoring and Impact Prediction – Baseline Survey and Monitoring and Report Writing, Evaluation of the Water Quality Impacts and Mitigation |
|   |                     |                    |                                      | Measures, Adaptation for Water Pollution, Water Pollution Management, Control and Monitoring)  |
|   |                     |                    | Supporting Team                      |  |
|   |                     | •                  | napter 5 ( <b>Water Pollution, I</b> | Prevention, Control, Monitoring and odelling, Data Entry)  |
| 1 | Mrs. Pyae Phyo Win  | Review Biolo       |                                      | <b>Management (Forestry) -</b> Check and d Report Writing, Evaluation of the tres)   |

## 1.5. EMP REPORT STRUCTURE

The remainder of this report is structured as follows:

- Chapter 1 Introduction
- Chapter 2 Overview of the Policy, Legal and Institutional Framework

- Chapter 3 Presents the Project Description
- Chapter 4 Presents a summary of environmental baseline conditions within the Project Area.
- Chapter 5 Presents the impact assessment methodology and the findings of the assessment of potentially significant impacts to environmental and social receptors and resources and proposed mitigation measures.
- Chapter 6 Details the Environmental Management Plan and any monitoring measures to be completed.
- Chapter 7 Presents a summary of the public consultation carried out for the Project.
- Chapter 8 Conclusion and Recommendation

## 2. POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK

This chapter of the report mainly entailed stating and recommending a legal and regulatory framework for existing legal rights of national laws and regulations relating to natural resource conservation, labor rights, land use rights, and laws relating to implementing a plantation within Myanmar, whilst sub-chapters include the international laws, international treaties, and conventions. It is essential for Wide Vision Enterprise Company Limited to identify and implement appropriate legal arrangements which were required for performing foundry processes. At present, the existing legal framework in Myanmar is not yet fully developed to support environmental conservation, while some laws set out only basic principles and therefore require implementing regulations in order to be effective. Wide Vision Enterprise Company Limited itself is addressed only in disparate, vague, and related pieces of legislation.

This chapter will be the regulations and legal framework for the proposed project and recommendations to regulatory frameworks that fit with the Myanmar context and requirements will be covered. The project proponent is committed to the existing relevant Myanmar Laws, rules, and regulations. In addition, the project proponent is committed the international rules, regulations and guidelines related to the project.

#### 2.1. MYANMAR REGULATORY FRAMWORK

Myanmar has 31 ministries under the Office of the President as of 2021. 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

The Project Proponent commits to follow these laws relating to environmental and social issues and their relevance to the EMP study for the proposed project are as the following Table 2-1.

Table 2-1 List of Myanmar's Law Relating to Environmental Management

| Table 2-1 List of Myanmar's Law Relating to Environmental Management  |   |  |  |
|---|---|--|--|
| Law and Regulation  | Description   |  |  |
| Constitution of the Republic of the Union of Myanmar (2008)   |   |  |  |
| Section 45  | The Union shall protect and conserve natural environment.   |  |  |
| Section 350   | Women shall be entitled to the same rights and salaries as that received by men in respect of similar work. |  |  |
| Section 390   | Every citizen has the duty to assist the Union in carrying out the following matters:                       |  |  |
|   | (a) preservation and safeguarding of cultural heritage;   |  |  |
|   | (b) environmental conservation;   |  |  |
|   | (c) striving for development of human resources;  |  |  |
|   | (d) protection and preservation of public property  |  |  |
| Environmental Conservation Law, 30 March 2012   |   |  |  |
| The project proponent commits to comply with the section 3 sub-sections (c), (d) and (e), section 7 sub-sections (c), (m), (n) and (p), section 14, Section 15, Section 16 sub-sections (a), (b) and (c). |   |  |  |

|  | (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;   |  |
|--|--|--|
| Section 3                              | (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;  |  |
| Section 7                              | (c) laying down, carrying out and monitoring programmed for conservation and enhancement of the environment, and for conservation, control and abatement not to cause environmental pollution  (m) causing to lay down and carry out a system of environmental impact assessment and social impact assessment 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;  |  |
|  | <ul> <li>(n) laying down guidance relating to the management, conservation and enhancement of environment for the matters of protection of ozone layer, conservation of biological diversity, conservation of coastal environment, mitigation and adaptation of global warming and climate change, combating desertification and management of non-depleting substances and management of other environmental matters;</li> <li>(p) carrying out other functions and duties assigned by the Union Government relating to environmental conservation</li> </ul> |  |
| Section 14                             | A person causing a point source of pollution shall treat, emit, discharge and depote the substances which cause pollution in the environment in accord with stipulate 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.  |  |
|  | A person or organization operating business in the industrial estate or business in the SEZ or category of business stipulated by the Ministry:  |  |
| Section 16                             | (a) is responsible to carry out by contributing the stipulated cash or kind in the relevant combined scheme for the environmental conservation including the management and treatment of waste;  |  |
|  | (b) shall contribute the stipulated user's charges or management fees for the environmental conservation according to the relevant industrial estate, SEZ and business organization;   |  |
|  | (c) shall comply with the directives issued for environmental conservation according to the relevant industrial estate, SEZ or business.   |  |
| Environmental Conservation Rules, 2014 |  |  |
| The project proponent c                | ommits to comply with the rule 69 sub-sections (a) and (b).  |  |
| Rule 69                                | (a) Any person shall not emit, cause to emit, dispose, cause to dispose, pile and cause to pile, by any means, the pollutants to environment and the hazardous waste or hazardous material stipulated by notification under the Law and any of these rules at any place which may affect the public directly or indirectly.  |  |
| Train ou                               | (b) Nobody shall carry out any activity which can damage the ecosystem and the natural   |  |
|  | environment which is affected due to such system, except for the permission of the Ministry for the interests of the people.   |  |

| Er                       | vironmental Impact Assessment Procedure (December 2015)   |
|--------------------------|---|
| The project proponent of | ommits to comply with the article 63 (8.0), article 87, article 88.   |
|                          | Environmental Management Plan   |
|                          | 8.1 Project Description by Project phase (pre-construction, construction,   |
|                          | operation, decommissioning, closure and post-closure)   |
|                          | 8.2 Project's Environmental, Socio-economic and, where relevant, Health   |
|                          | Policies and Commitments, legal requirements and institutional  |
|                          | arrangements  |
|                          | 8.3 Summary of Impacts and Mitigation Measures  |
|                          | 8.4 Overall budget for implementation of the EMP  |
|                          | 8.5 Management and Monitoring Sub-Plans by Project phase (pre-  |
|                          | construction, construction, operation, decommissioning, closure and post-   |
|                          | closure); the Management and Monitoring Sub-Plans shall address and   |
|                          | satisfy all relevant environmental and social management and monitoring   |
| Article 63 (8.0)         | issues such as but not limited to noise, vibrations, waste, hazardous   |
| Article 03 (0.0)         | waste, wastewater and storm water, air quality, odor, chemicals, water  |
|                          | quality, erosion and sedimentation, biodiversity, occupational and  |
|                          | community health and safety, cultural heritage, employment and training,  |
|                          | and emergency response  |
|                          | 8.6 Content of each Sub-Plan  |
|                          | 8.6.1 Objectives  |
|                          | 8.6.2 Legal Requirements  |
|                          | 8.6.3 Overview maps and site layout maps, images, aerial photos,  |
|                          | Satellite images  |
|                          | 8.6.4 Implementation Schedule   |
|                          | 8.6.5 Management Actions  |
|                          | 8.6.6 Monitoring Plans  |
|                          | 8.6.7 Projected Budgets and Responsibilities  |
|                          | Upon receipt of the written approval from the relevant authority, the Project Proponent   |
| Article 87               | shall commence implementation of the Project strictly in accordance with the conditions attached to the ECC and including the EMP, within such time as may be prescribed by |
|                          | the Ministry.   |
|                          | An ECC is granted in respect of a specific, clearly identified Project. The ECC must  |
|                          | specify:  |
|                          | a) the registered name and registered office address of the Project Proponent to whom   |
|                          | the ECC is issued;  |
|                          | b) the documentation (IEE Report/EIA Report) that the Project Proponent submitted to  |
| Article 88               | the Ministry and on the basis of which the ECC has been issued;   |
|                          | c) a map, images, aerial photos and satellite images showing the geographic location(s) of the Project and each of its components;  |
|                          | d) the Project type and layout with an overview of activities, installations, operations, production capacity, production methods, and waste generation; and                |
|                          | e) Project phases and timing (the commencement and conclusion dates of each).   |
|                          | , , ,   |

|  | National Environmental Policy of Myanmar (2019)  |  |
|--|--|--|
| The project proponent c                          | The project proponent commits to comply with the principle 1, 2, 3, 4, 5, 6, 8, 10, 11, 13.  |  |
| Principle 1                                      | Every person and citizen living in Myanmar has the right to access a clean and healthy environment, and the duty to protect the environment.   |  |
| Principle 2                                      | The complete value of Myanmar's environment is recognized and considered – both tangible and intangible values, including its significant spiritual values, ecological assets and cultural heritage, in addition to its direct benefits for humanity.  |  |
| Principle 3                                      | Environment and natural resource management will recognise the critical roles that Myanmar's natural capital and ecosystem services play in the country's society and economy.   |  |
| Principle 4                                      | Myanmar's ecosystems are to be protected and managed in a sustainable way in order to maintain their natural functions and resilience, and rich biodiversity.  |  |
| Principle 5                                      | Myanmar's natural resources are to be protected and managed in integrated and sustainable ways without diminishing their availability and quality for future generations.  |  |
| Principle 6                                      | The rights of indigenous people and ethnic nationalities to their lands, territories, resources and cultural heritage, and their roles in environmental conservation and natural resources management, are recognised and protected  |  |
| Principle 8                                      | Environmental sustainability will always be a central objective in determining Myanmar's economic and social development strategies, which will prioritise low carbon and green economy pathways, through responsible investment and partnerships with the private sector and civil society.   |  |
| Principle 10                                     | Sustainable and renewable energy for the needs of people and for economic development in Myanmar will be secured, and utilized efficiently, through the use of existing technology and innovations in the generation, storage, supply and use of energy  |  |
| Principle 11                                     | Climate smart approaches to development, including resilience, climate change adaptation and mitigation, and disaster reduction strategies, will be aligned to environmental protection and good natural resource management approaches in the pursuit of low- carbon, sustainable development |  |
| Principle 13                                     | Pollution and waste are to be avoided and minimised at the source as more cost effective than remediation, enterprises will be encouraged to adopt clean production principles and best practices  |  |
| Myanmar Investment Rules (2017, amended in 2018) |  |  |
| The project proponent c                          | The project proponent commits to comply with the rule 202, 203.  |  |
| Rule 202   | The investor shall comply with all terms and conditions in the permit and other applicable laws when the investment is carried out.  |  |
| Rule 203   | The investor shall fully assist the negotiating processes with the relevant government departments and government organizations for the affected persons due to investment plans.  |  |

|  | Myanmar Investment Law, 2016 (Amended in 2019)   |  |
|--|--|--|
| The project proponent commits to comply with the section 50 sub-section (d), section 51 sub-section (a), (b), (c), (d), (e) and (f), section 65 sub-sections (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m), (n), (o), (p) and (q), and section 73. |  |  |
| Section 50   | (d)The investor shall register the land lease contract at the Office of Registry of Deeds in accordance with the Registration Act.   |  |
| Section 51   | The investor:  (a) may appoint of any citizen who is a qualified person as senior manager, technical and operational expert, and advisor in his investment within the Union in accordance with the Laws;  (b) shall appoint them to replace, after providing for capacity building programs in order to be able to appoint citizens to different level positions of management, technical and operational experts, and advisors;  (c) shall appoint only citizens for works which does not require skill;  (d) shall appoint skilled citizen and foreign workers, technicians, and staff by signing an employment contract between employer and employee in accordance with the labor laws and rules;  (e) shall ensure to obtain the entitlements and rights in the labor laws and rules, including minimum wages and salary, leave, holiday, overtime fee, damages, compensation of the workman, social welfare, and other insurance relating to workers in stipulating the rights and duties of employers and employees and occupational terms and conditions in the employment contract;  (f) shall settle disputes arising among employers, among workers, between employers and workers, and technicians or staff in the investment in accordance with the applicable laws.  |  |
| Section 65   | The Investor:  (a)shall respect and comply with the customs, traditions and traditional culture of the ethnic groups in the Union;  (b)shall establish and register a company or sole proprietorship or legal entities or branches of such entities under the laws in order to invest;  (c)shall abide by the terms and conditions, stipulations of special licenses, permits, and business operation certificates issued to them, including the rules, notifications, orders, and directives and procedures issued by this Law and the applicable laws, terms and conditions of contract and tax obligations;  (d)shall carry out in accordance with the stipulations of the relevant department if it is, by the nature of business or by other need, required to obtain any license or permit from the relevant Union Ministries, government departments and governmental organizations, or to carry out registration;  (e)shall immediately inform the Commission if it is found that natural mineral resources or antique objects and treasure trove not related to the investment permitted above and under the land on which the investor is entitled to lease or use and not included in the original contracts. If the Commission allows, the investor shall continue to carry out the investment in such land, and if not allowed, the investor shall transfer and carry out, by obtaining the permission, at the substituted place which is selected and submitted by him;  (f)shall not make any significant alteration of topography or elevation of the land on which he is entitled to lease or to use, without the approval of the Commission;  (g)shall abide by the applicable laws, rules, procedures and best standards practiced internationally for this investment so as not to cause damage, pollution, and loss to the natural and social environment and not to cause damage to cultural heritage; |  |

| (h)shall list and keep proper records in books of accounting and annual financial statements, and necessary financial matters relating to the investment performed by a Permit or an Endorsement in accordance with internationally and locally recognized accounting standards:  (i)shall close and discontinue the investment only after payment of compensation to employees in accordance with applicable laws for any breach of employment contracts, closure of investment, sale and transfer of investment, discontinuation of investment, sale and transfer of investment, discontinuation of investment, sale and transfer of investment, discontinuation of investment, or reduction of workforce;  (j)shall pay wages and salaries to employees in accordance with applicable laws, rules, procedures, directives and so forth during the period of suspension of investment for a credible reason;  (k)shall pay compensation and indemnification in accordance with applicable laws to the relevant employee or his successor for injury, disability, disease and death due to the work;  (j)shall supervise foreign experts, supervisors and their families, who employ in its investment, to abide by the applicable laws, rules, orders and directives, and the culture and traditions of Myanmar;  (m)shall respect and comply with the labor laws;  (n)shall are the right to sue and to be sued in accordance with the laws;  (o) shall pay effective compensation for loss incurred to the victim, if there is damage to the natural environment and socioeconomic losses caused by logging or extraction of natural resources which are not related to the scope of the permissible investment, except from carrying out the activities required to conduct investment in a Permit or an Endorsement.  (j)shall allow the Commission to inspect the investment;  (g)shall allow the Commission to inspect the investment;  (g)shall allow the assessment. Such investments shall be submitted the situation of environmental and social impact assessment to the Commission during the permitted investme |   |   |
|--|---|---|
| employees in accordance with applicable laws for any breach of employment contracts, closure of investment, sale and transfer of investment, discontinuation of investment, as ale and transfer of investment, discontinuation of investment, as ale and transfer of investment, closure of investment, as a coordance with applicable laws, rules, procedures, directives and so forth during the period of suspension of investment for a credible reason;  (k)shall pay compensation and indemnification in accordance with applicable laws to the relevant employee or his successor for injury, disability, disease and death due to the work;  (l)shall supervise foreign experts, supervisors and their families, who employ in its investment, to abide by the applicable laws, rules, orders and directives, and the culture and traditions of Myammar;  (m)shall respect and comply with the labor laws;  (n)shall pay effective compensation for loss incurred to the victim, if there is damage to the natural environment and socioeconomic losses caused by logging or extraction of natural resources which are not related to the scope of the permissible investment, except from carrying out the activities required to conduct investment in a Permit or an Endorsement.  (p)shall allow the Commission to inspect in any places, when the Commission informs the prior notice to inspect the investments;  (q)shall allow the Commission to inspect in any places, when the Commission for the investments which need to obtain prior approval under the Environmental Conservation Law and the procedures of environmental impact assessment, before undertaking the assessment. Such investments shall be submitted the situation of environmental and social impact assessment to the Commission during the permitted investment period.  Section 73  The investor shall ensure the types of insurance stipulated in the provision of the rules at any insurance enterprise which is entitled to carry out insurance businesses within the Union.  Myanmar Insurance Law (1993)  The project proponent |   | statements, and necessary financial matters relating to the investments performed by a Permit or an Endorsement in accordance with internationally and  |
| rules, procedures, directives and so forth during the period of suspension of investment for a credible reason;  (k)shall pay compensation and indemnification in accordance with applicable laws to the relevant employee or his successor for injury, disability, disease and death due to the work;  (l)shall supervise foreign experts, supervisors and their families, who employ in its investment, to abide by the applicable laws, rules, orders and directives, and the culture and traditions of Myanmar;  (m)shall respect and comply with the labor laws; (n)shall have the right to sue and to be sued in accordance with the laws; (o) shall pay effective compensation for loss incurred to the victim, if there is damage to the natural environment and socioeconomic losses caused by logging or extraction of natural resources which are not related to the scope of the permissible investment, except from carrying out the activities required to conduct investment in a Permit or an Endorsement.  (p)shall allow the Commission to inspect in any places, when the Commission informs the prior notice to inspect the investment;  (g)shall take in advance a Permit or an Endorsement of the Commission for the investments which need to obtain prior approval under the Environmental Conservation Law and the procedures of environmental impact assessment, before undertaking the assessment. Such investments shall be submitted the situation of environmental and social impact assessment to the Commission during the permitted investment period.  Section 73  The investor shall ensure the types of insurance stipulated in the provision of the rules at any insurance enterprise which is entitled to carry out insurance businesses within the Union.  Myanmar Insurance Law (1993)  The project proponent commits to comply with the section 15 and 16.  Section 15  Owners of motor vehicles shall affect compulsory Third Party Liability Insurance with the Myanmar Insurance.  Payment of Wages Law (2016)  The project proponent commits to comply with the section 3 sub-sec |   | (i)shall close and discontinue the investment only after payment of compensation to employees in accordance with applicable laws for any breach of employment contracts, closure of investment, sale and transfer of investment,  |
| the relevant employee or his successor for injury, disability, disease and death due to the work;  (I)shall supervise foreign experts, supervisors and their families, who employ in its investment, to abide by the applicable laws, rules, orders and directives, and the culture and traditions of Myanmar;  (m)shall respect and comply with the labor laws;  (n)shall have the right to sue and to be sued in accordance with the laws;  (o) shall pay effective compensation for loss incurred to the victim, if there is damage to the natural environment and socioeconomic losses caused by logging or extraction of natural resources which are not related to the scope of the permissible investment, except from carrying out the activities required to conduct investment in a Permit or an Endorsement.  (p)shall allow the Commission to inspect in any places, when the Commission informs the prior notice to inspect the investment;  (q)shall take in advance a Permit or an Endorsement of the Commission for the investments which need to obtain prior approval under the Environmental Conservation Law and the procedures of environmental impact assessment, before undertaking the assessment. Such investments shall be submitted the situation of environmental and social impact assessment to the Commission during the permitted investment period.  Section 73  The investor shall ensure the types of insurance stipulated in the provision of the rules at any insurance enterprise which is entitled to carry out insurance businesses within the Union.  Myanmar Insurance Law (1993)  The project proponent commits to comply with the section 15 and 16.  Section 15  An entrepreneur or an organization operating an enterprise which may cause loss to State-owned property or which may cause damage to the life and property of the public or which may cause pollution to the environment shall affect compulsory General Liability Insurance with the Myanmar insurance.  Payment of Wages Law (2016)  The project proponent commits to comply with the section 3 sub-sections ( |   | rules, procedures, directives and so forth during the period of suspension of   |
| investment, to abide by the applicable laws, rules, orders and directives, and the culture and traditions of Myanmar;  (m)shall respect and comply with the labor laws;  (n)shall have the right to sue and to be sued in accordance with the laws;  (o) shall pay effective compensation for loss incurred to the victim, if there is damage to the natural environment and socioeconomic losses caused by logging or extraction of natural resources which are not related to the scope of the permissible investment, except from carrying out the activities required to conduct investment in a Permit or an Endorsement.  (p)shall allow the Commission to inspect in any places, when the Commission informs the prior notice to inspect the investment;  (g)shall take in advance a Permit or an Endorsement of the Commission for the investments which need to obtain prior approval under the Environmental Conservation Law and the procedures of environmental impact assessment, before undertaking the assessment. Such investments shall be submitted the situation of environmental and social impact assessment to the Commission during the permitted investment period.  The investor shall ensure the types of insurance stipulated in the provision of the rules at any insurance enterprise which is entitled to carry out insurance businesses within the Union.  Myanmar Insurance Law (1993)  The project proponent commits to comply with the section 15 and 16.  Section 15  Owners of motor vehicles shall affect compulsory Third Party Liability Insurance with the Myanmar Insurance.  An entrepreneur or an organization operating an enterprise which may cause loss to State-owned property or which may cause damage to the life and property of the public or which may cause pollution to the environment shall affect compulsory General Liability Insurance with the Myanmar insurance.  Payment of Wages Law (2016)  The project proponent commits to comply with the section 3 sub-sections (a), (b), (c), (d), (e), (f), (g), (h), (i) and (j), section 15, 7, 8, 9, section 10 sub |   | the relevant employee or his successor for injury, disability, disease and death  |
| (n)shall have the right to sue and to be sued in accordance with the laws; (o) shall pay effective compensation for loss incurred to the victim, if there is damage to the natural environment and socioeconomic losses caused by logging or extraction of natural resources which are not related to the scope of the permissible investment, except from carrying out the activities required to conduct investment in a Permit or an Endorsement.  (p)shall allow the Commission to inspect in any places, when the Commission informs the prior notice to inspect the investment;  (q)shall take in advance a Permit or an Endorsement of the Commission for the investments which need to obtain prior approval under the Environmental Conservation Law and the procedures of environmental impact assessment, before undertaking the assessment. Such investments shall be submitted the situation of environmental and social impact assessment to the Commission during the permitted investment period.  Section 73  The investor shall ensure the types of insurance stipulated in the provision of the rules at any insurance enterprise which is entitled to carry out insurance businesses within the Union.  Myanmar Insurance Law (1993)  The project proponent commits to comply with the section 15 and 16.  Section 15  Owners of motor vehicles shall affect compulsory Third Party Liability Insurance with the Myanmar Insurance.  An entrepreneur or an organization operating an enterprise which may cause loss to State-owned property or which may cause damage to the life and property of the public or which may cause pollution to the environment shall affect compulsory General Liability Insurance with the Myanmar insurance.  Payment of Wages Law (2016)  The project proponent commits to comply with the section 3 sub-sections (a), (b), (c), (d), (e), (f), (g), (h), (i) and (j), section 11 sub-sections (a), (b).  The employer:  a) shall pay wages to the workers employing in his business in local currency or foreign  |   | investment, to abide by the applicable laws, rules, orders and directives, and the  |
| (o) shall pay effective compensation for loss incurred to the victim, if there is damage to the natural environment and socioeconomic losses caused by logging or extraction of natural resources which are not related to the scope of the permissible investment, except from carrying out the activities required to conduct investment in a Permit or an Endorsement.  (p)shall allow the Commission to inspect in any places, when the Commission informs the prior notice to inspect the investment;  (q)shall take in advance a Permit or an Endorsement of the Commission for the investments which need to obtain prior approval under the Environmental Conservation Law and the procedures of environmental impact assessment, before undertaking the assessment. Such investments shall be submitted the situation of environmental and social impact assessment to the Commission during the permitted investment period.  The investor shall ensure the types of insurance stipulated in the provision of the rules at any insurance enterprise which is entitled to carry out insurance businesses within the Union.  Myanmar Insurance Law (1993)  The project proponent commits to comply with the section 15 and 16.  Section 15  Owners of motor vehicles shall affect compulsory Third Party Liability Insurance with the Myanmar Insurance.  An entrepreneur or an organization operating an enterprise which may cause loss to State-owned property or which may cause damage to the life and property of the public or which may cause pollution to the environment shall affect compulsory General Liability Insurance with the Myanmar insurance.  Payment of Wages Law (2016)  The project proponent commits to comply with the section 3 sub-sections (a), (b), (c), (d), (e), (f), (g), (h), (i) and (j), section 11 sub-sections (a), (b).  The employer:  a) shall pay wages to the workers employing in his business in local currency or foreign   |   | (m)shall respect and comply with the labor laws;  |
| (o) shall pay effective compensation for loss incurred to the victim, if there is damage to the natural environment and socioeconomic losses caused by logging or extraction of natural resources which are not related to the scope of the permissible investment, except from carrying out the activities required to conduct investment in a Permit or an Endorsement.  (p)shall allow the Commission to inspect in any places, when the Commission informs the prior notice to inspect the investment;  (q)shall take in advance a Permit or an Endorsement of the Commission for the investments which need to obtain prior approval under the Environmental Conservation Law and the procedures of environmental impact assessment, before undertaking the assessment. Such investments shall be submitted the situation of environmental and social impact assessment to the Commission during the permitted investment period.  The investor shall ensure the types of insurance stipulated in the provision of the rules at any insurance enterprise which is entitled to carry out insurance businesses within the Union.  Myanmar Insurance Law (1993)  The project proponent commits to comply with the section 15 and 16.  Section 15  Owners of motor vehicles shall affect compulsory Third Party Liability Insurance with the Myanmar Insurance.  An entrepreneur or an organization operating an enterprise which may cause loss to State-owned property or which may cause damage to the life and property of the public or which may cause pollution to the environment shall affect compulsory General Liability Insurance with the Myanmar insurance.  Payment of Wages Law (2016)  The project proponent commits to comply with the section 3 sub-sections (a), (b), (c), (d), (e), (f), (g), (h), (i) and (j), section 11 sub-sections (a), (b).  The employer:  a) shall pay wages to the workers employing in his business in local currency or foreign   |   |   |
| the prior notice to inspect the investment;  (q)shall take in advance a Permit or an Endorsement of the Commission for the investments which need to obtain prior approval under the Environmental Conservation Law and the procedures of environmental impact assessment, before undertaking the assessment. Such investments shall be submitted the situation of environmental and social impact assessment to the Commission during the permitted investment period.  The investor shall ensure the types of insurance stipulated in the provision of the rules at any insurance enterprise which is entitled to carry out insurance businesses within the Union.  Myanmar Insurance Law (1993)  The project proponent commits to comply with the section 15 and 16.  Section 15  Owners of motor vehicles shall affect compulsory Third Party Liability Insurance with the Myanmar Insurance.  An entrepreneur or an organization operating an enterprise which may cause loss to State-owned property or which may cause damage to the life and property of the public or which may cause pollution to the environment shall affect compulsory General Liability Insurance with the Myanmar insurance.  Payment of Wages Law (2016)  The project proponent commits to comply with the section 3 sub-sections (a), (b)), (c), (d), (e), (f) and (g), section 5, 7, 8, 9, section 10 sub-sections (a), (b)), (c), (d), (e), (f), (g), (h), (i) and (j), section 11 sub-sections (a), (b).  The employer:  a) shall pay wages to the workers employing in his business in local currency or foreign  |   | to the natural environment and socioeconomic losses caused by logging or extraction of natural resources which are not related to the scope of the permissible investment, except from carrying out the activities required to conduct investment in a Permit or an   |
| investments which need to obtain prior approval under the Environmental Conservation Law and the procedures of environmental impact assessment, before undertaking the assessment. Such investments shall be submitted the situation of environmental and social impact assessment to the Commission during the permitted investment period.  The investor shall ensure the types of insurance stipulated in the provision of the rules at any insurance enterprise which is entitled to carry out insurance businesses within the Union.  Myanmar Insurance Law (1993)  The project proponent commits to comply with the section 15 and 16.  Section 15  Owners of motor vehicles shall affect compulsory Third Party Liability Insurance with the Myanmar Insurance.  An entrepreneur or an organization operating an enterprise which may cause loss to State-owned property or which may cause damage to the life and property of the public or which may cause pollution to the environment shall affect compulsory General Liability Insurance with the Myanmar insurance.  Payment of Wages Law (2016)  The project proponent commits to comply with the section 3 sub-sections (a), (b), (c), (d), (e), (f), (g), (h), (i) and (j), section 11 sub-sections (a), (b).  The employer:  a) shall pay wages to the workers employing in his business in local currency or foreign   |   |   |
| Section 73 at any insurance enterprise which is entitled to carry out insurance businesses within the Union.  Myanmar Insurance Law (1993)  The project proponent commits to comply with the section 15 and 16.  Section 15 Owners of motor vehicles shall affect compulsory Third Party Liability Insurance with the Myanmar Insurance.  An entrepreneur or an organization operating an enterprise which may cause loss to State-owned property or which may cause damage to the life and property of the public or which may cause pollution to the environment shall affect compulsory General Liability Insurance with the Myanmar insurance.  Payment of Wages Law (2016)  The project proponent commits to comply with the section 3 sub-sections (a), (b)), section 4 sub-sections (a), (b), (c), (d), (e), (f) and (g), section 5, 7, 8, 9, section 10 sub-sections (a), (b), (c), (d), (e), (f), (g), (h), (i) and (j), section 11 sub-sections (a), (b).  The employer: a) shall pay wages to the workers employing in his business in local currency or foreign  |   | investments which need to obtain prior approval under the Environmental Conservation Law and the procedures of environmental impact assessment, before undertaking the assessment. Such investments shall be submitted the situation of environmental and social impact assessment to the Commission during the permitted |
| The project proponent commits to comply with the section 15 and 16.  Section 15  Owners of motor vehicles shall affect compulsory Third Party Liability Insurance with the Myanmar Insurance.  An entrepreneur or an organization operating an enterprise which may cause loss to State-owned property or which may cause damage to the life and property of the public or which may cause pollution to the environment shall affect compulsory General Liability Insurance with the Myanmar insurance.  Payment of Wages Law (2016)  The project proponent commits to comply with the section 3 sub-sections (a), (b)), section 4 sub-sections (a), (b), (c), (d), (e), (f) and (g), section 5, 7, 8, 9, section 10 sub-sections (a), (b), (c), (d), (e), (f), (g), (h), (i) and (j), section 11 sub-sections (a), (b).  The employer:  a) shall pay wages to the workers employing in his business in local currency or foreign  | Section 73  | at any insurance enterprise which is entitled to carry out insurance businesses within  |
| Section 15  Owners of motor vehicles shall affect compulsory Third Party Liability Insurance with the Myanmar Insurance.  An entrepreneur or an organization operating an enterprise which may cause loss to State-owned property or which may cause damage to the life and property of the public or which may cause pollution to the environment shall affect compulsory General Liability Insurance with the Myanmar insurance.  Payment of Wages Law (2016)  The project proponent commits to comply with the section 3 sub-sections (a), (b)), section 4 sub-sections (a), (b), (c), (d), (e), (f) and (g), section 5, 7, 8, 9, section 10 sub-sections (a), (b), (c), (d), (e), (f), (g), (h), (i) and (j), section 11 sub-sections (a), (b).  The employer:  a) shall pay wages to the workers employing in his business in local currency or foreign   |   | Myanmar Insurance Law (1993)  |
| the Myanmar Insurance.  An entrepreneur or an organization operating an enterprise which may cause loss to State-owned property or which may cause damage to the life and property of the public or which may cause pollution to the environment shall affect compulsory General Liability Insurance with the Myanmar insurance.  Payment of Wages Law (2016)  The project proponent commits to comply with the section 3 sub-sections (a), (b)), section 4 sub-sections (a), (b), (c), (d), (e), (f) and (g), section 5, 7, 8, 9, section 10 sub-sections (a), (b), (c), (d), (e), (f), (g), (h), (i) and (j), section 11 sub-sections (a), (b).  The employer:  a) shall pay wages to the workers employing in his business in local currency or foreign   | The project proponent c   | ommits to comply with the section 15 and 16.  |
| Section 16  State-owned property or which may cause damage to the life and property of the public or which may cause pollution to the environment shall affect compulsory General Liability Insurance with the Myanmar insurance.  Payment of Wages Law (2016)  The project proponent commits to comply with the section 3 sub-sections (a), (b)), section 4 sub-sections (a), (b), (c), (d), (e), (f) and (g), section 5, 7, 8, 9, section 10 sub-sections (a), (b), (c), (d), (e), (f), (g), (h), (i) and (j), section 11 sub-sections (a), (b).  The employer:  a) shall pay wages to the workers employing in his business in local currency or foreign  | Section 15  | ,   |
| The project proponent commits to comply with the section 3 sub-sections (a), (b)), section 4 sub-sections (a), (b), (c), (d), (e), (f) and (g), section 5, 7, 8, 9, section 10 sub-sections (a), (b), (c), (d), (e), (f), (g), (h), (i) and (j), section 11 sub-sections (a), (b).  The employer:  a) shall pay wages to the workers employing in his business in local currency or foreign  | Section 16  | State-owned property or which may cause damage to the life and property of the public or which may cause pollution to the environment shall affect compulsory General   |
| (b), (c), (d), (e), (f) and (g), section 5, 7, 8, 9, section 10 sub-sections (a), (b), (c), (d), (e), (f), (g), (h), (i) and (j), section 11 sub-sections (a), (b).  The employer:  a) shall pay wages to the workers employing in his business in local currency or foreign   | Payment of Wages Law (2016)   |   |
| Section 3 a) shall pay wages to the workers employing in his business in local currency or foreign   | (b), (c), (d), (e), (f) and (g), section 5, 7, 8, 9, section 10 sub-sections (a), (b), (c), (d), (e), (f), (g), (h), (i) and (j), |   |
| Section 3 a) shall pay wages to the workers employing in his business in local currency or foreign   |   | The employer:   |
|  | Section 3   | a) shall pay wages to the workers employing in his business in local currency or foreign  |

|            | cash or cheque or deposit into the bank account of the worker with the agreement between the employer and the worker.   |
|------------|---|
|            | b) In paying such wages:  |
|            | i. if it is necessary to pay particular benefit, profits and opportunities for workers working in commerce, production and service businesses, it may be paid in cash or some in cash and some in things set up by local price on own volition of workers in accordance with the stipulations;                              |
|            | The employer:   |
|            | a) shall pay wages at the end of the work or at the time agreed to pay to the worker for hourly, daily, weekly or other part time work, or temporary or piece work;   |
|            | b) shall not exceed one month than the period agreed with the worker under subsection (a) to pay wages;   |
|            | c) shall pay the wages for the permanent work monthly. In making such payment:  |
|            | i. if workers are not more than 100, wages shall be paid at the end of the period for payment of wage;  |
| Section 4  | ii. if workers are more than 100, it shall be paid no later than five days after the end of the period for payment of wage;   |
|            | d) shall pay the due wages within two working days from the date of termination, if a worker is terminated;   |
|            | e) shall pay the wages at the end of the period for payment of wages, if a worker resigns on his own volition by sending prior written notice of resignation;   |
|            | f) shall pay the due wages to a legal heir within two working days after the decease, if a worker is deceased;  |
|            | g) shall pay all wages on a working day.  |
| Section 5  | If an employer encounters difficulties to make payment under sub-section (c) of the Section 4 due to any unexpected condition, including natural disaster, the employer shall submit that which date has been altered for the payment of wages with the consent of the workers to the Department on reasonable ground.      |
|            | The employer:   |
|            | a) may deduct from wages, except leaves which are entitled wages under the relevant law and public holidays, for the absent period from work;   |
| Section 7  | b) may deduct expenses which are allowance for accommodation and ferry service arranged by the employer, meal allowance, electricity charges, water service charges and income taxes liable to be paid by worker and cash paid in excess under a mistake, which are not included in the expression of wages under this Law; |
|            | c) may deduct advance payment or reimburse or savings for the worker or any contribution under any law demanded by a worker from wages;   |
|            | d) may deduct from the wages of the worker under a decision of a Court or Arbitration Council or Arbitration Body.  |
| Section 8  | The employer shall not deduct from the wages of the worker except deduction from wages in accordance with provisions of Section 7 and Section 11.   |
| Section 9  | In deducting from wages under Section 7, all deductions made by the employer shall not exceed 50 percent of the wages of a worker except deduction from wages for the failure of a worker to perform his duty.  |
|            |   |
| Section 10 | The employer:   |

|                          | a) shall obtain prior approval of the Department for what deduction can be made from wage and how much can be deducted before deducting anything stipulated as a fine under section 11;  |
|--------------------------|--|
|                          | b) shall post the approval contained in sub-section (a) in conspicuous places at relevant factory and work;  |
|                          | c) shall not exceed fine deducted for compensation than the value of damage or loss by action or omission of a worker;   |
|                          | d) in deducting from wages under Section 11:   |
|                          | i. shall not deduct from wages without giving right to defence of the worker;  |
|                          | ii. shall not deduct more than 5 percent of the monthly wages of the worker;   |
|                          | e) shall not absolutely deduct as the fine from a worker under 16 years of age;  |
|                          | f) may carry out the date of payment of passing fine in accordance with the agreement between the employer and the worker;   |
|                          | g) shall deduct from wages for compensation due to loss of property within a limited period by an agreement of the relevant Township Conciliation Body;  |
|                          | h) shall enter the deducting cash from wages into the register and systematically maintain it;   |
|                          | i) shall submit a report of the deduction from wages to the Department;  |
|                          | j) shall use fines of deduction from wages under sub-section (b) of Section 11 for the worker benefit in coordination with legally registered Labour Organization in the factory.  |
|                          | The employer may designate as fine to compensate for the following acts and omissions of a worker and deduct from his wages:   |
| Section 11               | a) any loss of property and cash expressly entrusted to the worker by the employer due to intentional negligence and carelessness or dishonest acts or omissions of the worker, which is caused directly by the carelessness and mistake of such worker; |
|                          | b) violation of any terms or conditions stipulated as fines in the employment agreement.   |
|                          | The Factories Act, 1951 (Amended in 2016)  |
| The project proponent co | ommits to comply with the section 13, 15, 16, 19, 20, 21, 23, 40, 47.  |
|                          | (1) Every factory and the compound there of shall be kept clean and kept free from effluvia arising from any drain, privy or other nuisance, and in particular-  |
|                          | <ul> <li>(a) Accumulations of dirt and refuse shall be removed daily by sweeping or by<br/>any other effective method from the floors, benches of work-rooms and<br/>from stair-cases and passages, and disposed of in a suitable manner;</li> </ul>     |
| Section 13               | (b) The floor of every work-room shall be cleaned at least once a week by<br>washing, using disinfectant where necessary, or by some other effective<br>method,  |
|                          | (c) When there is likelihood of water collecting on the floor in the course of<br>any manufacturing process, effective means of drainage shall be provided<br>and maintained   |
|                          | (1) Effective and suitable arrangement shall be made in every factory for securing and maintaining in every workroom adequate ventilation by the circulation of  |
| Section 15               | fresh air, and such equable temperatures as will secure workers therein reasonable conditions of comfort and health; - and in particular-  |

|            | (b) Where the nature of the work carried on in the factory involves, or is likely to<br>involve, the production of excessively high temperatures, such adequate<br>measures as are practicable shall be taken to protect the workers there from,<br>by separating the process which produces such temperatures from the<br>workroom, by insulating the hot parts or by other effective means.   |
|------------|---|
| Section 16 | (1) If in the factory, there is given off any dust, fume or other impurity of such a nature or in sub- substantial quantity as is likely to be injurious to workers employed in connection with the manufacturing process carried on therein, effective measures shall be taken to prevent its inhalation and accumulation in any workroom, and if any exhaust is necessary for this purpose it shall be provided to the nearest possible point of origin of the dust, fume of other impurity, and such point shall be far as possible. |
|            | (2) In any factory no stationary internal combustion engine shall be operated unless<br>the exhaust is conducted into the open air outside, and no other internal combustion<br>engine shall be operated in any room unless effective measures have been taken<br>to prevent such accumulation of fumes as is likely to be injurious to the workers<br>employed therein.  |
|            | (1) In every part of a factory where workers are working or passing, there shall be provided and maintained sufficient and suitable lighting natural or artificial.   |
|            | (2) In every factory all glazed windows and apertures used for the lighting of a workroom shall be kept clean on both the inner and outer sides. All windows, in so far as the provisions of any rules made under sub-section (3) of section 15 are not infringed, shall also be kept free from obstruction.  |
| Section 19 | (3) All possible measures shall be taken for the effective prevention of -  |
|            | (a) glare hurtful to the eyes, either directly from a source of light or by reflection from a smooth and polished surface; and  |
|            | (b) darkness to such an extent as to cause eyestrain or the risk of accident to any worker  |
|            | (4) The President may prescribe standards of sufficient and suitable lighting for<br>factories or for any class of factories or parts there of or for any manufacturing<br>process.   |
|            | (1) In every factory, effective arrangements shall be made to provide at points conveniently situated for all workers employed therein a sufficient supply of wholesome drinking water.   |
|            | (2) All such points shall be legibly marked "drinking water" and no such point shall be within twenty feet of any washing place, latrine or urinal.   |
| Section 20 | (3) In every factory wherein more than two hundred and fifty workers are ordinarily employed, provision shall be made for cooling drinking water during hot weather by effective means and for distribution thereof;  |
|            | (4) The President may prescribe methods in respect of all factories or any class of factories for the examination by Public Health Authorities of the supply and distribution of wholesome drinking water in factories and such other requirements.   |
| Section 21 | (1) In every factory-   |
|            | (a)Sufficient latrines and urinals of prescribed plan conveniently situated and access workers at all times shall be provided.  |
|            | (b) Latrines and urinals for female workers shall be provided separately from those of male workers;  |

|            | (c) Latrines and urinals shall be displayed an approved sign or notice clearly indicating the sex for which the latrine is provided;  |
|------------|---|
|            | (d) Latrines and urinals shall be adequately lighted and ventilated sufficiently No latrine or urinal shall be connected with any workroom except through an intervening open space or ventilated passage;  |
|            | (e) Latrines and urinals shall be employed, maintained in a clean and sanitary condition at all times.  |
|            | (f)sufficient number of sweepers shall be employed, whose primary duty will be to clean latrines, urinals and washing places.   |
|            | (2) In every factory wherein more than two hundred and fifty workers are ordinarily employed  |
|            | (a) Latrines and urinals shall be of prescribed sanitary plan.  |
|            | (b) the floors and internal walls, up to a height of three feet, of the latrines and urinals and the sanitary blocks shall be laid in enameled tiles or shall be done with other materials of smooth and impervious surface;  |
|            | (c) without prejudice to the provisions of clauses (e) and (f) of sub-section (1), the floors, portions of the walls and blocks so laid or done with and the sanitary pans of latrines and urinals shall be thoroughly washed and cleaned every day with suitable detergents or disinfectants or with both.   |
| Section 23 | (1) In every factory the following shall be securely fenced by safe-guards of<br>substantial construction which shall be constantly maintained and kept in<br>position while the parts of the machinery they are fencing are in motion or in<br>use; -  |
|            | (a)(iii) Every part of an electric generator, motors or rotary converters will not be fenced unless it is in such position or of such construction as to be as safe to every person employed or working in the factory as it would be if securely fenced.   |
| Section 40 | (1) Every factory shall be provided with such means in case of fire as may be prescribed and if it appears to the Inspector that any factory is not so provided, he may serve on the manager of the factory an order in writing specifying the arrangements which, in his opinion, should be carried out to bring the factory into conformity with the provisions of this section and any rules made there under and requiring them to be carried out before a date specified in the order. |
|            | (2) In every factory the doors affording egress from any room shall not be locked<br>or fastened so that cannot be easily and immediately opened from the inside<br>while any person is within the room, and all such doors, unless they are of the<br>sliding type, shall be constructed to open outwards.   |
|            | (3) In every factory, every window, door or other exit affording a means of escape<br>in case of fire, other than the means of exit in ordinary use, shall be distinctively<br>marked in a language understood by the majority of workers and in red letters<br>or by some other effective and clearly understood sign.   |
|            | (4) In every factory there shall be installed apparatus to give warning in case of<br>fire clearly audible to every person employed in the factory.   |
|            | (5) A passage – way giving access to such means of escape in case of fire shall<br>be kept clear for the use of all workers in every room of the factory.   |
|            | (6) Effective measures shall be taken to ensure that in every factory   |
|            | (a) wherein more than twenty workers are ordinarily employed in any place of the lowest floor, or   |

|            | (b) wherein explosive or highly inflammable materials are stored or used.   |
|------------|---|
|            | (1) In every factory the manager shall provide and maintain a first-aid box or a cupboard equipped with the prescribed contents in suitable place as may be directed by the Inspector so as to be readily accessible during all working hours, and where more than one maintained for every additional one hundred workers or part thereof. |
| Section 47 | (2) Nothing but the prescribed contents shall be kept in the first-aid boxes or cupboards referred to in sub-section (1), and all such first-aid boxes and cupboard shall be kept in the charge of a responsible who has been trained in first-aid treatment and who shall always be available during working hours.                        |
|            | (3) In every factory wherein more than two hundred and fifty workers are employed there shall be provided and maintained a first-aid room or dispensary of the prescribed dimension, containing the prescribed equipment, and shall be kept under the supervision of such medical officer and nursing staff as may be prescribed.           |
|            | The Private Industrial Enterprise Law, 1990   |
| ' ' ' '    | ommits to comply with the section 4 sub-sections (a) and (b), section 5, section 13, (d), (e), (f), (g) and (h), and 15 sub-sections (b), section 26,27,28,29.  |
|            | (a) Any person desirous of conducting any private industrial enterprise;  |
| Section 4  | (b) Any person conducting any private industrial enterprise on the day this Law is enacted; by using any type of power which is three horsepower and above or manpower of ten wage-earning workers and above shall register under this Law.   |
| Section 5  | In applying for registration under Section 4, application shall be submitted to the respective State or Divisional Officer-in-charge in the prescribed manner.  |
|            | The duties of the entrepreneur are as follows: -  |
|            | (a) shall pay the registration fees, fees for the renewal of registration and other payable duties and taxes prescribed by the Directorate;   |
|            | (b) shall abide by the terms and conditions of the registration certificate;  |
|            | (c) shall conduct the enterprise by opening an account with the relevant bank in the name of its registered enterprise;   |
| Section 13 | (d) shall maintain systematically and fully as prescribed by the Directorate, the statement of accounts relating to the registered private industrial enterprise and shall submit the same to the relevant Government department, organization or Supervisory Body when required to do so;  |
|            | (e) shall submit to the inspection of the person or inspection body assigned by the Directorate or Supervisory Body;  |
|            | (f) shall shift the place of enterprise, change the nature of enterprise, amalgamate enterprises and split up enterprises only with the approval of the Directorate;  |
|            | (g) shall abide by the orders and directives issued from time to time by the Ministry and the Directorate;  |
|            | (h) shall also abide by the existing laws.  |
|            | The entrepreneur has the right to carry out the followings: -   |
| Section 15 | (b)carrying out change of the name of enterprise, transfer of ownership, temporary suspension or permanent closing down of the enterprise in the manner prescribed and with the approval of the Directorate.  |
| Section 26 | No one shall conduct a private industrial enterprise contained in section 4 without obtaining registration under this Law.  |

| Continu 27  | An entrepreneur: -   |  |  |
|---|--|--|--|
|   | (a) in distributing and selling the goods he has produced shall not sell without a trade mark:   |  |  |
| Section 27  | (b) shall not violate any provision of section 13:   |  |  |
|   | (c) shall not fail to comply with any order or decision passed by the Minister and the Director General:   |  |  |
|   | Whoever violates the provision of section 26 shall, on conviction: -   |  |  |
| Section 28  | (c) in the case of conducting a large scale private industrial enterprise be punished with fine which may extend from a minimum of kyats 20,000 to a maximum of kyats 50,000.  |  |  |
| Section 29  | If a person who is convicted of an offence under Section 28 continues in the commission of such offence, he shall be punished with fine at the following rate for each day of the extent of the period of continuance thereof:   |  |  |
|   | (c) in the case of a large scale private industrial enterprise, at the rate of kyats 200.  |  |  |
| Prever  | ntion of Hazard from Chemical and Related Substances Law, 2013   |  |  |
| (g), (h), (i), (j), (k), (l), (m<br>27 sub-sections (a), (b), | The project proponent commits to comply with the section 13, section 15 sub-sections (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m), (n), section 17,18,20,22, section 23 sub-sections (a), (b), section 24,25,26, section 27 sub-sections (a), (b), (c), (d), (e), section 28 sub-sections (a), (b), (c), section 29 sub-sections (a), (b), section 33,34,35,36, 45. |  |  |
| Section 13  | A person who wants to operate the chemical and related substances business shall apply to obtain a licence together with the management working plan relation to the environmental conservation to the Central Supervisory Board in accordance with the stipulations   |  |  |
|   | A person who has obtained a licence, before starting the respective chemical and related substances business:  |  |  |
|   | a) shall be inspected for the safety and the power of resistance of the machinery and equipment by the respective Supervisory Board and Board of Inspection;   |  |  |
|   | b) shall be attended the person who serve in the work to the respective foreign trainings or the trainings and the expert trainings on prevention of hazard from the chemical and related substances opened by the government department and the government organizations.   |  |  |
|   | c) Section 16. A person who has obtained a licence:  |  |  |
|   | d) shall abide the licence regulations;  |  |  |
| Section 15  | e) shall perform to abide strictly the instructions for being safety in using the chemical and related substances by himself and also the persons who serve the work;  |  |  |
|   | f) shall keep the required safety equipment enough in the chemical and related substances businesses, furthermore shall grant the personal protection equipment and dresses free of charge to the working persons;   |  |  |
|   | g) shall make the course of training and study and instruction if necessary to the working persons for using the occupational safety equipment, the personal protection equipment and the dresses systematically in the chemical and related substances business;  |  |  |
|   | h) shall be inspected by the respective Supervisory Board and Boards of Inspection in respect of whether or not the hazard may impact on the Human Being and Animals' health and the environment;  |  |  |

|            | <ul> <li>i) shall make medical check up the working persons who will work in the chemical and<br/>related substances business and shall permit to serve in that work after obtaining<br/>the recommendation that his health is suitable for that work. This medical check up<br/>records shall be kept systematically;</li> </ul>  |
|------------|--|
|            | <ul> <li>j) shall send the copy of informative letter of the permission to the respective<br/>Department of Township Administration, if the hazardous chemical or related<br/>substances are permitted to store;</li> </ul>  |
|            | <ul> <li>k) shall acquire in advance the guidance and agreement of the respective Department<br/>of Fire Brigade, if the business that is worried to fire hazard is operated by using the<br/>fire hazard substances or the explosive substances;</li> </ul>   |
|            | I) shall transport only the permitted amount of the chemical and related substances in accordance with the prescriptive stipulations, if they are transported in local;  |
|            | m) shall take the permission from the Central Supervisory Board if the chemical and related substance is altered and transferred from one place to any other place which contained in the licence;   |
|            | n) shall abide and perform in accordance with the related environmental laws not to impact and damage to the environment in operating the chemical and related substances business.  |
| Section 17 | A person who has obtained a licence, shall put the insurance in accordance with the prescriptive stipulations to be able to pay the compensation, if the impact and damage is occurred on the Human Being and Animals or the environment in respect of the chemical and related substances businesses.   |
| Section 18 | A person who has obtained a licence, shall apply to extend the duration of licence, (30) days in advance before the date of expiry to the Central Supervisory Board in accordance with the stipulations.   |
| Section 20 | A person who has obtained a licence shall apply the related chemical and related substances that will be used in his chemical and related substances business in accordance with the stipulations to the Central Supervisory Board.  |
| Section 22 | person who has obtained the registration certificate shall abide the regulations consisted in the registration certificate furthermore shall also abide the order and instructions issued occasionally by the Central Supervisory Board.   |
|            | A person who has obtained the registration certificate:  |
| Section 23 | a) shall apply to register again, to the Central Supervisory Board if the chemical and related substances, which are not contained in the registered list, are used;   |
|            | b) shall inform and submit the unused chemical and related substances list to the Central Supervisory Board, although which are contained in the registered list.  |
| Section 24 | A person who has obtained the registration certificate shall apply to extend the duration of the registration certificate (30) days in advance before the date of expiry to the Central Supervisory Board in accordance with the stipulations.   |
| Section 25 | The Central Supervisory Board may permit or refuse the application according to section 24 after scrutinizing in accordance with the stipulations.   |
| Section 26 | The Central Supervisory Board shall prohibit the performance of the chemical and related substances business, if the chemical and related substances which have granted by the registration are known to be hazardous to Human Being, Animal and environment according to the information that is obtained again from local and abroad. The registration certificate may be withdrawn, if necessary. |

|                                  | A person who has obtained the licence to be complied the following matters to control and decrease the hazard of the chemical and related substances:  |  |
|----------------------------------|--|--|
|                                  | a) classifying the hazard level to protect in advance the hazard according to the properties of the chemical and related substances;   |  |
|                                  | b) expressing the Material Safety Data Sheet and Pictogram;  |  |
| Section 27                       | c) providing the safety equipment, the personal protection equipment to protect and decrease the accident and attending to the training to be used systematically;   |  |
|                                  | d) performing in accordance with the stipulations in respect of transporting, possessing, storing, using, discharging the chemical and related substances;   |  |
|                                  | e) not being imported or exported the chemical and related substances banned by the Central Supervisory Board and the machinery and equipment which are used them.   |  |
|                                  | The licence shall be deemed to be annulled, when one of the following matter is appeared:  |  |
| Section 28                       | (a) re-entrusting the licence;   |  |
|                                  | (b) no applying to renew the licence until the licence duration is due;  |  |
|                                  | (c) annulling the licence according to this Law.   |  |
|                                  | A person who has obtained the licence:   |  |
| Section 29                       | (a) has an opportunity to reapply the licence in the case of licence annul due to any matter contained in sub-section (a) and (b) of the section 28 in accordance with the stipulations;   |  |
|                                  | (b) has no opportunity to reapply the licence due to the matter of licence annulled according to sub-section (c) of the section 28.  |  |
| Section 33                       | No one shall produce, treat and formulate, use, possess, store, distribute, sell, transport, import or export the chemical or related substances prohibited by the Central Leading Board.  |  |
| Section 34                       | No one shall operate the chemical and related substances business without licence.   |  |
| Section 35                       | No one shall use the chemical or the related substances which are unregistered or annulled from the registered list or not met to the quality and norm in the chemical and related substance business.                             |  |
| Section 36                       | No one shall restrict or disturb the inspecting of the Central Supervisory Board, the Supervisory Board and the Boards of Inspection in respect of the chemical and related substances business.                                   |  |
| Section 45                       | A person who has obtained licence acquire the recommendation of the Central Supervisory Board and shall apply to the respective Department and Organization if he wants to import or export the chemical and related substances.   |  |
| The Underground Water Act (1930) |  |  |
| The project proponent c          | The project proponent commits to comply with the section 3 and 5.  |  |
|                                  | No person shall sink a tube for the purpose of obtaining underground water except under and in accordance with the terms of a licence granted by the water officer.  |  |
| Section 3                        | Every person owning a tube which was in existence before the extension of this Act to the local area concerned shall apply to the water officer for a licence for the said tube, and such licence shall be granted free of charge. |  |

| Section 5                  | Every person obtaining or attempting to obtain underground water shall supply the water officer with such information as the Governor may by rule prescribe.   |  |
|----------------------------|--|--|
|                            | Myanmar Fire Brigade Law (2015)  |  |
| The project proponent c    | The project proponent commits to comply with the section 16,17,24,25,30,32.  |  |
|                            | The person-in-charge of the Township Fire Services Department shall:   |  |
| Section 16                 | a) issue, from time to time, the directives on fire safety to be abided by the residents in the city, ward or village – tract;   |  |
|                            | b) inspect or cause to inspect in accord with the stipulations whether the residents in the city, ward or village – tract abide by the directives issued under sub-section (a) and arrange to enable warning or taking action, as may be necessary, against those who do not abide by. |  |
| Section 17                 | The relevant Government department or organization shall, for the purpose of fire safety, obtain the recommendation of the inspection on fire safety of the Department of Fire Services before granting permission for the following matters:  |  |
|                            | a) constructing three-storied and above buildings, condominium, market and complex buildings;  |  |
| Section 24                 | No person shall fail to abide by the directives of fire safety issued under section 16 by the head of the relevant Township Department of Fire Services.   |  |
| Section 25                 | The owner or manager of the factory, workshop, bus terminal, airport, port, hotel, motel, lodgings, condominium, market, department, organization or business exposed to fire hazard shall, in accord with the directive of the Department of Fire Services:                           |  |
|                            | <ul><li>a) not fail to form the Reserve Fire Brigade;</li><li>b) not fail to provide fire safety equipment.</li></ul>  |  |
| Section 30                 | No person shall remove, clear or transfer the evidence from the specified area of the place razed by fire before the place of starting fire on and cause of fire are inspected confirmed by whom it concerns.  |  |
| Section 32                 | No person shall form or dissolve the Reserve Fire Brigade without the direction or permission of the Department of Fire Services.  |  |
| Yang                       | on City Development Committee Law (2018) (Amended in 2021)   |  |
| The project proponent co   | ommits to comply with the section 317,318,322.   |  |
| 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 Electricity Law (2014) |  |  |
| The project proponent c    | ommits to comply with the section 44, 45, 46, 47, and 48.  |  |
| Section 44                 | No person shall operate the electrical business without permit.  |  |
|                            |  |  |

| Section 45               | No permit holder shall operate any other electrical business except the business contained in the permit.  |
|--------------------------|--|
| Section 46               | No person shall operate the electrical installation and repair without obtaining the electrical professional certificate.  |
| Section 47               | No person shall operate the generation, transmission, connection of electric power without obtaining the electrical safety certificate.  |
| Section 48               | No person shall operate the importing, manufacturing in the country, exporting, distributing and selling of the electrical equipment which are not consistent with the prescribed norm and standard.   |
|                          | The Social Security Rules (2014)   |
| The project proponent co | ommits to comply with the rule 42, 43, 54,57,59,61,64,65,66,174,175,176.   |
| Rule 42                  | (c) The employer shall, when he registers his establishment or appoints a new worker, submit to the relevant social security office together with medical certificate of good health, after causing his worker to receive necessary medical examination within ten days after effecting registration or appointing new worker as such, and after fulfilling the full data about his worker completely and truly in stipulated worker registration (Form-2). In fulfilling in the worker registration (Form-2), it shall cause the worker to sign that the data mentioned are true, if he has involved in and registered with the social security in the past, it shall cause to mention the card number of insurance scrutiny obtained at that time. |
| Rule 43                  | The employer who has registered according to law shall, when the transfer, resignation, retirement and death of workers of his establishment occurs, inform to the relevant social security office within ten days.  |
| Rule 54                  | (a)The employer shall, In order to give medical care to the insured persons, to give social security benefits in accord with the Law to the insured person and the survived dependents after his death, to defray the costs of other matters in accord with the Law and to defray the costs of administration, pay the contributions of the employers and workers monthly to the relevant township social security offices or to the bank accounts opened by the township social security offices;  (b) The voluntary insured person shall pay the contributions which shall be paid to  |
|                          | relevant social security fund monthly as contained in sub-rule(a).   |
| Rule 57                  | The employer shall, in order to give medical care to the insured persons, to give employment injury benefit in accord with the Law to the insured person and the survived dependents after his death, to defray the costs of other matters in accord with the Law and to defray the costs of administration, make monthly contribution to the Employment Injury Fund at the relevant township social security offices, or to the bank accounts opened by the township social security offices.   |
| Rule 59                  | (a) The employer shall pay the rates of contribution stipulated to pay under sub-rule (a) of rule 58 commencing from the date of the coming into force of the Law.   |
|                          | The employer:  |
| Rule 61                  | (a) shall not take into calculation of the cash benefits such as sickness benefit, maternity benefit, temporary disability benefit, permanent disability benefit, unemployment benefit as the wages and income so as to determine the contribution; (b)shall not take into calculation of the money paid by the employer to the insured person under any existing law or employment agreement for the period contained in sub-rule(a) as the wages and income so as to determine the contribution;   |

|          | (c)shall not take into calculation of the service reward monies, annual reward monies, aids paid for religious and social festivals and lay-off  |
|----------|--|
|          | The employer:  |
| Rule 64  | <ul><li>(a) shall pay the contribution for the insured person if he works at least for a day in the calendar month for wages;</li><li>(b)shall pay the contribution which shall be paid by the insured person according to the rates stipulated in rule 55 and based upon his wages or income per month after deducting the contribution which shall be paid, from his wages and income, together</li></ul>  |
|          | with the contributions which shall be paid by him under rules 55 and 58, to the accounts of the Township Social Security Office or the bank account opened by the Township Security Office monthly not later than 15 days after the end of the relevant month; (c)shall not deduct more than the contribution, which shall be paid by the insured person, stipulated to pay in rule 55 to the Social Security Fund; (d)shall also submit necessary accounts and lists in contributing to the Social Security |
|          | Office's accounts.  (a)The employer:   |
| Rule 65  | (i)shall, if he fails to pay the contribution contained in rules 55 and 58, within the stipulated period contained in sub-rule(b) of rule 64, pay 10 per cent of the contribution for a month for every day of default as addition to the contribution. Moreover, if he continues to default to pay contribution, the said defaulting fee shall be paid for every defaulting day as addition n;  |
|          | (ii)shall, if he pays the reduced contribution by expressing the wages of the worker as reduced, or if he pays contribution by concealing the number of workers, or if he fails to pay the contribution deducted from the wages of the worker, pay at the rate of 10 per cent per month over the reduced contribution as the defaulting fee in addition to the reduced or deducted contribution as provided in clause (i), to the accounts of the relevant Township Social Security Office.                  |
|          | The employer:  |
| Rule 66  | (a) shall, in paying contributions under rules 55 and 58, send to the relevant Township Social Security Office by entering into and fulfilling completely for each worker in the stipulated contribution list (Form-13) and after signing that it is true and he takes responsibility for it;  |
|          | (b) shall affix the contribution list contained in sub-rule(a) at the visible place of his establishment.  |
| Rule 174 | (a)The insured person who obtains employment injury shall inform to the employer or responsible person of the establishment by himself or through another person; (b)The employer:   |
|          | (i) shall maintain a record book of employment injury in (Form-36) stipulated by the Social Security Board;  |
|          | (ii) shall enter all particulars in the employment injury record book immediately if an employment injury happens to his workers. The responsible person shall endorse the truth of the particulars so entered.  |
|          | (iii) shall keep the record book of employment injury for five years since its first entry.  |
| Rule 175 | (a)The employer shall inform to the relevant Township Social Security Office immediately if his insured worker occurs serious employment injury or dies for such injury. Moreover, it shall be informed again to the relevant Township Social Security Office within 24 hours in the stipulated (Form-37) in triplicate.   |

| Rule 176  | <ul> <li>(a) The employer shall carry out holding workshops and awareness works for the safety of occupational hazards of the workers at his establishments, fencing the dangerous parts of the machinery safely, causing to use protection materials and uniforms which shall be used for the workers according to the category of the production works, arranging for sufficient vehicles so as not to take place more than the stipulated number at the ferries and causing to use only the good conditioned vehicles etc. and also comply with the provisions relating to the safety of occupational hazard issued by the State.</li> <li>(b) The employer shall, if the employment injuries and occupational diseases occur due to his failure to make arrangements and protections for the safety of occupational hazards contained in above clause (a), incur the cash and other benefits as follows in lump sum, after making calculation, for which the insured persons have the right to enjoy as follows:</li> <li>(i) 50 per cent of the benefits enjoyable by the insured person if it occurs before the inspections and directions are made in accord with Law;</li> <li>(ii) 100 per cent of the benefits enjoyable by the insured person if it occurs due to failure to comply with the directives though they were issued on</li> </ul> |
|---|--|
|   | the matters to be complied with in accord with law according to the finding of the inspection.   |
|   | The Social Security Law (2012) (Amendment 2014)  |
| (a), section 50, section 5 sections (a), section 65 (a), section 69 sub-section | ommits to comply with the section 48 sub-sections (a) and (b), section 49 sub-sections 51 sub-sections (a) and (b), section 53 sub-sections (a) and (b), section 54 sub-sections (a) and (b), section 66 sub-sections (a) and (b), section 67 sub-section on (b), section 70 sub-sections (a), (b) and (c), section 74, section 75 sub-sections (a), ub-sections (a), (b), (c) and (d).  |
| Section 48  | <ul> <li>(a) The employer shall affect insurance by registering at the relevant township social security office in order to get employment injury benefit by the workers applied to provisions of compulsory registration for employment injury benefit insurance system contained in section 45 and by paying contribution to employment injury benefit fund in accord with the stipulations.</li> <li>(b) The employers may affect insurance by registering voluntarily for the workers who</li> </ul>   |
|   | are not applied to provisions of compulsory registration for employment injury benefit insurance system and by paying stipulated contribution to employment injury benefit insurance fund.   |
| Section 49  | (a) The employers and insured of establishments where the employer had registered<br>compulsorily under sub-section (a) of section 48 or where the employer had<br>registered voluntarily under sub-section (b) of section 48 who have paid<br>contribution to employment injury benefit fund shall not apply to the provisions<br>contained in the Workmen's Compensation Act in respect of the employment injury<br>benefit.   |
| Section 50  | In respect of employer's contribution to be paid to employment injury benefit fund for the worker to enjoy the employment injury benefit under section 47, the Ministry of Labour, Immigration and Population shall determine rates of contribution depending on the worker's wage and degree of possibility of employment hazard, by notification, in coordination with the Social Security Board with the approval of the Union Government.  |
| Section 51  | The employer:  |

|            | <ul> <li>a) shall pay contribution monthly to Employment Injury Benefit Fund at the rates<br/>stipulated under section 50. Moreover, he shall also incur the expenses for paying<br/>as such;</li> </ul>   |
|------------|--|
|            | b) shall pay defaulting fees stipulated under section 88, in addition to the contribution if fails to contribute after effecting insurance for employment injury benefit.  |
| Section 53 | (a) The employers and workers shall co-ordinate with Social Security Board or<br>insurance agency in respect of keeping plans for safety and health in order to<br>prevent employment injury, contracting disease and decease owing to occupation<br>and in addition to safety and educational work of the workers and accident at the<br>establishment.   |
|            | (b) The employer shall incur the costs of medical treatment for employment injury occurring from criminal action or omission of the employer, or occurring from employer's failure to keep occupational safety plans and protections, and other benefits entitled to enjoy under this Law in accord with the stipulations without fail.  |
| Section 54 | (a) The employer shall report immediately to the relevant township social security office if a serious occupational accident has been occurred to his insured worker. There shall not be any delay without sufficient cause to report as such.   |
|            | The employer:  |
|            | a) has the right of reimbursement out of benefits granted under this Law, for expenses incurred according to social obligation for an insured in cases of health care, medical treatment and other matters entitled to benefit;  |
| Section 65 | b) if the total amount of wages and cash benefit paid to the insured during the period of enjoying any of sickness or maternity, or employment injury benefits under this Law exceeds the normal wages of that insured, may deduct the amount in excess out of benefits granted under this Law. Such payment of excess amount shall be informed to the relevant township social security office. |
|            | (a) The employer, subject to health care and medical treatment in accord with sections 67 and 68:  |
|            | i. shall not dismiss or terminate the insured from work or demote to lower level during the period which an insured is enjoying any of the sickness or maternity or temporary disability benefits owing to employment injury under this Law;   |
| Section 66 | ii. shall not reduce or deduct wages and fees of his worker due to liability for contribution payable under this Law.  |
|            | (b) The insured, as regards his injury due to employer's violation of prohibitions under subsection (a), may submit the matter to the relevant township social security office for settlement in accord with the stipulations.   |
| Section 67 | (a) The employer may, in order to provide medical treatment to his insured workers, after obtaining permission and terms and conditions of the Social Security Board, establish private hospital and clinic in accord with the existing law and provide health care and medical treatment in accord with the stipulations with doctors and nurses appointed by him.                              |
| Section 69 | (b) The employer who defaults to pay contribution shall pay contribution liable under section 17 and 50 and also defaulting fees stipulated under section 88, and incur the benefits and cost payable to the insured and all expenses.   |
| Section 70 | (a) When the insured voluntarily resigns from work or transfers to any other establishment not applied by this Law before the completion of age stipulated for superannuation benefit under section 34:  |

|            | (iv) the employer has the right to draw 25 per cent of contribution paid by him for the insured to the fund for invalidity benefit, superannuation benefit, and survivors' benefit for 36 months and above together with interest from that fund in accord with the stipulations.  |
|------------|--|
|            | (b) In case of permanent total disability or decease of an insured owing to employment injury:   |
|            | (ii) the employer has the right to draw 25 per cent of contribution paid for 36 months and above to the fund contained in clause (i) for an insured together with interest in accord with the stipulations.  |
|            | (c) In case of voluntary resignation or transfer to any other establishment which is not applied by this Law of taking superannuation or becoming invalidity or permanent total disability owing to employment injury, or decease resulting from any cause of an insured:  |
|            | (ii) the employer has the right to draw contribution paid for that insured to the fund for unemployment benefit for 36 months and above together with interest in accord with the stipulations.  |
| Section 74 | The employer of each establishment applied by this Law shall keep record of contributions paid to the Social Security Fund and Employment Injury Benefit Fund for himself and his insured workers, keep the record of benefits received for each insured and open account for each insured. Those records and accounts shall be submitted to the relevant township social security office in accord with the stipulations. |
|            | The employers of establishments applied by this Law:   |
|            | a) shall prepare and keep the following records and lists correctly and submit to the relevant township social security office in accord with the stipulations:  |
|            | i. records and lists of workers' daily attendance;   |
|            | ii. records on appointment of new workers, employing worker by changing of work, termination, dismissal and resignation;   |
|            | iii. records on promotion and paying remuneration;   |
| Section 75 | iv. records and lists of employer, manager, and administrator and records on change of them;   |
|            | b) shall inform the relevant township social security office if the following matters arise:   |
|            | i. changes in number of workers and address of establishment;  |
|            | ii. change of employer, change of business, suspension of work, and closedown of work;   |
|            | iii. employment injury, decease and contracting diseases.  |
|            | c) shall submit records of work and lists if requested by inspectorate or official assigned by the Social Security Head Office and various levels of Regional Social Security Office under this Law.   |
|            | Any employer of establishment concerning with the social security and employment injury benefit:   |
| Section 77 | a) shall not prepare incorrectly, modify or delete records contained in section 74 and sub-section (a) of section 75;  |
|            | b) shall not report incorrectly to the relevant township social security office relating to the number of workers and contribution;  |

|            | c) shall not refuse when the inspectorate or the official requests to produce those records, reports and other necessary documents under this Law or assigned by the Social Security Board;   |
|------------|---|
|            | d) shall not fail when he is summoned by the inspectorate or the official under this Law or assigned by the Social Security Board or various levels of Regional Social Security Office.   |
| The L      | Labor Dispute Settlement Law (2012, amended in 2014 and 2019)   |
|            | ommits to comply with the section 23, section 28 sub-section (a), (b), section 34,35,36, (a), (b) and (c), section 38 sub-section (a), section 39,40,41,42,43,44,45 (a), 51.  |
| Section 23 | An employer or worker may file in person or through a legally authorized representative, an application to the relevant department or competent court with regard to a dispute concerning a right.  |
| Section 28 | The parties in dispute may do the following if they do not agree with the decision of the arbitration body, except a decision with regard to an essential services business – a) filing an application to the arbitration council by a party within 7 days from the receipt     |
| Section 20 | of the decision of the arbitration body;  |
|            | b) carrying out a lock-out or strike in accordance with the relevant law.   |
| Section 34 | If both parties agree with or no party files an application to the arbitration council within the specified period concerning a decision of the arbitration body, the decision shall be valid from the date of it having been passed.   |
| Section 35 | The decision of the Tribunal shall be deemed as the decision of the Arbitration Council. Such decision shall come into force on the day of its decision.  |
| Section 36 | The relevant parties may agree to amend the decision of the Arbitration Body or Arbitration Council after ninety days from the day of coming into force. In such circumstances, the new agreement shall supersede the relevant part of the Arbitration decision.                |
|            | The following persons shall be complied with the decision which had been come into force:   |
| Section 37 | a) all of the persons relevant to the dispute;  |
|            | b) legal successors of the employer involved in the dispute;  |
|            | c) all of the workers working in the trade at the time of the dispute or thereafter.  |
|            | No employer or worker shall fail to be present in person or through a representative without proper reason on the date and time set by the conciliation body for the negotiation of a dispute.  |
| Section 38 | (a) No employer or worker shall fail to form a coordination committee according to the provisions of section 3. Furthermore, there shall be no failure to do so within 60 days after being sentenced by the relevant court for the failure.                                     |
| Section 39 | No employer shall, with the intention of harming the interest of the workers, suddenly amend the employment terms specified before the dispute or carry out a lock-out without proper reason during the process of the dispute being heard by the arbitration body or tribunal. |
| Section 40 | No person shall lock-out or strike without accepting negotiation, conciliation and arbitration by Arbitration Body in accord with this law in respect of a dispute.   |

| Section 41               | No person shall lock-out or strike to amend such decision or agreement to amend within the effective period of any decision or collective agreement of the Arbitration Body or the Arbitration Council.   |
|--------------------------|---|
| Section 42               | No person shall prohibit the right to work independently of the workers who are not desirous to participate in the strike nor impede the right of a worker to strike.   |
| Section 43               | No employer or worker shall fail to comply with or enforce an item in the agreement concluded in front of the conciliation body with regard to a dispute.   |
| Section 44               | No person, after having informed in advance by the Arbitration Body or Tribunal for settling the dispute, shall fail to arrange to enable to examine the trade under dispute or to produce the documents which is considered by the Arbitration Body or Tribunal that it concerns with the dispute or to appear as a witness when he is so summoned.  |
| Section 45               | No person, if he is sent notice for examination before the Arbitration Body or Tribunal, shall fail without sufficient cause to appear in person or to send legal representative within the stipulated period.  |
|                          | (a) No one shall violate any provision of the rules, notifications, orders and directives issued according to this law.   |
| Section 51               | An employer having done or omitted, without proper reason, an act with the intention of harming the interest of a worker during the settlement of a dispute shall fully pay the amount specified by the arbitration body, arbitration council or tribunal. An officer of the Department assigned by the Ministry shall collect the amount like arrears of land tax.   |
| The Wo                   | kmen's Compensation Act (1923, amended in 1955, 1957 and 2005)  |
| The project proponent of | commits to comply with the section 3, 4,8.  |
|                          | (1) If personal injury is caused to a workman by accident arising out of and in the course of his employment, his employer shall be liable to pay compensation with the provisions of this Chapter:   |
|                          | Provided that the employer shall not be so liable in respect of any injury, not resulting in death, caused by an accident which is directly attributable to –   |
|                          | I. the workman having been at the time thereof under the influence of drink or drugs, or  |
|                          | II. the wilful disobedience of the workman to an order expressly given, or to a rule expressly framed, for the purpose of securing the safety of workmen, or  |
| Section 3                | III. the wilful removal or disregard by the workman of any safety guard or other device which he knew to have been provided for the purpose of securing the safety of workmen.  |
|                          | (2) * * * * If a workman, whilst in the service of an employer in whose service he has been employed for a continuous period of not less than six months in any employment specified in [List A of] Schedule III, contracts any disease specified therein as an occupational disease peculiar to that employment, the contracting of the disease shall be deemed to be an injury by accident within the meaning of this section and, unless the employer proves the contrary, the accident shall be deemed to have arisen out of and in the course of the employment. |
|                          | Explanation - For the purposes of this sub-section a period of service shall be deemed to be continuous which has not included a period of service under any other employer.  |

| (3) If a workman contracts any disease specified in List B of Schedule III, and it is |
|---|
| certified by a qualified medical practitioner that the disease is directly due to the |
| nature of any employment in which the workman was employed at any time within         |
| the twelve months previous to the date of disablement, the contracting of the         |
| disease shall be deemed to be an injury by accident within the meaning of this        |
| section, and unless the employer proves the contrary the accident shall be deemed     |
| to have arisen out of and in the course of the employment aforesaid:                  |
|   |

Provided that the compensation shall be recoverable from the employ yer who last employed the workman during the said twelve months in the employment to the nature of which the disease was due.

- (1) Subject to the provisions of this Act, the amount of compensation shall be as follows, namely:
- A. Where death results from the injury -
- I. in the case of an adult, a sum equal to 36 times the workman's monthly wages calculated in accordance with this Act:
- Provided that the minimum and the maximum payment in such a case shall be the amount of compensation prescribed by notification made by the Ministry of Labour with the approval of the Government respectively, and
- II. in the case of a minor- the amount of compensation prescribed by notification made by the Ministry of Labour, Immigration and Population with the approval of the Government;
- B. Where permanent total disablement results from the injury -
- I. in the case of an adult, a sum equal to 36 times 140 per cent of the workman's monthly wages calculated in accordance with this Act:
- Provided that the minimum and the maximum payment in such a case shall be the amount of compensation prescribed by notification made by the Ministry of Labour, Immigration and Population with the approval of the Government respectively, and
- II. in the case of a minor- the amount of compensation prescribed by notification made by the Ministry of Labour, Immigration and Population with the approval of the Government:
- C. Where permanent partial disablement results from the injury -
- I. in the case of an injury specified in Schedule I, such percentage of the compensation which would have been payable in the case of permanent total disablement as is specified therein as being the percentage of the loss of earning capacity caused by that injury, and
- II. in the case of an injury not specified in Schedule I, such percentage of the compensation payable in the case of permanent total disablement as is proportionate to the loss of earning capacity permanently caused by the injury;
- Explanation Where more injuries than one are caused by the same accident, the amount of compensation payable under this head shall be aggregated but not so in any case as to exceed the amount which would have been payable if permanent total disablement had resulted from the injuries;
- D. Where temporary disablement, whether total or partial, results from the injury, a half monthly payment payable on the sixteenth day \* \* \* \* from the date of the disablement, and thereafter half-monthly during the disablement or during a period of five years, whichever period is shorter —
- I. in the case of an adult-of a sum equivalent to one-third of the workman's monthly wages calculated in accordance with this Act, and

#### Section 4

# Myanwei Environmental Solutions Company Limited

II. in the case of a minor-of one-half of his monthly wages:

Provided that —

a) there shall be deducted from any lump sum or half-month.

- a) there shall be deducted from any lump sum or half-monthly payments to which the workman is entitled the amount of any payment or allowance which the workman has received from the employer by way of compensation during the period of disablement prior to the receipt of such lump sum or of the first half-monthly payment, as the case may be; and
- b) no half-monthly payment shall in any case exceed the amount, if any, by which half the amount of the monthly wages of the workman before the accident exceeds half the amount of such wages which he is earning after the accident; and
- c) no compensation shall be payable in respect of the first four days of the disablement if the period of the workman's disablement is ten days or less.
- E. In cases where the injury results in incapacity of such a nature that the injured workman must have the constant help of another person, additional compensation equivalent to twenty-five percent of the compensation payable in respect of the injury shall be paid to the injured workman.
- (2) On the ceasing of the disablement before the date on which any half-monthly payment falls due, there shall be payable in respect of that half-month a sum proportionate to the duration of the disablement in that half-month.
- (3) Where the injury sustained is of such a nature as would entitle the injured workman to the supply and renewal by the employer of such artificial limbs and surgical appliances as are recognised to be necessary, the injured workman shall be paid a lump sum compensation representing the probable cost of the supply and renewal of such appliances. This sum, which shall not exceed ten percent of the compensation payable in respect of the injury, shall be decided at the time when the amount of compensation payable in respect of the injury is settled or revised.
- (1) No payment of compensation in respect of a workman whose injury has resulted in death, and no payment of a lump sum as compensation to a woman or a person under a legal disability, shall be made otherwise than by deposit with the Commissioner, and no such payment made directly by an employer shall be deemed to be a payment of compensation:
- Provided that, in the case of a deceased workman, an employer may make to any dependent advances on account of compensation not exceeding an aggregate of the amount of compensation prescribed by notification made by the Ministry of Labour, Immigration and Population with the approval of the Government, and so much of such aggregate as does not exceed the compensation payable to that dependent shall be deducted by the Commissioner from such compensation and repaid to the employer.
- (2) Any other sum amounting to not less than the amount of money prescribed by notification made by the Ministry of Labour, Immigration and Population with the approval of the Government which is payable as compensation may be deposited with the Commissioner on behalf of the person entitled thereto.
- (3) The receipt of the Commissioner shall be a sufficient discharge in respect of any compensation deposited with him.
- (4) On the deposit of any money under sub-section (1) as compensation in respect of a deceased workman the Commissioner shall deduct therefrom the actual cost of the workman's funeral expenses, to an amount not exceeding the amount of money prescribed by notification made by the Ministry of Labour, Immigration and Population with the approval of the Government, and pay the same to person by

## Section 8

whom such expenses were incurred, and shall, if he thinks necessary, cause notice to be published or to be served on each dependent in such manner as he thinks fit, calling upon the dependents to appear before him on such date as he may fix for determining the distribution of the compensation. If the Commissioner is satisfied after any inquiry which he may deem necessary, that no dependent exists, he shall repay the balance of the money to the employer by whom it was paid. The Commissioner shall, on application by the employer, furnish a statement showing in detail all disbursements made.

- (5) Compensation deposited in respect of a deceased workman shall, subject to any deduction made under sub-section (4), be apportioned among the dependents of the deceased workman or any of them in such proportion as the Commissioner thinks fit, or may, in the discretion of the Commissioner, be allotted to any one dependent.
- (6) Where any compensation deposited with the Commissioner is payable to any person, the Commissioner shall, if the person to whom compensation is payable is not a woman or a person under a legal disability, and may in other cases, pay the money to the person entitled thereto.
- (7) Where any lump sum deposited with the Commissioner is payable to a woman or a person under a legal disability, such sum may be invested, applied or otherwise dealt with for the benefit of the woman, or of such person during his disability, in such manner as the Commissioner may direct; and where a half-monthly payment is payable to any person under a legal disability, the Commissioner may, of his own motion or on an application made to him in this behalf, order that the payment be made during the disability to any dependent of the workman or to any other person whom the Commissioner thinks best fitted to provide for the welfare of the workman.
- (8) Where, on application made to him in this behalf or otherwise, the Commissioner is satisfied that, on account of neglect of children on the part of a parent or on account of the variation of the circumstances of any dependent or for any other sufficient cause, an order of the Commissioner as to the distribution of any sum paid as compensation, or as to the manner in which any sum payable to any such dependent is to be invested, applied or otherwise dealt with, ought to be varied, the Commissioner may make such orders for the variation of the former order as he thinks just in the circumstances of the case:
- Provided that no such order prejudicial to any person shall be made unless such person has been given an opportunity of showing cause why the order should not be made, or shall be made in any case in which it would involve the repayment by a dependent of any sum already paid to him.
- (9) Where the Commissioner varies any order under sub-section (8) by reason of the fact that payment of compensation to any person has been obtained by fraud, impersonation or other improper means, any amount so paid to or on behalf of such person may be recovered in the manner hereinafter provided in section 31.

# The Leave and Holidays Rules (1951, partially revised in 2018)

The project proponent commits to comply with the rule 15,20,21,29, 33, 41, 50, 51,52.

Rule 15

As an employer, one must document the wages for the weekly day off and send a monthly report with Form (4) to the Department.

| Rule 20 | Even if the employer instructs a worker to work only part-time on a gazette holiday, the employer must still pay double of the respective basic wages or basic salary, according to the law.  |
|---------|---|
| Rule 21 | When the employer instructs a piece-work worker to work full working hours on a gazette holiday, the employer has to pay double of the regular respective wages, calculated based on the number of products or counted based on the extent of the worker's performance.   |
| Rule 50 | The employer —  a) must provide the worker casual leave, medical leave and maternity leave with respective wages or salary. Moreover, must allow the worker earned leave with respective average wages or average salary. If the employer normally pays the cost of living then the cost of living must also be included;  b) must provide the worker with earned leave starting from the day of entitlement within 12 months, with respective average wages or with average salary, and also must advance the entitled wage prior to the worker taking leave;  c) must announce the number of entitled earned leave calculations within three months starting from the last day of the 12-month period or entitled earned leave. In this way, workers can take leave by turns (alternatively). Moreover, to fix the eligibility period within which workers can take earned leave;  d) if the worker resigns or is terminated or in case of death, has to pay the respective wages/salary within two business/working days starting from the date of incidence;  e) has to pay the eligible wage/salary for earned leave to his/her official representative (if the worker is deceased);  f) has to pay for the respective earned leave period if there is a temporary or permanent shutdown and to allow eligible earned leave if the nature of work is less than twelve months;  g) is not allowed to suspend, to reduce the salary, to relocate or to terminate a worker due to the worker taking maternity leave or medical leave;  h) has to fill up Form (1), (2), (3), (4), (5) and (6) according to the law. These forms shall be easily accessible from the Inspector. The employer must maintain these documents for up to twelve months' period;  i) has to record the leave taken in Form (7) and submit to the Inspector not later than every seventh day of each month;  j) wants the worker to work on a gazette holiday, the employer must receive consent from the worker. The employer must submit Form (8) to the Inspector for approval. |
| Rule 29 | Workers can take a maximum of three days' consecutive casual leave. If the worker needs to take additional casual leave, and has a concrete reason, the worker must present to the employer or manager or to an authorized person the concrete reason. If so, the employer can allow casual leave of more than three days.  |
| Rule 33 | The employer or manager or authorized person must maintain the casual leave record. And, this also must be reported to the Department in the designated format.   |
| Rule 41 | The employer has to pay wages for entitled earned leave to the terminated worker for the earned leave period according to the employment contract or workplace rules established based upon the nature of work.   |

| Rule 51   | If the employer rents the business to another person or organization, that other person or organization (the one renting the premises) is responsible for the legal entitlements included within these Rules.  |  |
|---|--|--|
| Rule 52   | One must follow the provisions within the Rules when settling disputes on matters related to leave and holidays.   |  |
|   | The Labor Organization Law (2011)  |  |
| The project proponent c   | ommits to comply with the section 29,30,31,37,43,44,49.  |  |
| Section 29  | The employer shall recognize the labour organizations of his trade as the organizations representing the workers.  |  |
| Section 30  | The employer shall allow the worker who is assigned any duty on the recommendation of the relevant executive committee to perform such duty not exceeding two days per month unless they have agreed otherwise. Such period shall be deemed as if he is performing the original duty of his work.  |  |
| Section 31  | The employer shall assist as much as possible if the labour organizations request for help for the interest of his workers. However, the employer shall not exercise any acts designed to promote the establishment or functioning of labour organizations under his domination or control by financial or other means.  |  |
| Section 37  | The employer desirous of locking-out the public utility service or service which is not included in the public utility service shall inform the starting day and period of lock-out of the work in accord with the stipulation, at least 14 days in advance before the lock-out to the relevant township labour organization and relevant conciliation body and lock-out the work only after receiving the permission of the relevant conciliation body.   |  |
| Section 43  | No employer shall, without permission of the relevant conciliation body, lock-out a public utility service or service which is not included in public utility service.   |  |
| Section 44  | <ul> <li>No employer shall:</li> <li>a) lock-out a work due to such dispute during the pendency of a trade dispute settlement;</li> <li>b) carry out an illegal lock-out which is involved with any provision contained in subsections (a) and (c) of section 41;</li> <li>c) dismiss a worker who opposes an illegal lock-out which is involved with any provision contained in sub-sections (a) and (c) of section 41;</li> <li>d) dismiss a worker for his membership in a labour organization for the exercise of organizational activities or participating in a strike in accord with this Law.</li> </ul> |  |
| Section 49  | No person shall coerce, threaten, use undue influence or seduce by illegal means any worker to participate or not to participate in a labour organization.   |  |
| The Minimum Wages Law (2013)  |  |  |
| The project proponent commits to comply with the section 12 sub-sections (a), (b), (c), (d), (e), section 13 sub-sections (a), (b), (c), (d), (e), section 22 sub-sections (a), (b), (c), (d), (e), section 22 sub-sections (a), (b). |  |  |
| Section 12  | The employer:  a) shall not pay wage to the worker less than the minimum wage stipulated under this Law;  b) may pay more than the minimum wage stipulated under this Law;   |  |

|            | c) shall not have the right to deduct any other wage except the wage for which it has the right to deduct as stipulated in the notification issued under this Law;   |
|------------|--|
|            | d) shall pay the minimum wage to the workers working in the commerce, production business and service in cash. Moreover, if the specific benefits, interests or opportunities are to be paid, it may be paid in cash in accord with the stipulations or jointly in some cash and in some produce prescribed in local price according to the desire of the worker;  |
|            | e) may pay jointly in some cash and some produce prescribed in local price according to the local custom or desire of the majority of workers or collective agreement in paying the minimum wage to the workers and working in the agriculture and livestock breeding business. Such payment shall be for any personal use and benefit of the worker and his family and the value shall also be considerable and fair.   |
|            | The employer:  |
|            | a) shall inform the workers the rates of minimum wage relating to the business among the rates of minimum wage stipulated under this Law and advertise it at the workplace to enable to be seen by the relevant workers;   |
|            | b) shall record the lists, schedules, documents and wages of the workers correctly in accord with the stipulation;   |
|            | c) shall report the lists, schedules and documents recorded under sub-section (b) to the relevant department in accord with the stipulations;  |
| Section 13 | d) shall accept the inspection when summoned by the inspection. Moreover, he shall produce the said lists and documents when so required;  |
|            | e) shall allow the entry and inspection of the inspector workplaces of commerce, production and service, agriculture and livestock breeding and give necessary assistances;  |
|            | f) shall give them holiday for medical treatment in accord with the stipulations if the workers cannot work due to sickness;   |
|            | g) shall give holiday without deducting from the minimum wage, in accord with the stipulations if the funeral matter of the family of worker or his parent occurs.   |
| Section 16 | If an employer is convicted by a court for his failure to pay the minimum wages and other benefits stipulated under this Law or for the payment to worker less than such minimum wage and ordered to pay defaulted wages and other benefits to the relevant worker as fine, and if such worker does not obtain fully the wages and other benefits which is entitled under section 14, it shall not affect the right to institute civil proceeding for such wages and benefits. |
|            | Any employer:  |
|            | a) shall not fail to pay the workers the minimum wage stipulated under this Law;   |
| Section 22 | b) shall not pay to the workers less than the minimum wages and other benefits which is entitled to enjoy by the worker under section 14;  |
|            | c) in respect of the accounts, schedules, documents and lists of wage of the workers:  |
|            | i. shall not make false entry, deceitful recording or false and deceitful reporting;   |
|            | ii. shall not fail to report to the relevant department in accord with the stipulations;   |
|            | iii. shall not fail to submit when required by the inspection officer.   |
|            | d) shall not fail to go and accept without sufficient case when summoned by the inspection officer;  |

|                          | e) shall not disturb or interfere with the inspection officer who comes and inspects on duty.   |
|--------------------------|---|
|                          | Any employer:   |
|                          | a) shall not violate term and condition contained in the minimum wage notification;   |
| Section 24               | b) shall not fail to inform the workers in respect of the rates of minimum wage concerning to his workers among the rates of minimum wage stipulated under this Law   |
|                          | and advertise at the place where the workers are enable to see it in the work   |
|                          | department and workplace.   |
|                          | The Minium Wages Rules (2013)   |
| The project proponent of | commits to comply with the rule 43 (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l).  |
|                          | The employer:   |
|                          | a) shall increase the remuneration depending on the skill, to promote the productivity and the employment skill of the employees;   |
|                          | b) shall perform in accord with the factory act 1951, leave and holiday act 1951 under section 13 (b) at the law for the list, schedule and document, remunerations;  |
|                          | c) when the employees are not able to work due to ill health, injury at work site:  |
|                          | i. if they are under premium paid insurance to the health and social care fund, the insurance under health and social security care 2012, or  |
|                          | ii. if they are not entitled to enjoy social security law 2012, they must be arranged to enjoy the leave and holiday act 1951.  |
|                          | d) in the event of family or parents' funeral affairs, his entitled remuneration should not be deducted and shall be arranged to enjoy according to leave and holiday act 1951;   |
|                          | e) before fixing of the minimum wage by the National Committee under this rule, if his remuneration is less than the prescribed amount, he should be paid up to the full amount;  |
| Rule 43                  | f) part time, hourly job employees shall be paid the prescribed minimum wage for the working hours;   |
| Truic 40                 | g) for the salary employees one-day day – off shall be allowed in a week. If he has to work on the off day, overtime wage shall be paid in accord with the existing law;  |
|                          | h) if the employee has to work less than the prescribed working hour and if it is not due to his will or he has to stop the work due to the shortage of work from the employer, he shall be entitled to enjoy the remuneration as if he has to work full time;  |
|                          | i) the prescribed minimum wage shall be paid without discrimination of the male or female;  |
|                          | j) although he has the obligation to pay the minimum wage in cash, separate entitlement, benefit in accord with the stipulation shall be given due to the employee's will, majority of the employees' will, collective consent, in cash or partial in cash or prevailing regional rate or regional tradition;   |
|                          | k) overtime work shall be allowed according to the law after negotiation with the employees;  |
|                          | I) the employee who is not capable to fulfill the standard norm or production norm prescribed in accord with the factory, workshop, department, shall be trained to be skillful in the probation period. If necessary, the relevant factory, workshop, departments under this law shall be paid for not less than 50% of the remuneration within three months. In the probation period 75% of the remuneration shall be paid. |

## The Employment and Skill Development (2013)

The project proponent commits to comply with the section 5 sub-sections (a), (b), (c), (d), (e), (f), (g), (h), section 14, section 15 sub-sections (a) and (b).

- (a) (i) The employer shall conclude an employment agreement within thirty days after appointing a worker to do any work. However, it does not concern with appointment of permanent staff at the Government department, Government organization:
- (ii) If the pre-orientation period and probation period are prescribed before the appointment, such trainee shall not concern with stipulation in sub-section (1).
- (b) The employment agreement shall include the followings:
- (i) category of employment;
- (ii) period of probation;
- (iii) wage, salary;
- (iv) place of employment;
- (v) term of agreement;
- (vi) workinghour;
- (vii) holiday, day-off and leave;
- (viii) over-time;
- (ix) messing arrangement during working hour;
- (x) accommodation;
- (xi) medical treatment;
- (xii) arrangement for ferry and travelling;
- (xiii) terms and conditions to be abided by the workers;
- (xiv) term of period agreeded by the worker to continue to work after attending the training if the worker has to attend the training sent by the employer;
- (xv) resignation from work and termination of work;
- (xvi) termination of agreement;
- (xvii) obligation from work and termination of work;
- (xviii) termination of employment agreement by mutual consent of employer and worker;
- (xix) other matters;
- (xx) prescribing, amending and adding the terms and condition of the agreement;
- (xxi) miscellaneous.
- (c) Workplace terms and conditions included in the employment agreement shall be in conformity with any existing law and benefits of the worker shall not be less than benefits contained in any existing law;
- (d) The Ministry shall issue notification to pay stipulated compensation to worker by the employer if the work is completed earlier than the period concluded in the employment agreement or if all or any part of the work is terminated due to unexpected cause or if a matter to terminate the work arises for any other cause;
- (e) The employment agreement concluded under sub-section (a) shall apply to daily wage earners and piece-workers temporarily at the Government organization;
- (f) The employer and the worker or workers may amend, by mutual agreement, conditions and benefits contained in the employment agreement as may be necessary in accord with the existing law;

## Section 5

|            | (g) The copy of employment agreement concluded between the employer and worker shall be sent to the relevant labour exchange office by the employer within the stipulated time and obtain approval;   |
|------------|---|
|            | (h) The employment agreements concluded before coming into force of this Law shall be valid until the original term terminates.   |
| Section 14 | The employer shall carry out training programmes for increasing employment skill of the workers who are intended to appoint or who are working presently in his work in accord with the policy of the Skill Development Body according to the requirement of the work.  |
|            | The employer:   |
| Section 15 | (a) may carry out to cause to train each or group of workers, according to each or<br>combination of works, in opening on-job trainings, training in workplace<br>systematically, sending to external trainings and training by the system applying<br>information technology in managing and carrying out training programmes for<br>increasing employment skill of the workers. |
|            | (b) may carry out to cause to train persons who have attained 16 years of age, by appointing them as apprentices, the technologies relating to the employment in accord with regulations and by laws stipulated by the Skill Development Body.  |
|            | Vehicle Safety and Motor Vehicle Management Law (2020)  |
|            | ommits to comply with the section 17, section 18 sub-section (a), (b), section 19 sub-24,26,28,29 sub-section (a), (b), 75 sub-sections (a), (b), (c), (d), (e), (f), (g), (h), (i), (j),   |
| Section 17 | An owner of a motor vehicle shall register his or her vehicle with the relevant registrar in accordance with the stipulations.  |
|            | An owner of a motor vehicle shall:  |
|            | (a) repair and maintain his or her motor vehicle to meet the standards specified by the Department in order to drive safely;  |
| Section 18 | (b) not have the right to register his/her motor vehicle if: (i) there is any mechanical<br>defect in the motor vehicle; (ii) it does not conform with the standards in subsection<br>(a); (iii) it does not conform with the stipulations in rules; or (iv) the owner fails to<br>mention the previous registration of the motor vehicle.  |
|            | (a) An owner of a motor vehicle may apply for temporary registration of the motor vehicle to the relevant registrar in accordance with the stipulations.  |
| Section 19 | (b) The relevant registrar shall scrutinize the application under sub-section (a) and may register the motor vehicle by specifying the limited period and permitted area if it conforms with the stipulations.  |
| Section 24 | An owner of a motor vehicle shall apply to the relevant registrar for the registration of a commercial motor vehicle as a rental vehicle.   |
| Section 26 | A registrant of a motor vehicle shall inform the relevant registrar of the change of his or her address to record it whenever he or she changes the address.  |
| Section 28 | A registrant of a motor vehicle shall, within the prescribed period, apply to the relevant local registrar for vehicle registration renewal before the date of expiry of registration, and pay a fine specified by the Ministry with the approval of the Union Government if it is applied after the date of expiry of registration.  |
| Section 29 | If the registrant of a motor vehicle:   |
|            |   |

|                       | (a) wishes to change or alter any parts of a motor vehicle, he or she shall apply to the  |
|-----------------------|---|
|                       | relevant registrar for the prior permission;  |
|                       | (b) makes any changes or alterations in any parts of a motor vehicle except the changes or alterations in subsection (b) of section 31, he or she shall pay a fine specified by the Ministry with the approval of the Union Government in accordance with stipulations. |
|                       | No person shall:  |
|                       | (a) drive a motor vehicle in a public place without taking the driving licence issued to him or her;  |
|                       | (b) serve as a conductor without taking the conductor's licence issued to him or her;   |
|                       | (c) drive a motor vehicle with an expired driving licence;  |
|                       | (d) serve as a conductor with an expired conductor's licence;   |
|                       | (e) drive a motor vehicle while he is suffering from mental or physical disorders;  |
|                       | (f) drive an overloaded motor vehicle that exceeds the permissible load capacity;   |
| 0 // 75               | (g) drive a motor vehicle with an extra light bulb or extra light;  |
| Section 75            | (h) drive a motor vehicle in violation of any provision of rules relating to pedestrian crossings;  |
|                       | (i) serve as a conductor by using conductor's licence of any other persons;   |
|                       | (j) fail to show registration certificate in the prescribed manners when driving a motor vehicle with a valid registration;   |
|                       | (k) use a mobile phone while driving a motor vehicle;   |
|                       | (I) allow the children under 10 years of age to ride in a motor vehicle without using safety seat while driving the prescribed motor vehicle;   |
|                       | (m) drive a motor vehicle or allow the passengers to ride in a motor vehicle without fastening seat belt while driving the prescribed motor vehicle.  |
| Т                     | The Vehicle Safety and Motor Vehicle Management Rules (2022)  |
| The project proponent | t commits to comply with the rule 252, 253, 254, 255, 256, 261, 262, 269 and 271.   |
|                       | မည်သည့်မော်တော်ယာဉ်ကိုမဆို အငှားယာဉ်အဖြစ် မှတ်ပုံတင်ထားခြင်း မရှိသည့်အပြင်  |
| Rule (252)            | ကုန်းလမ်းသယ်ယူပို့ဆောင်ရေးလုပ်ငန်းများ ဥပဒေအရ ထုတ်ပေးသော သက်ဆိုင်ရာ   |
| Nuie (232)            | လုပ်ငန်းလိုင်စင်ရယူထားခြင်း မရှိလျှင် စီးပွါးရေးလုပ်ငန်းသုံးမော်တော်ယာဉ်အဖြစ် အသုံးမပြုရ။   |
|                       | စီးပွားရေးလုပ်ငန်းသုံးမော်တော်ယာဉ်မျာသည် ဦးစီးဌာနက သတ်မှတ်သည့် တင်ဆောင်နိုင်သော   |
| Rule (253)            | ခရီးသည်အရေအတွက် သို့မဟုတ် ကုန်အလေးချိန်ထက်ပို၍ တင်ဆောင်ခြင်းမပြုရ။  |
| Rule (254)            | စီးပွားရေးလုပ်ငန်းသုံးမော်တော်ယာဉ်များသည် အောက်ပါအချက်များကို လိုက် နာရမည်-   |
|                       | (က)ကုန်းလမ်းသယ်ယူပို့ဆောင်ရေးလုပ်ငန်းများ ဥပဒေအရ ထုတ်ပေးသော သက်ဆိုင်ရာ<br>လုပ်ငန်းလိုင်စင်တွင်ပါရှိသည့် သတ်မှတ်ချက်များအတိုင်းသာ လုပ်ကိုင်ရမည်။   |
|                       |   |
| Rule (254)            | (၁)ခရီးသည်တင်ယာဉ်အတွက် ခရီးသည်တက်၊ ဆင်းရန်နေရာနှင့် ရပ်နားရန်   |
| Rule (254)            | (ခ)ခရီးသည်တင်ယာဉ်အတွက် ခရီးသည်တက်၊ ဆင်းရန်နေရာနှင့် ရပ်နားရန်<br>နေရာတို့ကိုလည်းကောင်း၊ ကုန်တင်ယာဉ်အတွက် ကုန်တင်ကုန်ချရန်နေရာ နှင့်   |
| Rule (254)            |   |

|            | သို့မဟုတ် ပြည်နယ် အစိုးရအဖွဲ့များ၊ အစိုးရဌာနနှင့် အစိုးရအဖွဲ့အစည်းများက သတ်မှတ်ထားသည့်<br>အတိုင်း အသုံးပြုရမည်။   |
|------------|---|
| Rule (255) | မည်သည့်အငှားယာဉ်ပိုင်ရှင်၊ ယာဉ်မောင်းနှင်သူ သို့မဟုတ် ယာဉ်အကူမဆို သတ်မှတ်ထားသော<br>ယာဉ်ငှားရမ်းခ သို့မဟုတ် လူစီးခ သို့မဟုတ် ကုန်တင်ခထက် ပိုမို၍ တောင်းယူခြင်းမပြုရ။   |
| Rule (256) | ကုန်တင်ယာဉ် (ဝန်လေး)၊ ခရီးသည်တင်ယာဉ်နှင့် တက္ကစီယာဉ်တို့တွင် ယာဉ်မောင်းနှင်သူ သို့မဟုတ်<br>ယာဉ်မောင်းနှင်သူနှင့် ယာဉ်အကူနှစ်ဦးစလုံး၏ အမည်များနှင့် လိုင်စင်အမှတ်များကို<br>ယာဉ်မောင်းနှင်သူအခန်းတွင် မြင်သာထင် ရှားစွာ ဖော်ပြထားရမည်။   |
| Rule (261) | (က)ကုန်တင်ယာဉ်တွင် ကုန်ပစ္စည်းများကို မော်တော်ယာဉ်အတွင်း၌ တင်ဆောင် ရမည်။<br>မော်တော်ယာဉ်၏ ပြင်ပ ရှေ့၊ နောက်နှင့် ဘေးနှစ်ဘက်တွင် ပစ္စည်း များ<br>တင်ဆောင်ချိတ်ဆွဲခြင်းမပြုရ။<br>(ခ)ကုန်တင်ယာဉ်တွင် သယ်ဆောင်လာသော ကုန်ပစ္စည်းများ အများပြည်သူ ဆိုင်ရာ လမ်းပေါ်သို့<br>ဖိတ်စဉ်ခြင်း မရှိစေရ။   |
| Rule (262) | ဘေးအန္တရာယ်ရှိသော ကုန်ပစ္စည်းများကို သယ်ယူပို့ဆောင်မည့် မော်တော်ယာဉ် သည်- (က) ဓာတုပစ္စည်းနှင့် ဆက်စပ်ပစ္စည်းများ အန္တရာယ်မှ တားဆီးကာကွယ်ရေး ဥပဒေ၊ နည်းဥပဒေများ ပြဋ္ဌာန်းချက်များနှင့်အညီ လိုက်နာဆောင်ရွက်ပြီး ဖြစ်ရမည်။ (ခ) သက်တမ်းရှိ အငှားမော်တော်ယာဉ် မှတ်ပုံတင်ဆိုင်ရာ အထောက်အထား များနှင့် ကုန်းလမ်းသယ်ယူပို့ဆောင်ရေးဥပဒေအရ ထုတ်ပေးသော သက်ဆိုင်ရာ လုပ်ငန်းလိုင်စင်အပြင် ဘေးအန္တရာယ်ရှိသော ကုန်ပစ္စည်းများ သယ်ယူပို့ဆောင်ခွင့် အတွက် သက်ဆိုင်ရာအစိုးရဋ္ဌာန၊ အစိုးရအဖွဲ့အစည်းက ထုတ်ပေးသည့် ထောက်ခံချက်များ ပြည့်စုံစွာပါရှိရမည်။ (ဂ) ဘေးအန္တရာယ်ရှိသော ကုန်ပစ္စည်းများ တင်ဆောင်လာသည့် မော်တော်ယာဉ် ဖြစ်ကြောင်း သိသာထင်ရှားစေရန် မော်တော်ယာဉ်အမှတ် အသား (Vehicle Marking) ၊ ကွန်တိန်နာ အမှတ်အသား (Container Marking) နှင့် တိုင်ကီ အမှတ်အသား (Tank Marking) များ၊ ကုန်ပစ္စည်းအမျိုးအစားအလိုက် အန္တရာယ် ကင်းရှင်းစေရန် ထုပ်ပိုးခြင်း (Packaging) ၊ တံဆိဝ်ကပ်ခြင်း (Labelling)၊ ကုန်တင်ခြင်း (Loading) နှင့် ကုန်ချခြင်း (Unloading) များကို ဦးစီးဌာနက သတ်မှတ်ထားသည့်အတိုင်း တပ်ဆင်ထားရှိရမည်။ (ဃ)ဘေးအန္တရာယ်ရှိသော ကုန်ပစ္စည်းများ တင်ဆောင်လာစဉ် မတော်တဆမှု ဖြစ်ပွားပါက ဆောင်ရွက်ရမည့်အစီအမံများ၊ အန္တရာယ်ကင်းရှင်းစေရေး လိုအပ်သည့် ပစ္စည်းကိရိယာများ (Safety Equipment) ကို ဦးစီးဌာနက သတ်မှတ်ထားသည့် အတိုင်း ပြည့်စုံစွာ ကြိုတင်ပြင်ဆင်ထားရမည်။ |
| Rule (269) | စီးပွားရေးလုပ်ငန်းသုံးမော်တော်ယာဉ်တွင် အသင့်အသုံးပြုနိုင်သည့် အရန်ဘီး၊ စက်ကိရိယာပြုပြင်ရန်<br>တန်ဆာပလာ ပါရှိသည့်သေတ္တာ၊ မီးသတ်ဆေးဘူး၊ အရေးပေါ် ထွက်ပေါက်မှန်ခွဲရန် တူ သို့မဟုတ်<br>ပုဆိန်၊ ကြမ်းတုံး၊ ရပ်နားတြိဂံနှင့် ရှေးဦးသူနာပြု ဆေးသေတ္တာတို့ ပါရှိရမည်။   |
| Rule (271) | စီးပွားရေးလုပ်ငန်းသုံးမော်တော်ယာဉ် မှတ်ပုံတင်ထားသူအမည် သို့မဟုတ် နေရပ်လိပ်စာ<br>ပြောင်းလဲလိုပါက မော်တော်ယာဉ်ပိုင်ရှင်သည် သက်ဆိုင်သည့် ဒေသဆိုင်ရာ မှတ်ပုံတင် အရာရှိနှင့်<br>ကုန်းလမ်းသယ်ယူပို့ဆောင်ရေး လုပ်ငန်းများ ဥပဒေအရ လုပ်ငန်းလိုင်စင် ထုတ်ပေးသည့်  |

|  | တိုင်းဒေသကြီး သို့မဟုတ် ပြည်နယ် သို့မဟုတ် ပြည်ထောင်စုနယ်မြေ သို့မဟုတ် ခရိုင် သို့မဟုတ်  |
|--|---|
|  | မြို့နယ်ဦးစီးဌာနသို့ လျှောက်ထား ဆောင်ရွက်ရမည်။  |
|  | Public Health Law (1972)  |
| The project proponent c  | ommits to comply with the section 3 sub-sections 1. (a), (b), (c), (d).   |
| Section 3  | <ol> <li>Environmental health activities:</li> <li>(a)Residential area has to be trash free and wastage has to be properly disposed.</li> <li>(b)Area of drinking water source has to be cleaned and monitor according to the international standards.</li> <li>(c)Residential area has to be free of odor, smoke, carbon dioxide, dust, noise and radioactive materials.</li> <li>(d)Buildings and places which are used for the development of city/villages, building construction and public uses are advised to be clean.</li> </ol>   |
| Prevention   | and Control of Communicable Disease Law (1995, amended in 2011)   |
| The project proponent commits to comply with the section 8 sub-sections (a), (b), (c), (d), (e), section 9 sub-sections (a), (b), (c), (d), section 11 sub-sections (a), (b), (c), (d), (e), section 14 sub-sections (a), (b), (c), (d), (e), (f). |   |
| Section 8  | 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:  a) indoor, outdoor sanitation or inside the fence, outside the fence sanitation;  b) well, ponds and drainage sanitation;  c) proper disposal of refuse and destruction thereof by fire;  d) construction and use of sanitary latrines;  e) other necessary environmental sanitation measures. |
| Section 9  | When the head of the household, any member of the household or any entrepreneur knows the occurrence of any of the following matters, he shall report immediately to the nearest health department or hospital:  a) enmasse death of animals including chicken and birds; b) rat fall; c) suspicion or occurrence of epidemic disease; d) occurrence of notifiable disease.   |
| Section 11   | In order to prevent and control the spread of a Principal Epidemic Disease, the Health Officer may undertake the following measures:  (a) investigation of a patient or any other person required;  (b) medical examination;  (c) causing laboratory investigation of stool, urine, sputum and blood samples to be carried out;  (d) other necessary investigation;  (e) prohibition of the right of movement of the vehicle carrying animal or animal product suspected of having epidemic disease.  |

| Section 14  | An organization or an officer on whom power is conferred by the Ministry of Health may issue a prohibitive order or a restrictive order in respect of the following matters:-  |
|---|--|
|   | (a) right of the person suffering from Epidemic Disease to leave and return to his house;  |
|   | (b) right of people living in the house, ward, village or township infected by Epidemic Disease to leave and return thereto;   |
|   | (c) right of people from outside to enter the house, 'ward, village or township infected by Epidemic Disease;  |
|   | (d) if there is a person suffering from Epidemic Disease among those people arriving by train, motor vehicle, aircraft, vessel or any other vehicle, right of such person put under quarantine up to a period necessary for medical examination, to leave and return thereto;  |
|   | (e) when an outbreak of Epidemic Disease occurs during the time of fair and festival, right of the public to visit the site and right to continue the festival.  |
|   | (f) right of movement of the vehicle carrying animal or animal product suspected of having epidemic disease.   |
|   | Occupational Safety and Health Law (2019)  |
| The project proponent commits to comply with the section 12 sub-sections (a) and (b), section 26 sub-sections (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m), (n), (o), (p), (q) and (r), section 27 sub-sections (a), (b), (c) and (d), section 28, section 29 sub-sections (a), (b), (c), section 34 sub-sections (a) and (b) and section 48 sub-sections (a), (b), section 49 sub-sections (a), (b), (c), (d), (e). |  |
|   | The employer shall:  |
| Section 12  | (a) appoint a person in-charge for occupational safety and health according to the type of industries to closely supervise the safety and health of the workers in accordance with the specifications of the Ministry;   |
|   | (b) establish each Occupational Safety and Health Committee comprising equal number of employers and workers' representatives according to the types of industry without lessening the number of workers prescribed by the Ministry to be safe and healthy workplace, in accordance with the specifications of the Ministry. In establishing the Committee, occupational safety and health matters for female workers shall be considered according to the nature of work. |
|   | Any employer shall:  |
|   | (a) arrange to assess the risk severity of material and machinery used in the workplace and process, if necessary;   |
|   | (b) arrange to assess the risk of occupational factors, if necessary;  |
|   | (c) arrange to conduct medical examination for workers by the certified doctor in accordance with the specifications whether occupational diseases are contracted;   |
| Section 26  | (d) arrange to be safe and healthy workplace based on the findings of subsections (a), (b) and (c);  |
|   | (e) provide the suitable personal protective equipment, things and facilities adequately prescribed and allowed by the Department to the workers with free of charge, and make sure them to wear at the workplace;   |
|   | (f) take the preventive measures and emergency response preparedness;  |
|   | (g) establish dispensary, appoint registered doctors and nurses, and provide necessary medicines and facilities at the workplace where the workers are not less than the number of workers prescribed by the Ministry;   |

|            | (h) cause to attend the training on occupational safety and health prescribed by the Ministry to the managers and workers from the respective type of work or branch including himself and members of the Occupational Safety and Health Committee;                         |
|------------|---|
|            | (i) arrange to give information immediately to the person in-charge for occupational safety and health or managers if any worker faces the situation which is likely to happen occupational injury or harm his life and health;   |
|            | (j) arrange to be safe and healthy for persons at the work place due to material and machinery used in the workplace or process, or wastes;   |
|            | (k) arrange to stop the process immediately, remove the workers from the workplace, and perform necessary evacuation and rescue procedures in case of imminent danger. If possible, workers are transferred to and worked at other suitable safety workplaces;              |
|            | (I) have instructions, warning signs, notices, posters and signage regarding occupational safety and health in accordance with the specifications;  |
|            | (m) arrange to follow the precautions in accessing to the restricted workplaces where may be harmful;   |
|            | (n) arrange to distribute or disseminate the manual and guidance regarding the occupational safety and health issued by respective Ministries to workers and persons related to the workplace for acquiring knowledge, technology and skills;                               |
|            | (o) design the fire security plan and organize the fire-drills, and train to use systematically fire extinguishers and devices;   |
|            | (p) allow the chief inspector and inspectors to inspect the workplace, inquire, ask for documents or seize exhibits;  |
|            | (q) employ workers within the prescribed working hours at hazardous work and workplaces;  |
|            | (r) bear any expenditure regarding occupational safety and health measures.   |
|            | No employer shall dismiss or suspend any worker due to one of the following reasons:  |
|            | (a) before obtaining the medical report of a registered doctor for being injury in the workplace or the medical report of a certified doctor for contracting occupational disease;  |
| Section 27 | (b) complaint about a matter of unsafe or health risk;  |
|            | (c) undertaking the functions and duties of the Occupational Safety and Health Committee;   |
|            | (d) no longer working at the imminent danger situation or situation to be contracted the occupational disease.  |
| Section 28 | The employer shall bear all expenses for medical check-up to determine the degree of reduction in ability to work and the class of disability in case the worker contracting occupational accident or occupational disease is not applied to the Social Security Law, 2012. |
|            | The employer:   |
| Section 29 | (a) may restrict the employment of unfit workers based on the nature of work according to the registered doctor's medical report;   |
|            | (b) shall, without delay, allow to resume the original work or any suitable workplace when the worker restricted under subsection (a) submits the document for recovery from his illness;   |
|            | (c) shall arrange not to harm the health of pregnant or breast-feeding women of the workplace.  |

| Section 34  Section 48  | An employer, in accordance with the specifications, is liable to:   |
|---|---|
|   | (a) inform the Department in case of an occupational accident, dangerous occurrence and major accident;   |
|   | (b) submit a report with the medical report of the certified doctor to the Department, in case of any worker contracted any of the prescribed occupational diseases or being or likely to be occupational poisoning due to any material or process.   |
|   | (a) Any person who is currently operating or wants to operate any Industry/Business to which this Law applies shall not fail to lodge the registration with the Department.   |
|   | (b) No one shall fail to notify the Department in accordance with the stipulations that he/she will build, extend or restructure a building, place, install, extend or change the use of machines in respective processes for the Industry/Business to which this Law applies in accordance with Occupational Safety and Health stipulations. |
|   | Any employer shall not:   |
|   | (a) fail to comply with the temporary stop-work order issued under section 18;  |
|   | (b) fail to comply with the conditions prescribed under subsection (b) of section 20;   |
| Section 49  | (c) fail to comply with the instructions issued by the inspector under subsection (a) of section 21;  |
|   | (d) employ more than working hours prescribed under subsection (q) of section 26;   |
|   | (e) fail to bear the expenditure on occupational safety and health under subsection (r) of section 26.  |
| The Conse   | rvation of Water Resources and River Law (2016) (Amended in 2017)   |
| The project proponent commits to comply with the section 8 sub-sections (a) and (b), section 11 sub-section (a), section 19, 22 and 29. |   |
|   | No person shall:  |
| Section 8   | <ul> <li>a) carry out any act or channel shifting with the aim to ruin the water resources and<br/>rivers and creeks;</li> </ul>  |
|   | b) cause the wastage of water resources willfully.  |
| Section 11  | No person shall:  (a) 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.  |
| Section 19  | No one shall dispose of any substance into the river-creek that may cause damage to waterway or change of watercourse from the bank or vessel which is plying, vessel which has berthed, anchored, stranded or sunk.  |
| Section 22  | No one shall, without the permission of the directorate, pile sand, shingle and other heavy materials for business purposes in the bank area and waterfront area.   |
| Section 29  | Whoever attempts or conspires or abets in the commission of an offence under this Law shall be punished with the punishment provided for such offence in this Law.  |
| The Protection and Preservation of Cultural Heritage Regions Law (2019)   |   |
| The project proponent co  | ommits to comply with the section 21.   |
|   | A person desirous of carrying out one of the following shall abide by the provisions of   |

Regional Preservation Committee in accordance with stipulations to obtain prior permission for not impacting the cultural heritage regions:

- a) Within the urban and villages of cultural heritage zone
- 1) constructing or extending a building;
- 2) renovating other building or fencing, renovating or extending the boundary of its enclosure except heritage building;
- 3) renovating and constructing the religious buildings, education and health infrastructures without impacting the cultural heritage;
- 4) expansion of road and road repairing and renovation of jetty;
- 5) digging well, pond, swimming pool, reservoir, fish-breeding pond, livestock farm, perennial trees plantation, or extending or renovation;
- 6) constructing, extending or repairing craftwork factories;
- 7) constructing, extending or repairing restaurants, souvenir shops, activities related to touring;
- 8) constructing, extending or repairing exhibition buildings;
- 9) Repairing the existing hotel, motel, inn, guest house or small and medium industrial buildings;
- 10) Flying helicopter, gas ballons, drones.
- b) In buffer zone
- 1) Road construction, constructing or extending jetty, railroad, railway station, stadium and field, building and bridges;
- 2) Constructing and erecting transmission towers, underground works, underground cables, power grid, electrical sub-station, posts, and gas pipelines;
- 3) Flying helicopter, gas ballons, drones;
- 4) Constructing entertainment building, guest house, rest camp, horse riding field and infrastructure.
- c) Within the cultural heritage zone
- 1) Growing perennial trees which can impact the environment and surrounding views on farm land:
- 2) Carrying out the following which can destroy the original topography of the land:
- i. Gold panning, sand extraction, rock extraction, brick making, garbage disposal and wastewater disposal;
- ii. Land clearing, earthwork excavation, bulldozing natural high lands and blocking water flow;
- iii. Covering pond, stream, irrigation channel with soil.
- 3) Destroying and cutting the existing local species of natural plants and growing the exotic species and perennial trees;
- 4) Blocking or fencing the heritage buildings or places which are located in a compound.

#### The Commercial Tax Law (1990) Amended 2014

The project proponent commits to comply with the section 11 sub-sections (b), section 12 sub-sections (a), (b), (c), (d), (e).

Section 11

(b) Any Person who commences operation of a goods production enterprise or service enterprise shall furnish letter of intimidation on the commencement of the operation as such to the relevant Township Revenue Officer as stipulated by regulations.

|                         | (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. |  |  |  |  |
|-------------------------|---|--|--|--|--|
|                         | (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.   |  |  |  |  |
| Section 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.                                       |  |  |  |  |
|                         | (d)The tax paid under sub-section (a), (b) or (c) shall be set-off from the tax due in the assessment.  |  |  |  |  |
|                         | (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.   |  |  |  |  |
|                         | The Export and Import Law (2012)  |  |  |  |  |
| The project proponent c | ommits to comply with the section 5, 6, 7.  |  |  |  |  |
| Section 5               | No persons shall export or import restricted, prohibited and banned goods.  |  |  |  |  |
| Section 6               | Without obtaining license, no person shall export or import the specified goods whare to obtain permission.   |  |  |  |  |
| Section 7               | A person who obtained any license shall not violate the conditions contained in the license.  |  |  |  |  |
|                         | The Standardization Law (2014)  |  |  |  |  |
| The project proponent c | ommits to comply with the section 17, 29.   |  |  |  |  |
| Section 17              | A person desirous of obtaining quality recommendation shall apply to the department and organization which have obtained the accreditation certificate from the Department.   |  |  |  |  |
| Section 29              | The person who has obtained the quality recommendation, its agent and its successor shall comply with compulsory standards.   |  |  |  |  |
| Q                       | ၃ပ်ငန်းခွင်သုံးပေါက်ကွဲစေတတ်သော ဝတ္ထုပစ္စည်းများဆိုင်ရာဥပဒေ (၂၀၁၈)  |  |  |  |  |
|                         | ommits to comply with the section 9,13,15 sub-sections (a), (b), (c), (d), section 16 sub-21 sub-sections (a), (b), (c).  |  |  |  |  |
|                         | လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတတ်သော ဝတ္ထုပစ္စည်းများ တင်သွင်းလိုသူသည် ပုဒ်မ ၇၊ ပုဒ်မခွဲ (ဂ)အရ  |  |  |  |  |
| ပုဒ်မ ၉                 | ကာကွယ်ရေးဦးစီးဌာနချုပ်ရုံး (ကြည်း) ၏ ခွင့်ပြုချက်ကို လက်ခံရရှိလျှင် ဥပဒေနှင့်အညီ  |  |  |  |  |
|                         | တင်သွင်းခြင်းပြုနိုင်ရေးအတွက် သက်ဆိုင်ရာအစိုးရဌာန၊ အစိုးရအဖွဲ့အစည်းနှင့် လိုအပ်သလို   |  |  |  |  |
|                         | ညှိနှိုင်းဆောင်ရွက်ရမည်။  |  |  |  |  |
|                         | လိုင်စင်ရရှိသူသည် လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတတ်သော ဝတ္ထုပစ္စည်းများ သိုလှောင်ခြင်းလုပ်ငန်း  |  |  |  |  |
| ပုဒ်မ ၁၃                | ဆက်လက်ဆောင်ရွက်လိုပါက သက်တမ်းမကုန်ဆုံးမီ ရက်ပေါင်း၃၀ ကြိုတင်၍ သက်တမ်းတိုးပေးရန်   |  |  |  |  |
| 1                       | <br>  စစ်ဆေးရေးအရာရှိချုပ်ထံ သတ်မှတ်ချက်နှင့်အညီ လျှောက်ထားနိုင်သည်။  |  |  |  |  |

|                          | လိုင်စင်ရရှိသူသည်-  |  |  |  |  |  |
|--------------------------|---|--|--|--|--|--|
|                          | (က) လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတတ်သော ဝတ္ထုပစ္စည်းများကို ခွင့်ပြုသည့်ပမာဏထက်မပိုစေဘဲ          |  |  |  |  |  |
|                          | သတ်မှတ်ချက်နှင့်အညီ စနစ်တကျ သိုလှောင်သိမ်းဆည်းရမည်။   |  |  |  |  |  |
|                          | (ခ)စစ်ဆေးရေးအရာရှိချုပ် သို့မဟုတ် စစ်ဆေးရေးအရာရှိ၏ အခါအားလျော်စွာ စစ်ဆေးခြင်း                 |  |  |  |  |  |
|                          | ခံယူရမည်။   |  |  |  |  |  |
| ပုဒ်မ ၁၅                 | (ဂ) လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတတ်သော ဝတ္ထုပစ္စည်းများ ပျောက်ဆုံးခြင်း၊ မီးလောင်ခြင်း၊         |  |  |  |  |  |
|                          | ပေါက်ကွဲခြင်းကြောင့် ဆုံးရှုံးပျက်စီးခြင်း၊ လူများထိခိုက်ဒဏ်ရာရခြင်း သို့မဟုတ် သေဆုံးခြင်း    |  |  |  |  |  |
|                          | ဖြစ်ပေါ်ပါက အနီးဆုံးရဲစခန်းသို့ ချက်ချင်း အကြောင်းကြားရမည့်အပြင် စစ်ဆေးရေးအရာရှိချုပ်ထံ       |  |  |  |  |  |
|                          | အချိန်နှင့်တစ်ပြေးညီ သတင်းပို့ရမည်။   |  |  |  |  |  |
|                          | (ဃ)လိုင်စင်အတွက်ဝန်ကြီးဌာနက သတ်မှတ်သော နှုန်းထားအတိုင်း အခကြေးငွေကို                          |  |  |  |  |  |
|                          | ဦးစီးဌာနသို့ပေးဆောင်ရမည်။   |  |  |  |  |  |
|                          | ခွင့်ပြုချက်ရရှိသူသည်-  |  |  |  |  |  |
|                          | (က) လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတတ်သော ဝတ္ထုပစ္စည်းများကို လိုင်စင်ရယမ်းတိုက်များတွင်သာ         |  |  |  |  |  |
| ပုဒ်မ ၁၆                 | သိုလှောင်ရမည်။  |  |  |  |  |  |
| <b>γ38 36</b>            | (ခ) လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတတ်သော ဝတ္ထုပစ္စည်းများကို သယ်ယူပို့ဆောင်ခြင်း၊ ပြုလုပ်ခြင်း၊   |  |  |  |  |  |
|                          | သုံးစွဲခြင်း၊ လက်ဝယ်ထားရှိခြင်းပြုရာတွင် အန္တရာယ်မဖြစ်စေရေးအတွက် လိုအပ်သော                    |  |  |  |  |  |
|                          | ကာကွယ်မှုများကို သတ်မှတ်ချက်များနှင့်အညီ ကြိုတင်ဆောင်ရွက်ရမည်။                                |  |  |  |  |  |
|                          | လိုင်စင်ရရှိသူသည်-  |  |  |  |  |  |
|                          | (က)ဝန်ကြီးဌာနက ထုတ်ပေးသော လိုင်စင်ပါ ခွင့်ပြုပမာဏထက်ပိုမိုသော                                 |  |  |  |  |  |
|                          | လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတတ်သော ဝတ္ထုပစ္စည်းများကို လက်ခံသိုလှောင်ခြင်း မပြုရ။               |  |  |  |  |  |
| 080 10                   | (ခ)ပုဒ်မ၁၅၊ ပုဒ်မခွဲ (ဂ)ပါ လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတတ်သော ဝတ္ထုပစ္စည်းများကြောင့်           |  |  |  |  |  |
| ပုဒ်မ ၂၁                 | တစ်ခုခုဖြစ်ပွားပါက အနီးဆုံးရဲစခန်းသို့ ချက်ချင်းအကြောင်းကြားခြင်းနှင့် စစ်ဆေးရေးအရာရှိချုပ်ထံ |  |  |  |  |  |
|                          | အချိန်နှင့်တစ်ပြေးညီ သတင်းပို့ရန် ပျက်ကွက်ခြင်းမရှိစေရ။                                       |  |  |  |  |  |
|                          | (ဂ)လိုင်စင်သက်တမ်း ကုန်ဆုံးသည့်အချိန်တွင် သက်တမ်းတိုးမြှင့်ခြင်းမရှိဘဲ                        |  |  |  |  |  |
|                          | လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတတ်သော ဝတ္ထုပစ္စည်းများကိုဆက်လက်သိုလှောင်ခြင်းမပြုရ။                |  |  |  |  |  |
| လုဝ်င                    | လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတတ်သော ဝတ္ထုပစ္စည်းများဆိုင်ရာနည်းဥပဒေများ (၂၀၂၂)                   |  |  |  |  |  |
| The project proponent of | ommits to comply with the section 48 sub-sections (a), (d), (e), (f), section 67.             |  |  |  |  |  |
|                          | သက်ဆိုင်ရာလုပ်ငန်းတာဝန်ခံသည် လက်ခံရရှိသော ပေါက်ကွဲစေတတ်သော ဝတ္ထုပစ္စည်းများကို                |  |  |  |  |  |
|                          | လုပ်ငန်းခွင်၌ အသုံးပြုရာတွင် အောက်ပါအတိုင်း စီမံဆောင်ရွက်ရမည်-                                |  |  |  |  |  |
| ပုဒ်မ ၄၈                 | (က)လုပ်ငန်းခွင်ဘေးအန္တရာယ်ကင်းရှင်းရေးသည် ပထမဦးစားပေးအဖြစ် သတ်မှတ်၍                           |  |  |  |  |  |
|                          | သတိထားအသုံးပြုဆောင်ရွက်ရန်၊   |  |  |  |  |  |
|                          |   |  |  |  |  |  |

|          | (ဃ)လုပ်ငန်းခွင်အသုံးပြုမှုနှင့်စပ်လျဉ်း၍ လုပ်ငန်းနှင့် လုပ်ကွက်နေရာအလိုက် မှတ်တမ်းထားရှိရန်နှင့်<br>တာဝန်ရှိသူများမှ လာရောက်စစ်ဆေးလျှင် မှတ်တမ်းစာအုပ်နှင့်အတူ အစစ်ဆေးခံနိုင်ရေးအတွက်                               |
|----------|---|
|          | စီစဉ်ထားရှိရန်၊   |
|          | (င)လုပ်ငန်းခွင်ဘေးအန္တရာယ်ကင်းရှင်းစွာ အသုံးပြုနိုင်ရေးအတွက် အရည်အချင်းပြည့်စုံသော<br>နားလည်ကျွမ်းကျင်သူများကို တိကျစွာ တာဝန်ပေးကြပ်မတ်လုပ်ကိုင်စေရန်၊  |
|          | (ဆ)လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတတ်သော ဝတ္ထုပစ္စည်းများကို မသက်ဆိုင်သူများထံသို့<br>မရောက်ရှိစေရေးအတွက် တာဝန်ရှိသူအဆင့်ဆင့်မှတာဝန်ခံ၍ အထူးဂရုပြုကြပ်မတ်ဆောင်ရွက်ရန်။   |
| ပုဒ်မ ၆၇ | လိုင်စင်ရရှိသူသည် လိုင်စင်ပါ ခွင့်ပြုပမာဏထက်ပိုသော သို့မဟုတ် ခွင့်ပြုချက်မရှိသော<br>လုပ်ငန်းခွင်သုံးပေါက်ကွဲစေတတ်သော ဝတ္ထုပစ္စည်းများကို ယမ်းတိုက်တွင် လက်ခံသိုလှောင်ထားပါက<br>ဥပဒေပါ ပြစ်ဒဏ်များချမှတ်ခြင်းခံရမည်။ |

### 2.2. NATIONAL ENVIRONMENTAL QUALITY (EMISSION) GUIDELINES

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

According to the Environmental Conservation Law, 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 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 NEQEGs's Air Quality Guidelines

| Parameter                            | Averaging Period | Guideline Value |  |
|--------------------------------------|------------------|-----------------|--|
| Nitragan Diavida                     | 1-year           | 40              |  |
| Nitrogen Dioxide                     | 1-hour           | 200             |  |
| Ozone                                | 8-hour           | 100             |  |
| Particulate Matter PM10 <sup>a</sup> | 1-year           | 10              |  |
| Particulate Matter PM10°             | 24-hour          | 50              |  |
| Particulate Matter PM2.5b            | 1-year           | 10              |  |
| Faiticulate Matter FM2.5°            | 24-hour          | 25              |  |
| Sulfur dioxide                       | 24-hour          | 20              |  |
| Sullui dioxide                       | 10-minute        | 500             |  |

<sup>&</sup>lt;sup>a</sup> Particulate matter 10 micrometers or less in diameter

### 2.2.1.2. Noise Level Standard

In NEQEGs, the noise level is set as shown in **Table 2-3** and noise prevention and mitigation measures should be taken by all projects where the 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 impact should not exceed the levels shown below, or result in a maximum increase in background levels of three decibels at the nearest offsite receptor location.

Table 2-3 National Environmental Quality (Emission) Guidelines

|   | One Hour LAeq (dBA)                          | Guideline Value                              |  |  |
|---|--|--|--|--|
| Receptor                                      | Day Time                                     | Night Time                                   |  |  |
| πουσμιοί                                      | 7:00-22:00 (10:00-22:00 for public holidays) | 22:00-7:00 (22:00-10:00 for public holidays) |  |  |
| Residential,<br>Institutional,<br>Educational | 55   | 45   |  |  |
| Institutional,<br>Commercial                  | 70   | 70   |  |  |

<sup>&</sup>lt;sup>a</sup> Equivalent continuous sound level in decibels

# 2.2.1.3. Light Intensity Standard

The light intensity measurements will be compared and presented according to the Zumtobel standard from *The Lighting Handbook*. The standard levels are shown in the table below.

Table 2-4 Standard Value for Light Intensity

| Type of Industry | Task or Activities                           | Lux Level |
|------------------|--|-----------|
|                  | Work places and zones in baths, bale opening | 200       |

<sup>&</sup>lt;sup>b</sup> Particulate matter 2.5 micrometers or less in diameter

|                           | Carding, washing, ironing, devilling machine work, drawing, combing, sizing, card cutting, pre-spinning, jute and hemp spinning | 300  |
|---------------------------|---|------|
|                           | Spinning, plying, reeling, winding  | 500  |
|                           | Warping, weaving, braiding, knitting  | 500  |
|                           | Sewing, fine knitting, taking up stitches   | 750  |
| Textile manufacturing and | Manual design, drawing patterns   | 750  |
| processing                | Finishing, dyeing   | 500  |
|                           | Drying room   | 100  |
|                           | Automatic fabric printing   | 500  |
|                           | Burling, picking, trimming  | 1000 |
|                           | Colour inspection; fabric control   | 1000 |
|                           | Invisible mending   | 1500 |
|                           | Hat manufacturing   | 500  |

#### 2.2.1.4. 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 2-5 Wastewater, Storm Water Runoff, Effluent and Sanitary Discharges (general application)<sup>1</sup>

| 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              |

| 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   |
| рН                        | 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     | <3b  |
| Total coliform bacteria   | 100 ml | 400  |
| Total phosphorus          | mg/l   | 2    |
| Total suspended solids    | mg/l   | 50   |
| Zinc                      | mg/l   | 2    |
|                           |        | •    |

a Standard Unit

# 2.3. အမျိုးသားမြေပေါ်ရေအရည်အသွေးစံချိန်စံညွှန်း

# 2.3.1. လူသားတို့၏ ကျန်းမာရေးအတွက်သတ်မှတ်ချက်များ

လူသားများကိုပြင်းထန်သော အဆိပ်သင့်စေခြင်းသို့မဟုတ် ရေရှည်အဆိပ်သင့်စေခြင်း စသည်တို့နှင့် စပ်လျဉ်းသည့် သတ်မှတ်ချက်များကို လူသားတို့၏ ကျန်းမာရေးအတွက် သတ်မှတ်ချက်များအဖြစ် အမျိုးအစားခွဲ၍ ဖော်ပြထားပါသည်။ ဤအမျိုးအစားတွင် ဖော်ပြထားသော စံချိန်စံညွှန်းတန်ဖိုးများသည် လူသားတို့၏ ကျန်းမာရေးအပေါ် ဆိုးရွားသော သက်ရောက်မှုများ မဖြစ်စေနိုင်သည့် လက်ခံနိုင်သော အမြင့်ဆုံးပါဝင်မှု ပမာဏအဖြစ် ကိုယ်စားပြုပါသည်။ သမာရိုးကျရေသန့်စင်ခြင်းနည်းလမ်းများအသုံးပြု၍ သန့်စင်ရန်ခက်ခဲသည့် ပစ္စည်းများနှင့် မြေပေါ် ရေကို အသုံးပြုရန် ရည်ရွယ်ထားခြင်း သို့မဟုတ် မမျှော်လင့်ဘဲ သုံးစွဲခြင်းဖြစ်ပေါ်နိုင်မှု အခြေအနေတို့ကို ထည့်သွင်းစဉ်းစား၍

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

ရေအသုံးပြုမှုအမျိုးအစားအလိုက် မခွဲခြားတော့ဘဲ လူသားတို့၏ ကျန်းမာရေးအတွက် စံတန်ဖိုးအမျိုးအစားတစ်မျိုးတည်း ကိုသာ သတ်မှတ်ပါသည်။ သက်ဆိုင်ရာသတ်မှတ်ချက်များအတွက် စံတန်ဖိုးများကို ဇယား တွင်ဖော်ပြထားပါသည်။

Table 2-6 လူသားတို့၏ကျန်းမာရေးအတွက်သတ်မှတ်ချက်များ၏ စံတန်ဖိုးများ

| Parameter                       | Unit | Class I-V |  |  |  |  |
|---------------------------------|------|-----------|--|--|--|--|
| Chemical Parameter              |      |           |  |  |  |  |
| Boron                           | mg/L | 2.4       |  |  |  |  |
| Cyanide                         | mg/L | 0.07      |  |  |  |  |
| Fluoride                        | mg/L | 1.5       |  |  |  |  |
| Nitrate nitrogen                | mg/L | 10        |  |  |  |  |
| Nitrite nitrogen                | mg/L | 1         |  |  |  |  |
| Organics                        |      |           |  |  |  |  |
| Benzene                         | mg/L | 0.01      |  |  |  |  |
| Phenol                          | mg/L | 0.05      |  |  |  |  |
| Polychlorinated Biphenyls (PCB) | mg/L | 0.5       |  |  |  |  |
| Heavy Metals                    |      |           |  |  |  |  |
| Arsenic                         | mg/L | 0.05      |  |  |  |  |
| Cadmium                         | mg/L | 0.003     |  |  |  |  |
| Chromium (Hexavalent)           | mg/L | 0.05      |  |  |  |  |
| Lead                            | mg/L | 0.01      |  |  |  |  |
| Mercury                         | mg/L | 0.001     |  |  |  |  |
| Nickel                          | mg/L | 0.07      |  |  |  |  |
| Selenium                        | mg/L | 0.04      |  |  |  |  |

# 2.3.2. ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးအတွက်သတ်မှတ်ချက်များ

ရေနေဂေဟစနစ်နှင့် သက်ရှိပတ်ဝန်းကျင်ကိုထိန်းသိမ်းရန်အတွက် အဓိက အရေးကြီးသည့် သတ်မှတ်ချက်များကို ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးအတွက် သတ်မှတ်ချက်များအဖြစ် အုပ်စုခွဲ၍ ဖော်ပြထားပါသည်။ ရည်ရွယ်ထားသော ရေအသုံးပြုမှုများအရ လက်ခံနိုင်သော မြေပေါ် ရေ အရည်အသွေးများအား ထည့်သွင်းစဉ်းစား၍ သက်ဆိုင်ရာရေအမျိုးအစားအလိုက် စံတန်ဖိုးများကိုကွဲပြားစွာ သတ်မှတ်ထားပါသည်။ သက်ဆိုင်ရာ သတ်မှတ်ချက်များအတွက် စံတန်ဖိုးများကို ဧယား တွင်ဖော်ပြထားပါသည်။

Table 2-7 ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးအတွက်သတ်မှတ်ချက်များ၏စံတန်ဖိုးများ

| Parameter          | Unit | Class I | Class II | Class III | Class IV | Class V |
|--------------------|------|---------|----------|-----------|----------|---------|
| Physical Parameter |      |         |          |           |          |         |

| Total<br>Suspended<br>Solids             | mg/L                            | 25                 | 50              | 75   | 100  | 150 |  |
|--|---------------------------------|--------------------|-----------------|------|------|-----|--|
|  |                                 | Ch                 | nemical Paramet | er   |      |     |  |
| Biochemical<br>Oxygen<br>Demand<br>(BOD) | mg/L                            | 2                  | 3               | 8    | 25   | 30  |  |
| Chemical<br>Oxygen<br>Demand<br>(COD)    | mg/L                            | 5                  | 8               | 13   | 50   | 100 |  |
| Dissolved<br>Oxygen                      | mg/L                            | >6                 | >5              | >4   | >3   | >2  |  |
| рН                                       | mg/L                            | 6.5-8.5            | 6.5-8.5         | 6-9  | 5-9  | -   |  |
| Ammonia nitrogen                         | mg/L                            | 0.2                | 0.3             | 0.5  | 0.8  | 0.9 |  |
|  |                                 |                    | Organics        |      |      |     |  |
| Oil & Grease                             |                                 | No noticeably seen |                 |      |      |     |  |
|  | Biological Parameter            |                    |                 |      |      |     |  |
| Escherichia<br>coli (E. coli)            | MPN/100mL<br>(or) CFU/<br>100mL | 20                 | 300             | 1000 | 1000 | -   |  |
|  | Heavy Metals                    |                    |                 |      |      |     |  |
| Copper                                   | mg/L                            | 0.1                | 0.3             | 0.5  | -    | -   |  |

# 2.4. MYANMAR NATIONAL DRINKING WATER QUALITY STANDARD

Myanmar National Drinking Water Quality Standard for Drinking Water, which is shown in Table 2-8.

Table 2-8 Standard Value of Drinking Water Quality

| Parameter | Parameter Unit G |         |
|-----------|------------------|---------|
| рН        | S.U              | 6.5-8.5 |
| Colour    | HU               | ≤15     |
| TDS       | mg/L             | ≤1000   |
| Turbidity | FAU              | ≤5      |
| Hardness  | mg/L             | ≤500    |
| Chloride  | mg/L             | ≤250    |
| Arsenic   | mg/L             | ≤0.05   |

| Copper    | mg/L | ≤2    |
|-----------|------|-------|
| Iron      | mg/L | ≤1    |
| Lead      | mg/L | ≤0.01 |
| Manganese | mg/L | ≤0.4  |
| Zinc      | mg/L | ≤3    |

#### 2.5. IFC EHS GUIDELINES

The EHS Guidelines 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 2-9 shows the contents of the section of Community Health and Safety.

Table 2-9 Community Health and Safety Contents

| Contents  | Brief Description  |
|---|--|
| Water Quality                                     | 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.  |
| and Availability                                  | Project activities should not compromise the availability of water for personal hygiene needs and should take account of potential future increases in demand. The overall target should be the availability of 100 liters per person per day.   |
| Structural<br>Safety of Project<br>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<br>Hazardous<br>Materials            | Projects should have procedures in place that ensure compliance with local laws and international requirements applicable to the transport of hazardous materials.   |
| Disease<br>Prevention                             | Recommended interventions against the communicable diseases at the project level include (1) providing surveillance and active screening and treatment of workers, (2) preventing  |

| Contents                                  | Brief Description   |  |  |  |
|---|---|--|--|--|
|   | 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 onsite or community health care facilities.  |  |  |  |
| Emergency<br>preparedness<br>and Response | All projects should have an Emergency preparedness and Response Plan that is commensurate with the risks of the facility and that includes the following basic elements: (1) Administration (policy, purpose, distribution, definitions, etc.) (2) Organization of emergency areas (command centers, medical stations, etc. (3) Roles and responsibilities, (4) Communication systems, (5) Emergency response procedures, (6) Emergency resources, (7) Training and updating, (8) Checklists (role and action list and equipment checklist), and (9) Business Continuity and Contingency. |  |  |  |

Source: IFC, Environmental, Health, and Safety (EHS) Guidelines, General EHS Guidelines: Community Health and Safety (April 30.20070)

#### 2.6. THAILAND AMBIENT AIR QUALITY STANDARDS

Table 2-10 Ambient Air Quality Standard

| Item              | Unit  | 1-hr | 8-hr | 24-hr | 1-month | 1-year |
|-------------------|-------|------|------|-------|---------|--------|
| СО                | ppm   | 30   | 9    | -     | -       | -      |
| NO <sub>2</sub>   | ppm   | 0.17 | -    | -     | -       | 003    |
| SO <sub>2</sub>   | ppm   | 0.3  | -    | 0.12  | -       | 0.04   |
| O <sub>3</sub>    | ppm   | 1.0  | 0.07 | -     | -       | -      |
| TSP               | mg/m3 | -    | -    | 0.33  | -       | 0.1    |
| PM <sub>10</sub>  | mg/m3 | -    | -    | 0.12  | -       | 0.05   |
| PM <sub>2.5</sub> | mg/m3 | -    | -    | 0.05  | -       | 0.025  |

### 2.7. COMMITMENT OF WIDE VISION ENTERPRISE COMPANY LIMITED

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

Wide Vision Enterprise 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 services

 To carry out fire safety assessment and ensure adequate and appropriate fire safety measures for employee

# 3. PROJECT DESCRIPTION

### 3.1. PROJECT BACKGROUND

Wide Vision Enterprise Company Limited is the heavy industry and intends to manufacture of various kinds of Bags on CMP basis and to export 100% of the finished products. Wide Vision Enterprise Company Limited will be imported raw materials from China and finished the good products exported to US and Europe. This project is located at Sethmu – (19, 20, 21, 81), Plot No. (1), Kan Gyi Kone Kwin, Ward No. (4), Htantabin Township, Yangon Region and 100% foreign investment. Yangon Region Investment Committee (YRIC) issues the project on 12 March 2019 with the Endorsement No. YGN-169/2019. YRIC notified for the environmental approval and comments of the Ministry of the Natural Resources and Environmental Conservation (MONREC) on the proposed project and had approved the proposal for investment in manufacturing of various kinds of Bags on Cutting, Making and Packaging (CMP) basis under the name of Wide Vision Enterprise 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. 900/EIA/2 (2403/2024) on 26 July 2024.

### 3.1.1. Location of Proposed Project

The proposed project is located at Latitude 17°1'12.39" N and Longitude 95°58'32.79"E, Sethmu – (19, 20, 21, 81), Plot No. (1), Kan Gyi Kone Kwin, Ward No. (4), Htantabin Township, Yangon Region. The location map of the proposed project site is shown in Figure 3.2.

## 3.1.2. Adjacent Location of Proposed Project

Wide Vision Enterprise Company Limited is located at Sethmu – (19, 20, 21, 81), Plot No. (1), Kan Gyi Kone Kwin, Ward No. (4), Htantabin Township, Yangon Region. The nearest water source is Hlaing River which is about 0.94 kilometres away from project site. The main street of the proposed project is Bayintnaung Road.

### 3.2. PRE-CONSTRUCTION AND CONSTRUCTION PHASE

The project identification of construction phase is factory building construction and machinery and equipment installation period. Project proponent was leased the project area from previous owner and the construction of the buildings started on 15 August 2022 and ended on 28 April 2024. The installation of machinery and equipment started on 19 March 2024 and ended on 21 March 2024. The construction period is about 1 year. During the EMP study, the factory building has been constructed and has started commercial operation at the project site. Therefore, these phases are not considered in the EMP report. Land lease agreement of this factory is described in Appendix E.

#### 3.3. OPERATION PHASE

The factory has started the commercial operation on 21 March 2024. It is intended to operate for about 10 years.

# 3.3.1. Site Description of Proposed Project Site

The total land area is 2.686 acres (117,002.16  $\rm ft^2$ ) and (277ft x 96ft x 32ft-9in) Office Building, (590ft-7in x 105ft x 26ft-8in) Factory Building, (168ft-8in x 66ft-8in) Store Room, (113ft-4in x 20ft x 38ft-8in) Dormitory Building, (46ft x 16.5ft) Dormitory Area (4 rooms), (33ft x 16.5ft) Garbage Room, (49ft-2in x 11.5ft) Generator & Electrical Room, (59ft-1in x 16.5ft) First Aid & Interview & Prayer Room, (33ft x 16.5ft) Chemical Room which were built on its land area.



Figure 3.1 Adjacent Location Map of Proposed Project



Figure 3.2 Location Map



- 1 Final Product Packing Storage Area, 2 Final Product Storage Area, 3 Packing Area, 4 Sewing Area, 5 Assemble Area, 6 Printing Area, 7 Cutting Area,
- 8 Office Area, 9 Clinic Room, 10 Interview Room, 11 Chemical Storage Room, 12 Security Room, 13 Dormitory (1), 14 Dormitory (2), 15 Firefighting Equipment, 16 Waste House, 17 Toilet, 18 Canteen, 19 Water Purify Room, 20 Store Room, 21 Generator & Transformer, 22 Store Department, 23 Warehouse

Figure 3.3 Factory Layout Map

### 3.3.2. 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, print, sewn, quality inspection and packed in the factory, after which all of the finished products are exported.

# 3.3.2.1. Materials Receiving

Firstly, the raw materials are receiving and inspecting. And then, the imported raw materials are stored in the store department.



Figure 3.4 Process Flow for Materials Receiving

# 3.3.2.2. Cutting

The raw materials are designing and cutting in the cutting department. After that, the cut fabrics are checked, stored and sent to the sewing department.

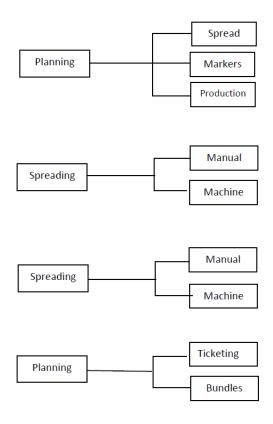






Figure 3.5 Process Flow for Cutting

3.3.2.3. Printing

# Step-1: Making Photosensitive Glue

Firstly, the glue should be mixed with distilled water (or) pure water (50 ml) and stirred until the bubbles disappear. Photosensitive glue must be processed and stored at low temperature and away from light.

# Step-2: Prepare Mold

The sample cup must be degreased and washed before use. After washing and drying, the photosensitive glue should be applied.

# Step-3: Drying Mold by Putting Glue

The mold with photosensitive glue should be dried at a temperature below 35 degrees Celsius by drying machine (or) using the hot air dryer.

# Step-4: Put on Logo Film on Mold

After drying the mold with a dryer, tape the Logo Film and put it in the dryer and dry it for a set time. The dried mold should be immersed in water for 1 (or) 2 minutes. Then the mold should be dried naturally (or) with a dryer.

# Step-5: Put on Oil-based (or) Water-based

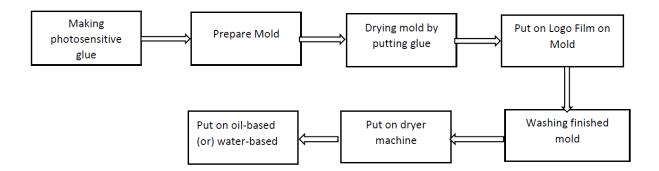
The mold with the logo film that has been dried should be taped to the sides and painted on the fabric with oil-based (or) water-based.

## Step-6: Put on Dryer Machine

Oil-based (or) water-based is applied to the fabric and dried with the dryer.

# Step-7: Washing Finished Mold

Used molds must be washed in the designated area. Mold washing water is discharged through the pipeline into the sedimentation tank on the ground floor.



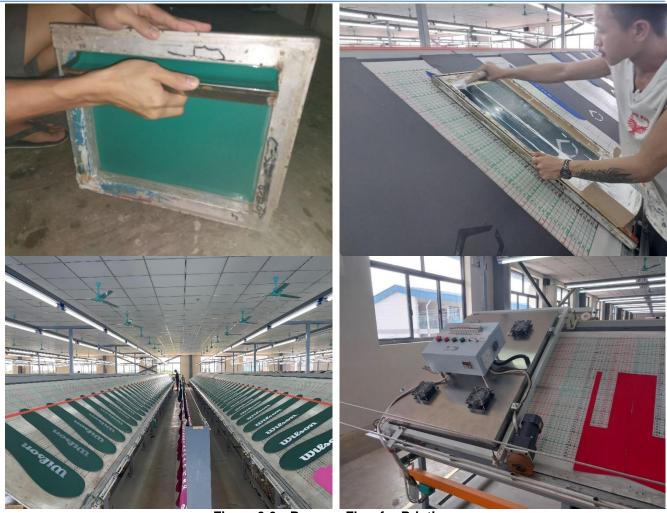


Figure 3.6 Process Flow for Printing

# 3.3.2.4. Sewing

The fabrics sent from the cutting department are receiving and sewing. The necessary parts of the bag are bracing and bar tacking to ensure the strength of the bag with bar tacking sewing machines. After that, the eyelets needed in the bag are made with eyeleting and riveting machines.

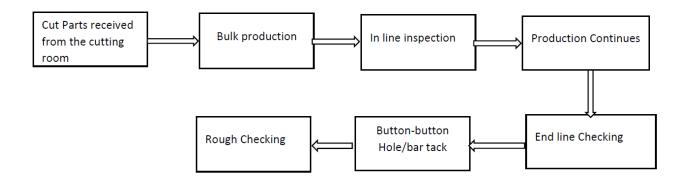




Figure 3.7 Process Flow for Sewing

# 3.3.2.5. Quality Inspection and Finishing

The sewn bags are inspected in the quality inspection department and then the checked bags are placed in the drying room.

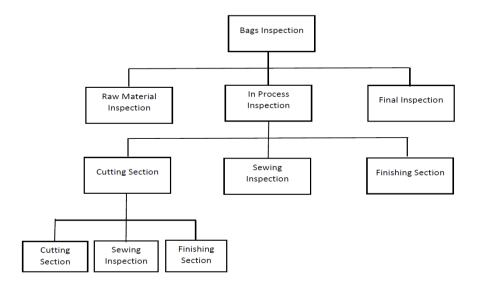




Figure 3.8 Process Flow for Quality Inspection and Finishing

# 3.3.2.6. Packing and Shipping

After drying the bags, these bags are packed with plastic bag and carton box in the packing department and properly stored in the final product storage area. After that the final products are prepared to export to the foreign countries.

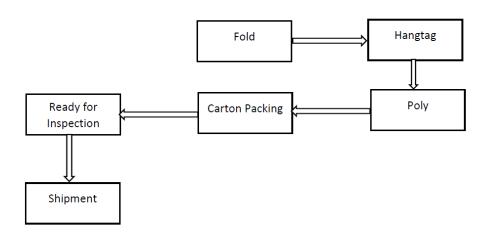




Figure 3.9 Process Flow for Packing and Shipping

# 3.3.3. **Product**

Production rate of Wide Vision Enterprise Company Limited is produced **412,470** pieces annually. During operation, the proposed factory is expected to produce various kinds of bags as per Table 3-1. The final products are exported to US and Europe.



Figure 3.10 Final Products Storage Area

Table 3-1 Annual Production Rate

| No. | Item   | Composition                | HS Code (with four digits) | Units/year |
|-----|--|----------------------------|----------------------------|------------|
| 1.  | WRZ840815<br>WRZ843915 Super Tour 3 Comp                                 | 78%<br>POLYESTER<br>22%TPU | 4202                       | 5101       |
| 2.  | WRZ840809<br>WRZ843909 Super Tour 2 Comp                                 | 77%<br>POLYESTER<br>23%TPU | 4202                       | 3891       |
| 3.  | WRZ840803<br>WRZ843906 Super Tour 2 Comp<br>Small                        | 77%<br>POLYESTER<br>23%TPU | 4202                       | 3791       |
| 4.  | WRZ840896<br>WRZ843996 Super Tour Backpack<br>Red                        | 72%<br>POLYESTER<br>28%TPU | 4202                       | 5186       |
| 5.  | Tour Duffel Black  | 73%PU<br>27%POLYESTER      | 4202                       | 8000       |
| 6.  | WRZ843294 TOUR TRAVELER<br>RDBK  | 100%<br>POLYESTER          | 4202                       | 500        |
| 7.  | WRZ847991<br>WRZ842891 WILSON DUFFEL<br>SMALL                            | 80%PU<br>20%POLYESTER      | 4202                       | 13061      |
| 8.  | WRZ857909<br>WRZ854909 Team 2 Comp                                       | 100%<br>POLYESTER          | 4202                       | 1459       |
| 9.  | WRZ857903<br>WRZ854903 Team 1 Comp Small                                 | 100%<br>POLYESTER          | 4202                       | 6736       |
| 10. | WRZ857996<br>WRZ854996 Team Backpack                                     | 100%<br>POLYESTER          | 4202                       | 1826       |
| 11. | WRZ647903 JUNIOR 3 PACK Black  | 100%<br>POLYESTER          | 4202                       | 501        |
| 12. | WRZ647995<br>WRZ642995<br>WRZ643995 JUNIOR BACKPACK                      | 100%<br>POLYESTER          | 4202                       | 1737       |
| 13. | WRZ865996<br>WRZ868996<br>WRZ863996 Women's Fold Over<br>Backpack        | 53%PU<br>47%POLYESTER      | 4202                       | 2296       |
| 14. | WRZ868997<br>WRZ868997<br>WRZ863997 Women's Tote                         | 70%PU<br>30%POLYESTER      | 4202                       | 1538       |
| 15. | WRZ865995<br>WRZ863995<br>WRZ868995 Women's Minimalist<br>Backpack Black | 56%PU<br>44%POLYESTER      | 4202                       | 2331       |
| 16. | WTD9406PR Demarini Backpack SC   | 100%<br>POLYESTER          | 4202                       | 220000     |

| No. | ltem                                      | Composition       | HS Code (with four digits) | Units/year |
|-----|---|-------------------|----------------------------|------------|
| 17. | WTD9406PR Demarini Trolley Bag            | 100%<br>POLYESTER | 4202                       | 24852      |
| 18. | WTDA302008K NCAA WILSON<br>SPORT BAG      | 100%<br>POLYESTER | 4202                       | 12000      |
| 19. | WTB201910 SINGLE BALL BSKT<br>BAG         | 100%<br>POLYESTER | 4202                       | 18000      |
| 20. | WRZ601301 WILSON BAGS IN A<br>PDQ 14 BKNY | 100%<br>POLYESTER | 4202                       | 39664      |
| 21. | 927A Gun Case                             | 100%<br>POLYESTER | 4202                       | 20000      |
| 22. | 375-40 Gun Case                           | 100%<br>POLYESTER | 4202                       | 20000      |









Figure 3.11 Products Photo

# 3.3.4. Raw Material

The Raw Materials are PVC Netting Cloth, PU Fabric, Aluminum Foil, Zipper and etc., which are imported from China. List of raw materials are described in Table 3-2. The raw materials are properly stored at the raw materials storage area.





Figure 3.12 Raw Materials Storage Area

Table 3-2 List of Raw Materials Requirement

| I able 3 | -2 List of Naw Materials Nequirement                    |            |      |           |
|----------|---|------------|------|-----------|
| No       | Descriptions  | HS Code    | Unit | Quantity  |
| 1        | Zipper  | 9607190000 | KG   | 22249.53  |
| 2        | Zipper puller   | 9607200000 | KG   | 9068.05   |
| 3        | Plastic fittings  | 3926909090 | KG   | 6666.31   |
| 4        | Hardware accessories                                    | 8308100000 | KG   | 1913.63   |
| 5        | Webbing   | 5806320000 | KG   | 39342.22  |
| 6        | Velcro  | 5806109000 | KG   | 1200.12   |
| 7        | Plastic Tupe  | 3917320000 | KG   | 11180.76  |
| 8        | PE board  | 3920109090 | KG   | 37178.72  |
| 9        | Polyester thread  | 5509420000 | KG   | 6557.64   |
| 10       | Emblem  | 5807100000 | KG   | 1029.8    |
| 11       | Hardware pull bar                                       | 8308900000 | KG   | 375       |
| 12       | Wheel   | 3926909090 | KG   | 11636.57  |
| 13       | Carton  | 4819100000 | KG   | 31149.06  |
| 14       | LDPE  | 3923210000 | KG   | 11305.56  |
| 15       | Elevator  | 4821100000 | KG   | 2820.63   |
| 16       | Plumb-line  | 3916909000 | KG   | 19.41     |
| 17       | White paper   | 48029900   | KG   | 221.41    |
| 18       | Nylon   | 5407420000 | KG   | 100       |
| 19       | Polyester   | 5407520000 | KG   | 158413.17 |
| 20       | Printed Polyester Fabric                                | 60063300   | KG   | 9260.28   |
| 21       | PU  | 3921131000 | KG   | 9408.08   |
| 22       | Netting   | 5804103000 | KG   | 10724.87  |
| 23       | Aluminum-foil   | 7607200000 | KG   | 4748.07   |
| 24       | PVC Netting Cloth                                       | 5903109029 | KG   | 26794.31  |
| 25       | PP Nonwoven Fabric                                      | 5603939000 | KG   | 2170      |
| 26       | Polyester Velvet  | 5603949000 | KG   | 7712.13   |
| 27       | Ethylene Vinyl Acetate                                  | 3901909000 | KG   | 3295.55   |
| 28       | Foam  | 3921110000 | KG   | 14341.83  |
| 29       | EPE   | 39211990   | KG   | 14817.06  |
| 30       | 2-way stretch polyester + sbr + 2-way stretch polyester | 5903909000 | KG   | 21509.4   |
| 31       | Polyester + eva foam + 2-way stretch polyester          | 3926909090 | KG   | 9554.46   |
| 32       | TPU Polyester   | 39209919   | KG   | 188413.17 |
| 33       | PVB Polyester   | 39209119   | KG   | 128413.17 |
|          |   |            |      |           |

| No | Descriptions                    | HS Code    | Unit | Quantity  |
|----|---------------------------------|------------|------|-----------|
| 34 | TPE Polyester                   | 39079990   | KG   | 98413.17  |
| 35 | EVA Polyester                   | 39013000   | KG   | 198413.17 |
| 36 | Aluminium screen-printing frame | 76109090   | KG   | 3000      |
| 37 | Tape                            | 3919909900 | KG   | 700       |
| 38 | Stapler Pin                     | 7317002000 | KG   | 200       |
| 39 | Stapler                         | 7317002000 | KG   | 5         |
| 40 | LED                             | 8539500000 | KG   | 120       |
| 41 | Thermal Transfer Ribbon         | 9612109030 | KG   | 35        |
| 42 | PVC/PP Board                    | 39259090   | KG   | 5600      |
| 43 | Stickers                        | 39199010   | KG   | 792       |
| 44 | Pallet                          | 44152000   | KG   | 1600      |

# 3.3.5. Chemical Usage

Chemical used in the production process are currently purchased from Dong Ying Ink Printing Materials Co., Ltd and Dajia Myanmar Co., Ltd in local and will be imported from China in future. Monthly chemical usages are listed in Table 3-3. The material safety data sheets and vouchers for chemical are described in Appendix L.

Table 3-3 Chemical List

| No | Particular                             | Unit  | Amount Used Per Month |
|----|--|-------|-----------------------|
| 1  | Glue                                   | Liter | 22.8                  |
| 2  | Cross Linking Agent                    | Kg    | 1.04                  |
| 3  | Water-based three-dimensional goal oil | Kg    | 247                   |
| 4  | Solvent-based screen-printing ink      | Kg    | 236.6                 |







Figure 3.13 Chemical Storage Photo

# 3.3.6. Machinery and Equipment

List of machinery and equipment required for Wide Vision Enterprise Company Limited is following in Table 3-4. These machinery and equipment are imported from China, Hongkong and Taiwan. The running day of these machinery and equipment is about 288 days per year.

Table 3-4 List of Machinery and Equipment

| No. | Particular   | Model            | A/U | Quantity |
|-----|--|------------------|-----|----------|
| 1.  | RIHUI Peeling machine  | RH-801           | Set | 2        |
| 2.  | RIHUI Computer automatic roll machine  | RH-430           | Set | 2        |
| 3.  | RIHUI Computer pattern sewing machine  | RH-2010          | Set | 2        |
| 4.  | RIHI Template sewing machine   | RH-800           | Set | 2        |
| 5.  | KSEW Zigzag stitch industrial sewing machine                                   | KSEW-2153        | Set | 2        |
| 6.  | RIHUI Direct-drive overlock sewing machine                                     | RH-747           | Set | 1        |
| 7.  | High-head sewing machine   | LU3-6860-<br>BOB | Set | 24       |
| 8.  | LU2-4420-BOB: Double-needle lockstitch compound-feed industrial sewing machine | LU2-4420-<br>BOB | Set | 4        |
| 9.  | Double-needle lockstitch needle-feed industrial sewing machines                | LU2-2220-<br>BOB | Set | 4        |
| 10. | Electronic Direct Drive Lockstitch Bar<br>Tacker                               | KE-430HD-5       | Set | 4        |
| 11. | With Double-capacity look  | 246U             | Set | 4        |
| 12. | MEALONE DY MACHINE   | HC-450A          | Set | 84       |

| No. | Particular                                       | Model        | A/U | Quantity |
|-----|--|--------------|-----|----------|
| 13. | 4-COLUMN HIGH SPEED HYDRAULIC<br>CUTTING MACHINE | -            |     | 2        |
| 14. | SEMI-AUTOMATIC RIVETING MACHINE                  | HC-10RX36    | Set | 1        |
| 15. | TWO STROGERIVETING MACHINE (BIG MODEL)           | HC-8RPA      | Set | 2        |
| 16. | SEMI-AUTOMATIC EYELETING<br>MACHINE (TABLE TYPE) | HC-5E        | Set | 2        |
| 17. | COMPUTER CONTROLLED BELT<br>CUTTING MACHINE      | HC-800H-B    | Set | 3        |
| 18. | JINLET DRY MACHINE                               | JL-AR8.8KG/H | Set | 2        |
| 19. | JINLET DRY MACHINE                               | JL-AR10LG/H  | Set | 1        |
| 20. | JINLET DRY MACHINE                               | 5L-AR138L/D  | Set | 1        |
| 21. | Sewing Machine                                   | FEI SU       | Set | 4        |
| 22. | Sewing Machine                                   | FEI SU-6860  | Set | 1        |
| 23. | Sewing Machine                                   | FENGAO-0321  | Set | 4        |
| 24. | Sewing Machine                                   | FENGAO-1341  | Set | 2        |
| 25. | Sewing Machine                                   | FENGAO-246   | Set | 1        |
| 26. | Sewing Machine                                   | QI XIN       | Set | 4        |
| 27. | DY Sewing Machine                                | QI XIN       | Set | 1        |
| 28. | Screw Air compressor                             | -            | Set | 1        |
| 29. | Air Dryers                                       | -            | Set | 1        |
| 30. | Chongqing cummins desel generator (KVA-400)      | -            | Set | 1        |
| 31. | Jidong cummins diesel generator (KVA-94)         | -            | Set | 1        |
| 32. | Sewing Machine                                   | XING CHI     | Set | 1        |
| 33. | Double Needle Sewing Machine                     | XING CHI     | Set | 1        |
| 34. | DY Sewing Machine                                | RHI HUI      | Set | 4        |
| 35. | DY Sewing Machine                                | JIA FEN      | Set | 10       |
| 36. | Sewing Machine (High Head)                       | JIA FENG     | Set | 1        |

| No. | Particular  | Model             | A/U | Quantity |
|-----|---|-------------------|-----|----------|
| 37. | Sewing Machine                                      | XING CHI          | Set | 1        |
| 38. | DY Sewing Machine                                   | XING CHI          | Set | 1        |
| 39. | Four-column cutting machine                         | -                 | Set | 1        |
| 40. | Computer sewing machine                             | -                 | Set | 1        |
| 41. | Computer sewing machine                             | -                 | Set | 1        |
| 42. | Computer DY Sewing Machine                          | RHI HUI-<br>0308D | Set | 85       |
| 43. | Computer Pattern Sewing Machine                     | RHI HUI-<br>3020G | Set | 8        |
| 44. | Computer Pattern Sewing Machine                     | RHI HUI-210D      | Set | 5        |
| 45. | High Head Sewing Machine                            | RHI HUI-6860      | Set | 16       |
| 46. | Long Arm Sewing Machine (Industrial Sewing Machine) | ORRIS-461         | Set | 2        |













Figure 3.14 Machinery and Equipment Photo

### 3.3.7. Human Resource

Human resource required by foreign experts and local persons for administrative and production process are about 625 persons which are also described in Table 3-5. Currently, there are local employee for female 262 persons and male 60 persons, foreign employee for male 8 persons and female 3 persons, total employees are 333 persons and one day (1 shift) (8 hours + overtime 2 hours) of production is running for operation. Lunch break time is 30 mins. The working day of Wide Vision Enterprise Company Limited is 6 days per week, 24 days per month and 288 days per year.

Table 3-5 Employment Schedule of Wide Vision Enterprise Company Limited

| No. | Description    | Year 1-3 | Year 4-10 |
|-----|----------------|----------|-----------|
| 1   | Foreign Expats |          |           |

| CEO                               | 2   | 2   |  |
|-----------------------------------|---|---|--|
|                                   |   | 2   |  |
| Production Line Supervisor        | 1   | 5   |  |
| Quality Check Supervisor          | 1   | 5   |  |
| Storage Supervisor                | 1   | 5   |  |
| Mechanical Supervisor             | 1   | 5   |  |
| Chief Supervisor                  | 1   | 5   |  |
| Sub Total                         | 7   | 27  |  |
| II Local                          |   |   |  |
| Factory Manager                   | 1   | 1   |  |
| Finance Supervisors               | 1   | 2   |  |
| General Supervisors               | 1   | 1   |  |
| General Staffs                    | 2   | 2   |  |
| Driver                            | 2   | 3   |  |
| Technician Supervisors            | 3   | 6   |  |
| Purchasing Supervisors            | 1   | 1   |  |
| Quality Control Supervisors       | 1   | 2   |  |
| Human Resource Supervisors        | 1   | 2   |  |
| Production Management Supervisors | 10  | 14  |  |
| Production Management Staffs      | 4   | 8   |  |
| Production Line Labour            | 174   | 348   |  |
| Sub Total                         | 201   | 390   |  |
| Total                             | 208   | 417   |  |
| lotai                             | 625   |   |  |
|                                   | Storage Supervisor  Mechanical Supervisor  Chief Supervisor  Sub Total  Factory Manager  Finance Supervisors  General Supervisors  General Staffs  Driver  Technician Supervisors  Purchasing Supervisors  Quality Control Supervisors  Human Resource Supervisors  Production Management Supervisors  Production Management Staffs  Production Line Labour | Production Line Supervisor         1           Quality Check Supervisor         1           Storage Supervisor         1           Mechanical Supervisor         1           Chief Supervisor         1           Sub Total         7           Local           Factory Manager         1           Finance Supervisors         1           General Supervisors         1           General Staffs         2           Driver         2           Technician Supervisors         3           Purchasing Supervisors         1           Quality Control Supervisors         1           Human Resource Supervisors         1           Production Management Supervisors         10           Production Management Staffs         4           Production Line Labour         174           Sub Total         201           Total         208 |  |

## 3.3.8. Water Requirement

The factory gets water from the tube well installed inside the factory compound. There are two tube wells that the depth of 250 fts in this factory. Groundwater from these tube wells is pumped into the water storage tanks for firefighting, drinking water 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 tube well water in which tube well water is pumped by 2 inches PVC pipe and treated by oxidation tower, chlorine dosing system, de-iron filter (FRP), carbon filter, and cartridge filter. The tube well water is treated by sedimentation tank, filers in overhead tank and lastly water treatment system including sand filter, carbon filter, water softener and reverse osmosis (RO) system before distribution through the pipe lines. The water will be reserved into the two water storage tanks which the size of 5ft-7in x 5ft-7in x 137ft (capacity of 8 tons) for supplying domestic use and drinking water and the underground water storage tank which the size of 91ft x 11.5ft x 7.2ft (capacity

of 180 tons) for firefighting. The amount of water for drinking water and domestic use is about 2.7 tons per day and 81 tons per month and 972 tons per year.



Figure 3.15 Water Storage Tank, Water Supply for Drinking Water and Firefighting

# 3.3.9. Electricity and Fuel Requirement

The proposed project gets required electricity supply from Yangon Electricity Supply Corporation (YESC) and distributed by 800 kVA of Transformer and another sources of energy 440 kVA, and 94 kVA generators which also be kept as the emergency generator if normal electricity supply could

not provide for the proposed project. Estimated electricity usage is about 30,000 units per month. Required diesel for generator are purchased from Myan Oil Terminal Company Limited. Fuel requirement is about 1,271 gallons per month. The amount of fuel storage for generator is 1,200 gallons. To handle the leakage and spillage of the diesel, an interception with sand is kept under the tank.



Figure 3.16 Electricity Facilities and Fuel Storage

# 3.3.10. Facilities

### 3.3.10.1.Solid Waste Disposal

In this project, plastic & fabric waste, carton waste, fabric rolls & thread rolls, food waste, and hazardous waste are generated from the departments such as Production Department, Store Department, Cutting Department, Printing Department, Packing Department, Canteen, and Canteen (Dormitory). Plastic waste and fabric waste are disposed of in the garbage tank, and food waste is discarded in a 116-gallon waste bin. Hazardous waste generated from the printing process is stored in the chemical storage room. In coordination with YCDC services, plastic & fabric waste, food waste, and hazardous waste (used PPE and adhesive-covered cloths) are disposed of once a week. The disposal amount per week is 2721.55 kg for plastic & fabric waste and food waste, and 140 kg for hazardous waste (used PPE and adhesive-covered cloths). Hazardous waste (empty cans) is disposed of by connecting with YCDC per month and the amount of waste is 102 pics in one time. Carton waste, fabric rolls, and thread rolls are temporarily stored in the waste storage area and sold to local buyers once a

month. Monthly discharged amount of solid waste from the all departments for production is described in Table 3-6.

Table 3-6 Monthly Discharged Amount of Solid Waste

| No | Waste Type         | Discharged Amount (KG) |
|----|--------------------|------------------------|
| 1. | Fabric Waste       | 5,750                  |
| 2. | Plastic Waste      | 700                    |
| 3. | Food Waste         | 2,000                  |
| 4. | Carton Waste       | 1,053                  |
| 5. | Fabric Roll Waste  | 612                    |
| 6. | Thread Rolls Waste | 142                    |
| 7. | Hazardous Waste    | 1,000                  |



စားကြွင်းစားကျန် အမှိုက်ပစ်ရန်

Hazardous Waste Storage Area

Hazardous Waste Place အန္တရာသယ်ရှိသောအ မှိုက်များစွန့်ပစ်ရန်။

**Food Waste Bin** 

**Hazardous Waste Bin** 



YCDC's Waste Collecting Service Figure 3.17 Solid Waste Disposal System

## Production Department

In the sewing line, fabric and plastic waste are generated, with each machine equipped with a 5-gallon waste bin designated for fabric waste only. Additionally, each sewing line has 2 (30-gallon) bins, one for fabric waste and one for plastic waste, allowing for separate disposal. In the production department, there are 16 (30-gallon) bins and 270 (5-gallon) bins. The production department generates 80 kg of fabric waste and 25 kg of plastic waste daily. This waste is transported to the waste storage area twice daily for disposal.







30-gallon Waste Bins





Fabric & Plastic Waste and Carton Boxes Stored in Waste Storage Area

# > Store Department

The store department primarily generates plastic waste, which is disposed of in a 20-gallon waste bin. There is one (20-gallon) waste bin in the Store Department, and approximately 3 kg of plastic waste is generated daily. The plastic waste from the store department is transported to the waste storage area. In addition, wastes such as carton wastes, fabric rolls, and thread rolls are generated and transported to the waste storage area once a day. Each week, 263.25 kg of carton waste, 153 kg of fabric rolls, and 35.5 kg of thread rolls are generated.



20-gallon Waste Bin

# > Cutting Department

In the cutting department, fabric scraps are primarily generated, with approximately 150 kg produced daily. There are no separate waste bins in this department; instead, fabric scraps are collected and transported using a hand trolley to the waste storage area once a day.



**Hand Trolley Photos** 

# > Printing Department

The primary source of hazardous waste in the factory is from the printing department, which generates waste such as used PPE, old adhesive-covered cloths, and empty cans. In the printing department, there is 1 (22-gallon) waste bin and 5 (80-liter) waste bins. The waste generated from used PPE and old adhesive-covered cloths amounts to approximately 40 kg per day, and this waste is transported to a designated area for temporary hazardous waste disposal once daily. The monthly cans waste is detailed in the table below, and these bottles are temporarily stored in the chemical storage room.

Table 3-7 Monthly Cans Waste List

| No | Types                            | Qty (No.) |  |
|----|----------------------------------|-----------|--|
| 1  | Water-Based                      | 24        |  |
| 2  | Glue (Iron Barrel)               | 8         |  |
| 3  | Glue (blue)                      | 6         |  |
| 4  | Water-Based (black)              | 3         |  |
| 5  | Water-Based (Reducer)            | 5         |  |
| 6  | Lubricant Oil                    | 4         |  |
| 7  | Oil-Based Plastic Bottle (white) | 12        |  |
| 8  | Water-Based (White)              | 14        |  |
| 9  | Oil-Based (Iron Barrel)          | 16        |  |
| 10 | Glue (blue)                      | 1         |  |
| 11 | Glue (Iron Barrel)               | 9         |  |



**80-liter Waste Bin** 



22-Gallon Waste Bin





**Used Cans Stored in the Temporary Disposal Area** 

#### Canteen Area

The factory has two types of canteens; one used by workers and another for the dormitory. The main waste is food waste. In the worker canteen, there are four 30-gallon waste bins for disposing of food waste, with approximately 80 kg generated daily. In the dormitory canteen, there is 1 (15-gallon) waste bin, which produces around 47 kg of waste per day. The food waste from both canteens is collected and disposed of at a temporary storage area once a day.



30-gallon Waste Bin



15-Gallon Waste Bin

#### 3.3.10.2.Liquid Waste Control Facility

In the factory, wastewater is generated from various sources, including industrial wastewater from the printing process and domestic wastewater from sinks, kitchens, toilets, and machine washing.

#### > Industrial Wastewater

The factory generates industrial wastewater from the cleaning of used molds in the printing process. This wastewater is first collected and treated in a sedimentation tank ( $5' \times 5' \times 5'$ ) as shown in Figure 3.18, where suspended solids are allowed to settle out. The sedimentation tank consists of four chambers, the first chambers allow the particles to settle. The liquid in the remaining (2) chambers is filtered step by step and the clean water from the last chamber is discharged into the factory's drainage system. This sedimentation process ensures that large particles are removed before the wastewater is released, reducing the environmental impact. Regular monitoring and maintenance of the sedimentation tank are essential to ensure its continued effectiveness in treating the industrial wastewater.

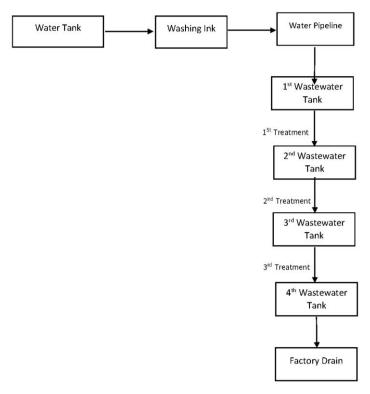


Figure 3.18 Flow Pattern of Sedimentation Tank





Figure 3.19 Used Mold Washing Area in Printing Department and Sedimentation Tank

#### Domestic Wastewater

The factory site includes kitchen, canteen, and toilet facilities distributed across various buildings. In the kitchen, separate drainage lines have been installed to handle wastewater from activities such as washing and cooking. Additionally, the compound area surrounding the project site is equipped with drainage systems designed to manage stormwater, including rainwater, snowmelt, and surface runoff. The compound will be paved with concrete, with strategically placed drainage holes to facilitate the flow of stormwater. For wastewater management, the factory plans to implement separate channels for domestic and industrial wastewater, with a septic-type toilet system in place. The factory is committed to cooperating with the local township development committee to ensure proper disposal and management of the septic tank waste in accordance with municipal regulations. The estimated wastewater discharge from domestic use is approximately 2,068.6 gallons per day, 62,058 gallons per month, and 755,039 gallons per year. Drainage systems are strategically located along the sides of the factory buildings, canteen, and office areas to effectively manage both domestic wastewater and stormwater runoff. To mitigate the environmental impact on water resources, regular maintenance and cleaning of the drainage systems will be carried out by dedicated staff. Additionally, measures will be taken to minimize spills and leaks of oil and grease, ensuring that these substances do not contaminate the surrounding environment. Regular monitoring and maintenance of the entire drainage system are essential to ensure its functionality and to prevent any water pollution.





Figure 3.20 Drainage System and Hand Washing Basin

## 3.3.10.3. Fire Hazards Protect Facility

For fire safety plan, Wide Vision Enterprise Company Limited has a plan to keep sufficient amount of firefighting equipment, in case of emergency fire problems in factory building. Regular inspection for existing firefighting equipment must be done. In case of fire emergency, water storage tank for fire firefighting is also constructed with the size of 91ft x 11.5ft x 7.2ft (capacity of 180 tons) 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. Firefighting training plan is also prepared for all employees by using the instructions, techniques and guidelines in concern with fire emergency matters according to the guidelines of Myanmar Fire Services Department. Moreover, smoking inside the building is strongly prohibited to avoid unwanted fire problems. Fire safety equipment lists are described in Table 3-8.

Table 3-8 Fire Safety Equipment Lists

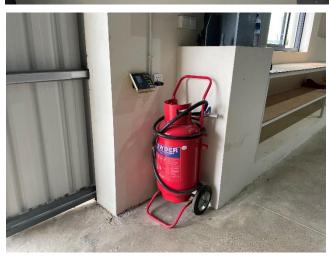
|     | and the state of t |                                  |           |  |  |  |
|-----|--|----------------------------------|-----------|--|--|--|
|     |  | Quantity (pcs)                   |           |  |  |  |
| No. | Items  | Production, Warehouse and Office | Dormitory |  |  |  |
| 1.  | Fire Extinguishers   | 78                               | 6         |  |  |  |
| 2.  | Fire Alarm   | 28                               | 6         |  |  |  |
| 3.  | Fire Hose  | 33                               | 6         |  |  |  |
| 4.  | Fire Hydrant   | 6                                | 6         |  |  |  |
| 5.  | Smoke Detector   | 36                               | 36        |  |  |  |
| 6.  | Sprinkler Head   | 1259                             | -         |  |  |  |
| 7.  | Automatic Heat Detector  | 2                                | 2         |  |  |  |
| 8.  | Emergency Light  | 26                               | 6         |  |  |  |
| 9.  | First Aid Box  | 10                               | 2         |  |  |  |
| 10. | Emergency Exit   | 32                               | 6         |  |  |  |











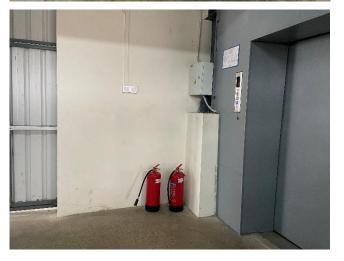




Figure 3.21 Emergency Safety and Fire Management System

# 3.3.10.4. Toilet Facility

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. The number of toilets for male are 11 rooms and for female are 33 rooms, total 44 rooms.





Figure 3.22 Toilet Facility Photo

# 3.3.10.5. Medical and Health Facility for Employees

The factory has medical and health care such as first aid and clinic room with a nurse and first aid boxes has been provided to treat employees for minor injuries, sickness and emergency medical care. First aid boxes that including medicines are provided in the operation area of this factory for emergency cases of workers. To prevent electric shock hazards, electrical maintenance staff (handyman) is to be assigned to do regular inspections and take preventive measures.



Figure 3.23 First Aid Box, Clinic and First Aid Room Photo

#### 3.3.10.6. Ventilation and Cooling System

The factory ventilation and cooling systems consist of natural and mechanical system. Natural ventilation and cooling systems are provided in canteen, warehouse area, generator and transformer room. Mechanical ventilation and cooling systems such as air-cons and fans are installed in kitchen and dining room, office room, director room, meeting room, production area, dormitory, interview room, first aid room, server room. The list of air-conditioners is described in Table 3-9.

Table 3-9 List of Air-Conditioners

| No | Product Name           | Model No         | Brand<br>Name | Qty | НР   | Type of<br>Gas | Cooling<br>Capacity | Voltage Source        |
|----|------------------------|------------------|---------------|-----|------|----------------|---------------------|-----------------------|
| 1  | Floor Standing<br>Type | MFJ-<br>48CRN1   | Midea         | 1   | 5.00 | R410a          | 48000Btu/h          | 380-415V-50Hz,<br>3ph |
| 2  | Floor Standing<br>Type | MFJ-<br>48CRN1   | Midea         | 5   | 5.00 | R410a          | 48000Btu/h          | 380-415V-50Hz,<br>3ph |
| 3  | Wall Mounted<br>Type   | MSAG-<br>18CRDN8 | Midea         | 2   | 2.00 | R32            | 18000Btu/h          | 220-240V-50Hz,<br>1ph |
| 4  | Wall Mounted<br>Type   | MSAG-<br>12CRDN8 | Midea         | 22  | 1.50 | R32            | 12000Btu/h          | 220-240V-50Hz,<br>1ph |
| 5  | Wall Mounted<br>Type   | MSAG-<br>09CRDN8 | Midea         | 2   | 1.00 | R32            | 9000Btu/h           | 220-240V-50Hz,<br>1ph |







Figure 3.24 Ventilation and Cooling System

# 3.4. DECOMMISSIONING PHASE

The proposed project investment duration is 10 years and will close out the project according to their MIC proposal. The land and building are leased, so the permit expires, it will be returned to the owner without cancellation. The uninstalling and carrying of the machinery and equipment is properly and carefully performed to prevent injury and accident, and will follow the relevant law, rules and regulations to reduce the impacts on the environment.

# 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;

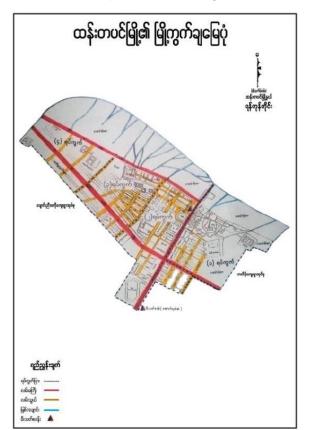
- Onsite Measurements and Analysis Baseline parameters such as air quality, noise quality, operation light conditions and water quality of the project site during operation phase were measured onsite. The analyzed results are mentioned in this chapter.
- Secondary data collection of proposed project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



Figure 4.1 1km Radius Map

#### 4.2. PHYSICAL COMPONENT

Htantabin Township lies between latitude 17° and 18° to longitude 95° and 96°. It is located 16 miles from East to West and 38 miles from South to North and 22 ft above sea level. Township map of Htantabin Township is shown in Figure 4.2.



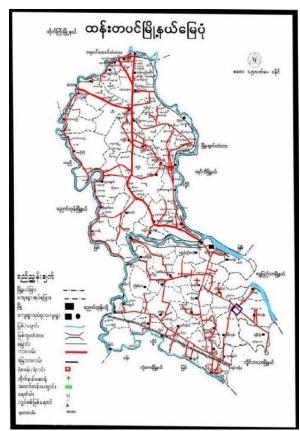


Figure 4.2 HtantabinTownship Map

## 4.2.1. Topography

Htantabin Township is a plain area with many rivers and lakes. The prominent rivers are Pun Hlaing River, Hlaing River, Kokkowa River and Bawlal River. Pun Hlaing River, Hlaing River and Bawlal River flow from north to south and Kokkowa River flows from east to west. (Source; General Administration Department, Htantabin Township)

#### 4.2.2. Climate Conditions

Htantabin Township has hot and wet climate with a maximum temperature of  $38\,^\circ$ C and a minimum temperature of  $30\,^\circ$ C. The rainfall and temperature that occurred from 2019 to 2023 are as follows:

Table 4-1 Yearly Status of Rainfall and Temperature (2019-2023)

|    |      | Rainfall*    |                                  | Tempera   | Temperature* |  |
|----|------|--------------|----------------------------------|-----------|--------------|--|
| No | Year | Paining Days | Paining Dava Total Bainfall (mm) |           | Winter       |  |
|    |      | Raining Days | Total Rainfall (mm)              | Higher °C | Lower °C     |  |
| 1  | 2019 | 93           | 85.22                            | 38° C     | 29° C        |  |
| 2  | 2020 | 69           | 77.03                            | 35° C     | 31° C        |  |

| 3 | 2021 | 85 | 119.09 | 36° C | 24° C |
|---|------|----|--------|-------|-------|
| 4 | 2022 | 4  | 2.31   | 39° C | 25° C |
| 5 | 2023 | -  | -      | 39° C | -     |

<sup>\*</sup> General Administration Department in Htantabin Township

## 4.2.3. **Geology**

In Yangon area mainly composed of Pegu Group, Irrawaddy Formation and Alluvium. Alluvial deposits (Pleistocene to Recent), the non-marine fluviatile sediments of Irrawaddy formation (Pliocene), and hard, massive sandstone of Pegu series (early-late Miocene) underlie the Yangon area. Alluvial deposits are composed of gravel, clay, silts, sands and laterite which lie upon the eroded surface of the Irrawaddy formation at 3-4.6 m above mean sea level (MSL). The rock type in Yangon is mainly soft rocks, which consist of sandstone, shale, limestones and conglomerate. Geological map of Yangon Regional area is shown in Figure 4.3.

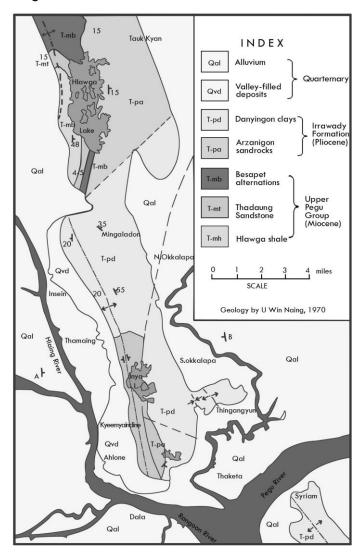


Figure 4.3 Geological Map of Yangon Region

#### 4.2.3.1. 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).

# 4.2.3.2. Soil

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

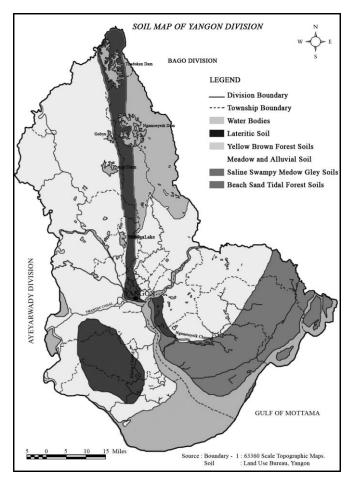


Figure 4.4 Soil Map of Yangon (Source: Land use of Bureau of Yangon)

# 4.2.4. 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 Hlaing River which flows north to south. 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.

# 4.2.5. Environmental Baseline Study

The field observation for determining the environmental baseline of the proposed project area was undertaken during operation 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 4-2 Location of the Survey Point

| Type of Survey      | Coordinates                   | Survey Point | Description of Survey Point      |
|---------------------|-------------------------------|--------------|----------------------------------|
| Outdoor Air Quality | 17°1'10.61"N<br>95°58'32.99"E | Project Site | In front of the factory building |

| Indoor Air Quality  | 17°1'12.82"N<br>95°58'33.55"E | Operation Area | Sewing Department          |
|---------------------|-------------------------------|----------------|----------------------------|
| Noise Level         | 17°1'12.18"N<br>95°58'32.08"E | Operation Area | Cutting Department         |
| Noise Level         | 17°1'13.14"N<br>95°58'33.52"E | Operation Area | Sewing Department          |
|                     | 17°1'12.02"N<br>95°58'33.21"E |                | Warehouse                  |
|                     | 17°1'12.6"N<br>95°58'31.89"E  |                | Cutting Department         |
|                     | 17°1'13.02"N<br>95°58'32.13"E |                | Printing Department        |
| Light Intensity     | 17°1'13.14"N<br>95°58'33.63"E | Operation Area | Sewing Department          |
|                     | 17°1'12.83"N<br>95°58'33.27"E |                | Quality Control Department |
|                     | 17°1'11.2"N<br>95°58'34.74"E  |                | Final Product Storage Area |
|                     | 17°1'11.4"N<br>95°58'34.49"E  |                | Packing Department         |
| Wastewater Sampling | 17°1'13.53"N<br>95°58'32.09"E | Project Site   | Sedimentation Tank         |



Figure 4.5 Baseline Study Map of Wide Vision Enterprise Company Limited

## 4.2.6. Air Quality

The air quality monitoring was conducted within the project area from 23 to 24 August 2024. The measurement location points are situated at latitude 17°1'12.82"N and longitude 95°58'33.55"E and latitude 17°1'10.61"N and longitude 95°58'32.99"E. To reveal the existing status of baseline air quality, the average outdoor air quality measured were compared with National Environmental Quality (Emission) Guidelines, and Thailand Ambient Air Quality Standards. It was observed that the air quality measurement results are within the Guidelines.

## 4.2.6.1. Methodology and Approach

The air quality and meteorological parameters was monitored by using air quality monitoring system (AQM-09) which provides direct reading in real time with data-logging capabilities. Sampling rate or air quality data will be measured automatically every five minutes and directly read and recorded onsite.

Primary data on ambient air quality measurement was done at one location in the project site compound during field survey as shown in Figure 4.6. The measurement will be conducted for 24-hour at the location in the project site as shown in Table 4-3. The parameters to be monitored are Ozone (O<sub>3</sub>), Nitrogen Dioxide (NO<sub>2</sub>), Nitric Oxide (NO), Sulphur Dioxide (SO<sub>2</sub>), Carbon Monoxide (CO), Total Volatile Organic Compound (VOC), Particulate Matters (PM<sub>10</sub> and PM<sub>2.5</sub>) and Total Suspended Particulate (TSP). In addition, meteorological parameters such as Temperature, Relative Humidity, Air Pressure, Wind Speed and Wind Direction were also measured as same schedule with air quality monitoring.

Table 4-3 Air Quality Measurement Result

| Parameters        | Observed<br>Value<br>(Indoor) | Observed<br>Value<br>(Outdoor) | Guideline<br>Value | Unit              | Guideline                                       | Averaging<br>Period |
|-------------------|-------------------------------|--------------------------------|--------------------|-------------------|---|---------------------|
| TSP               | 8.75                          | 12.79                          | 0.33               | mg/m³             | Thailand<br>Ambient Air<br>Quality<br>Standards | 24-hr               |
| PM <sub>10</sub>  | 8.07                          | 11.62                          | 50                 | µg/m³             | NEQEGs  | 24-hr               |
| PM <sub>2.5</sub> | 3.26                          | 10.03                          | 25                 | µg/m³             | NEQEGs  | 24-hr               |
| NO <sub>2</sub>   | 3.81                          | 5.21                           | 200                | µg/m³             | NEQEGs  | 1-hr                |
| SO <sub>2</sub>   | 15.71                         | 18.99                          | 20                 |                   | NEQEGs  | 24-hr               |
| SO <sub>2</sub>   | 0.11                          | 0.13                           | 500                | μg/m <sup>3</sup> | NEQEGS  | 10-mins             |
| O <sub>3</sub>    | 4.55                          | 6.25                           | 100                | µg/m³             | NEQEGs  | 8-hr                |
| СО                | 4.17                          | 2.87                           | 9                  | ppm               | Thailand<br>Ambient Air<br>Quality<br>Standards | 8-hr                |
| NO                | 9.38                          | 3.65                           | -                  | ppb               | NG  | 24-hr               |
| TVOC              | 0.004                         | 0.003                          | -                  | ppm               | NG  | 24-hr               |

<sup>\*</sup>NG = No Guideline

Sources: Air Quality Assessments for Health and Environment Policies in Thailand, 2018



Figure 4.6 Indoor and Outdoor Air Quality Measurement Photos

# 4.2.7. Wind Speed and Wind Direction

# 4.2.7.1. Location of Measurement and Survey Methods

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.

# 4.2.7.2. Survey Results

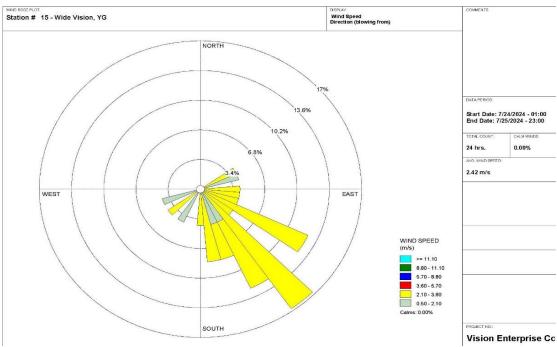
Wind speed and wind direction are also measured at the same location of air quality measurement. The results of wind speed and wind direction are described in Table 4-4. The wind rose diagram and wind class frequency distribution are shown in Figure 4.7.

0.00% of wind are calm and wind in 24 hours is 2.42 meter per second. The wind blows mostly to the southeast (SE) direction.

Table 4-4 Wind Speed and Direction Measurement Result

| Station | Measurement Date     | Wind Speed (m/s) | Wind Calm (%) | Prevailing<br>Wind<br>Direction |
|---------|----------------------|------------------|---------------|---------------------------------|
| 1       | 23 – 24 August, 2024 | 2.42             | 0.00          | SE                              |





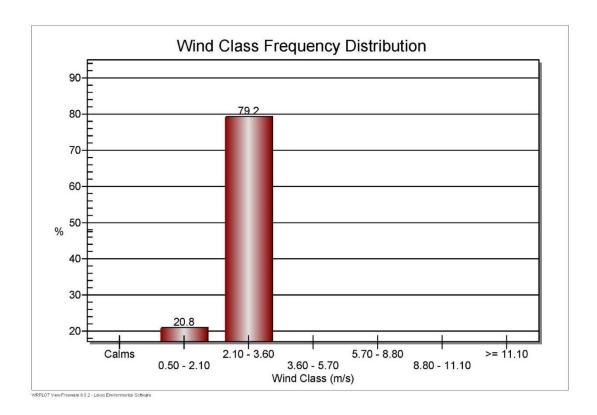


Figure 4.7 Wind Speed and Wind direction

## 4.2.8. Weather Condition

On 23<sup>rd</sup> to 24<sup>th</sup> August 2024 the weather condition of the factory area is shown in the below Table 4-5.

Table 4-5 Meteorological Measurement at Proposed Project

| 1 ,  |                         |                   |              |  |  |
|--|-------------------------|-------------------|--------------|--|--|
| Date   | Location                | Description       | Result Value | Environmental Parameter<br>Air Station Guideline |  |
|  | Indoor Area of factory  | Relative Humidity | 69.38 (%)    |  |  |
| 23 <sup>rd</sup> to 24 <sup>th</sup><br>August, 2024 | indoor Area or factory  | Temperature       | 31.3 °C      |  |  |
|  | Outdoor Area of factory | Relative Humidity | 83.93 (%)    | Present condition                                |  |
|  |                         | Temperature       | 29.68 °C     |  |  |
|  |                         | Air Pressure      | 1002.26 hPa  |  |  |

#### 4.2.9. **Noise**

The Noise level was measured at two stations within the project area for 24 hours on 23-24 August 2024. The average noise level in the project area is presented in Table 4-7 compared with the NEQEGs. According to the noise results, noise levels are within the acceptable level of National Environmental Quality (Emission) Guidelines.

# 4.2.9.1. Methodology and Approach

The noise was measured at project site area and the operation area. Sound Pressure Level (LAeq dB) at two stations was done at the target receivers during field survey. Measurement of noise level was conducted by referring to the recommendation of International Organization for Standardization (ISO), i.e ISO 1996-1:2003. Sound level meter (GM-1356) was utilized. The instrument used for noise measurement was set at the height of 1.2 m. A-weighted loudness equivalent level is measured automatically every 1 minutes and recorded in a memory card. The detail of sound equipment GM – 1356 is shown in Table 4-6.

Table 4-6 Technical Features of GM – 1356

|                                    | 100111100111100111100011111111111111111                   |  |  |  |
|------------------------------------|---|--|--|--|
| Sound Level Meter                  | GM - 1356   |  |  |  |
| Measurement range                  | 30~130dBA、35~130dBC                                       |  |  |  |
| Accuracy                           | ±1.5dB (reference sound pressure standard, 94dB@1KHz)     |  |  |  |
| Frequency response                 | 31.5Hz~8.5KHz   |  |  |  |
| Resolution                         | 0.1dB   |  |  |  |
| Measuring level                    | 30 to 80, 50 to 100, 60 to 110, 80 to 130, 30 to 130      |  |  |  |
| Dynamic range                      | 50dB/100dB  |  |  |  |
| Overload indication                | OVER / UNDER  |  |  |  |
| Frequency weighting characteristic | A and C   |  |  |  |
| Digital display                    | 4 digits  |  |  |  |
| Analogy bar graph                  | 1dB/1 bar graph   |  |  |  |
| Sampling rate                      | FAST:8times/second; SLOW:2times/second                    |  |  |  |
| AC signal output                   | 4Vrms/ full bar graph, output impedance is about 600 ohms |  |  |  |
| PWM signal output                  | Duty cycle =0.01X db value/3.3 x 100 %                    |  |  |  |
| Dyna mic characteristic            | FAST (high speed)/SLOW (low speed)                        |  |  |  |
| Calendar accuracy                  | ±30seconds/day  |  |  |  |
| Data storage quantity              | 4700  |  |  |  |
| The maximum value holding          | MAX   |  |  |  |
| Auto power off                     | 10 minutes without operation                              |  |  |  |
| Micro phone                        | 1/2inch polarization capacitance microphone               |  |  |  |

| Power supply | 6V (4PCS 1.5V Alkline battery)          |
|--------------|---|
| Dimension    | 70x35x256mm                             |
| Weight       | 244G (Without battery)                  |
| Battery life | 24h continuous use (Alkaline batteries) |

Table 4-7 Noise Level Measurement Result

| Date and Time                                     | Location           | GPS Value     | Result Value | NEQEGs Value |
|---|--------------------|---------------|--------------|--------------|
| 22rd to 24th August 2024                          | Cutting Department | 17°1'12.18"N  | 55 02 dPA    |              |
| 23 <sup>rd</sup> to 24 <sup>th</sup> August, 2024 | Cutting Department | 95°58'32.08"E | 55.92 dBA    | 70 dBA       |
|   | Sowing Doportment  | 17°1'13.14"N  | 62.94 dBA    | 70 UBA       |
|   | Sewing Department  | 95°58'33.52"E | 62.94 UDA    |              |





Figure 4.8 Sound Level Measurement Photo

## 4.2.10. Light Intensity

The light intensity is measured at the project area on 23 August 2024. The measurement location points are situated at latitude 17°1'12.02"N and longitude 95°58'33.21"E, latitude 17°1'12.6"N and longitude 95°58'31.89"E, latitude 17°1'13.02"N and longitude 95°58'32.13"E, latitude 17°1'13.14"N and longitude 95°58'33.63"E, latitude 17°1'12.83"N and longitude 95°58'33.27"E, latitude 17°1'11.2"N and longitude 95°58'34.74"E, latitude 17°1'11.4"N and longitude 95°58'34.49"E. The light measurement results in the factory are presented in Table 4-9 and compared with standards "*The Lighting Handbook*". According to the Light Intensity measurement results, the level of this area is within the acceptable level of standards "*The Lighting Handbook*".

# 4.2.10.1.Methodology and Approach

The light intensity was measured at seven sections of operation area such as warehouse, cutting department, sewing department, printing department, quality control department, final product storage area, packing department. The UT-382 light meter is placed in the designated area intended to measure light, and hold the sensor of the light meter towards the light source. Sampling rate is 100 times

per second. The display will show the light intensity reading in lux, and take note of the reading displayed on the screen for the measurement.

Table 4-8 UT-382 Specification

| Specifications                | Resolution  | UT382        |  |
|-------------------------------|---|--------------|--|
|                               | 20 lux  | ± (3%+20)    |  |
| illuminana maaayaana (luu)    | 200 lux   | ± (3%+8)     |  |
| illuminance measurement (Lux) | 2000 lux  | ± (3%+8)     |  |
|                               | 20000 Lux   | ± (3%+8)     |  |
|                               | 2 Fc  | √            |  |
| illurais and a second (Fa)    | 20 Fc   | √            |  |
| illuminance measurement (Fc)  | 200 Fc  | √            |  |
|                               | 2000 Fc   | √            |  |
|                               | Features  |              |  |
| Display count                 |   | 2000         |  |
| Auto range                    |   | √            |  |
| Data hold                     |   | V            |  |
| Auto power off                | Around 10 minutes                                 | √            |  |
| Low battery indication        | Around ≤7.1V                                      | √            |  |
| MAX/MIN mode                  |   | √            |  |
| Data storage                  |   | 2044         |  |
| USB interface                 |   | √            |  |
| Auto record time setup        |   | √            |  |
| Real-time clock               |   | √            |  |
|                               | General Characteristics                           |              |  |
| Power                         | 9V batt   | ery (6LF22)  |  |
| Display                       | 22.5mn  | n x 32.5mm   |  |
| Product Color                 | Red   | and grey     |  |
| Product net weight            | 185 g   |              |  |
| Product size                  | 195mm x 45mm x 26mm                               |              |  |
| Standard accessories          | Carrying bag, USB interface cable, PC software CD |              |  |
| Standard individual packing   | Blister, gift box, English manual                 |              |  |
| Standard quantity per carton  | 20 pcs  |              |  |
| Standard carton measurement   | 447 mm x 3  | 00mm x 335mm |  |
| Standard carton gross weight  |   | 7kg          |  |

Table 4-9 Light Intensity Measurement Result

| No. | Location  | Measure Value (Lux) | Standard |
|-----|-----------|---------------------|----------|
| 1   | Warehouse | 494                 | 200      |

| No. | Location                   | Measure Value (Lux) | Standard |
|-----|----------------------------|---------------------|----------|
| 2   | Cutting Department         | 1187                | 300      |
| 3   | Printing Department        | 805                 | 500      |
| 4   | Sewing Department          | 761                 | 750      |
| 5   | Quality Control Department | 1661                | 1000     |
| 6   | Final Product Storage Area | 321                 | 300      |
| 7   | Packing Department         | 1468                | 500      |



Figure 4.9 Light Intensity Measurement Photo

# 4.2.11. Water Quality

The Project requires water for operation and domestic uses. In this project, water is obtained from the tube well inside the project site area. Wastewater samples was collected for the primary baseline data.

# 4.2.11.1.Methodology and Approach

The water sampling was conducted within the project site area. Water samples was taken by Alpha horizontal water sampler and collected in plastic and sterilized glass sample containers. The sample collectors have to wear starch-free rubber gloves at all time while collecting water samples. The water samples bottles must be rinsed with the sampling water before use. The collected sample of water was tested at ALARM Ecological Laboratory.

# 4.2.11.2. Wastewater Quality

Wastewater sample was collected according to the National Environmental Quality (Emission) Guidelines (NEQEGs). In this project, the wastewater (treated) which is obtained from the sedimentation tank of printing department, was collected on 24 July, 2024. The sampling point is situated at latitude 17°1'13.53"N and longitude 95°58'32.09"E. According to the wastewater analysis results see in Table 4-10. All of the parameter are within the NEQEGs.

| Table 4-10 | Wastewater ( | (Treated) | Quality | / Result |
|------------|--------------|-----------|---------|----------|
|            |              |           |         |          |

| No. | Parameter             | Unit | Result | NEQEGs value |
|-----|-----------------------|------|--------|--------------|
| 1.  | рН                    | S.U  | 7.2    | 6-9          |
| 2.  | Temperature           | °C   | 26     | <3           |
| 3.  | Colour                | HU   | 1      | -            |
| 4.  | TSS                   | mg/l | 3      | 50           |
| 5.  | BOD₅                  | mg/l | 16     | 50           |
| 6.  | COD                   | mg/l | 38     | 250          |
| 7.  | Total Phosphorous     | mg/l | 1.8    | 2            |
| 8.  | Copper                | mg/l | 0.11   | 0.5          |
| 9.  | Chromium (Hexavalent) | mg/l | 0.02   | 0.1          |
| 10. | Oil & Grease          | mg/l | 4      | 10           |
| 11. | Total Nitrogen        | mg/l | 2.8    | -            |



Figure 4.10 Wastewater Sample Collecting Photo

# 4.2.11.1.Drinking Water Quality

The management team of Wide Vision Enterprise Company Limited collects the drinking water sample from the purified water tank inside the project site area once a year for the employee. The collected water sample was tested at ISO TECH Laboratory. The lab result of drinking water is described in Appendix D.

# 4.3. SOCIO-ECONOMIC ENVIRONMENT (SECONDARY DATA)

## 4.3.1. Population

In March, 2023, the population of Htantabin Township is about 200,997 people as present in Table 4-11.<sup>[1]</sup>

Table 4-11 Population of Males and Females at Htantabin Township (2023)

| Itam  | Older 18 year |         | Younger 18 year |       | Total   |       |       |         |        |
|-------|---------------|---------|-----------------|-------|---------|-------|-------|---------|--------|
| Item  | Males         | Females | Total           | Males | Females | Total | Males | Females | Total  |
| Urban | 3875          | 4413    | 8288            | 1314  | 1375    | 2689  | 5189  | 5788    | 10977  |
| Rural | 66851         | 74385   | 141236          | 24846 | 23938   | 48784 | 91697 | 98323   | 190020 |
| Total | 70726         | 78798   | 149524          | 26160 | 25313   | 51473 | 69886 | 104111  | 200997 |

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

# 4.3.2. Local Economy

Among regional towns, Htantabin 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

# 4.3.3. Public Infrastructure and Access

## 4.3.3.1. Communication and Transportation

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

Table 4-12 Transportation Route

| Categories                 | Towi | Miles |                      |
|----------------------------|------|-------|----------------------|
| Guidgeniae                 | From | to    |                      |
| Yangon – Pathein Road      | 6/3  | 17/4  | 11 Mile 1<br>furlong |
| Thida Aye – Htantabin Road | 0/0  | 7/0   | 7 Miles              |

| Htantabin Myo Shaung Road                           | 0/0      | 1/1       | 1 Mile 1<br>furlong            |
|---|----------|-----------|--------------------------------|
| Htantabin – Lamutan-Kyutaw Road                     | 0/0      | 15/4+529' | 15 Miles<br>4furlong<br>529 ft |
| Yaytwinkone – Myochaung – Tawlati-<br>YwarThar Road | 2/6+330' | 14/3+330' | 11 Miles 5<br>Furlongs         |

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

# 4.3.3.2. Electricity

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

## 4.3.3.3. 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 Htantabin Township. The name and the located village tract/ ward of schools are described in Table 4-13.<sup>[1]</sup>

Table 4-13 List of Major School in Htantabin Township

| Na  |                                      |                        |
|-----|--------------------------------------|------------------------|
| No. | Name of School                       | Location               |
| 1   | West Yangon Technological University | Wartayar Village Tract |
| 2   | BEHS (Htantabin)                     | 2 Ward                 |
| 3   | BEHS (Yay so ma Ngae Su)             | Yay So Village         |
| 4   | BEHS (Pan Tine)                      | Pan Tine Village       |
| 5   | BEHS (Nae Tha main)                  | Nae Tha main Village   |
| 6   | BEHS (Alain Lal)                     | Alain Lal Village      |
| 7   | BEHS (Kyu Taw)                       | Kyu Taw Village        |
| 8   | BEHS (Hle Sate)                      | Hle Sate Village       |
| 9   | BEHS (Baw Lal)                       | Baw Lal Village        |
| 10  | BEHS-Branch (Yoe Khwa)               | Yoe Khwa Village       |
| 11  | BEHS Branch (Atwin Thae Phyu)        | Atwin Thae Phyu        |
| 12  | BEHS Branch (Kyike Kha Nar)          | Kyike Kha Na Village   |
| 13  | BEHS Branch (Rakhine Yoe Gyi)        | Rakhine Yoe Gyi        |
| 14  | BEHS Branch (Pauk Tan)               | Pauk Tan Village       |
| 15  | BEHS Branch (Wartayar)               | Wartayar Village       |
| 16  | BEHS Branch (Lamu Tan Gyi)           | Lamu Tan Gyi Village   |
| 17  | BEHS Branch (Nyaung Yoe)             | Nyaung Yoe Village     |
| 18  | BEHS Branch (Atwin Yay Kyaw)         | Atwin Yay Kyaw Village |
| 19  | BEHS Branch (Amae Pa li)             | Amae Pa li Village     |

| No. | Name of School                 | Location                 |
|-----|--------------------------------|--------------------------|
| 20  | BEHS Branch (Oak Pho)          | Oak Pho Village          |
| 21  | BEHS Branch (Taline Hme)       | Taline Hme Village       |
| 22  | BEMS (Sat Kalay)               | Sat Kalay Village        |
| 23  | BEMS (Tu Chaung)               | Tu Chaung Village        |
| 24  | BEMS (Rakhine Yoe Lay)         | Rakhine Yoe Lay Village  |
| 25  | BEMS (Sandayaw)                | Sandayaw Village         |
| 26  | BEMS (Kywal Kuu)               | Kywal Kuu Village        |
| 27  | BEMS Branch (Kyaung Kone)      | Kyaung Kone Village      |
| 28  | BEMS Branch (Ywar Thit)        | Ywar Thit Village        |
| 29  | BEMS Branch (Tat Thit)         | Tat Thit Village         |
| 30  | BEMS Branch (Thayat Chan)      | Thayat Chan Village      |
| 31  | BEMS Branch (Ma Shwe Ou)       | Ma Shwe Ou Village       |
| 32  | BEMS Branch (Ka Twal)          | Ka Twal Village          |
| 33  | BEMS Branch (Daunt Gyi)        | Daunt Gyi Village        |
| 34  | BEMS Branch (Nyaung Thone Pin) | Nyaung Thone Pin Village |

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

#### 4.3.3.4. Health Status

The diseases of high prevalence reported in 2019 are Tuberculosis (TB), followed by Acute Respiratory Infection (ARI), Diarrhea, TB and snakebites. With reference to the Township Health Profile 2023 of Htaintabin Township, no accidental work injuries reported to the township hospital in 2023. The common diseases are shown in Table 4-14.

Table 4-14 Common Diseases in the Htantabin Township

| Disease      | Htantabin Township |           |  |  |
|--------------|--------------------|-----------|--|--|
| Disease      | Morbidity          | Mortality |  |  |
| Diarrhea     | 558                | -         |  |  |
| Tuberculosis | 291                |           |  |  |
| Dysentery    | 85                 | -         |  |  |
| Malaria      | 1                  | -         |  |  |

Table 4-15 Lists of hospital in the Htantabin Township

| Hospital Name           | Beds/Services | Responsible |
|-------------------------|---------------|-------------|
| မြို့နယ်ပြည်သူ့ဆေးရုံ   | 50            | Government  |
| နဲသမိန်တိုက်နယ်ဆေးရုံ   | 16            | Government  |
| လှည်းဆိပ်တိုက်နယ်ဆေးရုံ | 16            | Government  |
| ဘောလည်တိုက်နယ်ဆေးရုံ    | 16            | Government  |

| အလိန်လည်တိုက်နယ်ဆေးရုံ | 16 | Government |
|------------------------|----|------------|
| တက်သစ်တိုက်နယ်ဆေးရုံ   | 16 | Government |

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

#### 4.4. BIOLOGICAL COMPONENT (SECONDARY DATA)

As the proposed project area is located in Kan Gyi Kone Kwin, the information of ecological resources is very unlikely. In addition, within the proposed project area, there are no forests, wild life and rare or endangered species. The proposed project site is not located in or near a sensitive ecosystem as the proposed project area is situated in the Htantabin Township. The Project Site is a built-environment and the species of flora surveyed at the site are native species uncommon to the Yangon area.

| Ecological Resources       | Existing Condition   |
|----------------------------|--|
| Fisheries, aquatic biology | The nearest river is Hlaing River. Fresh water fish species are residing in the river. |
| Wildlife                   | Non existence  |
| Forests                    | Non existence  |
| Rare or endangered species | Non existence  |
| Protected areas            | Non existence  |
| Coastal resources          | A few mangrove species observed at the river banks of Hlaing River.                    |

## 4.5. CULTURAL AND VISUAL COMPONENTS (SECONDARY DATA)

#### 4.5.1. Cultural and Religious Sites

The cultural of Myanmar have been heavily influenced by Buddhism. Burmese culture has also been influenced by its neighbors India and China. Aspects of Burmese culture is most apparent in religious sites. Htantabin 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.

Table 4-16 Religion in Htantabin Township (2023)

| Township  | Buddhist | Christian | Hindu | Islam | Other | Total  |
|-----------|----------|-----------|-------|-------|-------|--------|
| Htantabin | 169283   | 31300     | 368   | 46    | •     | 200997 |

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

Table 4-17 Prominent Pagodas and Monastery

| No. | Pagoda       | Location                      |
|-----|--------------|-------------------------------|
| 1   | မြသိန်းတန်   | ၁ရပ်ကွက်၊ ထန်းတပင်            |
| 2   | လွမ်းစေတီ    | ၃ရပ်ကွက်၊ ထန်းတပင်            |
| 3   | ရွှေမှော်ဖြူ | ကျောင်းကုန်းကျေးရွာ၊ ထန်းတပင် |

| 4 | တဝရွှေဂူကြီး         | ၁ရပ်ကွက်၊ ထန်းတပင်         |
|---|----------------------|----------------------------|
| 5 | မနော်ဟရီ             | လှည်းဆိပ်ကျေးရွာ၊ ထန်းတပင် |
| 6 | မိုးကောင်း၊ ရန်အောင် | ရှမ်းစုကျေးရွာ၊ ထန်းတပင်   |

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

# 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               |   |  |  |   |  |  |  |  |
| Assessment      | 1                   | 2   | 3  | 4  | 5   |  |  |  |  |
| Magnitude (M)   | Insignificant       | small and will<br>have no effect<br>on working<br>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<br>improbable  | Improbable  | Probable   | Highly probable  | Definite  |  |  |  |  |

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

Significant Point (SP) = (Magnitude + Duration + Extent) \* 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 in terms of physical, biological and socio-economic aspects along with the perspective on both positive and negative impacts. The potential environmental impacts brought by various activities of

proposed factory project will be identified and judged by site surveying with checklist, meeting with client team, including plant manager and supervisor, representatives from the factory operators and assessing the environmental baseline information for operation and decommissioning phases along with its mitigation measure.

#### 5.2.1. Positive Impact

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

## 5.2.2. Negative Impact

The following Figure 5.1 briefly described the potential negative impacts of the proposed project. There are four main types of impacts; impact on environmental resources, impact on ecological resource, impact on human and impact of waste generation.

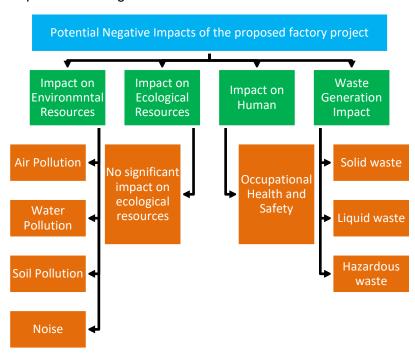


Figure 5.1 Potential negative impact affect from proposed factory project

# 5.3. PROJECT ACTIVITIES AND ITS SIGNIFICANT IMPACTS DURING CONSTRUCTION, OPERATION & DECOMMISSIONING PHASES

#### 5.3.1. Environmental Impact for Pre-Construction and Construction Phase

During the EMP study, the factory has been constructed and has started commercial operation at the project site. Therefore, these phases are not considered in the EMP report.

# 5.3.2. Environmental Impact for Operation and Decommission Phase

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

Table 5-2 Evaluation and Perdition of Significant Impacts for Operation and Decommission Phase

| Categories         | Project Activities  | Significant of Potential Impacts |   |   |   |    | Impact Significance |
|--------------------|---|----------------------------------|---|---|---|----|---------------------|
|                    | 1 Tojest Asilvides  |                                  | D | Е | Р | SP |                     |
|                    | Operation Pl  | nase                             |   |   |   |    |                     |
| Air Pollution      | <ul> <li>The activities from printing process</li> <li>Dust and GHGs emission from vehicles used for transporting raw materials and final products</li> <li>Emission from emergency diesel generator</li> </ul>   | 3                                | 4 | 2 | 3 | 27 | Low                 |
| Water Pollution    | <ul> <li>Industrial wastewater from the printing process discharged into the factory drainage</li> <li>Domestic wastewater from sinks, kitchens, toilets and machines washing</li> <li>Oil spills and grease leaks from the vehicles and equipment used during the operation phase</li> </ul> | 3                                | 4 | 2 | 4 | 36 | Moderate            |
| Soil Contamination | <ul> <li>Accidental spillage of oil used by vehicles operating</li> <li>Engine oil leaks, spills at diesel storage and during fuel refueling.</li> </ul>  | 1                                | 4 | 1 | 1 | 6  | Very Low            |

| Categories                     | Project Activities  | Significant of Potential Impacts |   |   |   |    | Impact Significance |
|--------------------------------|---|----------------------------------|---|---|---|----|---------------------|
| Cutogonico                     | 1.10,000.710  |                                  | D | E | Р | SP | impact eigimicance  |
| Noise                          | <ul> <li>Generating noise from the respective production machines such as sewing, cutting</li> <li>Generating noise from the noisy machinery</li> </ul>   | 3                                | 4 | 1 | 3 | 24 | Low                 |
|                                | such as generator and ventilation units   |                                  |   |   |   |    |                     |
| Fire Hazard                    | <ul> <li>Electrical installations</li> <li>Faulty equipment and machinery</li> <li>Waste disposed area, raw materials and chemical/fuel storage area</li> </ul>   | 3                                | 4 | 2 | 4 | 36 | Moderate            |
| Occupational Health and Safety | <ul> <li>Accidental cases cause by operating machines.</li> <li>Electricity and emergency diesel generators.</li> <li>Malfunctioning electrical equipment.</li> <li>Loading and unloading the setter trays and cardboard boxes.</li> <li>Handling chemical boxes</li> </ul> | 3                                | 4 | 1 | 4 | 32 | Moderate            |
| Solid Waste                    | <ul> <li>Reusable waste like residual pieces of fabric scraps from the production lines and packaging materials</li> <li>Non-reusable waste from kitchen, dormitory and office</li> <li>Empty chemical containers</li> </ul>  | 3                                | 4 | 2 | 4 | 36 | Moderate            |
| Hazardous Waste                | <ul> <li>Hazardous waste of chemical in production process</li> <li>Used oil and lubricant discharged from the maintenance of vehicles and machines.</li> </ul>   | 3                                | 4 | 1 | 3 | 24 | Low                 |

| Categories                | Project Activities   |   | nificant | of Pote | Impact Significance |    |                   |
|---------------------------|--|---|----------|---------|---------------------|----|-------------------|
| Calogo 1.00               |  | М | D        | E       | Р                   | SP | puot oigiiniounio |
|                           | Small amounts of hazardous waste such as<br>fluorescent tube lights, batteries, machine oil<br>containers, etc.  |   |          |         |                     |    |                   |
| Odor                      | <ul> <li>Chemical odor in the printing process</li> <li>Odor problems in the areas where employees eat and dispose of their waste</li> </ul>   | 2 | 4        | 1       | 3                   | 21 | Low               |
| Flora and Fauna           | <ul> <li>Disturbance to the flora and fauna carried on by noise, or human presence during the operation period.</li> <li>In addition, vehicle movement, water pollution, air pollution may lead to biodiversity impact.</li> </ul> | 1 | 4        | 2       | 2                   | 14 | Very Low          |
| Social-economic Condition | Job opportunities for local people   |   | -        | -       | -                   | -  | Positive Impact   |
|                           | Decommissioning Phase  |   |          |         |                     |    |                   |
| Air Pollution             | <ul> <li>Demolition activities</li> <li>Transporting equipment and machinery</li> </ul>  | 3 | 1        | 2       | 4                   | 24 | Low               |

| Categories   | Project Activities   |   | nificant | of Pote | Impact Significance |    |                    |
|--|--|---|----------|---------|---------------------|----|--------------------|
| Outegones  |  |   | D        | E       | Р                   | SP | impact organicance |
| Water Pollution                                      | <ul><li>Demolition activities</li><li>Waste materials</li><li>Oil spills from vehicles</li></ul>   |   | 1        | 2       | 3                   | 15 | Low                |
| Soil Contamination                                   | <ul><li>Waste materials</li><li>Oil spills from vehicles</li></ul>   |   | 1        | 1       | 3                   | 15 | Low                |
| Noise  | <ul><li>Demolition activities</li><li>Transporting equipment and machinery</li></ul>   | 3 | 1        | 2       | 3                   | 18 | Low                |
| Solid Waste  | Various kinds of solid waste from decommissioning activities   |   | 1        | 1       | 3                   | 15 | Low                |
| Hazardous waste                                      | Used lubricants from decommissioning vehicles and machines   |   | 1        | 1       | 3                   | 12 | Very Low           |
| Flora and Fauna                                      | Transporting equipment and machinery   |   | 1        | 2       | 2                   | 10 | Very Low           |
| Occupational Health and Safety (Accidents, Injuries) | <ul> <li>Handling of equipment and machinery</li> <li>Uninstalling and removal of equipment and machinery</li> <li>Disconnecting power sources</li> <li>Waste materials</li> </ul> | 3 | 1        | 2       | 3                   | 18 | Low                |

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 and decommissioning phase.

In operation phase, there are 4 moderate significance impact on environment and human (Solid waste, Liquid waste, Fire, occupational health and safety). 2 very low significant impact on environment and human (soil, flora and fauna). 4 low significant impact on environment and human (air, noise, odor and hazardous waste).

In decommissioning phase, 2 very low significant impact on environment and human (biodiversity, hazardous waste). 6 low significant impacts on environmental and human (occupational health and safety, solid waste, air pollution, water pollution, soil contamination, noise pollution). 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.

#### 5.4. ENVIRONMENTAL IMPACT AND MITIGATION MEASURES FOR OPERATION PHASE

### 5.4.1. Air Quality

# 5.4.1.1. Impact on Air Quality

There is no emission of smoke from the process of production. Dust particles, CO<sub>2</sub> and SO<sub>2</sub> would be emitted from the activities of loading, unloading and transportation of the raw materials and final product. Various activities as using air conditioners in office building, storage of raw materials, vehicles movements, operating diesel generators would also be a factor slightly affecting to air quality.

Though main electricity source for the factory is the national grid line, sound-proof diesel generators will be set-up in case of electricity shortages. So, 94 kVA and 490 kVA of standby generators will be used for both operation and administration appliances. The proposed project will use annually 15470 gallons of diesel for emergency use of generator and vehicle. The following table shows the amount of CO<sub>2</sub> emission coming from the combustion of fuels.

Burning diesel or other fuels creates exhaust gasses. Diesel generators produced( $CO_2$ ), nitrogen oxide (NOx), and particulate matter. These generators release this into the atmosphere and substantially reduce air quality in the nearby regions. Every liter of fuel has 0.73 kg of pure carbon, 2.6 kg of carbon dioxide released per liter of diesel fuel.

Table 5-3 Category of GHGs Assessment

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

Source: EBRD GHG Assessment Methodology, 2010

Table 5-4 CO<sub>2</sub> Emission by the Uses of Fuel

| No. | Туре                             | Amount (gallon/year) | Equivalent CO <sub>2</sub> emission (Kilotons) | Status     |
|-----|----------------------------------|----------------------|--|------------|
| 1   | Diesel for generator and vehicle | 15470                | 0.15   | Negligible |

According to above conversion, the emission of CO<sub>2</sub> relative to the fuel consumed by the proposed project will not harmfully effect to the environment. However, the proposed belts and bags will use a lot of electrical energy mainly for lighting, running of equipment, running of pumping systems for pumping water into the storage tank. Since electricity generation involves utilization of natural resources, excessive electricity consumption will strain the resource and negatively impact on their sustainability.

# 5.4.1.2. Mitigation Measures of Impact on Air Quality

Ventilation system of the factory is enough for the workers. To control air pollution, the vehicles, generators and machineries have to check and maintain regularly. Since the factory compound area is paved with concrete, dust emission from the movements of vehicles and cars is not significant. The project proponent must install good exhaust system at the office room and toilets to reduce adverse impacts of indoor air quality. The factory uses chimney for generator through which the flue gas is emitted for reducing the impact of stack emission on environment. Monitoring and check installed ventilation system. Ensuring vehicles, compressor and generator are well maintained.





Figure 5.2 Ventilation System

### 5.4.2. Water Quality

### 5.4.2.1. Impact on Water Quality

Water is utilized both in the washing of used molds during the printing process and for various domestic purposes. The two tube wells are the primary sources of raw water for the factory's water use. Moreover, sewage disposed of by employees and staff, as well as oil spills and grease leaks from transporting vehicles and equipment used in the operation of the project, and the cleaning of finished molds in the printing process can all contribute to the pollution of the water source.

# 5.4.2.2. Mitigation Measures of Impact on Water Quality

Water discharge from the washing of used molds during the printing operation will be treated by sedimentation tank ( $5' \times 5' \times 5'$ ) before discharging. Water effluent levels should be within acceptable limit of the National Environmental Quality (Emissions) Guidelines values. In the factory, separated drainage lines are provided to flow wastewater from the activities washing finished molds and domestic usage, etc. And around the compound area of the project area, drainages are also provided and maintain to flow storm water (rain water, snow and surface water). The existing drainage at the project area can be seen in Figure 5.3. The proponent will connect and cooperate with municipal to be carried out for disposing of these septic tank wastes. To mitigate the impact on water, the drainages around the compound area of the factory have to maintain and clean regularly. Spillage and leakages of oil and grease should also be minimized.





Figure 5.3 Drainage System and Sedimentation Tank in the project area

# 5.4.3. Soil Quality

### 5.4.3.1. Impact on Soil Quality

There is no significant impact on soil quality due to the project activities because concrete road facilities have been implemented at the production area to prevent accidental spillage of fuel oil. However, there may be effect on soil if wastes from the factory are disposed improperly.

# 5.4.3.2. Mitigation Measure of Impact on Soil Quality

The production area (washing and cleaning area, fuel storage area, printing area, chemical storage area, waste storage area etc..) will be paved with concrete and hence, contamination due to the oil spillage at this area is insignificant. But refilling fuel must be done with great care for preventing spillage.

# 5.4.4. **Noise**

# 5.4.4.1. Impact of Noise

The significant source of noise impact activities is the operation of generator, but the generator is housed in an isolated area with a concrete building within the factory compound. However, there is significant impact of noise on the nearest residential area. According to the noise results, at the source of operation area inside the factory and within the factory area are within the noise level of 70 dBA of the NEQEGs. Therefore, no obvious influence can be caused expected to environment.

### 5.4.4.2. Mitigation Measure of Impact of Noise

Generators are kept in a separate room with concrete building within the factory area to minimize noise impact on employees. All preventive measures such as regular operation and maintenance of pump motors and compressor should be carried out and enclosures will be provided to abate noise levels at source.

### 5.4.5. Odor Emission

### 5.4.5.1. Impact of Odor Emission

The use of chemicals in the printing process can emit unpleasant odor, and the domestic wastes such as solid waste and food waste generated from the kitchen and domestic use of employee is not properly disposed of, it can emit odor. It can cause discomfort among employees and other health problems not only for employees but also residents in that area.

#### 5.4.5.2. Mitigation Measure of Impact of Odor Emission

The printing process can generate unpleasant odor that can impact on employees and nearby communities. Therefore, the factory regularly cleans the finished molds and surfaces to prevent emitting odor. Ventilation helps in diluting and dispersing the odor. Employees are provided with appropriate PPE such as masks to minimize their exposure to odorous chemicals. Chemical waste and domestic waste are disposed of properly.

### 5.4.6. Biodiversity

# 5.4.6.1. Impact on Biodiversity

It may disturb to the flora and fauna carried on by noise, or human presence during the operation period. In addition, vehicle movement, water pollution, air pollution may lead to biodiversity impact.

# 5.4.6.2. Mitigation Measure of Impact on Biodiversity

Endangered and rare plant species must be preserved and cultivated in or near the project area. If any migratory birds or animals are found entering and sheltering in the project property, avoid arrest and move to safe location in cooperation with the related departments.

### 5.4.7. Impact on Human

### 5.4.7.1. Socio-economic

Most of the impacts of the proposed project on socio-economic environment may be positive. Implementation of proposed project may create temporary employment permanent jobs in the operation phase. Subsequently, socio-economic standards of local people will be increased and eventually it may lead to the economic growth at local and regional level.

#### 5.4.8. Fire Hazard

#### 5.4.8.1. Fire Hazard

Fire hazards can arise from various sources: malfunctioning or overloaded electrical equipment such as incubators, heaters, ventilation systems, and other devices can pose a fire risk if not properly monitored and maintained. Presence of combustible materials such as paper, cardboard, or packing materials can easily catch fire if exposed to heat sources or electrical sparks. In addition, Improper storage or handling of chemicals can lead to chemical reactions or leaks that may cause fires. Accumulation of waste materials in and around the factory can provide fuel for fires and hinder firefighting efforts.

### 5.4.8.2. Mitigation Measure on Fire Hazard

The project proponent has provided fire extinguishers (3 pcs of 35kg, 2pcs of 9kg, 30 pcs of 5kg, 15 pcs of 4 kg and 28pcs of 3kg), 39pcs of fire hoses, 12 pcs of fire hydrants, 72 pcs of smoke detectors, 1259 pcs of sprinkler heads, 4 pcs of automatic heat detectors, 38pcs of emergency lights on the walls of the project area (production, warehouse, offices, dormitory) for fire emergency cases. Regular inspection for existing firefighting equipment must be done. In case of fire emergency, water storage tank for fire frightening is also constructed with the capacity of 180 tons (91'  $\times$ 11.5'  $\times$  7.2') 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 34 pcs of 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 fire-frightening system is mentioned in Figure 5.4.

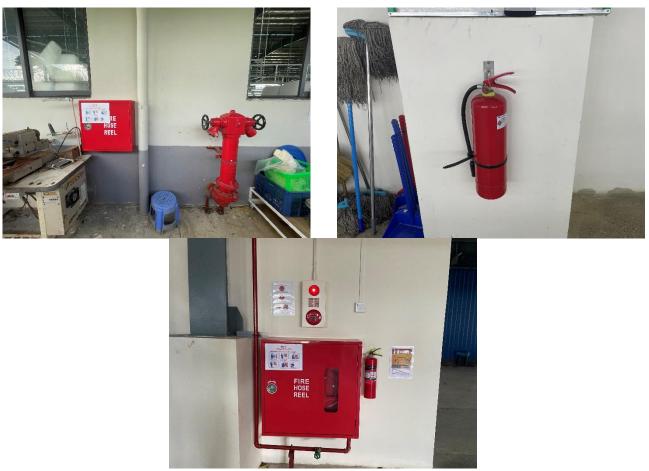


Figure 5.4 Firefighting System

### 5.4.9. Occupational Health and Safety

### 5.4.9.1. Occupational Health and Safety

Use of chemicals in the printing process requires special care in managing them. Employees who handle chemicals can cause health problems if they are not handled properly. Noise from the generating of the generator may also affect the health of people working in the project area. Fire and explosion hazards are mainly cause from the storage of raw materials and poor management of waste disposal. The usage of fuel must carefully handle because spillage and leakage of oil and grease can cause ignition of fire. Domestic wastewater produced from bathroom and toilets will cause enormous breeding of mosquitos, which can lead to diseases like malaria and dengue fever, if not carefully managed.

#### 5.4.9.2. Mitigation Measure for Occupational Health and Safety

Medicines have been provided for emergency cases of the employees and if the employees are not healthy, they will be connected with the village clinic. First aid training, safety training, firefighting training or other essential training for machinery handling must be provided for the employees. Personal Protective Equipment (PPEs) like mask, earmuffs, safety gloves, helmets and goggles are provided for the employees, and the employees who handle chemical are trained in how to handle chemicals properly. To prevent electric shock hazards, electrical maintenance staff (handyman) is to be assigned to do

regular inspections and take preventive measures. The project proponent must manage the drainage systems of the factory to prevent health risk of the workers.

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

Table 5-5 Permissible Exposure of Noise Limits

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

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

#### 5.4.10. Waste Generation

### 5.4.10.1.Solid Waste

The plastic & fabric waste, carton waste, fabric rolls & thread rolls, food waste, and hazardous waste are generated from the departments such as Production Department, Store Department, Cutting Department, Printing Department, Packing Department, Canteen, and Canteen (Dormitory). If these wastes are disposed of improperly, it may lead to contamination of soil, water, and air, affecting both human health and ecosystems.

### 5.4.10.2.Liquid Waste

Water is utilized both in the washing of used molds during the printing operation and for various domestic purposes. Sewage disposed of by employees and staff, as well as oil spills and grease leaks from transporting vehicles and equipment used in the operation of the project, and the washing of used molds in the printing process can all contribute to the pollution of the water source. If it is not properly managed, it may contribute to environmental pollution in several ways: leading to eutrophication, posing risks to aquatic ecosystems and human health.

# 5.4.10.3. Mitigation Measure of Waste Generation

Solid waste such as empty chemical containers and cardboard boxes are placed in a waste storage area inside the factory compound. Hazardous waste generated from the printing process is

stored in the chemical storage room. Hazardous waste (empty cans) is disposed of by connecting with YCDC per month and the amount of waste is 102 pics in one time. Carton waste, fabric rolls, and thread rolls are temporarily stored in the waste storage area and sold to local buyers once a month.

Moreover, the septic tank waste will be connected and cooperated with municipal to be carried out for disposing of. Wastewater is generated from personal washing, washing used molds which is discharged into sedimentation tank through the drains in the factory. Drainages and wastewater sedimentation tank were shown in Figure 5.3.





Figure 5.5 Waste Management System

# 5.5. ENVIRONMENTAL IMPACT AND MITIGATION MEASURE FOR DECOMMISSIONING PHASE

# 5.5.1. Air Quality

# 5.5.1.1. Impact on Air Quality

Demolition activities, it can generate dust and particulate matter. This may include feathers and other organic debris. Wind can carry these particles, potentially affecting air quality in the surrounding area. In addition, transportation activities, such as the hauling of materials and waste removal can contribute to air pollution through vehicle emissions. This includes pollutants such as nitrogen oxide, carbon monoxide and particulate matter.

### 5.5.1.2. Mitigation Measure of Impact on Air Quality

The impact on air quality can be controllable and reduced to minimum level and minimized dust emissions from material handling sources. Sprinkling water on the top soil can reduce dust emission from the decommissioning activities. In the proposed project area, vehicle movements should be limit and maintain and check the vehicles and machineries regularly.

# 5.5.2. Water Quality

# 5.5.2.1. Impact on Water Quality

If waste materials are disposed of improperly, it can all contribute to the pollution of the water source. Moreover, oil spill from the vehicles and machinery can penetrate into the ground water quality. Ground subsidence may occur from the factory's excessive extraction of ground water. Water can also

be contaminated by activities related with decommissioning works. And infrastructure such as buildings, tanks and pipelines may be removed or demolished. If not conducted carefully, this process could result in soil erosion and sedimentation of nearby water bodies.

### 5.5.2.2. Mitigation Measure of Impact on Water Quality

An accidental spill of fuel and oil should be avoided. Waste generated from the decommissioning activities should not be disposed directly into the drainage channels, and disposed of the waste materials properly to prevent contamination of water sources.

### 5.5.3. Soil Quality

### 5.5.3.1. Impact on Soil Quality

Transportation and transferred of heavy machinery may happen oil leakage and lubricants, and thus it can lead to impact on soil. In addition, if domestic and food wastes are disposed of improperly, it can lead to nutrient enrichment or depletion in the soil, affecting its fertility and microbial composition.

# 5.5.3.2. Mitigation Measure of Impact on Soil Quality

Impact on soil can be mitigated by using modernized machineries, these machines would be maintained regularly and isolated maintenance area would be identified. Any accidental spills of fuel, oil or other hazardous waste must be avoided.

# 5.5.4. **Noise**

# 5.5.4.1. Impact of Noise

If any structures need to be demolished as part of the decommissioning process, noise from heavy machinery like bulldozers and excavators could be significant. Dismantling and removal of machinery and equipment used in the operation and transporting debris away from the site may generate noise by trucks or other vehicles.

#### 5.5.4.2. Mitigation Measure of Impact of Noise

Noisy activities will be conducted during daytime hours when they are less likely to disrupt nearby residents or business. The decommissioning vehicles must be imposed speed limit, maintained and checked regularly.

#### 5.5.5. Biodiversity

## 5.5.5.1. Impact on Biodiversity

Improper disposal of waste materials generated during decommissioning can pollute soil and water, which could harm local flora and fauna. Moreover, noise from demolishing activities and transporting the equipment and machinery may disrupt nearby wildlife, affecting their natural behaviors such as breeding, feeding and communication.

# 5.5.5.2. Mitigation Measure of Impact on Biodiversity

Bird shooting and hunting of animals are prohibited within the project area. Limit vehicle traffic to designated roads to minimize the environmental effect of decommissioning activities as well as the risk of animal species accidents. As far as possible, any disruption of sensitive floral habitat and species of conservation significance must be avoided.

# 5.5.6. Occupational Health and Safety

# 5.5.6.1. Occupational Health and Safety

During the dismantling process, workers can inhale dust, particulates, it may lead to respiratory problem of the workers. Handling of equipment and machinery, such as lifting heavy objects or working at heights may cause physical hazards on workers. In addition, workers may be exposed to pathogens such as bacteria, viruses, and fungi present in the waste material, organic matter or remains of the chicks. While disconnecting power sources or malfunctioning electrical equipment, workers may expose to electrical hazards. Noise pollution from decommissioning activities can have adverse effects on workers and nearby residents.

# 5.5.6.2. Mitigation Measure for Occupational Health and Safety

The factory will provide the appropriate warning signs, marking and safety signs and injury notice board to help workers avoid occupational hazards. Moreover, PPE such as mask, gloves, safety boots will be provided to workers, and PPE will be readily available on-site and easily accessible to workers to prevent damage or contamination.

#### 5.5.7. Solid Waste Generation

### 5.5.7.1. Solid Waste

Various kinds of solid wastes can be generated from the decommissioning activities of the project, such as equipment, ventilation systems, building materials, packing materials, and other organic waste. If these wastes are not disposed of properly, it can cause undesirable working conditions and negative environmental impacts.

### 5.5.7.2. Mitigation Measure of Solid Waste Generation

Some of decommissioning solid wastes will be recycled and the other solid wastes will be stored in dedicated waste storage area in the project site and transferred to the township municipality for final disposal.

# 6. ENVIRONMENTAL MANAGEMENT PLAN

### 6.1. OBJECTIVE

An Environmental 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.

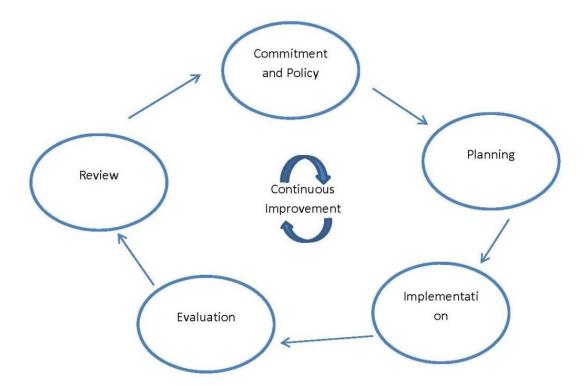


Figure 6.1 Continuous Improvement Circle

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.
- o Implementation An organization follows through with the action plan using the necessary resources (human, financial, etc.). An important component is employee training and awareness for all employees. Other steps in the implementation stage include documentation, following operating procedures, and setting up internal and external communication lines.
- Evaluation A company monitors its operations to evaluate whether targets are being met.
   If not, the company takes corrective action.
- 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.

#### 6.2. INSTITUTIONAL REQUIREMENT

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:

**Wide Vision Enterprise Co., Ltd.:** 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 Wide Vision Enterprise Co., Ltd. for EMP implementation facilities.

**ECD:** 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.

**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.

# 6.3. STRUCTURE AND RESPONSIBILITIES FOR THE EMP DEVELOPMENT AND IMPLEMENTATION

Wide Vision Enterprise Co., Ltd. shall 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 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. 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.

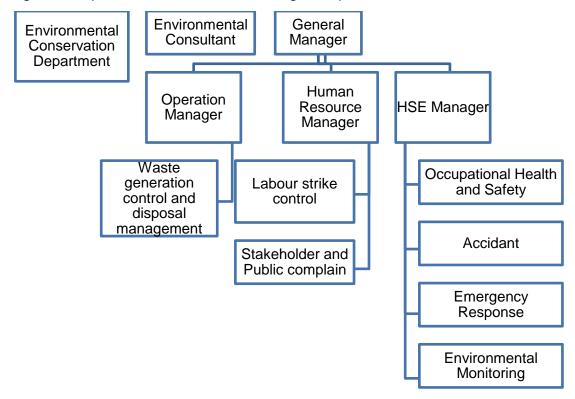


Figure 6.2 Organization Structure of EMP Implementation

Table 6-1 Responsibilities of HSE members

| Roles   | Responsibilities  |  |  |  |  |  |
|---------|---|--|--|--|--|--|
|         | The General Manager will be assisted by the Supervisor and also the office and leader. In terms of environmental protection commitments, the Operation Manager will be the key driving force and will be responsible for: |  |  |  |  |  |
| General | Establishing overall environmental direction and policy   |  |  |  |  |  |
| Manager | Ensuring the implementation of the EMP  |  |  |  |  |  |
|         | <ul> <li>Ensuring investigation of all environmental incidents are reviewed and that reports are<br/>submitted on time</li> </ul>   |  |  |  |  |  |
|         | Ensuring an effective system of internal and external communication is in place   |  |  |  |  |  |

| Roles   | Responsibilities   |
|---------|--|
|         | Providing advice regarding the environmental program   |
|         | The Admin will assist the Manager in looking into the overall environmental matters during the operational phase of the Project. The Admin will also be responsible for:   |
| Admin   | Adherence to the overall environmental direction and policy  |
| Aumin   | <ul> <li>Ensuring the implementation of the recommended actions in the investigation of all<br/>environmental incidents</li> </ul>   |
|         | Managing resources for operation wastes  |
|         | The Finance will carry out the day-to-day management of workers and social issues in the factory. The Finance will be responsible for:   |
| Finance | <ul> <li>Assisting the management in publicizing and implementing corporate and local policies,<br/>objectives and programs</li> </ul>   |
|         | Maintaining key environmental-related documents and information  |
|         | Communicating/ liaising with the local authorities on environmental issues   |
|         | The HR will be the key person in charge of all environmental matters pertaining to the site. The HR will be responsible for:   |
|         | <ul> <li>Coordinating the implementation of environmental programs, including monitoring of<br/>the project site environmental performance</li> </ul>  |
|         | <ul> <li>Performing periodic internal environmental audits and inspections to ensure<br/>compliance with the legal environmental requirements</li> </ul>   |
| HR      | <ul> <li>Ensure a monitoring system is in place to track and report all health, safety and<br/>environmental incidents;</li> </ul>   |
|         | <ul> <li>Carry out a thorough initial site inspection of environmental controls prior to work<br/>commencement;</li> </ul>   |
|         | <ul> <li>Record and provide a written report to the General Manager and production team of<br/>non-conformances with the EMP and require the HR Manager to undertake mitigation<br/>measures to avoid or minimize any adverse impacts on environment or report required<br/>changes to the EMP.</li> </ul> |

### 6.4. ENVIRONMENTAL MANAGEMENT SUB-PLAN

The EMP for Wide Vision Enterprise Co., Ltd. has been prepared to added potential issues based upon discussion with factory management, workers, local community view, stakeholder consultation and the site visit. The following environmental impact issues which require environmental management plans based upon the potential impact's activities of Wide Vision Enterprise Co., Ltd. are as follows:

# 6.4.1. Air Pollution/ Dust Management Plan

# 6.4.1.1. Objective

- ➤ 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

# 6.4.1.2. Legal Requirements

The plan will be in line with Environmental Conservation Law (2012), Environmental Conservation Rules (2014), EIA Procedure (2015), Vehicle Safety and Motor Vehicle Management Law (2020) and National Environmental Quality (Emission) Guidelines (2015).

### 6.4.1.3. Overview Maps and Site Layout Maps, Images, Aerial Photos, Satellite Images

The air quality monitoring was conducted biannually inspections within the project area and parameter are TVOC, TSP, PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub>, NO, CO, O<sub>3</sub>. The air quality monitoring location is shown in Figure 6.3.



Figure 6.3 Air Quality Monitoring Point

### 6.4.1.4. Implementation Schedule

The plan will be implemented for the operation and decommissioning phases of project.

#### 6.4.1.5. Management Action

The following mitigation measures will be implemented for reducing the air and dust emissions generated from the operation and decommissioning phases of the project. The project proponent will be encouraged to adopt the following mitigation measures.

- > Air quality will be monitored every six months after EMP report is approved.
- Must be planted in the space of the factory area and around the proposed project to reduce carbon emission.
- There is no open burning of waste materials at the site.
- Must be controlled air pollution, the vehicles and generator have to check and maintain regularly.

- > The factory must use chimney for generator through which the flue gas is emitted for reducing the impact of stack emission on environment.
- Must be ensuring generator is well maintained.
- Provide sufficient personal protective equipment (PPE) employees and encourage them to wear masks and work.
- Monitor and check the ventilation system of the factory regularly.

# 6.4.1.6. Budget

About 2,000,000 Ks per year is budgeted for implementing Environmental Management Plan and Monitoring Plan.

### 6.4.2. Noise Management Plan

# 6.4.2.1. Objective

➤ To maintain low noise exposures, such that human health and well-being are protected. The specific objectives of noise management are to develop criteria for the maximum safe noise exposure levels, and to promote noise assessment and control as part of environmental health program.

# 6.4.2.2. Legal Requirements

The plan will be in line with Environmental Conservation Law (2012), Environmental Conservation Rules (2014), EIA Procedure (2015), Vehicle Safety and Motor Vehicle Management Law (2020) and National Environmental Quality (Emission) Guidelines (2015).

# 6.4.2.3. Overview Maps and Site Layout Maps, Images, Aerial Photos, Satellite Images

The Noise Level monitoring was conducted biannually inspections within the project area. The noise level monitoring location is shown in Figure 6.4.



Figure 6.4 Noise Level Measurement Point

### 6.4.2.4. Implementation Schedule

The plan will be implemented for the operation and decommissioning phases of project.

### 6.4.2.5. Management Actions

The following mitigation measures will be implemented for reducing noise generated from the operation and decommissioning phases of the project. The project proponent will be encouraged to adopt the following mitigation measures.

- Noise level will be monitored every six months after EMP report is approved.
- ➤ Building noise insulated generator room and ensure satisfactory maintenance of relevant equipment.
- > Regular maintenance and inspection of generator for the project.
- > Keep the generator in a sound proof room within the factory area.
- Impose speed limit to track and vehicles at the transportation route.
- Provide sufficient personal protective equipment (PPE) at the work place.

# 6.4.2.6. Budget

About 800,000 Ks per year is budgeted for implementing Environmental Management Plan and Monitoring Plan.

# 6.4.3. Energy Management Plan

# 6.4.3.1. Objective

To improve energy efficiency, reduce cost, optimize capital investment, reduce environmental and greenhouse gas emissions, and conserve natural resources.

# 6.4.3.2. Legal Requirements

The plan will be in line with National Energy Management Committee (Myanmar Energy Master Plan 2015).

6.4.3.3. Overview Maps and Site Layout Maps, Images, Aerial Photos, Satellite Images

The light intensity measurement will be monitored every six months. The areas to be monitored are shown in Figure 6.5.



Figure 6.5 Light Intensity Monitoring Points

### 6.4.3.4. Implementation Schedule

The plan will be implemented for the operation and decommissioning phases of project.

# 6.4.3.5. Management Actions

The following mitigation measures will be implemented for solid waste management in the operation and decommissioning phases of the project. The project proponent will be encouraged to adopt the following mitigation measures.

- > Energy saving light (normal) 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
- Conduct annual energy efficiency of adult to find out the scope for energy saving

# 6.4.3.6. Budgets

About 1,000,000 Ks per year is budgeted for implementing Environmental Management Plan and Monitoring Plan.

# 6.4.4. Solid Waste Management Plan

# 6.4.4.1. Objective

- > 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.

# 6.4.4.2. Legal Requirements

The plan will be in line with National Waste Management Strategy and Master Plan (2018-2030), ရန်ကုန်မြို့တော်စည်ပင်သာယာရေးဥပဒေ (၂၀၂၁).

# 6.4.4.3. Overview Maps and Site Layout Maps, Images, Aerial Photos, Satellite Images

Solid waste generated from the operation are collected and stored in temporary waste storage areas, and the waste is disposed to the designated place for waste disposal by the YCDC's Service once a week. The location of temporary solid waste storage area is shown in Figure 6.6.



Figure 6.6 Temporary Waste Storage Area

# 6.4.4.4. Implementation Schedule

The plan will be implemented for the operation and decommissioning phases of project.

### 6.4.4.5. Management Actions

The following mitigation measures will be implemented for solid waste management in the operation and decommissioning phases of the project. The project proponent will be encouraged to adopt the following mitigation measures.

- 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.
- Must be established a system for the reuse or recycling of materials whenever possible such as hair can be collected and repurposed for fertilizers or compost
- > Final wastes from the process are disposed by using YCDC's service.

# 6.4.4.6. Budget

About 600,000 Ks per year is budgeted for implementing Environmental Management Plan and Monitoring Plan.

# 6.4.5. Liquid Waste Management Plan (Wastewater)

# 6.4.5.1. Objective

• To implementation plan for the management of liquid waste from collection, through treatment and resource recovery, to residual disposal.

### 6.4.5.2. Legal Requirements

The plan will be in line with National Environmental Quality (Emission) Guidelines (2015), The Underground Water Act (1930), and ရန်ကုန်မြို့တော်စည်ပင်သာယာရေးဥပဒေ (၂၀၂၁).

### 6.4.5.3. Overview Maps and Site Layout Maps, Images, Aerial Photos, Satellite Images

Liquid waste generated from the operation and employees are discharged into wastewater storage pond through concrete drains within the factory area, but there is no water in the pond due to the low amount of wastewater. the septic tank waste will be connected and cooperated with municipal to be carried out for disposing of. The location of wastewater sedimentation tank and outlet point of the factory drainage is shown in Figure 6.7.



Figure 6.7 Factory Drainage and Outlet Point of the Factory Drainage

### 6.4.5.4. Implementation Schedule

The plan will be implemented for the operation phase of project.

### 6.4.5.5. Management Actions

The following mitigation measures will be implemented for wastewater management in the operation phase of the project. The project proponent will be encouraged to adopt the following mitigation measures.

- Wastewater quality will be analyzed every six months after EMP report is approved.
- Regular inspection and cleaning factory drainage, oil traps, septic tank and adequate covers for all storage and waste disposal areas can decrease these contaminations.
- Wastewater from the process must be disposed of systematically to prevent environmental pollution or in accordance with the municipal guidelines for proper disposal.

# 6.4.5.6. Budget

About 800,000 Ks per year is budgeted for implementing Environmental Management Plan and Monitoring Plan.

# 6.4.6. Hazardous Waste Management Plan

# 6.4.6.1. Objective

To implementation plan for the management of hazardous waste from collection to disposal.

# 6.4.6.2. Legal Requirements

The plan will be in line with Environmental Conservation Law (2012), National Environmental Policy of Myanmar (2019), The Prevention of Hazard from Chemical and Related Substances Law (2013), and ရန်ကုန်မြို့တော်စည်ပင်သာယာရေးဥပဒေ (၂၀၂၁).

# 6.4.6.3. Overview Maps and Site Layout Maps, Images, Aerial Photos, Satellite Images

Hazardous waste generated from the operation are collected and stored in temporary waste storage area, and the waste is disposed to the designated place for waste disposal by YCDC's Service once a week. The location of temporary solid waste storage area is shown in Figure 6.8.



Figure 6.8 Temporary Hazardous Waste Storage Area

### 6.4.6.4. Implementation Schedule

The plan will be implemented for the operation phase of project.

### 6.4.6.5. Management Actions

The following mitigation measures will be implemented for hazardous waste management in the operation phase of the project. The project proponent will be encouraged to adopt the following mitigation measures.

- ➤ Ensure proper storage facilities for chemical agents with adequate ventilation and secure containers to prevent leakage or spillage.
- Replace damaged or deteriorating light bulb and tube promptly to prevent accidents and environmental contamination.
- Conduct regular training sessions to employees to raise awareness of hazardous waste associated with stored materials and reinforce proper handling procedures.

- ➤ Old engine oil from used vehicles and generators, rags with oil, empty chemical containers, and damaged light fixtures are properly disposed of to avoid the impact of hazardous waste.
- Empty chemical containers are reused in the production process of the project.

# 6.4.6.6. Budget

About 300,000 Ks per year is budgeted for implementing Environmental Management Plan and Monitoring Plan.

# 6.4.7. Fire Management Plan

# 6.4.7.1. Objective

• To ensure that fire control practices are implemented on site to minimize the risk of fire from site operations and bush fires.

# 6.4.7.2. Legal Requirements

The plan will be in line with Occupational Safety and Health Law (2019), Myanmar Fire Brigade Law (2015), and The Electricity Law (2014).

6.4.7.3. Overview Maps and Site Layout Maps, Images, Aerial Photos, Satellite Images

The locations of firefighting equipment placed within the factory for fire hazard safety are shown in Figure 6.9 .



Figure 6.9 Fire Fighting Equipment Location Points

# 6.4.7.4. Implementation Schedule

The plan will be implemented for the operation phase of the project.

### 6.4.7.5. Management Actions

The following mitigation measures will be implemented for fire hazard management of the project. The project proponent will be encouraged to adopt the following mitigation measures.

- Must provide fire extinguishers, fire hose reels and fire hydrants on the walls of the factory for fire emergency cases.
- Must indicate the emergency exit and assembly point in the project area.
- > Regular inspection for existing firefighting equipment must be done. In case of fire emergency, there must be a 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.

### 6.4.7.6. Budget

About 1,200,000 Ks per year is budgeted for implementing Environmental Management Plan and Monitoring Plan.

# 6.4.8. Water Consumption Management Plan

# 6.4.8.1. Objective

The water consumption management is aimed at minimizing ground water use.

### 6.4.8.2. Legal Requirements

The plan will be in line with The Underground Water Act (1930).

# 6.4.8.3. Overview Maps and Site Layout Maps, Images, Aerial Photos, Satellite Images

The water consumption monitoring was conducted every month inspection in the factory's water meter, and records the water meter usage and keep the data to analysis the consumption of underground water. The water consumption monitoring location is shown in Figure 6.10.



Figure 6.10 Water Consumption Monitoring Point

### 6.4.8.4. Implementation Schedule

The plan will be implemented for the operation phase of the project.

### 6.4.8.5. Management Actions

The following mitigation measures will be implemented for reducing underground water usage for the operation phases of the project. The project proponent will be encouraged to adopt the following mitigation measures.

- Install water meter for internal control of water consumption.
- All employees must be trained and aware of conservation practices, and proper methods of water use must be place in toilets and other areas of water consumption.
- > The contamination of water is avoided by suitable management of oil and fuel used in machineries and vehicles.
- Planting of tree around the factory.

### 6.4.8.6. Budget

About 500,000 Ks per year is budgeted for implementing Environmental Management Plan and Monitoring Plan.

# 6.4.9. Occupational Safety and Health Management Plan

# 6.4.9.1. Objective

 To provide a broad framework for improving standards of workplace health and safety to reduce work-related injury and illness.

# 6.4.9.2. Legal Requirements

The plan will be in line with Occupational Safety and Health Law (2019), Public Health Law (1972), Prevention and Control of Communicable Disease Law (1995 - Amended in 2011).

# 6.4.9.3. Implementation Schedule

The plan will be implemented for the operation and decommissioning phases of the project.

### 6.4.9.4. Management Actions

The following mitigation measures will be implemented for occupational safety and health management of the project. The project proponent will be encouraged to adopt the following mitigation measures.

- First aid training, safety training, firefighting training or other essential training for machinery handling must be provided for emergency cases of workers.
- Personal Protective Equipment (PPE) like mask, helmets and goggles are provided.
- > 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.
- Provide environmental awareness/ training the employees how chemicals are handled and used and the health problems that can result if they are not handled properly.
- > 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.

# 6.4.9.5. Budget

About 1,000,000 Ks per year is budgeted for implementing Environmental Management Plan and Monitoring Plan.

### 6.4.10. Emergency Response and Disaster Management Plan

### 6.4.10.1.Objective

• To reduce the harmful effects of all hazards, including disasters.

### 6.4.10.2.Legal Requirements

The plan will be in line with The Employment and Skill Development Law (2013), Myanmar Fire Brigade Law (2015), and Occupational Health and Safety Law (2019).

### 6.4.10.3.Implementation Schedule

The plan will be implemented for the operation phase of project.

### 6.4.10.4. Management Actions

The following mitigation measures will be implemented for emergency response and disaster management in the operation phase of the project. The project proponent will be encouraged to adopt the following mitigation measures.

- The factory must take proper measures to handle any emergency situation like fire, earthquake, flood and storm.
- Windows and doors are reinforced with impact-resistant materials to protect against high winds and flying debris.
- 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.

### 6.4.10.5.Budget

About 1,500,000 Ks per year is budgeted for implementing Environmental Management Plan and Monitoring Plan.

Note: If the amount described above is not enough at the time of implementation, it will be used up to a sufficient amount.

### 6.5. ENVIRONMENTAL MONITORING AND REPORTING PROCESS

# 6.5.1. Environmental Monitoring Plan (EMoP)

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 Wide Vision Enterprise Co., Ltd.

Table 6-2 Environmental Monitoring Schedule

| Table 0-2                                   | Litylioninental monitoring schedule   |                     |  |                          |  |
|---|---|---------------------|--|--------------------------|--|
| Issues                                      | Parameter   | Frequency           | Area to be monitored   | Monitoring<br>Cost (MMK) | Responsible<br>Organization  |
|   |   | Oper                | ration Phase   |                          |  |
| Air Quality                                 | PM <sub>2.5</sub> , PM <sub>10</sub> ,<br>SO <sub>2</sub> , NO <sub>2</sub> , O <sub>3</sub> ,<br>TSP, TVOC,<br>CO, NO  | Every six<br>months | Outdoor Area of the<br>Factory Building<br>(17° 1'10.61"N<br>95°58'32.99"E)  | 2,000,000<br>Kyats/ Year | Environmental Management Team of Wide Vision Enterprise Co., Ltd.                |
| Noise                                       | Noise level in<br>decibel (dBA)   | Every six<br>months | Operation Area (Sewing Department) (17°1'13.14"N 95°58'33.52"E) Outdoor Area of the Factory Building (17° 1'11.38"N 95°58'32.14"E) | 800,000 Kyats/<br>Year   | Environmental<br>Management<br>Team of Wide<br>Vision<br>Enterprise Co.,<br>Ltd. |
| Light                                       | Illuminance   | Every six<br>months | Operation Area<br>(17° 1'12.03"N<br>95°58'32.98"E)   | 800,000<br>kyats/Year    | Environmental Management Team of Wide Vision Enterprise Co., Ltd.                |
| Water<br>Consumption<br>(Drinking<br>Water) | pH, Colour, Turbidity, Conductivity, Total Hardness, Calcium Hardness, Magnesium Hardness, Total Alkalinity, Phenolphthalein Alkalinity, Carbonate, Bicarbonate, Iron, Chloride, Sodium Chloride, Sulphate, Total Solids, TSS, TDS, Manganese, Phosphate, | Yearly              | Drinking Water<br>Purification Tank<br>(17° 1'12.41"N<br>95°58'30.58"E)  | 500,000<br>Kyats/Year    | Environmental<br>Management<br>Team of Wide<br>Vision<br>Enterprise Co.,<br>Ltd. |

|                                      | Dhanalahthala:   |                     | <u> </u>   |                             |  |
|--------------------------------------|--|---------------------|--|-----------------------------|--|
|                                      | Phenolphthalein<br>Acidity, Methyl<br>Orange Acidity,<br>Salinity  |                     |  |                             |  |
|                                      | Solid waste  | Weekly              | Recycle house and waste house                      | 600,000 Kyats/<br>Year      |  |
| Waste<br>Generation                  | Liquid waste (wastewater from printing section) pH, Temperature, Colour, TSS, BOD <sub>5</sub> , COD, Total Phosphorous, Copper, Chromium (Hexavalent), Oil & Grease, Total Nitrogen | Every six<br>months | Sedimentation Tank                                 | 1,200,000 Kyats<br>/Year    | Environmental<br>Management<br>Team of Wide<br>Vision<br>Enterprise Co.,<br>Ltd. |
|                                      | Hazardous<br>Waste   | Weekly              | Waste bin  | 300,000 Kyats/<br>Year      |  |
| Fire Hazardous                       | Visual<br>inspection,<br>firefighting<br>equipment   | Monthly             | At the factory<br>(17° 1'12.03"N<br>95°58'32.98"E) | 1,200,000<br>Kyats/ Year    | Environmental<br>Management<br>Team of Wide<br>Vision<br>Enterprise Co.,<br>Ltd. |
| Occupational<br>Safety and<br>Health | Fire extinguishers and water hydrant in position Inspect that all fire exist are open Servicing fire extinguisher and records of accidents   | Weekly              | At the factory<br>(17° 1'12.03"N<br>95°58'32.98"E) | 1,000,000<br>Kyats/ Year    | Environmental<br>Management<br>Team of Wide<br>Vision<br>Enterprise Co.,<br>Ltd. |
| Emergency<br>Response                | Emergency<br>Preparedness<br>and Emergency<br>Plan   | Weekly              | At the factory<br>(17° 1'12.03"N<br>95°58'32.98"E) | 1,500,000 Kyats<br>per year | Environmental Management Team of Wide Vision Enterprise Co., Ltd.                |

|                                      | Decommissioning Phase  |                                  |                                   |                 |  |  |
|--------------------------------------|--|----------------------------------|-----------------------------------|-----------------|--|--|
| Air Quality                          | TSP, PM <sub>2.5</sub> ,<br>PM <sub>10</sub> , SO <sub>2</sub> ,<br>NO <sub>2</sub> , NO, O <sub>3</sub> ,<br>CO, TVOC | One time<br>during this<br>phase | One point in decommissioning area | 1,000,000 Kyats | Environmental Management Team of Wide Vision Enterprise Co., Ltd.                |  |
| Noise                                | Noise level in decibel (dBA)   | One time<br>during this<br>phase | One point in decommissioning area | 600,000 Kyats   | Environmental Management Team of Wide Vision Enterprise Co., Ltd.                |  |
| Solid Waste                          | Demolished solid wastes  | One time<br>during this<br>phase | Decommissioning<br>area           | 50,000 Kyats    | Environmental Management Team of Wide Vision Enterprise Co., Ltd.                |  |
| Occupational<br>Health and<br>Safety | Record of accidents, PPE, Training records, chemicals that used in the project.  | One time<br>during this<br>phase | Decommissioning<br>area           | 500,000 Kyats   | Environmental<br>Management<br>Team of Wide<br>Vision<br>Enterprise Co.,<br>Ltd. |  |
| Rehabilitation                       | Recovering and<br>Revegetation   |                                  | All<br>decommissioning<br>area    | 1,000,000 Kyats | Environmental Management Team of Wide Vision Enterprise Co., Ltd.                |  |

**Note:** If the amount described above is not enough at the time of implementation, it will be used up to a sufficient amount.

# 6.5.2. Reporting Plan

The project will submit environmental monitoring report to the Environmental Conservation Department under the Ministry of Natural Resources and Environmental Conservation after receiving the Environmental Compliance Certificate (ECC) for the EMP report. The environmental monitoring report will be performed once every six (6) months as the environmental monitoring schedule as described in Table 6-2. In the environmental monitoring report, it describes the compliance status of the project proponent with regard to mitigating negative environmental impact caused by operation of the project.

### 6.6. 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;

# 6.6.1. 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.

### 6.6.2. Emergency Procedures

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

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

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

# 6.6.3. 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

#### 6.6.4. Fire Prevention and Protection

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

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

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

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

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

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

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

# 6.6.5. Fire Protection Equipment

- 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
- 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.

#### 6.6.6. 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 6-3 American National Fire Fighting Association (NFFA) Standards

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

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

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

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

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

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

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

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

### 6.6.7. 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)

# 6.6.8. Employee Information and Training

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

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

# 6.6.9. Health and Safety Training Plan for Worker

Health and Safety Training plan currently used and provided in Wide Vision Enterprise Co., Ltd. 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 6-4 Training Plan Used in Wide Vision Enterprise Co., Ltd.

| 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                 |

## 6.7. GRIEVANCE REDRESS MECHANISM (GRM)

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

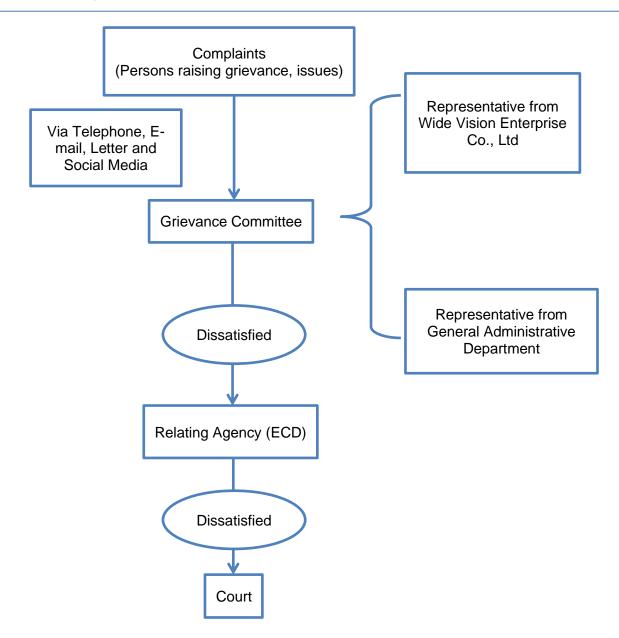


Figure 6.11 Grievance Redress Mechanism Flow Diagram

## 6.8. 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 Wide Vision Enterprise Co., Ltd. consists of three main sectors; Health, Education and Communities Development Sector.

Wide Vision Enterprise Co., Ltd. has a plan to implement and donate 2 percent of the profit per year for Corporate Social Responsibility (CSR) and Employee Welfare Arrangement.

Table 6-5 CSR Plan at Wide Vision Enterprise Co., Ltd.

| Area   | Priority Item                                   | Contribution (%) | Detail Targets  |
|--------|---|------------------|---|
| Health | Healthcare for<br>employees and their<br>family | 0.5 %            | One of our main concerns is the well-being of our employees. We will contribute 0.5 % of our net profit for the healthcare which includes medical |

|             |   |      | checkup for the employees and providing health education to our workers.   |
|-------------|---|------|--|
| Education   | Raising awareness<br>education level and<br>human right | 0.5% | We will contribute 0.5 % of our net profit to the public school near the factory to be a part of creating the better community. We will also work together with the school to understand more about the needs and we will also ensure that our contributions will be used in the most effective and efficient way for the society. |
|             |   | 1 %  | Donate to local charities with a worthy cause  |
|             |   |      | Actively participate in community events.  |
| Community   | Donation to local                                       |      | Encourage staff to participate, and to form a community engagement team to actively support community events.  |
| Development | community   |      | Embedding understanding and consciousness about human rights issues among the employees  |
|             |   |      | Development of sexual harassment and power harassment (workplace bullying & harassment) prevention efforts.  |

## 7. PUBLIC CONSULTATION

# 7.1. METHODOLOGY AND APPROACH

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

Public consultation during preparation of EMP report was conducted on 7 November, 2024, 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 district level are Environmental Conservation Department (ECD) and the township level are City Development Committee, Fire Services Department and Ward administrator. Public consultation carried out after the presentation on the project, followed by questions, answers and discussion. Daw No No Shee Sho presented EMP study and findings, after the presentation following questions and answer section. Summary of public consultation meeting is presented in Table 7-1 and Table 7-2.

Table 7-1 Summary of Public Consultation Meeting

| Time and Date | Thursday, 7 November 2024<br>11:00 AM -12:00 AM   |  |
|---------------|---|--|
| Venue         | Sethmu – (19, 20, 21, 81), Plot No. (1), Kan Gyi Kone Kwin, Ward No. (4), Htantabin Township, Yangon Region.  |  |
| Agenda        | <ul> <li>Presentation on the Background Information of Project</li> <li>Project Description</li> <li>Impact Assessment, Environmental Mitigation</li> <li>Environmental Management Plan and Monitoring Plan</li> <li>Received and Answer from feedback of participants</li> </ul> |  |









Figure 7.1 Public Consultation Meeting Photo

### 7.1.1. Participant List

(17 person) attended to the stakeholder meeting held on November 7, 2024, and scan document of attendance list and invitation list were mentioned in Appendix Q.

#### 7.2. RECOMMEND SUGGESTION AND COMMENT

Public Consultation Meeting for the EMP of Wide Vision Enterprise Company Limited was held on 7 November, 2024. The detailed of the meeting, including the meeting time, venue and names of participated attended the consultation meeting are listed in Appendix.

After the presentation, the floor opened for questions and answers. Residents who attended this meeting were asked whether they would object to the project and asked for suggestions, but were told that there was no objection. However, most of the government stakeholders are suggested for good monitoring measure during operation. The suggestion and comment are described in Table 7-2.

Table 7-2 Suggestion and Comment of Public Consultation Meeting

| Name   | Description  | Photo |
|--|--|-------|
| ဒေါ် ရွှေရည်အောင်<br>(ဦးစီးအရာရှိ)<br>ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန၊<br>ရန်ကုန်တိုင်းဒေသကြီး၊<br>မြောက်ပိုင်းခရိုင် | ရန်ကုန်တိုင်းဒေသကြီး၊ မြောက်ပိုင်းခရိုင် ပတ်ဝန်းကျင်ထိန်းသိမ်း<br>ရေးဦးစီးဌာန မှ ဦးစီးအရာရှိ ဒေါ်ရွှေရည်အောင်မှ ယခင်ရရှိပြီးသော ECC<br>လက်မှတ်မှာ ပယ်ဖျက်ကြောင်းစာပို့ထားပြီး ယခုပြုလုပ် သည့် PCM မှာ<br>အသစ်အတွက် ထပ်မံပြုလုပ်ခြင်းဖြစ်ကြောင်း၊<br>Printing Section ပါဝင်နေပါသဖြင့် Chemical အသုံးပြုခြင်းဖြင့်<br>ပတ်ဝန်းကျင်ထိခိုက်မှုမရှိစေရေး EMP အစီရင်ခံစာ၏ Impacti<br>Mitigation နှင့် Monitoring အပိုင်းတို့တွင် ထည့်သွင်း ရေးဆွဲရန်လို<br>အပ်ပါကြောင်း၊<br>တိုင်းတာရရှိသော ပတ်ဝန်းကျင်အရည်အသွေး ရလဒ်များကို NEQEG<br>Guidelines များထက် ကျော်လွန်မှုမရှိစေရန် စက်ရုံဘက်မှ အထူး<br>ဂရုပြုဆောင်ရွက်စေလိုကြောင်း၊<br>ယခုစာအုပ်သည် ECC ထပ်မံရရှိခဲ့လျှင် Monitoring (၆) လ တစ် ကြိမ်<br>စက်ရုံဘက်မှပုံမှန် ပြုလုပ်ပေးရန် လိုအပ်ကြောင်း၊<br>အနည်စစ်ကန်များမှ ထွက်ရှိလာသော စွန့်ပစ်ရေဆိုး ရလဒ်များအား<br>NEQEGs အတွင်း ဝင်ရောက်စေရေး ကြပ်မတ်ဆောင်ရွက်ရန်<br>လိုအပ်ပါကြောင်း အကြံပြု ပြောကြားခဲ့ပါသည်။ |       |

| ဦးမျိုးနိုင်ဦး<br>ဒုတိယဦးစီးမှူး<br>မီးသတ်ဦးစီးဌာန၊<br>ထန်းတပင်မြို့နယ်          | ထန်းတပင်မြို့နယ်၊ မီးသတ်ဦးစီးဌာန၊ ဒုတိယဦးစီးမှူး ဦးမျိုးနိုင်ဦးမှ<br>စက်ရုံတိုင်းတွင် Fire Safety Manager တစ်ဦးခန့်ထားရန်၊<br>စက်ရုံတွင်တပ်ဆင်ထားသော မီးဘေးလုံခြုံရေးကိရိယာများ၊<br>မီးသတ်ဆေးဘူးများအား အပတ်စဉ်စစ်ဆေးပေးရန်နှင့် စက်ရုံရှိ<br>ဝန်ထမ်းများအား မီးသတ်ဆေးဘူးအသုံးပြုပုံများနှင့် လက်တွေ့<br>မီးငြိမ်းသတ်ရေး သင်တန်းများ သင်ကြားပို့ချပေးရန် အကြံပြု<br>ပြောကြားခဲ့ပါသည်။          |  |
|--|--|--|
| ဒေါ် အေးအေးမြင့်<br>အကြီးတန်းစာရေး<br>ထန်းတပင်မြို့နယ်၊<br>စည်ပင်သာယာရေး ကော်မတီ | ထန်းတပင်မြို့နယ်၊ စည်ပင်သာယာရေးကော်မတီ၊ အကြီးတန်းစာရေး<br>ဒေါ် အေးအေးမြင့်မှ စွန့်ပစ်အမှိုက်များအား အမှိုက်အိတ် များဖြင့်<br>အထုပ်များထုတ်၍ စနစ်တကျ ခွဲခြားစွန့်ပစ်ရန်၊<br>ပတ်ဝန်းကျင်ဆူညံမှုများ မဖြစ်ပေါ် စေရန် အထူးဂရုပြု ဆောင်ရွက်ရန်၊<br>စွန့်ပစ်အမှိုက်များနှင့် စွန့်ပစ်ရေများကြောင့် ပတ်ဝန်းကျင်သို့<br>အနံ့အသက်များ မထွက်ရှိစေရေး အထူးဂရုပြုဆောင်ရွက်ရန် အကြံပြု<br>ပြောကြားခဲ့ပါသည်။ |  |
| ဦးခင်မြင့်<br>အုပ်ချုပ်ရေးမှူး<br>အမှတ် (၄) ရပ်ကွက်၊<br>ထန်းတပင်မြို့နယ်         | ထန်းတပင်မြို့နယ်၊ အမှတ် (၄) ရပ်ကွက်၊ အုပ်ချုပ်ရေးမှူး ဦးခင်မြင့်မှ<br>စက်ရုံလုံခြုံမှုရှိစေရန်နှင့် စက်ရုံပတ်ဝန်းကျင်အား မီးအလင်းရောင်<br>ရရှိစေရန်အတွက် စက်ရုံခြံဝန်း အတွင်းနှင့်အပြင်တွင်<br>မီးသီးများတပ်ဆင်လျှင် ပိုမိုကောင်းမွန်ကြောင်း အကြံပြု<br>ပြောကြားခဲ့ပါသည်။  |  |

## 8. CONCLUSION AND RECOMMENDATION

## 8.1. CONCLUSION

Environmental Management Plan (EMP) has been prepared for Wide Vision Enterprise Company Limited. The factory is located at Sethmu – (19, 20, 21, 81), Plot No. (1), Kan Gyi Kone Kwin, Ward No. (4), Htantabin Township, Yangon Region. The main objective of the study is focused specially on the required environmental management measures or creating environmentally friendly workplace. An EMP has been carried out for the factory according to the requirement of the proponent as it has been made for Manufacturing of Various Kinds of Bags.

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 and light 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) Guidelines (2015). On the other, the factory has positive impacts in terms of environmental in the operation phase. 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 factory is going to generate local employment opportunities and enhance capabilities and working skills of employees. Consequently, their socio-economic standard is expected to be improved and undertaking corporate social responsibilities (CSR) as recommended. The study further concluded that positive impacts will be of immense benefit to the local community and national development as well.

#### 8.2. RECOMMENDATION

This is recommended that;

- All appropriate environmental management measures detailed in this report, together with any other environmental management commitments should be implemented throughout the entire life of the factory
- Solid wastes and liquid wastes need to dispose according to municipality's 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 has to 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 has to abide environmental policy, laws, rules and instructions of the Republic of the Union of Myanmar. Therefore, the project will be able to operate with minimal impact on the natural and social environment.

# 9. REFERENCE

- [1] General Administrative Department (HtantabinTownship), HtantabinTownship Data (2023).
- [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.
- [4] Specifications for accident prevention signs and tags, regulations (standards 29-CFR), Occupational Safety and Health Administration.
- [5] Air Quality Assessments for Health and Environment Policies in Thailand, 2018.

# APPENDIX A Company Document of Wide Vision Enterprise Company Limited



ကုမ္ပဏီမှတ်ပုံတင်လက်မှတ် Certificate of Incorporation

WIDE VISION ENTERPRISE COMPANY LIMITED
Company Registration No. 113954140

မြန်မာနိုင်ငံကုမ္ပဏီများအက်ဥပဒေ ၁၉၁၄ ခုနှစ် အရ

WIDE VISION ENTERPRISE COMPANY LIMITED

အား ၂၀၁၈ ခုနှစ် ဇူလိုင်လ ၁၇ ရက်နေ့တွင်
အစုရှယ်ယာအားဖြင့် တာဝန်ကန့်သတ်ထား သည့် အများနှင့်မသက်ဆိုင်သောကုမ္ပဏီ
အဖြစ် ဖွဲ့စည်းမှတ်ပုံတင်ခွင့် ပြုလိုက်သည်။

This is to certify that

WIDE VISION ENTERPRISE COMPANY LIMITED

was incorporated under the Myanmar Companies Act 1914 on 17 July
2018 as a Private Company Limited by Shares.



ကုမ္ပဏီမှတ်ပုံတင်အရာရှိ Registrar of Companies ရင်းနှီးမြှုပ်နှံမှုနှင့်ကုမ္ပဏီများညွှန်ကြားမှုဦးစီးဌာန Directorate of Investment and Company Administration

Former Registration No. 392FC/2018-2019(YGN)

YANGON REGION INVESTMENT COMMITTEE Date 12 March 2019 nent No. YGN - 169/2019 This endorsement is issued by Yangon Region Investment Committee according to the section 25, sub-section (d) of the Myanmar Investment Law-Name of Investor MR. TSAI, WEN -WEI (1)(2)Citizenship TAIWANESE Residence Address NO.85, SEC.1, CHANG AN ROAD, SITUN (3)DISTRICT, TAI CHUNG CITY, TAIWAN, REPUBLIC OF CHINA. Name and Address of Principal Organization WIDE VISION (4) ENTERPRISE COMPANY LIMITED, NO.4, FRANKY BUILDING PROVIDENCE INDUSTRIAL ESTATE, MACHE, REPUBLIC OF SEYCHELLES. Place of Incorporation REPUBLIC OF SEYCHELLES (5)Type of business MANUFACTURING OF VARIOUS KINDS OF (6)BAGS ON CMP BASIS. PLOT NO.147, SURVEY NO. 14. Place(s) of investment Project (7)SHWE THANLWIN INDUSTRIAL ZONE, HLAING THARYAR TOWNSHIP, YANGON REGION. US\$ 4.506 MILLION Amount of Foreign Capital (8) Period for Foreign Capital to be brought in WITHIN 3 YEAR (9) FROM THE DATE OF ISSUANCE OF ENDORSEMENT Total Amount of Capital (Kyat) EQUIVALENT IN KYAT OF (10)US\$ 4.506 MILLION. Construction/ Preparation Period 6 MONTHS (11)Validity of Endorsement 10 YEARS (12)Form of Investment WHOLLY FOREIGN OWNED (13)Name of Company Incorporated in Myanmar (14)ENTERPRISE COMPANY LIMITED



(Phyo Min Thein)
Chairman

ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော် ရန်ကုန်တိုင်းဒေသကြီးရင်းနှီးမြှုပ်နှံမှုကော်မတီ အတည်ပြုမိန့် ၂၀၁၉ ခုနှစ် မတ် လ 🎿 ရက် **အတည်ပြုမိန့်အမှတ်** ရကတ*-* ၁၆၉/၂၀၁၉ ရှုန်ကွန်တိုင်းဒေသကြီး ရင်းနှီးမြှုပ်နှံမှု ကော်မတီသည် မြန်မာနိုင်ငံ ရင်းနှီးမြှုပ်နှံမှု ဥပဒေ ၂၅ ပုဒ်မခွဲ (ဃ) အရ ဤအတည်ပြုမိန့်ကိုထုတ်ပေးလိုက်သည် -(၁) ရင်းနှီးမြှုပ်နှံသူအမည် MR. TSAI, WEN –WEI နိုင်ငံသား TAIWANESE (1) နေရပ်လိပ်စာ NO.85,SEC.1, CHANG AN ROAD, SITUN DISTRICT, TAI CHUNG CITY, TAIWAN, REPUBLIC OF CHINA. ပင်မအဖွဲ့အစည်းအမည်နှင့်လိပ်စာ WIDE VISION ENTERPRISE (9) COMPANY LIMITED, NO.4, FRANKY BUILDING PROVIDENCE INDUSTRIAL ESTATE, MACHE, REPUBLIC OF SEYCHELLES. ဖွဲ့စည်းရာအရပ် REPUBLIC OF SEYCHELLES (9) ရင်းနှီးမြှုပ်နှံသည့်လုပ်ငန်းအမျိုးအစား CMP စနစ်ဖြင့် အိတ်အမျိုးမျိုး (G) ချုပ်လုပ်ခြင်း လုပ်ငန်း ရင်းနှီးမြှုပ်နှံသည့်အရပ်ဒေသ(များ) မြေကွက်အမှတ် (၁၄၇)၊ မြေတိုင်းရပ်ကွက်  $(\gamma)$ အမှတ် (၁၄)၊ ရွှေသံလွင် စက်မှုဇုန်၊ လှိုင်သာယာ မြို့နယ်၊ ရန်ကုန်တိုင်း ဒေသကြီး (၈) နိုင်ငံခြားမတည်ငွေရင်း ပမာဏ အမေရိကန်ဒေါ်လာ ၄.၅၀၆ သန်း နိုင်ငံခြားမတည်ငွေရင်းယူဆောင်လာရမည့်ကာလ အတည်ပြုမိန့် ရရှိသည့် (e) နေ့မှ ၃ နှစ် အတွင်း (၁၀) **စုစုပေါင်း မတည်ငွေရင်းပမာဏ(ကျပ်**) အမေရိကန်ဒေါ်လာ ၄.၅၀၆ သန်း နှင့် ညီမျှသော မြန်မာကျပ်ငွေ တည်ဆောက်မှု/ပြင်ဆင်မှုကာလ (၁၁) အတည်ပြုမိန့်သက်တမ်း (၁၀) နှစ် (o ]) **ရင်းနှီးမြှုပ်နှံမှုပုံစံ** ရာခိုင်နှုန်းပြည့် နိုင်ငံခြားရင်းနှီးမြှုပ်နှံမှု (99)မြန်မာနိုင်ငံတွင် ဖွဲ့စည်းမည့် ကုမ္ပဏီအမည် WIDE VISION ENTERPRISE (၁၄) COMPANY LIMITED





### THE REPUBLIC OF THE UNION OF MYANMAR

### YANGON REGION INVESTMENT COMMITTE

## Amendment on Endorsement No. YGN- 169/2019 dated 12<sup>nd</sup> March, 2019

The Yangon Region Investment Committee, at its meeting (9/2023) held on dated 27<sup>th</sup> September, 2023, approved the place(s) of investment project of Wide Vision Enterprise Company Limited which is carrying out manufacturing of various kinds of bags on CMP basis be changed from "Plot No. 147, Survey No. 14, Shwe Thanlwin Industrial Zone, Hlaing Tharyar Township, Yangon Region" to "Holding No. (Sethmu – 19, 20, 21, 81), Plot No (1), Kan Gyi Kone Kwin, Ward No. (4), Htantabin Township, Yangon Region".

(7) Place(s) of investment Project HOLDING NO. (SETHMU – 19, 20, 21, 81), PLOT NO. (1), KAN GYI KONE KWIN, WARD NO (4), HTANTABIN TOWNSHIP, YANGON REGION

For Chairman

(Myo Khaing Oo, Secretary)

Date: 6 October 2023

Location: Yangon





# ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်

# ရန်ကုန်တိုင်းဒေသကြီးရင်းနှီးမြှုပ်နှံမှုကော်မတီ

၂၀၁၉ ခုနှစ် မတ်လ ၁၂ ရက်စွဲပါ ရန်ကုန်တိုင်းဒေသကြီး ရင်းနှီးမြှုပ်နှံမှုကော်မတီ၏ အတည်ပြုမိန့်အမှတ် ရကတ- ၁၆၉/၂၀၁၉ တွင် ပြင်ဆင်ချက်

၂၀၂၃ ခုနှစ် စက်တင်ဘာလ ၂၇ ရက်နေ့တွင် ကျင်းပပြုလုပ်သော ရန်ကုန်တိုင်းဒေသကြီး ရင်းနှီးမြှုပ်နှံမှုကော်မတီ၏ ၉/၂၀၂၃ ကြိမ်မြောက် အစည်းအဝေးဆုံးဖြတ်ချက်အရ CMP စနစ်ဖြင့် အိတ်အမျိုးမျိုး ချုပ်လုပ်ခြင်း လုပ်ငန်းဆောင်ရွက်နေသော Wide Vision Enterprise Company Limited ၏ ရင်းနှီးမြှုပ်နှံသည့် အရပ်ဒေသကို မူလ "မြေကွက်အမှတ် (၁၄၇)၊ မြေတိုင်းရပ်ကွက် အမှတ်(၁၄)၊ ရွှေသံလွင်စက်မှုစုန်၊ လှိုင်သာယာမြို့နယ်၊ ရန်ကုန်တိုင်းဒေသကြီး"မှ " ဦးပိုင်အမှတ် (စက်မှု - ၁၉၊ ၂၀၊ ၂၁၊ ၈၁)၊ အကွက်အမှတ် (၁) ကံကြီးကုန်းကွင်း၊ အမှတ် (၄) ရပ်ကွက်၊ ထန်းတစ်ပင်မြို့နယ်၊ ရန်ကုန်တိုင်းဒေသကြီး" သို့ ပြောင်းရွှေ့ခွင့်ပြုလိုက်သည်။

(၇) ရင်းနှီးမြှုပ်နှံသည့်အရပ်ဒေသ(များ) ဦးပိုင်အမှတ် (စက်မှု - ၁၉၊ ၂ဝ၊ ၂၁၊ ၈၁)၊ အကွက်အမှတ် (၁) ကံကြီးကုန်းကွင်း၊ အမှတ် (၄) ရပ်ကွက်၊ ထန်းတစ်ပင်မြို့နယ်၊ ရန်ကုန်တိုင်းဒေသကြီး

> ဥက္ကဋ္ဌ်(ကိုယ်စား) (မျိုးခိုင်ဦး၊ အတွင်းရေးမှူး)

ရက်စွဲ၊ ၂၀၂၃ ခုနှစ်၊ အောက်တိုဘာလ ၆ ရက် နေရာ၊ ရန်ကုန်မြို့

#### Confidential

#### THE REPUBLIC OF THE UNION OF MYANMAR

#### YANGON REGION INVESTMENT COMMITTEE

lot No. 49, Sein Lae May Street, Kabar Aye Pagoda Road, Yankin Township, Yangon

Tel: 01-658263

Perion Investment

Our ref: YRIC-1/E-169/2023( 663

October 2023

)

Fax: 01 - 658264

Date :

Subject: Decision of the Yangon Region Investment Committee for

amendment of the place(s) of investment project of Wide Vision

**Enterprise Company Limited** 

Reference:

Wide Vision Enterprise Company Limited's letter dated 20th

September, 2023.

- 1. The Yangon Region Investment Committee, at its meeting (9/2023) held on dated 27<sup>th</sup> September, 2023, approved the place(s) of investment project of Wide Vision Enterprise Company Limited which is carrying out manufacturing of various kinds of bags on CMP basis be changed from "Plot No. 147, Survey No. 14, Shwe Thanlwin Industrial Zone, Hlaing Tharyar Township, Yangon Region" to "Holding No. (Sethmu 19, 20, 21, 81), Plot No (1), Kan Gyi Kone Kwin, Ward No. (4), Htantabin Township, Yangon Region".
- 2. Hence, the place(s) of investment project of Wide Vision Enterprise Company Limited is hereby amended to "Holding No. (Sethmu 19, 20, 21, 81), Plot No (1), Kan Gyi Kone Kwin, Ward No. (4), Htantabin Township, Yangon Region" on the Endorsement No. YGN- 169/2019 dated 12<sup>nd</sup> March, 2019.
- 3. It is also notified that Wide Vision Enterprise Company Limited shall have to abide by all terms and conditions stated in the Yangon Region Investment Committee's Letter No. YRIC-1/E-169/2019(213-F) dated 12<sup>nd</sup> March, 2019.

For Chairman

(Myo Khaing Oo, Secretary)

**Wide Vision Enterprise Company Limited** 

cc: 1. Ministry of Home Affairs

Confidential

#### Confidential

-2-

- 2. Ministry of Planning and Finance
- 3. Ministry of Office of the Union Government(1)
- 4. Ministry of Office of the Union Government(2)
- 5. Ministry of Investment and Foreign Economic Relations
- 6. Ministry of Natural Resources and Environmental Conservation
- 7. Ministry of Industry
- 8. Ministry of Immigration and Population
- 9. Ministry of Labour
- 10. Ministry of Commerce
- 11. Office of the Myanmar Investment Commission
- 12. Chairman, CMP Enterprises Supervision Committee
- 13. Office of the Yangon Region Government
- 14. Director General, National Archives Department
- 15. Director General, Customs Department
- 16. Director General, Internal Revenue Department
- 17. Director General, Directorate of Industrial Supervision and Inspection
- 18. Director General, Directorate of Investment and Company Administration
- 19.Director General, Department of Environmental Conservation
- 20.Director General, Department of Immigration
- 21. Director General, Directorate of Labour
- 22.Director General, Department of Trade
- 23. Monitoring and Supervision Division, Directorate of Investment and Company Administration

### Confidential



# ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်

# ရန်ကုန်တိုင်းဒေသကြီးရင်းနှီးမြှုပ်နှံမှုကော်မတီ

၂၀၁၉ ခုနှစ် မတ်လ ၁၂ ရက်စွဲဖြင့် ရန်ကုန်တိုင်းဒေသကြီး ရင်းနှီးမြှုပ်နှံမှုကော်မတီ၏ အတည်ပြုမိန့်အမှတ် ရကတ- ၁၆၉/၂၀၁၉ တွင် ပြင်ဆင်ချက်

၂၀၂၄ ခုနှစ် အောက်တိုဘာလ ၂၃ ရက်နေ့တွင် ကျင်းပပြုလုပ်သော ရန်ကုန်တိုင်း ဒေသကြီးရင်းနှီးမြှုပ်နှံမှုကော်မတီ၏ ၁၀/၂၀၂၄ ကြိမ်မြောက် အစည်းအဝေး ဆုံးဖြတ်ချက်အရ CMP စနစ်ဖြင့် အိတ်အမျိုးမျိုး ချုပ်လုပ်ခြင်း လုပ်ငန်းဆောင်ရွက်လျက်ရှိသော Wide Vision Enterprise Company Limited ၏ နိုင်ငံခြားမတည်ငွေရင်း ပမာဏနှင့် စုစုပေါင်း မတည်ငွေရင်း ပမာဏအား အမေရိကန်ဒေါ်လာ ၄.၅၀၆ သန်းမှ အမေရိကန်ဒေါ်လာ ၅.၀၉၄ သန်းသို့ တိုးမြှင့်ခွင့် ပြုလိုက်သည်။

- (၈ ) **နိုင်ငံခြားမတည်ငွေရင်းပမာဏ** အမေရိကန်ဒေါ် လာ ၅.၀၉၄ သန်း
- (၁၀) **စုစုပေါင်းမတည်ငွေရင်းပမာဏ (ကျပ်)** အမေရိကန်ဒေါ်လာ ၅.၀၉၄ သန်းနှင့် ညီမျှ သော မြန်မာကျပ်ငွေ

ဥက္ကဋ္ဌ (ကိုယ်စား) (မျိုးခိုင်ဦး ၊အတွင်းရေးမှူး)

ရက်စွဲ၊ ၂၀၂၄ ခုနှစ်၊ နိုဝင်ဘာလ 🤫 ရက် နေရာ၊ ရန်ကုန်မြို့

# APPENDIX B ECD Recommendation Letter



တိုင်းဒေသကြီး ညွှန်ကြားရေးမှူးရုံး ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန ရန်ကုန်တိုင်းဒေသကြီး၊ ရန်ကုန်မြို့

အမှတ် ၁၀ (ရေ)) ၅၅ လမ်း (ကုန်သည်လမ်းနှင့် ကမ်းနားလမ်းကြား) ၊ ဗိုလ်တထောင်မြို့နယ်၊ Postal Code-11161 ဖုန်း ဝ၁ ၈၂၀၃၈၃၈၊ ဖက်စ် - ဝ၁ ၈၂၀၃၈၃၉၊ အီးမေးလ် - ygnecd@gmail.com

> စာအမှတ်၊ ရက/ EIA/၂ ( ႖၎ဝ၃ /၂၀၂၄) ရက်စွဲ၊ ၂၀၂၄ ခုနှစ်၊ ဇူလိုင်လ 🚺 ရက်

သို့

မြန်နေးဂျင်းဒါရိုက်တာ

Wide Vision Enterprise Co., Ltd.

အကြောင်းအရာ။ Wide Vision Enterprise Co., Ltd. ၏ CMP စနစ်ဖြင့် အိတ်ချုပ်လုပ်ခြင်း လုပ်ငန်း နှင့်စပ်လျဉ်း၍ လိုအပ်သည့် ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်း အမျိုးအစားအား ဆက်လက်အကြောင်းကြားခြင်း

- ရည်ညွှန်းချက်။
- (၁) Wide Vision Enterprise Co., Ltd. ၏ ၁၆-၅-၂၀၂၄ ရက်စွဲပါ စာအမှတ် WV (၁၇၀၅/၂၀၂၄)
- (၂) ရန်ကုန်တိုင်းဒေသကြီး၊ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန၊ ညွှန်ကြားရေးမှူးရုံး၏ ၇-၆-၂၀၂၄ ရက်စွဲပါစာအမှတ်၊ ရက/ EIA/ ၆ (၁၈၆၀/၂၀၂၄)

၁။ ရန်ကုန်တိုင်းဒေသကြီး၊ လှိုင်သာယာမြို့နယ်၊ ရွှေသံလွင်စက်မှုဇုန်၊ ဗိုလ်အောင်ကျော်လမ်း၊ မြေတိုင်းရပ်ကွက်အမှတ် (၁၄) ၊ မြေကွက်အမှတ် (၁၄၇) တွင် အကောင်အထည်ဖော်ဆောင်ရွက် လျက်ရှိသော Wide Vision Enterprise Co., Ltd. ၏ CMP စနစ်ဖြင့် အိတ်ချုပ်လုပ်ခြင်း လုပ်ငန်းအား ရန်ကုန်တိုင်းဒေသကြီး၊ မှော်ဘီခရိုင်၊ ထန်းတပင်မြို့နယ်၊ အမှတ် (၄) ရပ်ကွက်၊ ကံကြီးကုန်းကွင်း၊ ဦးပိုင်အမှတ် (စက်မှု - ၁၉/၂၀/၂၁/ ၈၁) (အကွက်အမှတ် - ၁) သို့ပြောင်းရွှေ့ ဆောင်ရွက်ခြင်းနှင့်ပတ်သက်၍ ပတ်ဝန်းကျင်ဆိုင်ရာသဘောထားမှတ်ချက်အား ပြန်ကြားပေးနိုင် ပါရန် စီမံကိန်း/လုပ်ငန်း အဆိုပြုလွှာအား ရည်ညွှန်း (၁) ပါစာဖြင့် တင်ပြလာမှုအား စိစစ်တွေ့ရှိချက် များနှင့်တကွ ပတ်ဝန်းကျင်ဆိုင်ရာသဘောထားမှတ်ချက် ပြန်ကြားနိုင်ပါရန် ရည်ညွှန်း (၂) ပါစာဖြင့် ရုံးချုပ်သို့ တင်ပြခဲ့ပါသည်။

၂။ ရုံးချုပ်၏ ၁၇-၇-၂၀၂၄ ရက်စွဲပါ ပြန်ကြားချက်အရ Wide Vision Enterprise Co., Ltd. ၏ CMP စနစ်ဖြင့် အိတ်ချုပ်လုပ်ခြင်းလုပ်ငန်းနှင့်စပ်လျဉ်း၍ ပတ်ဝန်းကျင်ဆိုင်ရာသဘောထားမှတ်ချက် ပြန်ကြားမှုအား အောက်ပါအတိုင်း ဆက်လက် အကြောင်းကြားအပ်ပါသည်-

- (က) အဆိုပြု Wide Vision Enterprise Co., Ltd. ၏ CMP စနစ်ဖြင့် အိတ်ချုပ်လုပ်ခြင်း လုပ်ငန်းအတွက် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် (EMP) အစီရင်ခံစာကို ရေးဆွဲ ပြုစုရန်၊
- (ခ) ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာလုပ်ထုံးလုပ်နည်း အပိုဒ် ၇၆ အရ "စီမံကိန်းအဆိုပြုသူသည် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် ရေးဆွဲခြင်းကို မိမိ ကိုယ်တိုင်သော်လည်းကောင်း၊ အပိုဒ် ၁၈ နှင့်အညီ လုပ်ငန်းလိုင်စင်ရယူထားသော ပုဂ္ဂိုလ် သို့မဟုတ် အဖွဲ့ အစည်းကို အပ်၍သော်လည်းကောင်း" ဆောင်ရွက်ရန်နှင့် လုပ်ငန်းလိုင်စင်ရယူထားသောပုဂ္ဂိုလ် သို့မဟုတ် အဖွဲ့ အစည်းဖြင့် ဆောင်ရွက်မည် ဆိုပါက လုပ်ငန်းလိုင်စင်ဆိုင်ရာ လုပ်ထုံးလုပ်နည်း အပိုဒ် ၅၀ အရ လေ့လာ ဆန်းစစ်ရေးအဖွဲ့တွင် အကြံပေးပုဂ္ဂိုလ် သို့မဟုတ် တွဲဖက်အကြံပေးပုဂ္ဂိုလ် အနည်းဆုံး နှစ်ဦးဖြင့် ဆောင်ရွက်ရန်၊
- (ဂ) ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာလုပ်ထုံးလုပ်နည်း အပိုဒ် ၆၃ (e) ၊ ၇၆ ၊ ဂုဂု တို့နှင့်အညီ ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်ကို သယံဧာတနှင့်သဘာဝ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာနသို့ တင်ပြ အတည်ပြုချက်ရယူရန်။

(ကျော်ဆန်းနိုင်) ညွှန်ကြားရေးမှူး

မိတ္တူကို

လက်ထောက်ညွှန်ကြားရေးမှူး၊ ရန်ကုန်မြောက်ပိုင်းခရိုင်၊ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန ရုံးလက်ခံ၊ မျှောစာတွဲ၊ အမှုတွဲချုပ်

# APPENDIX C Environmental Impact Assessment License

## Organization



#### Individual



ပြည်ထောင်စုသမ္မကမြန်မာနိုင်ငံတော်အစိုးရ The Government of the Republic of the Union of Myanmar သယံဧာတနှင့် သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာန Ministry of Natural Resources and Environmental Conservation ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန Environmental Conservation Department

Environmental Conservation Department ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာလုပ်ငန်းလိုင်စင် (ပုဂ္ဂိုလ်)

**Environmental Impact Assessment License (Individual)** 

ဦးလင်းထက်စိန်၊ ၇/သကန(နိုင်)၁၀၁၃၇၇ အား တွဲဖက်အကြံပေးပုဂ္ဂိုလ် အဖြစ် လုပ်ကိုင်ဆောင်ရွက်ရန် ပတ်ဝန်းကျင် ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ငန်းလိုင်စင်ကို ကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းနှင့် ပတ်ဝန်းကျင်ထိခိုက်မှု ဆန်းစစ်ခြင်း ပြုလုပ်သည့် တတိယပုဂ္ဂိုလ် သို့မဟုတ် အဖွဲ့အစည်း လုပ်ငန်းလိုင်စင်ဆိုင်ရာလုပ်ထုံးလုပ်နည်းနှင့် အညီ ဤဝန်ကြီးဌာန၏ အသည်ကြုချက်ဖြင့် ထုတ်ပေးလိုက်သည်။

It is hereby issued that U Lin Htet Sein, 7/ThaKaNa(N)101377 has fulfilled the requirements for obtaining an Environmental Impact Assessment License to conduct as an Associate Consultant under the Licensing Procedure for the Third Persons or Organizations Undertaking Initial Environmental Examination and Environmental Impact Assessment, approved by the Ministry of Natural Resources and Environmental Conservation.

လေ့လာဆန်းစစ်ခွင့်ရှိသည့် ကျွမ်းကျင်မှုနယ်ပယ်များမှာ အောက်ပါအတိုင်းဖြစ်သည်– The areas of expertise, eligible to be conducted, are as follows:

1. အတွေထွေပတ်ဝန်းကျင်စီမံခန့်ခွဲခြင်း (General Environmental Management)

2.

3.

V

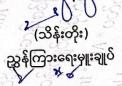
လိုင်စင်နံပါတ် License Number ထုတ်ပေးသည့် ရက်စွဲ Date of Issue ကုန်ဆုံးသည့် ရက်စွဲ Date of Expiry

: EIA-AC 053/2023

: 1-12-2023

30-11-2026

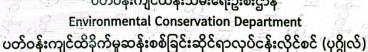








ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်အစိုးရ
The Government of the Republic of the Union of Myanmar
သယံဧာတနှင့် သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာန
Ministry of Natural Resources and Environmental Conservation
ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန
Environmental Conservation Department



# **Environmental Impact Assessment License (Individual)**

ဦးထွန်းလင်းကျော်၊ ၈/ပဖန(နိုင်)၁၀၃၉၅၅ အား တွဲဖက်အကြံပေးပုဂ္ဂိုလ် အဖြစ် လုပ်ကိုင်ဆောင်ရွက်ရန် ပတ်ဝန်းကျင် ထိနိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ငန်းလိုင်စင်ကို ကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းနှင့် ပတ်ဝန်းကျင်ထိနိုက်မှု ဆန်းစစ်ခြင်း ပြုလုပ်သည့် တတိယပုဂ္ဂိုလ် သို့မဟုတ် အဖွဲ့အစည်း လုပ်ငန်းလိုင်စင်ဆိုင်ရာ လုပ်ထုံးလုပ်နည်းနှင့် အညီ ဤဝန်ကြီးဌာန၏ အတည်ပြုချက်ဖြင့် ထုတ်ပေးလိုက်သည်။

It is hereby issued that U Tun Lin Kyaw, 8/PaPhaNa(N)103955 has fulfilled the requirements for obtaining an Environmental Impact Assessment License to conduct as an Associate Consultant under the Licensing Procedure for the Third Persons or Organizations Undertaking Initial Environmental Examination and Environmental Impact Assessment, approved by the Ministry of Natural Resources and Environmental Conservation.

လေ့လာဆန်းစစ်ခွင့်ရှိသည့် ကျွမ်းကျင်မှုနယ်ပယ်များမှာ အောက်ပါအတိုင်းဖြစ်သည်– The areas of expertise, eligible to be conducted, are as follows:

1. လူမှုရေးဆိုင်ရာ လေ့လာခြင်းနှင့် သရုပ်ခွဲဆန်းစစ်ခြင်း (Social Study and Analysis)

2.

٥. ۸

5.

လိုင်စင်နံပါတ် License Number ထုတ်ပေးသည့် ရက်စွဲ Date of Issue ကုန်ဆုံးသည့် ရက်စွဲ Date of Expiry : EIA-AC 051/2023

: 1-12-2023

30-11-2026



(သိန်းတိုး) ညွှန်ကြားရှေးမှူးချုပ်





ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်အစိုးရ
The Government of the Republic of the Union of Myanmar
သယံဧာတနှင့် သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာန
Ministry of Natural Resources and Environmental Conservation
ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန
Environmental Conservation Department
ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာလုပ်ငန်းလိုင်စင် (ပုဂ္ဂိုလ်)

**Environmental Impact Assessment License (Individual)** 

ဦးစောရန်နောင်၊ ၁၂/အစန(နိုင်)၂၂၂၂၅ဝ အား တွဲဖက်အကြံပေးပုဂ္ဂိုလ် အဖြစ် လုပ်ကိုင်ဆောင်ရွက်ရန် ပတ်ဝန်းကျင် ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ငန်းလိုင်စင်ကို ကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းနှင့် ပတ်ဝန်းကျင်ထိခိုက်မှု ဆန်းစစ်ခြင်း ပြုလုပ်သည့် တတိယပုဂ္ဂိုလ် သို့မဟုတ် အဖွဲ့ အစည်း လုပ်ငန်းလိုင်စင်ဆိုင်ရာ လုပ်ထုံးလုပ်နည်းနှင့် အညီ ဤဝန်ကြီးဌာန၏ အဘည်ပြုချက်ဖြင့် ထုတ်ပေးလိုက်သည်။

It is hereby issued that U Saw Yan Naung, 12/AhSaNa(N)222250 has fulfilled the requirements for obtaining an Environmental Impact Assessment License to conduct as an Associate Consultant under the Licensing Procedure for the Third Persons or Organizations Undertaking Initial Environmental Examination and Environmental Impact Assessment, approved by the Ministry of Natural Resources and Environmental Conservation.

လေ့လာဆန်းစစ်ခွင့်ရှိသည့် ကျွမ်းကျင်မှုနယ်ပယ်များမှာ အောက်ပါအတိုင်းဖြစ်သည်= The areas of expertise, eligible to be conducted, are as follows:

1. လူမှုရေးဆိုင်ရာ လေ့လာခြင်းနှင့် သရုပ်ခွဲဆန်းစစ်ခြင်း (Social Study and Analysis)

2.

3.

4.

လိုင်စင်နံပါတ် License Number ထုတ်ပေးသည့် ရက်စွဲ Date of Issue ကုန်ဆုံးသည့် ရက်စွဲ Date of Expiry

: EIA-AC 054/2023

: 1-12-2023

: 30-11-2026



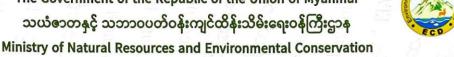
(သိန်းတိုး) ညွှန်ကြားရေးမှူးချုပ်





# ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်အစိုးရ

The Government of the Republic of the Union of Myanmar သယံဧာတနှင့် သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာန



ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန **Environmental Conservation Department** 

ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာလုပ်ငန်းလိုင်စင် (ပုဂ္ဂိုလ်)

# **Environmental Impact Assessment License (Individual)**

**ဒေါ်ဆုမြတ်လှိုင်၊ ၁၂/ဥကတ(နိုင်)၁၇၉၇၀၁** အား **တွဲဖက်အကြံပေးပုဂ္ဂိုလ်** အဖြစ် လုပ်ကိုင်ဆောင်ရွက်ရန် ပတ်ဝန်းကျင် ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ငန်းလိုင်စင်ကို ကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းနှင့် ပတ်ဝန်းကျင်ထိခိုက်မှု ဆန်းစစ်ခြင်း ပြုလုပ်သည့် တတိယပုဂ္ဂိုလ် သို့မဟုတ် အဖွဲ့အစည်း လုပ်ငန်းလိုင်စင်ဆိုင်ရာ လုပ်ထုံးလုပ်နည်းနှင့် အညီ ဤဝန်ကြီးဌာန၏ အတည်ပြုချက်ဖြင့် ထုတ်ပေးလိုက်သည်။

It is hereby issued that Daw Su Myat Hlaing, 12/OuKaTa(N)179701 has fulfilled the requirements for obtaining an Environmental Impact Assessment License to conduct as an Associate Consultant under the Licensing Procedure for the Third Persons or Organizations Undertaking Initial Environmental Examination and Environmental Impact Assessment, approved by the Ministry of Natural Resources and Environmental Conservation.

လေ့လာဆန်းစစ်ခွင့်ရှိသည့် ကျွမ်းကျင်မှုနယ်ပယ်များမှာ အောက်ပါအတိုင်းဖြစ်သည်-

The areas of expertise, eligible to be conducted, are as follows:

1. လေထှညစ်ညမ်းမှုစောင့်ကြပ်ကြည့်ရှုခြင်း (Air Pollution Monitoring)

2.

3.

လိုင်စင်နံပါတ် License Number

ထုတ်ပေးသည့် ရက်စွဲ Date of Issue

ကုန်ဆုံးသည့် ရက်စွဲ Date of Expiry

: EIA-AC 101/2024

: 30-6-2024

: 29-6-2027





ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်အစိုးရ
The Government of the Republic of the Union of Myanmar
သယံဒေတနှင့် သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာန
Ministry of Natural Resources and Environmental Conservation
ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန
Environmental Conservation Department
ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာလုပ်ငန်းလိုင်စင် (ပုဂ္ဂိုလ်)

**Environmental Impact Assessment License (Individual)** 

ဦးကောင်းဆက်လွင်၊ ၁၄/ဘကလ(နိုင်)၂၃၉၂၉၁ အား တွဲဖက်အကြံပေးပုဂ္ဂိုလ် အဖြစ် လုပ်ကိုင်ဆောင်ရွက်ရန် ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ငန်းလိုင်စင်ကို ကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းနှင့် ပတ်ဝန်းကျင် ထိခိုက်မှုဆန်းစစ်ခြင်း ပြုလုပ်သည့် တတိယပုဂ္ဂိုလ် သို့မဟုတ် အဖွဲ့ အစည်း လုပ်ငန်းလိုင်စင်ဆိုင်ရာ လုပ်ထုံး လုပ်နည်းနှင့်အညီ ဤဝန်ကြီးဌာန၏ အတည်ပြုချက်ဖြင့် ထုတ်ပေးလိုက်သည်။

It is hereby issued that U Kaung Sett Lwin, 14/BaKaLa(N)239291 has fulfilled the requirements for obtaining an Environmental Impact Assessment License to conduct as an Associate Consultant under the Licensing Procedure for the Third Persons or Organizations Undertaking Initial Environmental Examination and Environmental Impact Assessment, approved by the Ministry of Natural Resources and Environmental Conservation.

လေ့လာဆန်းစစ်ခွင့်ရှိသည့် ကျွမ်းကျင်မှုနယ်ပယ်များမှာ အောက်ပါအတိုင်းဖြစ်သည်– The areas of expertise, eligible to be conducted, are as follows:

- 1. ဘူမိဆိုင်ရာ ဆန်းစစ်လေ့လာခြင်း (Geological Assessment)
- 2.
- 3.
- 4
- လိုင်စင်နံပါတ် License Number ထုတ်ပေးသည့် ရက်စွဲ Date of Issue ကုန်ဆုံးသည့် ရက်စွဲ Date of Expiry

: EIA-AC 055/2023

: 1-12-2023

: 30-11-2026



် (သိန်းတိုး) ညွှန်ကြားရေးမှူးချုပ် ၂/ ၂၇ ၈



# APPENDIX D Environmental Quality Mornitoring Results

# Air Quality Result (Indoor and Outdoor)



No. (17), Min Ye Kyaw Swar Street, Yankin Township, Yangon Region, The Republic of the Union of Myanmar. Office: (+95) 9777922169, (+95) 9777929885 Mobile: (+95) 9421137569; Website: www.myanweiconsulting.com

**Project Name:** Wide Vision Enterprise Company Limited.

Project Location: Sethmu - 19,20,21,81, Plot No (1), Kan Gyi Kone Kwin, Ward

No-(4), Htantabin Township, Yangon Region.

Sampling Date: 23<sup>th</sup> to 24<sup>th</sup>, August, 2024.

Sampling Time: 24 hours

Sampling By: Environmental Team Represented by Myanwei Environmental

Solutions Company Limited.

| Instrument         | Parameter   | Sampling Rate   | Location  |
|--------------------|---|-----------------|---|
| OCEANUS-AQM-<br>09 | Dust Data: PM <sub>10</sub> , PM <sub>2.5</sub> , TSP  Gas Data: O <sub>3</sub> , NO <sub>2</sub> , SO <sub>2</sub> , CO,  TVOC, NO  Meteorological Parameter:  (Wind Direction, Wind Speed, Air Pressure, Temperature,  Relative Humidity) | 0-999.9 (μg/m³) | (Indoor Area)<br>17°1'12.82"N<br>95°58'33.55"E<br>(Outdoor Area)<br>17°1'10.61"N<br>95°58'32.99"E |

# National Environmental Quality (Emission) Guidelines

| Parameter                      | Averaging period | Guideline value | Unit    |  |
|--------------------------------|------------------|-----------------|---------|--|
| рм а                           | 1-year           | 20              | (ua/m3) |  |
| PM <sub>10</sub> <sup>a</sup>  | 24-hour          | 50              | (μg/m³) |  |
| DM a                           | 1-year           | 10              | (μg/m³) |  |
| PM <sub>2.5</sub> <sup>a</sup> | 24-hour          | 25              | (μg/m²) |  |
| O <sub>3</sub> a               | 8-hour           | 100             | (μg/m³) |  |
| NO <sub>2</sub> a              | 1-year           | 40              | (a/m3)  |  |
| NO <sub>2</sub> "              | 1-hour           | 200             | (μg/m³) |  |
| SO <sub>2</sub> a              | 24-hour          | 20              | (ug/m3) |  |
| 302*                           | 10-min           | 500             | (μg/m³) |  |

a. Values from air quality guidelines-global update 2005: Particulate Matter = PM, Ozone = O<sub>3</sub>, Nitrogen Dioxide = NO<sub>2</sub> and Sulfur Dioxide = SO<sub>3</sub>.

| Meteorological Results |                            |          |  |  |  |
|------------------------|----------------------------|----------|--|--|--|
| Parameters             | Observed Value             | Unit     |  |  |  |
| Temperature            | 29.68                      | °C       |  |  |  |
| Relative Humidity      | 83.93                      | %        |  |  |  |
| Air Pressure           | 1002.26                    | hPa      |  |  |  |
| Wind Speed             | 2.42                       | m/s      |  |  |  |
| Wind Direction         | 145 (South-East Direction) | Degree ° |  |  |  |

| Air Quality Monitoring Results |                |         |           |           |       |           |
|--------------------------------|----------------|---------|-----------|-----------|-------|-----------|
| Parameters                     | Observed Value |         | Guideline | Averaging | 11-14 | Guideline |
| raidilleteis                   | Indoor         | Outdoor | Value     | Period    | Unit  | Guideline |
| PM <sub>2.5</sub>              | 3.26           | 10.03   | 25        | 24 hours  | μg/m³ | NEQEGs    |
| PM <sub>10</sub>               | 8.07           | 11.62   | 50        | 24 hours  | μg/m³ | NEQEGs    |
| SO <sub>2</sub>                | 15.71          | 18.99   | 20        | 24 hours  | μg/m³ | NEQEGs    |
| NO <sub>2</sub>                | 3.81           | 5.21    | 200       | 1 hour    | μg/m³ | NEQEGs    |
| O <sub>3</sub>                 | 4.55           | 6.25    | 100       | 8 hours   | μg/m³ | NEQEGs    |
| со                             | 4.17           | 2.87    | NG        | 24 hours  | ppm   | )=        |
| TSP                            | 8.75           | 12.79   | NG        | 24 hours  | μg/m³ | -         |
| NO                             | 9.38           | 3.65    | NG        | 24 hours  | ppb   | -         |
| TVOC                           | 0.004          | 0.003   | NG        | 24 hours  | ppm   | s=        |

Carbon Monoxide = CO, TSP = Total Suspended Particulate, NO = Nitric Oxide, TVOC = Total Volatile Organic Compound

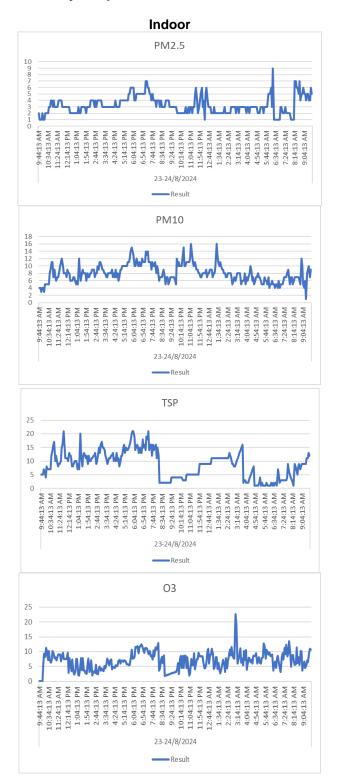
 $SO2 \; (1ppb = 2.62 \; ug/m3), \; NO2 \; (1ppb = 1.88 \; ug/m3), \; O3 \; (1ppb = 1.96 \; ug/m3)$ 

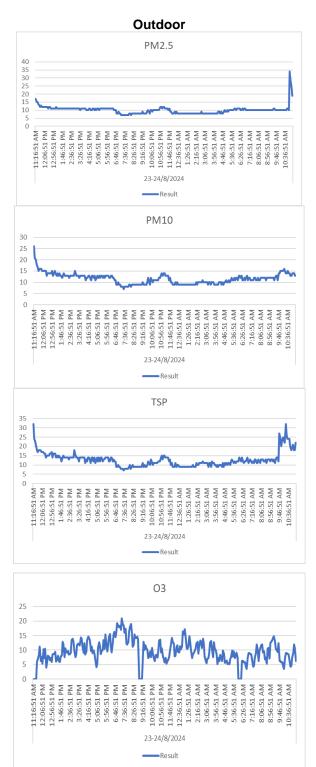
NEQEGS - National Environmental Quality (Emission) Guidelines

NG - No Guideline

LIN HTET SEIN
DIRECTOR
MYANWEI ENVIRONMENTAL SOLUTIONS
COMPANY LIMITED.

# **Air Quality Graph**









# **Noise Result (Cutting Department and Sewing Department)**



No. (17), Min Ye Kyaw Swar Street, Yankin Township, Yangon Region, The Republic of the Union of Myanmar. Office: (+95) 9777922169, (+95) 9777929885 Mobile: (+95) 9421137569; Website: www.myanweiconsulting.com

Project Name: Wide Vision Enterprise Company Limited.

Project Sethmu - 19,20,21,81, Plot No (1), Kan Gyi Kone Kwin, Ward

Location: No-(4), Htantabin Township, Yangon Region.

Sampling Date: 23<sup>th</sup> to 24<sup>th</sup>, August, 2024.

Sampling Time: 24 Hours

Sampling By: Environmental Team Represented by Myanwei Environmental

Solutions Company Limited.

| Instrument                             | Туре        | Sampling Rate |
|--|-------------|---------------|
| Sound Lab Digital<br>Sound Level Meter | GM 1356 USB | 0 - 70 dB     |

#### National Environmental Quality (Emission) Guidelines

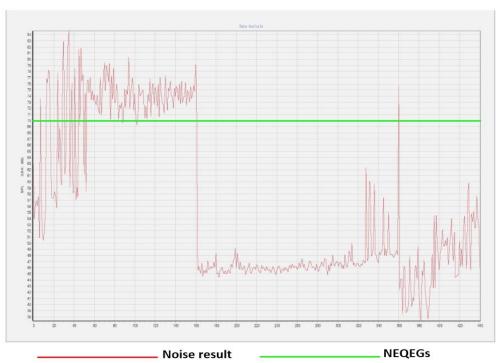
|   | One Hour Laeq (dBA)                                    | Guideline value   |
|---|--|---|
| D                                       | Daytime  | Nighttime   |
| Receptor                                | 7:00 – 22:00<br>(10:00 – 22:00 for public<br>holidays) | 22:00 – 07:00<br>(22:00 – 10:00 for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

| Sampling Point  | Unit | Result | Standard | Remark        |
|---|------|--------|----------|---------------|
| (Cutting Department)<br>17°1'12.18"N<br>95°58'32.08"E | dBA  | 55.92  | 70       | Within NEQEGs |
| (Sewing Department)<br>17°1'13.14"N<br>95°58'33.52"F  | dBA  | 62.94  | 70       | Within NEQEGs |

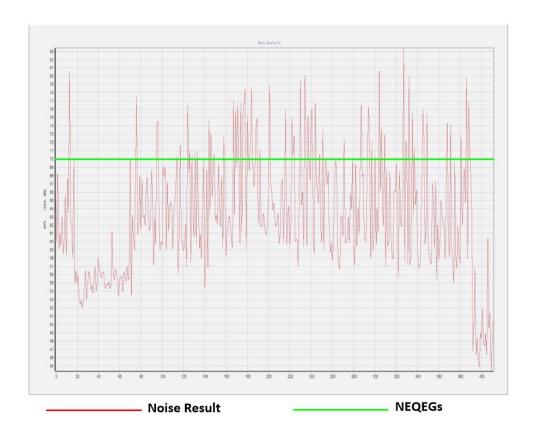


# **Noise Graph**

# **Cutting Department**



# **Sewing Department**



# **Light Result**



No. (17), Min Ye Kyaw Swar Street, Yankin Township, Yangon Region, The Republic of the Union of Myanmar. Office: (+95) 9777922169, (+95) 9777929885 Mobile: (+95) 9421137569; Website: www.myanweiconsulting.com

**Project** Wide Vision Enterprise Company Limited. Name:

**Project** Sethmu - 19,20,21,81, Plot No (1), Kan Gyi Kone Kwin, Ward

Location: No-(4), Htantabin Township, Yangon Region.

Sampling

23 August 2024 Date:

Sampling Working Period Time:

Sampling By: Environmental Team Represented by Myanwei Environmental

Solutions Company Limited

| Instrument             | Туре         | Sampling Rate    | Location       |
|------------------------|--------------|------------------|----------------|
|                        | 3 3          |                  | Operation Area |
|                        |              |                  | (17°1'12.02"N  |
|                        |              |                  | 95°58'33.21"E, |
|                        |              |                  | 17°1'12.6"N    |
|                        | UT380 Series | 100 times/second | 95°58'31.89"E, |
| Uni-T<br>(Luminometer) |              |                  | 17°1'13.02"N   |
|                        |              |                  | 95°58'32.13"E, |
|                        |              |                  | 17°1'13.14"N   |
|                        |              |                  | 95°58'33.63"E, |
|                        |              |                  | 17°1'12.83"N   |
|                        |              |                  | 95°58'33.27"E, |
|                        |              |                  | 17°1'11.2"N    |
|                        |              |                  | 95°58'34.74"E, |
|                        |              |                  | 17°1'11.4"N    |
|                        |              |                  | 95°58'34.49"E) |

The Lighting Handbook

| Type of Industry          | Task or Activities  | Lux Level |
|---------------------------|---|-----------|
|                           | Work places and zones in baths, bale opening  | 200       |
|                           | Carding, washing, ironing, devilling machine work, drawing, combing, sizing, card cutting, pre-spinning, jute and hemp spinning | 300       |
|                           | Spinning, plying, reeling, winding  | 500       |
|                           | Warping, weaving, braiding, knitting  | 500       |
| <b>-</b>                  | Sewing, fine knitting, taking up stitches   | 750       |
| Textile manufacturing and | Manual design, drawing patterns   | 750       |
| processing                | Finishing, dyeing   | 500       |
|                           | Drying room   | 100       |
|                           | Automatic fabric printing   | 500       |
|                           | Burling, picking, trimming  | 1000      |
|                           | Colour inspection; fabric control   | 1000      |
|                           | Invisible mending   | 1500      |
|                           | Hat manufacturing   | 500       |

# **Light Intensity Measurement Results**

| No | Type of Area               | Unit | Measure Value | Standard |
|----|----------------------------|------|---------------|----------|
| 1  | Warehouse                  | Lux  | 494           | 200      |
| 2  | Cutting Department         | Lux  | 1187          | 300      |
| 3  | Printing Department        | Lux  | 805           | 500      |
| 4  | Sewing Department          | Lux  | 761           | 750      |
| 5  | Quality Control Department | Lux  | 1661          | 1000     |
| 6  | Final Product Storage Area | Lux  | 321           | 300      |
| 7  | Packing Department         | Lux  | 1468          | 500      |

LIN HTET SEIN
DIRECTOR
MYANWEI ENVIRONMENTAL SOLUTIONS
COMPANY LIMITED.

## **Water Quality Result**

# **Drinking Water**







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

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

#### W0424 002

### WATER QUALITY TEST RESULTS FORM

| Client                                  | Life Co.,Ltd.      |  |
|---|--------------------|--|
| Nature of Water                         | Drinking Water     |  |
| Location                                | Htantabin Township |  |
| Date and Time of collection             | 1.4.2024           |  |
| Date and Time of arrival at Laboratory  | 1.4.2024           |  |
| Date and Time of commencing examination | 2.4.2024           |  |
| Date and Time of completing             | 4.4.2024           |  |

### Results of Water Analysis

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

|                                 | *    |                           |                               |
|---------------------------------|------|---------------------------|-------------------------------|
| pH                              | 6.8  |                           | 6.5 - 8.5                     |
| Colour (True)                   | Nil  | TCU                       | 15 TCU                        |
| Turbidity                       | Nil  | NTU                       | 5 NTU                         |
| Conductivity                    | 120  | micro S/cm                |                               |
| Total Hardness                  | 10   | mg/l as CaCO <sub>3</sub> | 500 mg/l as CaCO <sub>3</sub> |
| Calcium Hardness                | 6    | mg/l as CaCO <sub>3</sub> |                               |
| Magnesium Hardness              | 4    | mg/l as CaCO <sub>3</sub> |                               |
| Total Alkalinity                | 18   | mg/l as CaCO <sub>3</sub> |                               |
| Phenolphthalein Alkalinity      | Nil  | mg/l as CaCO <sub>3</sub> |                               |
| Carbonate (CaCO <sub>3</sub> )  | Nil  | mg/l as CaCO <sub>3</sub> |                               |
| Bicarbonate (HCO <sub>3</sub> ) | 18   | mg/l as CaCO <sub>3</sub> |                               |
| Iron                            | 0.08 | mg/l                      | 0.3 mg/l                      |
| Chloride (as CL)                | 30   | mg/l                      | 250 mg/l                      |
| Sodium Chloride (as NaCL)       | 50   | mg/l                      |                               |
| Sulphate (as SO <sub>4</sub> )  | Nil  | mg/l                      | 500 mg/l                      |
| Total Solids                    | 60   | mg/l                      | 1500 mg/l                     |
| Total Suspended Solids          | Nil  | mg/l                      |                               |
| Total Dissolved Solids          | 60   | mg/l                      | 1000 mg/l                     |
| Manganese                       | Nil  | mg/l                      | 0.05 mg/l                     |
| Phosphate                       | Nil  | mg/l                      |                               |
| Phenolphthalein Acidity         | 3    | mg/l                      |                               |
| Methyl Orange Acidity           | Nil  | mg/l                      |                               |
| Salinity                        | 0.1  | ppt                       |                               |

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

Tested by Signature:

Name:

aw Hein Oo B.Sc (Chemistry) Approved by

Signature: Name:

Thinzar Theint Theint B.E (Civil) Assistant Technical Officer ISO Tech Laboratory

(a division of WEG Co., Ltd.)

No.18. Lanthit Road, Nanthargone Quarter, Insein Township, Yangon, Myanmar.
Ph: 01-640955, 09-880100172, 09-880100173, 01-644506, E-mail: isotechlaboratory@gmail.com, Website: weg-myanmar.com

# **Wastewater (Treated)**

# ALARM Ecological Laboratory

# Water Testing Result Report



|  | EL-WR-24-03          | 3545  |  | Da                             | ate: August 8, 202 |
|--|----------------------|---|--|--------------------------------|--------------------|
| lient Information                        |                      |   | Sample Informati   | on                             |                    |
| Client Name                              | e : Wide \           | ision Enterprise Co., Ltd                         | Sample   | e ID : 11524                   |                    |
| Organization                             | n : Myanv            | vei Environmental Solution Co., Ltd               | Sample Na  | me : Waste Water               |                    |
| Client II                                | ) : -                |   | Sample Type / Sou  | irce :                         |                    |
| Registration Date &                      | 25.7.20              | 024;  |  | 24.7.2024                      |                    |
| Time                                     | 3:38 P               | М   | Sampling Date & T  | 3:00 PM                        |                    |
| Contac                                   | t : 09-448           | 3841090   | Sample Locat   | ion : Htantapin Ts             | p                  |
| Emai                                     | l : env@r            | nyanweiconsulting.com                             | Latit  | ude : -                        |                    |
| Testing Purpose                          | : For Mo             | onitoring   | Longit   | ude : -                        |                    |
|  |                      | Testing R   | esults   |                                |                    |
|  | This laboratory and  | alysis report is based solely on the sample sub   | mitted by the client unless cl   | ient took our sampling service | re.                |
| 877 11 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 | CATALOG A LANGE COME | is report shall not be reproduced except in full, | SEASON STATE OF THE SEASON |                                | Wall to a resident |
| ir. Quality Pa                           |                      | Results   | Jnits Emi:   | ssion Standards                | Remarks            |
| 1 pl                                     |                      | 7.2   | S.U  | 6.0 - 9.0 <sup>d</sup>         | Normal             |
| 2 Tempe                                  |                      | 26  | °C   | ±3* <sup>d</sup>               | -                  |
| 3 Cold                                   |                      | 1   | HU   | -                              | -                  |
| 4 TS                                     |                      |   | mg/L   | ≤50 <sup>d</sup>               | Normal             |
| 5 BOI                                    |                      |   | ng/L   | ≤ 50 <sup>d</sup>              | Normal             |
| 6 CO                                     |                      |   | mg/L   | ≤ 250 <sup>d</sup>             | Normal             |
| 7 Total Pho                              |                      |   | ng/L   | ≤2 <sup>d</sup>                | Normal             |
| 8 Cop                                    |                      |   | ng/L   | ≤ 0.5 <sup>d</sup>             | Normal             |
| 9 Chromium (F                            |                      |   | ng/L   | ≤ 0.1                          | Normal             |
| 0 Oil & G                                |                      |   | ng/L   | ≤ 10 <sup>d</sup>              | Normal             |
| 1 Total Ni                               | trogen               | 2.8   | ng/L   | -                              | 8#1                |
|  |                      |   |  |                                |                    |
| "ND" = No                                |                      | "LOD" = Lower limit                               | Relative to the same to the same of the  | " - " = No Referer             |                    |
|  | by                   | Checked   | by   | Аррі                           | oved by            |
| Tested                                   |                      |   |  |                                | 1                  |

No.237, Corner of Shu Khin Thar Street & 7 Street, (3) Block, South Oakkalapa Township, Yangon. Tel: 09-407496078, Email: aelab.2022@gmail.com

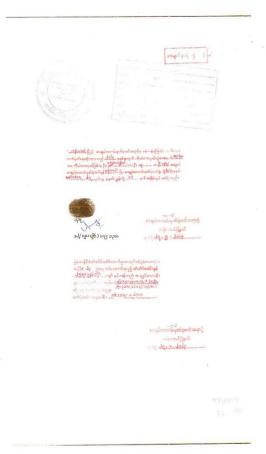
# APPENDIX E Land Lease Agreement



၃။ မြေစိုင်ရင်သည် အောက်တွင်အသေးစိတ်ဖော်ပြထားသော မြေ (၄)ကွက်၏ ပိုင်ဆိုင်ခွင့် မြေအသုံးပြုခွင့်နှင့် အကျိုးအမြတ်များအား ပိုင်ဆိုင်သူ ဖြစ်ပါသည်။









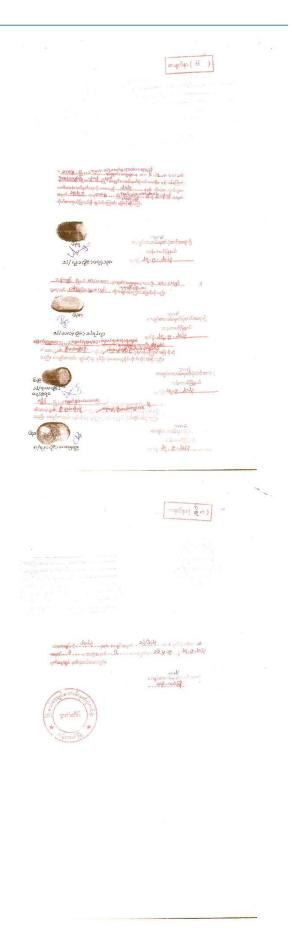
၅။ စိန်ပွားရေး (သို့မဟုတ်) တရားဥပဒေနှင့် စပ်လျှာ်သည့် အခြေအနေများတွင် အဓိကျသော မြောင်းလဲမှုတစ်ခုခု ရှိလာပါက၊ အငှာအျထားဖြင်းခံရသူက ဖြန်မာနိုင်ငံတွင် ဖြန်မာနိုင်ငံအစိုအမှ မြေများကို သိမ်းဆည်းဖြင်း (သို့မဟုတ်) ဥပဒေများ၊ စည်းမျှင်းရားတွင် ပြောင်းသဲမှုများရှိခဲ့လျှင် ဒီးပွားရေး (သို့မဟုတ်) တရားဥပဒေနှင့် ပေလျှင်းသည့် အခြေအနေများတွင် အဓိကကျသော ပြောင်းလဲမှုတစ်ခုခုကြောင့် ဒီဗျားရေးလုပ်ငန်း ဆောင်ရွက်ဖြင်းမှ တားဆီးဆံရပါက အငှာအျထားဖြင်း ခံရသူသည် မြော့အစာချွှင်အား ရုပ်ဆံခွင့်ရှိပြီး၊ မြေပိုင်ရှင်သည့် အငှာအျထားဖြင်းခံရသူအား၊ ကျန်ရှိသောအသုံးမပြုရသေးသည့် မြော့ကာလအတွက် မြော့အရမ်အသား၊ သိမ်းဆည်းဖြင်းခံရသူသုံး ပြန်လည်ပေးအပ်ရန်ရှိသော ပမာထာသည် ပိုမိုရားပြားသည့် ပမာဏဖြစ်သော (၁) မြေပိုင်ရှင်မှ မြန်မာနိုင်ငံအစိုးရတဲမှ ရရှိသည့် ပမာဏ (သို့မဟုတ်) (၂) ကျန်ရှိသော အသုံးမပြုရ သေးသည့် မြော့ကာလအတွက် မြော့အရမ်းနှင့်အညီ ဖြစ်ရာမည်း

မီး ဤသဘောတူလာချုပ်တွင် ဖော်ပြထားသော မည်သည့် အပိုးကိုမျှ အန်ကျင်ခြင်းမရှိစေဘဲ မြေများအား အနေ့ဆက်ခံခြင်း အပါအဝင် မြေများ၏ ပိုင်ဆိုင်မှုပြောင်းလဲသည့်အခါ မြေငှာအာချုပ်သည် မြေငှာဘက်တမ်း တစ်လျှောက်တွင် လွှဲပြောင်း ခြင်းခံရသူအပေါ်တွင်လည်း စည်းနောင်မှု ရှိခဲစရမည်း မြေပိုင်ရှင်သည် လွှဲပြောင်ခြင်းခံရသူအား: မြေငှာအေချုပ်၏ လွှမ်းမိုးတည်ရှိမှုအား အထိပေးရနှင့် တာဝန်ရှိပြီး အငှာအရုထားခြင်းခံရသူကိုလည်းလွှဲပြောင်ခြင်းခံရသူ ရှိလာမည်ဖြစ်ကြောင်း အသိပေးရမည်း

- ၇။ မြေဂိုင်ရှင်သည် အငှားချထားခြင်းခံရသူအား မြေများတွင် ဆောက်လုပ်ရေးများ ဆောင်ရွက်နှင့် မြေရမည်။ လိုအပ်သော ခွင့်ပြုချက်များကို ရယူရန်အတွက် အငှားချထားခြင်းခံရသူအား ကူညီဆောင်ရွက်ပေးရမည်။
- aး မြော့အတက်တမ်း (၃)နှစ်တစ်ကြိမ်ဖြင့် (၇(ကြိမ်သက်တန်ယဉ်၍ ကုန်ဆုံးသည့်အခါ အမှားချာအားဖြင့်အဲရသူက ၎င်းမြေနှင့် မြေပေါ် ရှိ အဆောက်အဦးများကို ထိုကာလတွင် တည်ရှိသည့်အတိုင်း မြေမိုင်ရှင်ထဲသို့ ပြန်လည်တွဲ့ပြောင်းပေးရပါမည်။







# APPENDIX F Electrical Systems and Instrumentation (EI) Certificate



# စက်မှုဝန်ကြီးဌာန

ရန်ကုန်တိုင်းဒေသကြီး စက်မှုကြီးကြပ်ရေးနှင့်စစ်ဆေးရေးဦးစီးဌာန လျှပ်စစ် – စစ်ဆေးရေးဌာန

အမှတ် – ၁၉၂ ၊ ကမ္ဘာအေးဘုရားလမ်း၊ ဗဟန်းမြို့နယ်၊ ရန်ကုန်မြို့ လျှပ်စစ်ဓာတ်အားအသုံးပြုခြင်းဆိုင်ရာ အန္တရာယ်ကင်းရှင်းကြောင်းလက်မှတ်

လက်မှတ်အမှတ်စဉ် EI/YD- 406 / 7 - 2024

၂၀၁၄ ခုနှစ် လျှပ်စစ်ဥပဒေ ပုဒ်မ ၃၂(ဃ) တွင် ပြဋ္ဌာန်းချက်အရ လျှပ်စစ်ဓာတ်အား အသုံးပြုခြင်း လုပ်ငန်းကို စစ်ဆေးရာတွင် လျှပ်စစ်ဥပဒေဆိုင်ရာ လုပ်ထုံးလုပ်နည်းများနှင့် ကိုက်ညီကြောင်း စစ်ဆေး တွေ့ရှိရသဖြင့် အောက်ဖော်ပြပါ နေရာဒေသ၌ လျှပ်စစ်ဓာတ်အားအသုံးပြုခြင်း လုပ်ငန်းကို အန္တရာယ် ကင်းရှင်းကြောင်း လက်မှတ် ထုတ်ပေးလိုက်သည်။

- ၁။ လျှပ်စစ်ဓာတ်အားအသုံးပြုခြင်း
  - (က) သတ်မှတ်ဗို့အား ၄၀၀ / ၂၃၀ ဗို့
  - (ခ) လုပ်ငန်းအမျိုးအမည် အိတ်အမျိုးမျိုးချုပ်လုပ်ခြင်းလုပ်ငန်း
    - Wide Vision Enterprise Co., Ltd
  - (ဂ) ခွင့်ပြုဝန်အား <u>858 HP + ( 440 kVA + 94 kVA )(Generator)</u>
- \_\_\_\_\_\_ ၂။ နေရာဒေသ Mr. Tsai Wen Wei
  - အမှတ် ( ၁၉၂၂၀၂၂၁၂၈၁ )၊ ဘုရင့်နောင်လမ်း၊
  - ( ၄ ) ရပ်ကွက်၊ ထန်းတပင်မြို့နယ်။
- ၃။ လက်မှတ်ထုတ်ပေးသည့်ရက် ၁၇
  - od · d · lolè
- - (ကျောဘက်တွင် ဖော်ပြထားသော စည်းကမ်းချက်များကို လိုက်နာရပါမည်။)

မှတ်ချက်။

စိစ်ဆေးရေးမှူး

ရန်ကုန်တိုင်းဒေသကြီး လျှပ်စစ်စစ်ဆေးရေးဌာန



# ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော် စက်မှုဝန်ကြီးဌာန စက်မှုကြီးကြပ်ရေးနှင့်စစ်ဆေးရေးဦးစီးဌာန လျှပ်စစ်စစ်ဆေးရေးဌာန

လျှပ်စစ်ဓာတ်အား ထုတ်လုပ်ခြင်း နှင့် အသုံးပြုခြင်းဆိုင်ရာ မှတ်ပုံတင်လက်မှတ်

ခွင့်ပြုမိန့် အမှတ်စဉ် - YD-G (N) ၁၉ဝ/ ၇-၂ဝ၂၄ ၁။ ၂၀၁၄ ခုနှစ် လျှပ်စစ်ဥပဒေပုဒ်မ ၃၂ (င) နှင့် တည်ဆဲလျှပ်စစ်ဥပဒေဆိုင်ရာ လုပ်ထုံးလုပ်နည်း များအရ Wide Vision Enterprise Co.,Ltd ၏ အိတ်ချုပ်လုပ်ငန်း အတွက် တပ်ဆင်ပြီးဖြစ်သော ဒီဇယ်အင်ဂျင် လျှပ်ထုတ်စက်အား အောက်ဖော်ပြပါ နယ်မြေဒေသအတွင်း မှတ်ပုံတင်လက်မှတ် တွင်ပါရှိသော စည်းကမ်းချက်များနှင့်အညီ ၂၀၂၄ ခုနှစ် ဇူလိုင် လ ( ၁၇ ) ရက်နေ့မှ စတင်၍ လျှပ်စစ် ဓာတ်အား ထုတ်လုပ်ခြင်းနှင့် အသုံးပြုခြင်းဆိုင်ရာ မှတ်ပုံတင်လက်မှတ်ကို ထုတ်ပေးလိုက်သည်-

က)ခွင့်ပြုသည့်နယ်မြေဒေသ - အမှတ်(၁၉၊၂ဝ၊၂၁၊၈၁)၊ဘုရင့်နောင်လမ်း၊(၄)ရပ်ကွက်၊

မြို့နယ် - ထန်းတပင်မြို့နယ်။

တိုင်း - ရန်ကုန်တိုင်းဒေသကြီး။

( ခ) အများဆုံးထုတ်လုပ်သည့် - 94 kVA ဓာတ်အားပမာဏ

( ဂ) သတ်မှတ်ဗို့အား - 380 V

(ဃ) လျှပ်ထုတ်စက်အမျိုးအစား - P100T5(Pro Diesel)

( c) လျှပ်ထုတ်စက်နံပါတ် - L123115

( စ) အင်ဂျင်အမျိုးအစား - 6BT5.9-G2(Cummins)

(ဆ) အင်ဂျင်မြင်းကောင်ရေ - 100 kW ( e) အင်ဂျင်နံပါတ် - 87165842

၂။ ဓာတ်အားထုတ်လုပ်ခြင်း နှင့် အသုံးပြုခြင်းတို့အတွက် အသုံးပြုသော လျှပ်စစ်ပစ္စည်း ကိရိယာ တည်ဆောက်မှုဆိုင်ရာ နည်းစနစ်များသည် လျှပ်စစ်ဥပဒေဆိုင်ရာ လုပ်ထုံးလုပ်နည်းများပါ ပြဋ္ဌာန်းချက်များ အရဖြစ်ရမည့်အပြင် စစ်ဆေးရေးမှူး ၏ စစ်ဆေးစမ်းသပ်ခြင်းကို ခံယူရပါမည်။

၃။ လျှပ်စစ်ဥပဒေဆိုင်ရာ လုပ်ထုံးလုပ်နည်းပါ ပြဋ္ဌာန်းချက်များကို တိကျစွာ လိုက်နာ ဆောင်ရွက် ရမည်။

၄။ လျှပ်စစ်ဥပဒေဆိုင်ရာလုပ်ထုံးလုပ်နည်းများနှင့် ဤလက်မှတ်တွင်ပါရှိသော အကြောင်းအရာများ ကို လိုက်နာခြင်း မရှိပါက ထုတ်ပေးထားသော လက်မှတ်ကို ပြန်လည်ရတ်သိမ်းမည်။

၅။ ဤမှတ်ပုံတင်လက်မှတ် သက်တမ်းသည် ခွင့်ပြုသည့်နေ့မှစတင်၍ (၄) နှစ် အချိန်ကာလ အတွင်းသာ အကျိုးသက်ရောက်စေရမည်။

> စတင်ခွင့်ပြုသည့်နေ့ - ၁၇ . ၇ . ၂၀၂၄ ကုန်ဆုံးသည့်နေ့ - ၁၆ . ၇ . ၂၀၂၈

> > လျှပ်စစ်စစ်ဆေးရေးမှူးချုပ် (🚧 🐠) ရန်ကုန်တိုင်းဒေသကြီး လျှပ်စစ်စစ်ဆေးရေးမှူး



ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော် စက်မှုဝန်ကြီးဌာန စက်မှုကြီးကြပ်ရေးနှင့်စစ်ဆေးရေးဦးစီးဌာန

လျှပ်စစ်စစ်ဆေးရေးဌာန

လျှပ်စစ်ဓာတ်အား ထုတ်လုပ်ခြင်း နှင့် အသုံးပြုခြင်းဆိုင်ရာ မှတ်ပုံတင်လက်မှတ်

ခွင့်ပြုမိန့် အမှတ်စဉ် - YD-G (N) ၁၉၁/ ၇-၂၀၂၄ ၁။ ၂၀၁၄ ခုနှစ် လျှပ်စစ်ဥပဒေပုဒ်မ ၃၂ (င) နှင့် တည်ဆဲလျှပ်စစ်ဥပဒေဆိုင်ရာ လုပ်ထုံးလုပ်နည်း များအရ Wide Vision Enterprise Co.,Ltd ၏ အိတ်ချုပ်လုပ်ငန်း အတွက် တပ်ဆင်ပြီးဖြစ်သော ဒီဇယ်အင်ဂျင် လျှပ်ထုတ်စက်အား အောက်ဖော်ပြပါ နယ်မြေဒေသအတွင်း မှတ်ပုံတင်လက်မှတ် တွင်ပါရှိသော စည်းကမ်းချက်များနှင့်အညီ ၂၀၂၄ ခုနှစ် ဇူလိုင် လ ( ၁၇ ) ရက်နေ့မှ စတင်၍ လျှပ်စစ် ဓာတ်အား ထုတ်လုပ်ခြင်းနှင့် အသုံးပြုခြင်းဆိုင်ရာ မှတ်ပုံတင်လက်မှတ်ကို ထုတ်ပေးလိုက်သည် -

က)ခွင့်ပြုသည့်နယ်မြေဒေသ - အမှတ်(၁၉၊၂ဝ၊၂၁၊၈၁)၊ဘုရင့်နောင်လမ်း၊(၄)ရပ်ကွက်၊

မြို့နယ် - ထန်းတပင်မြို့နယ်။ တိုင်း - ရန်ကုန်တိုင်းဒေသကြီး။

( ခ) အများဆုံးထုတ်လုပ်သည့် - 440 kVA

ဓာတ်အားပမာဏ ( ဂ) သတ်မှတ်ဗို့အား

- 380/220 V

(ဃ) လျှပ်ထုတ်စက်အမျိုးအစား - P440E1(FG Wilson) ( င) လျှပ်ထုတ်စက်နံပါတ် - FGWRPES2PPDS02520

( စ) အင်ဂျင်အမျိုးအစား - Perkins

(ဆ) အင်ဂျင်မြင်းကောင်ရေ -

( e) အင်ဂျင်နံပါတ် - FGD061137U1407L

၂။ ဓာတ်အားထုတ်လုပ်ခြင်း နှင့် အသုံးပြုခြင်းတို့အတွက် အသုံးပြုသော လျှပ်စစ်ပစ္စည်း ကိရိယာ တည်ဆောက်မှုဆိုင်ရာ နည်းစနစ်များသည် လျှပ်စစ်ဥပဒေဆိုင်ရာ လုပ်ထုံးလုပ်နည်းများပါ ပြဋ္ဌာန်းချက်များ အရဖြစ်ရမည့်အပြင် စစ်ဆေးရေးမှူး ၏ စစ်ဆေးစမ်းသပ်ခြင်းကို ခံယူရပါမည်။

၃။ လျှပ်စစ်ဥပဒေဆိုင်ရာ လုပ်ထုံးလုပ်နည်းပါ ပြဋ္ဌာန်းချက်များကို တိကျစွာ လိုက်နာ ဆောင်ရွက် ရမည်။

၄။ လျှပ်စစ်ဥပဒေဆိုင်ရာလုပ်ထုံးလုပ်နည်းများနှင့် ဤလက်မှတ်တွင်ပါရှိသော အကြောင်းအရာများ ကို လိုက်နာခြင်း မရှိပါက ထုတ်ပေးထားသော လက်မှတ်ကို ပြန်လည်ရှတ်သိမ်းမည်။

၅။ ဤမှတ်ပုံတင်လက်မှတ် သက်တမ်းသည် ခွင့်ပြုသည့်နေ့မှစတင်၍ (၄) နှစ် အချိန်ကာလ အတွင်းသာ အကျိုးသက်ရောက်စေရမည်။

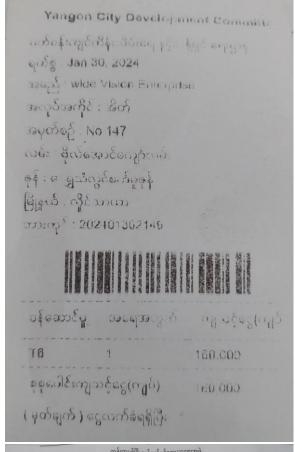
စတင်ခွင့်ပြုသည့်နေ့ - ၁၇ . ၇ . ၂၀၂၄ ကုန်ဆုံးသည့်နေ့ - ၁၆ . ၇ . ၂၀၂၈

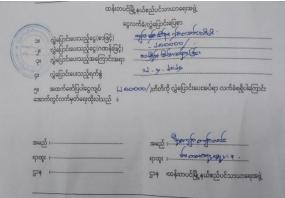
> လျှပ်စစ်စစ်ဆေးရေးမှူးချုပ် (မြေ) ရန်ကုန်တိုင်းဒေသကြီး လျှပ်စစ်စစ်ဆေးရေးမှူး

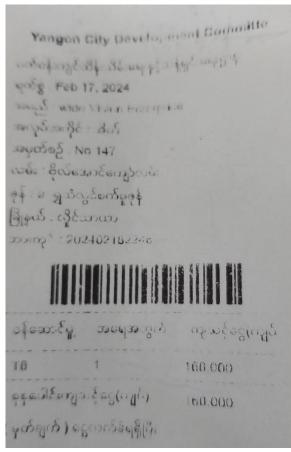
Myanwei Environmental Solutions Company Limited

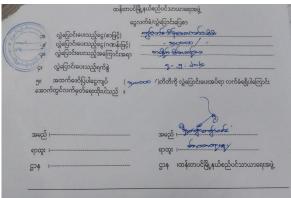
# APPENDIX G Waste Disposal Records

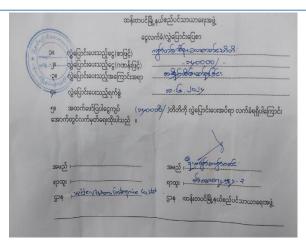
# Slips from YCDC's Service













# Slips from local buyer

| ł        | old Materiali  | selling price lists * Page     |
|----------|--|--------------------------------|
| 0004     | .262 +1700   | 2428400 Kold earton box        |
| 300      | .61 × 800  | 1,08m (old earton roll)        |
| 0        | -65 + 1200   | - 78000 ( old rost plastre)    |
| 3/05/05. | The state of the s | 2 10 2000. 1 Old textile soll) |
| OFFI     |  | 657200                         |

|     | (Wide Vision Enlerpsite Co., Ltd.) 2009-30/10/20 |
|-----|--|
| ı   | map 129 × 1300 = 557 700.                        |
| t   | 9h. 152×6502 96800                               |
| 9   | mn. 23 x1200 = 27600                             |
| UNG | omf. 48. \$ 1200 = 57600.                        |
|     | 741700   |

# APPENDIX H Industrial License



ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်အစိုးရ စက်မှုဝန်ကြီးဌာန စက်မှုကြီးကြပ်ရေးနှင့်စစ်ဆေးရေးဦးစီးဌာန ပုဂ္ဂလိကစက်မှုလုပ်ငန်းမှတ်ပုံတင်လက်မှတ်

| 10   |  | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,   |   |   |
|--|--|---|---|---|
| မှုမှတ်ပုံတင်အမှတ်                                 | ရက/ <u>က</u> ြီး/၅၄၉၆  | ရက်စွဲ  | JB. n. Jos  | e   |
|  |  |   |   | န်ကုန်  |
| အောက်ပါလုပ်ငန်းသည် ပုဂ္ဂ                           | လိကစက်မှုလုပ်ငန်း ဥပ   | ဒေ ပုဒ်မ ၇ ပုဒ်   | မခွဲ ( ဂ)အရ မှ  | တ်ပုံတင်ပြီး  |
| ပါသည်။   |  |   |   |   |
| လုပ်ငန်းအမည် Wide Vision                           | Enterprise Co.,Ltd.CN  | IP စနစ်ဖြင့် အိတ်   | အမျိုးမျိုးချုပ်လုပ်  | ခြင်းလုပ်ငန်း   |
| လုပ်ငန်းအမျိုးအမည်                                 | သားရေနှင့်ပတ်သက်   | သောပစ္စည်းများ  | ထုတ်လုပ်ခြင်း<br>   |   |
| အဓိကကုန်ချောပစ္စည်းအမျိုး                          | အမည် All Ki  | nds of Bag  |   |   |
|  |  |   |   |   |
| တည်နေရာလိပ်စာ <sup>ဦးပိုင်အမှဝ</sup><br>(၄)ရပ်ကွက် | က်(စက်မှု - ၁၉၊ ၂ဝ၊ ၂၁၊ ၈<br>ာ်၊ ထန်းတပင်မြို့နယ်၊ မေ  | ၁)၊ အကွက်အမှင<br>ာ်ဘီခရိုင်   | ာ်(၁)တံကြီးကုန်း  | ကွင်း၊ အမှတ်  |
| ပိုင်ဆိုင်မှုအမျိုးအစား                            | ကုမ္   | දුග් දිරි   |   |   |
|  |  |   | )   |   |
| ကိုင်ဆောင်သည့်မှတ်ပုံတင်အ                          | မှတ် PP No.  | 360405570   |   |   |
| ရင်းနှီးမြှုပ်နှံမှုတန်ဖိုး(ကျပ်)                  | US\$ ၀. ၃၇၅ သ  | <sup>န်း</sup> တည်ဖေ  | ထာင်သည့်ခုနှစ်  | ၂၀၁၉  |
|  | <sub>ား</sub> ထရန်စဖော်မာ/လျှပ်  | ထုတ်စက် <b>မြင်း</b> ေ  | ကာင်ရေ <u>၈</u> ၄   | ၂၈ HP/  |
| အလုပ်သမားဦးရေ                                      | ၃၂၀ ဦး   |   | <u> </u>  | SS Hb   |
| မှတ်ပုံတင်သက်တမ်းကုန်ဆုံး                          | သည့်နေ့ရက်   | ၃၁. ၈.  | , jojo  |   |
|  |  |   | 1   |   |
|  | မှုမှတ်ပုံတင်အမှတ် ငန်းအရွယ်အစား <sup>အကြီးစား</sup> ပြ အောက်ပါလုပ်ငန်းသည် ပုဂ္ဂ ပါသည်။ လုပ်ငန်းအမည် Wide Vision လုပ်ငန်းအမျိုးအမည် အဓိကကုန်ချောပစ္စည်းအမျိုး တည်နေရာလိပ်စာ ဦးပိုင်အမှတ (၄)ရပ်ကွက် ပိုင်ဆိုင်မှုအမျိုးအစား လုပ်ငန်းရှင်အမည် ကိုင်ဆောင်သည့်မှတ်ပုံတင်အရင်းနှီးမြှုပ်နှံမှုတန်ဖိုး(ကျပ်) အသုံးပြုသည့်အားအမျိုးအစား အလုပ်သမားဦးရေ မှတ်ပုံတင်သက်တမ်းကုန်ဆုံး | မှုမှတ်ပုံတင်အမှတ် ရက/ကြီး/၅၄၉၆ ငန်းအရွယ်အစား <sup>အကြီးစား</sup> ပြည်ထောင်စုနယ်မြေ/ဝ အောက်ပါလုဝ်ငန်းသည် ပုဂ္ဂလိကစက်မှုလုဝ်ငန်း ဥပ ပါသည်။ လုပ်ငန်းအမည် Wide Vision Enterprise Co.,Ltd.CM လုပ်ငန်းအမျိုးအမည် သားရေနှင့်ပတ်သက် အဓိကကုန်ချောပစ္စည်းအမျိုးအမည် All Ki တည်နေရာလိပ်စာ ဦးပိုင်အမှတ်(စက်မှု - ၁၉၊ ၂ဝ၊ ၂၁၊ ၈၁ (၄)ရဝ်ကွက်၊ ထန်းတပင်မြို့နယ်၊ ရှေ ပိုင်ဆိုင်မှုအမျိုးအစား ကုန် ထုပ်ငန်းရှင်အမည် Mr Tsai, Wer ကိုင်ဆောင်သည့်မှတ်ပုံတင်အမှတ် PP No ရင်းနှီးမြှုပ်နှံမှုတန်ဖိုး(ကျပ်) US\$ ၀- ၃၇၅ သ အသုံးပြုသည့်အားအမျိုးအစား ထရန်စဖော်မာ/လျှပ် | မှုမှတ်ပုံတင်အမှတ် ရက/ကြီး/၅၄၉၆ ရက်စွဲ ငန်းအရွယ်အစား အကြီးစား ပြည်ထောင်စုနယ်မြေ/တိုင်းဒေသကြီး// အောက်ပါလုပ်ငန်းသည် ပုဂ္ဂလိကစက်မှုလုပ်ငန်း ဥပဒေ ပုဒ်မ ၇ ပုဒ်ပါသည်။ လုပ်ငန်းအမည် Wide Vision Enterprise Co.,Ltd.CMP စနစ်ဖြင့် အိတ်လုပ်ငန်းအမည် သားရေနှင့်ပတ်သက်သောပစ္စည်းများပဲ အဓိကကုန်ချောပစ္စည်းအမျိုးအမည် All Kinds of Bag တည်နေရာလိပ်စာ ဦးပိုင်အမှတ်(စက်မှု - ၁၉၊ ၂ဝ၊ ၂၁၊ ၈၁)၊ အကွက်အမှတ် (၄)ရပ်ကွက်၊ ထန်းတပင်မြို့နယ်၊ မှော်ဘီခရိုင် ပိုင်ဆိုင်မှုအမျိုးအစား ကုမ္ပဏီပိုင် လုပ်ငန်းရှင်အမည် Mr Tsai, Wen-Wei (Director တိုင်ဆောင်သည့်မှတ်ပုံတင်အမှတ် PP No.360405570 ရင်းနှီးမြှုပ်နှံမှုတန်ဖိုး(ကျပ်) US\$ ၀. ၃၇၅ သန်း တည်ဝေ အသုံးပြုသည့်အားအမျိုးအစား ထရန်စဖော်မာ/လျှပ်ထုတ်စက် မြင်းအေလုပ်သမားဦးရေ ကုမ္ပဏီပုံတင်သက်တမ်းကုန်ဆုံးသည့်နေ့ရက် ၇၁. ၈. | ငန်းအရွယ်အစား <u>အကြီးစား ပြည်ထောင်စုနယ်မြေ/တိုင်း</u> ဒေသကြီး/ပြည်နယ် <u>အောက်ပါလုပ်ငန်းသည် ပုဂ္ဂ</u> လိကစက်မှုလုပ်ငန်း ဥပဒေ ပုဒ်မ ၇ ပုဒ်မခွဲ ( ဂ )အရ မှ ပါသည်။ လုပ်ငန်းအမည် <u>Wide Vision Enterprise Co.,Ltd.CMP စနစ်ဖြင့်</u> အိတ်အမျိုးမျိုးချုပ်လုပ် လုပ်ငန်းအမည် <u>သားရေနှင့်</u> ပတ်သက်သောပစ္စည်းများထုတ်လုပ်ခြင်း အဓိကကုန်ချောပစ္စည်းအမျိုးအမည် <u>All Kinds of Bag</u> တည်နေရာလိပ်စာ ဦးပိုင်အမှတ်(စက်မှု - ၁၉၊ ၂ဝ၊ ၂၁၊ ၈၁) အကွက်အမှတ်(၁)တံကြီးကုန်း (၄)ရပ်ကွက်၊ ထန်းတပင်မြို့နယ်၊ မှော်ဘီခရိုင် ပိုင်ဆိုင်မှုအမျိုးအစား ကုမ္ပဏီပိုင် လုပ်ငန်းရှင်အမည် <u>Mr Tsai, Wen-Wei (Director)</u> တိုင်ဆောင်သည့်မှတ်ပုံတင်အမှတ် <u>PP No.360405570</u> ရင်းနှီးမြှုပ်နှံမှုတန်ဖိုး(ကျပ်) <u>US\$ ၀. ၃၇၅ သန်း</u> တည်ထောင်သည့်ခုနှစ် အသုံးပြုသည့်အားအမျိုးအစား <u>ထရန်စဖော်မာ/လျှပ်ထုတ်စက် မြင်းတောင်ရေ</u> ၈၅ အလုပ်သမားဦးရေ <u>၇၂၀ ဦး</u> |



သိန်းဆွေ ညွှန်ကြားရေးမျှးချုပ်

# APPENDIX I YCDC License

ထန်းတပင်မြို့နယ်စည်ပင်သာယာရေးအဖွဲ့

(ရန်ကုန်တိုင်းဒေသကြီး)







မှတ်ပုံတင်စာရင်းအမှတ် လိုင်စင်အမှတ်

စည်ပင်သာယာရေးအဖွဲ့များဥပဒေပုဒ်မ ၁၄၊ပုဒ်မခွဲ ( စ)၊ ပုဒ်မ ၂၈ ၊ ပုဒ်မခွဲ (င)နှင့်ပုဒ်မ (၇၂)၊ ပုဒ်မခွဲ (က)
(ခ) တို့အရ ထန်းတပင် မြို့နယ်စည်ပင်သာယာရေးနယ်နိမိတ်အတွင်းအများပြည်သူများအားအန္တရာယ်ဖြစ်ရန် ရှိသည်(သို့မဟုတ်)အန္တရာယ်ဖြစ်စေသည့် အလုပ် အကိုင်နှင့် ကူးသန်းရောင်းဝယ်ရေးလုပ်ငန်းများ လုပ်ကိုင်ခြင်း ကိုစီမံခန့်ခွဲရန် စည်းကမ်းများအရထုတ်ပေးသည့်လိုင်စင်

- (က) လုပ်ငန်းအမည်
- (ခ) လုပ်ငန်းရှင်အမည်
- (ဂ) နိုင်ငံသားစိစစ်ရေးကတ်ပြားအမှတ်
- (ဃ) နေရပ်လိပ်စာ
- (c) လုပ် ကိုင်ခွင့်ပြုသည့်လုပ်ငန်း
- (စ) လုပ်ငန်းလုပ်ကိုင်သည့်နေရာ အကျယ်အဝန်း၊ အဆောက်အအုံတည်နေရာဥပစာပိုင်နက် (အဆောက်အအုံပိုင်နက်ဥပစာအကြောင်းအရာဖော်ပြချက် အခန်းနံပါတ်)
- (ဆ) လိုင်စင်ခပေးသွင်းငွေ
- ( ) ငွေသွင်းချလံအမှတ်/ရက်စွဲ
- (ဈ) လုပ်ကိုင်ခွင့်ကုန်ဆုံးသည့်နေ့စွဲ

# Wide Vision Enterprise Co,Ltd

# Mr, Tsai Wen Wei

# PP No -360405570

အမှတ်(၄)ရပ်ကွက်၊ထန်းတပင်မြို့ အိတ်အမျိုးမျိုးချုပ်လုပ်ခြင်းလုပ်ငန်း အမှတ်(၄)ရပ်ကွက်၊ဘုရင့်နောင်လမ်း ထန်းတပင်မြို့၊ရန်ကုန်တိုင်းဒေသကြီး

5000008/

( og ) je-9-joj9

၂၀၂၄ ခုနှစ် ဧပြီလ (၁) ရက်မှ ၂၀၂၅ ခုနှစ် မတ်လ (၃၁) ရက်နေ့ထိ

အမှုဆောင်အရာရှိ မြို့နယ်စည်ပင်သာယာရေးအဖွဲ့ ထန်းတပင်မြို့၊ရန်ကုန်တိုင်းဒေသကြီး

# **APPENDIX J**

# Fire Certificate, Safety Training and Fire Hazard Prevention Group







|         | Wide Vision Enterprise Company Limited Sethmu – 19,20,21.81, Plot No. (1), Kan Gyi Kone Kwin, Ward No. (4), Hlantabin Township, Yangon Phone: 195 705209001 Company Registration No: 113954140                 |     | Wide Vision Enterprise Company Limited Scthmu – 19,20,21,81, Plot No. (1), Kan Gyi Konc Kwin, Ward No. (4), Hantabin Township, Yangon Phone: 95 9762390001 Company Registration No. 113954140 |
|---------|--|-----|---|
|         | မီးဘေးအန္တရာယ်ကြိုတင်ကာကွယ်ရေးအဖွဲ့  |     | ဦးချစ်ကိုကို  |
|         | Fire Hazard Prevention Group   |     | ဦးထက်နိုင်မိုး  |
|         | Wide Vision Enterprise Co., Ltd တွင် စီးနှင့်ပတ်သက်သော ဘေးအန္တရာယ်များ မကျရောက်စေရန် ကြိုတင်   |     | ဦးချစ်ပိုင်မှူး   |
|         | ဒွယ်သည့်အနေဖြင့် ကြိုတင်ကာကွယ်ခြင်းဆိုင်ရာ စီမံချက်များကိုရေးဆွဲလိုက်ထားပါသည်။ မီးဘေးအန္တရာယ်နှင့်<br>သက်သော လျှစ်စစ်ဗီးသုံးစွဲမှုများနှင့် အခြားအန္တရာယ်ဖြစ်နိုင်သော ကိစ္စရပ်များကို စနစ်တကျ နားလည်သိရှိစေရန် |     | ဦးသိန်းထိုက်  |
|         | နှင့် လိုက်နာဆောင်ရွက်စေရန်အတွက် စက်ရုံအတွင်းရှိ ဝန်ထမ်းများ၊ အလုပ်သမားများကို ရှင်းလင်းပြောကြားထားပြီး  |     | ဦးဂေချာ်ကို   |
| ဖြစ်ပါ  | သည်။   |     | ဦးရှိုင်း   |
|         | ထို့ကြောင့် မီးဘေးအန္တရာယ်နှင့် ပတ်သက်ပြီး ကြိုတင်ကာကွယ်ထားနိုင်ရန်အတွက် စက်ရုံတွင် အောက်ပါ  |     | ဦးဉာဏ်ထက်   |
| ആറ്റ് ദ | စည်းများကို ဖွဲ့ စည်းတာဝန်ပေးအပ်လိုက်သည်။  | (9) | ပစ္စည်းသယ်ယူရေးအဖွဲ့  |
|         |  |     | <u>ද</u> ීෳෆො <u></u> ეරිකෞරි   |
| (c)     | තීප් <b>ခ</b> န်ခွဲမှုအဖွဲ့  |     | ဦးဇင်မျိုးသူ  |
|         | Mr. Cheng Ching Ju   |     | ဦးနိုးပိုင်သူ   |
|         | ဒေါ် စူးစူးသဥ္စာကျော်  |     | ဦးဟိန်းမင်းစိုး   |
|         | ခေါ်ပြည့်သဉ္စာကျော်  |     | ဦးတိုးတိုးနိုင်   |
|         | ခေါ် လှသိ <sup>ရှ</sup> ဦး   |     | ဦးညီစော်ထက်   |
| (J)     | ဆက်သွယ်ရေးအဖွဲ့  |     | ဦးလှိုင်ထွန်း   |
|         | မီးဘေးအန္တရာယ်ဖြစ်ပေါ် လာပါက အရေးပေါ် ဆက်သွယ်ရန် (မီးသတ်ရုံး၊ အုပ်ချုပ်ရေးရုံး၊ ပြည်သူ့ရဲ  |     | ဦးမျိုးမင်းသန့်   |
|         | တဝိဖွဲ့ ) များ ရှိပါသည်။   | (၅) | ပြန်လည်နေရာချထားရေးအဖွဲ့  |
|         | ဦးမြိုးဝေသန့်  |     | ဒေါ် စုမြ <b>ာ</b> န်းဝေ  |
|         | ခေါ် နှင်းအိမြိုး<br>  |     | ခေါ်ကြည်ကြည်ဝေ  |
|         | ဒေါ် ချစ်နှင်းစံ   |     | ဒေါ်ယုန <b>န္</b> တမြင့်  |
| (5)     | မီးငြိမ်းသတ်ရေးအဖွဲ့   |     | ခေါ် အိအိမ္ပန်  |
|         | ဦးဖော်ထွန်-ဦး  |     | <u>ටේ ශීකීණ</u>   |
|         | ဦးညီဖင်းဂွင်   |     | ဒေါ်သင်းသင်း  |
|         | <del>క్రికి</del> နိုင်လွင်  |     | ဒေါ်ဖြူနှင်းအေး   |
|         | ဦးစိုးလွင်လွင်   |     | ဒေါ် ချိမာကျော်   |
|         | ဦးအောင်ဇော်  |     | Page 2 of 2   |
|         | Page 1 of 2  |     | Fage Z Of Z   |

Wide Vision Enterprise Company Limited

Sethmu – 19,20,21,81, Plot No. (1), Kan Gyi Kone Kwin, Ward No. (4), Htantabin Township, Yangon Phone: +95 9765290001

Company Registration No: 113954140

ဒေါ် ချိုလွင်စိုး

ဒေါ် နန္ဒာစိုး

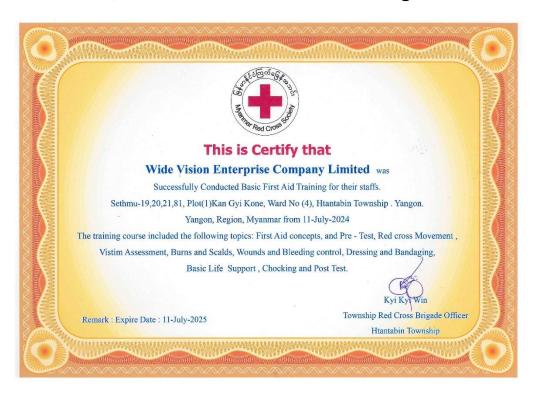
အထက်ဖော်ပြပါအနွဲ့ ခေါင်းဆောင်နှင့် အဖွဲ့ ဝင်များသည် မီးတေးအန္တရာယ်နှင့်ပတိသက်သောကိစ္စရပ်များကို အထူးရာပြုလုပ်ဆောင်ကြရန် လိုအဝိပါသည်။ ဧကိန်တွင် မီးတေးအန္တရာယ် ကြိုတင်ကာကွယ်ရန် ဗီးသတ်ဆေးဘူးများ။ မီးသတ်ရေပိုက်များ၊ မီးအသိပေးအချက်ပြလေ့တ်များ၊ အရေးပေါ်အသံနှင့်အဖြင့်ဆိုင်ရာ အချက်ပေးစနစ်များ၊ ထွက် ပေါက်နှင့်လွတ်ခမြတ်ပေါက် လမ်းညွှန်သက်တအိုင်းဘုတ်များ၊ အရေးပေါ်အုံမာဝွန်းစနန်၊ အရေးပေါ်သွား လျှစ်ဝန် တော်အားပေးခန်နဲ့၊ အလိုအလျောက်ရေဖြန်းနေနဲ့၊ မီးသတ်ရေးကိုမီးသတ်ရေးကန်၊ နှင့် အရေးပေါ်ထွားပိုပေါက်မြေပို အစရှိသော မီးဘေးအန္တရာယ် ကာကွယ်ရေးဆိုင်ရာ ပစ္စည်းများအား ဧကိန့်အတွင်းတွင် အလုံအလောက်ကြိုတင် ပြင်ဆင် ထားရှိပါသည်။ ဗီးဘေးအန္တရာယ် ကာကွယ်ရေးဆိုင်ရာ ပစ္စည်းများအား အချိန်နှင့်တပြောညီ စစ်ဆေးထားရှိပါသည်။

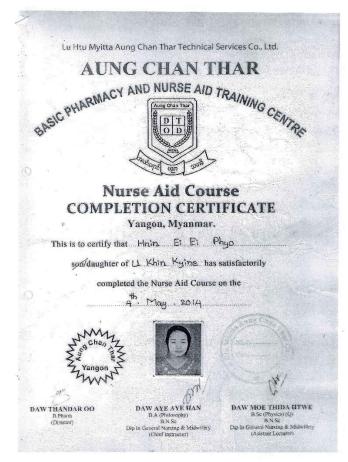




Page 3 of 3

# APPENDIX K Nurse, First Aid Certificate and Training Photos









# **APPENDIX L**

# **Chemical Voucher and Material Safety Data Sheet**

# **Chemical Voucher**

Dong Ying Ink Printing Materials Co., Ltd

ADDRESS; Hiaing Tharyar Shwe kan Tharyar.contact number: 09955989018

Payment details for June2024

| TO: 宏對   | 公司   |       |        |            |        |          |      |      |       |        |
|----------|------|-------|--------|------------|--------|----------|------|------|-------|--------|
| Delivery | Date | Order | number | Material   | Name   | quantity | unit | unit | price | Amount |
| 2024/6/  | 20   | 000   | 3487   | ater-based | goldoi | 100      | KG   | 5    | . 5   | 550    |

总计USD 小写: 650、 美元 大写: 伍佰伍拾、美元

DAJIA MYANMAR COMPANY LIMITED 緬甸大甲化工股份有限公司 No. (319/320), Padamyar Street, Industrial Zone (5), Hlaing Tharyar Township, Yangon, Myanmar Ph. 09972456378 2024年05份前數明網表

| 日期         | <b>客戶名稱</b>   | 出貨單號   | 材 90  | 品名規格  | 數量KG   | 単價(USD) | 金额(USD) | 備註       |
|------------|---------------|--------|-------|-------|--------|---------|---------|----------|
| 2024-04-29 | 宋野 (極甸)       | 003546 | 中乾溶剂  | NO.84 | 90.00  | 3.70    | 333,00  | HY240073 |
| 2024-04-29 | 宏斯(指向)        | 003546 | 慢乾溶剂  | NO.83 | 18.00  | 4.50 🗸  | 81.00   | HY240073 |
| 2024-05-07 | अस्ति (सिन्ह) | 003250 | 油性赤口金 | 188   | 3.00   | / 15.64 | 46.92   |          |
| 2024-05-14 | 宏贤 (指何)       | 003651 | 油性桔紅  | 149   | 5.00   | 9.58    | 47.90   | HY240083 |
| 2024-05-14 | 宏斯 (預何)       | 003651 | 油性棒蛛黄 | 120   | 5.00   | / 9.58  | 47.90   | HY240083 |
| 2024-05-14 | 宏野 (預句)       | 003651 | 油性拼背  | 135   | 5.00   | 9.58    | 47.90   | HY240083 |
| 2024-05-14 | 宏野 (預句)       | 003651 | 尼能特線  | 179   | 5.00   | / 11.67 | 58.35   | HY240083 |
| 2024-05-14 | 宏野 (領句)       | 003652 | 尼龍紫色  | 183   | 5.00   | 14.67   | 73.35   | HY240083 |
| 2024-05-14 | 宏野 (箝甸)       | 003652 | 油性螢光紫 | 185   | 5,00   | 14.67   | 73,35   | HY240083 |
| 2024-05-24 | 宏野 (缅甸)       | 003662 | 中被海刺  | NO.84 | 90.00  | 3.70    | 333.00  | HY240093 |
|            |               | 総計     |       |       | 231.00 |         | 1142.67 |          |

費公司核對後歌諸回傳. 謝謝

2 KML. 2024. b. b. 1948



# Glue

# Wide Vision Enterprise Company Limited

Sethmu – 19,20,21,81, Plot No. (1), Kan Gyi Kone Kwin, Ward No. (4), Htantabin Township, Yangon Phone: +95 9762509001 Company Registration No: 113954140

# ဘေးအန္တရာယ်ကင်းရှင်းရေးဒေတာစာရွက်များ(MSDS)

1. ဓာတုပစ္စည်းအမည်။

ကော်ရည်။

2. ကုန်ထုတ်လုပ်သူ။

GUAN DONG SHENG DONG FANSHUZHI CO., LTD

3. Composite

ကုန်ထုတ်အန္တရာယ်ရှိသောပါဝင်ပစ္စည်းများ/ပြန်ကြားရေး။

| အဓိကပါဝင်ပစ္စည်းများ                                      | အလုပ်ခွင်အိုင်အိုဒင်းစူးစိုက်မှု | IMDG Code            |                      |       |
|---|----------------------------------|----------------------|----------------------|-------|
|   | ဓာတုပုံသေနည်း                    | အကြောင်းအရာ<br>(WT%) |                      |       |
| Toluene   | C <sub>7</sub> H <sub>8</sub>    | 10-20                | 100mg/m <sup>3</sup> | 32052 |
| အောက်ပိုင်း Aliphatic ဟိုက်ဒရို<br>ကာဗွန်အရည်ပျော်ပစ္စည်း |                                  | 50-60                | 250mg/m <sup>3</sup> | 32002 |
| ③δ resins   |                                  | 20-30                | -                    | -     |

- 4. အဆိုပါအန္တရာယ် Flammable နှင့်ပေါက်ကွဲစေတတ်သော Acute ကျန်းမာရေးအန္တရာယ်
  - (1) မျက်စိကို ယားယံစေပါသည်။
  - (2) အရေပြားယားယံမှုနှင့် tardive နက်ရှိုင်းမှုနှင့် HSV ဖြစ်ပေါ် စေပါသည်။
  - (3) စားသုံးမိပါက ခေါင်းကိုက်ခြင်း၊ ခေါင်းမူးခြင်း၊အော့အန်ခြင်း၊အစာအိမ်အောင့်စေနိုင်ခြင်း၊ ရူရှိုက်မိခြင်းကြောင့် အသက်ရှူ လမ်းကြောင်းဆိုင်ရာ ယားယံခြင်းများဖြစ်ပေါ် စေခြင်း၊ ထပ်ခါတလဲလဲရှုရှိုက်မိပါက ပင်ပန်းနွမ်းနယ်ခြင်း များကိုဖြစ်ပေါ် စေခြင်း၊ ပျို့အန်ခြင်းများကို ဖြစ်ပေါ် စေပါသည်။

# နာတာရှည်ဇက်

100-200ppmm 8

600ppm

100-200ppm ၏ ရှစ်နာရီကြာ အာရုံစူးစိုက်မှုများမှာ မျက်လုံးများညောင်းညာခြင်း၊ ပျို့အန်ခြင်းများ ဖြစ်ပေါ်စေပါ သည်။

600ppm ၏ အာရုံစူးစိုက်ခြင်းကြောင့် အလွန်အကျွံပင်ပန်းခြင်း၊ ပျို့အန်ခြင်း၊ ခေါင်းကိုက်ခြင်း၊ အစာစားချင် စိတ်များပျောက်ဆုံးခြင်း, စိတ်ပင်ပန်းနွမ်းနယ်ခြင်း၊ အသက်ရှူလမ်းကြောင်းဆိုင်ရာအဆင်မပြေခြင်း၊ ထိတွေ့မိပါက အရေ ပြားရောင်ရမ်းခြင်းများကို ဖြစ်ပေါ် စေနိုင်ပါသည်။

# 5. အရေးပေါ် ဆောင်ရွက်ချက်များ

အရေးပေါ် မျက်လုံးဆေးသည့်နေရာသို့သွား၍ ဆေးကြောခြင်း (သို့မဟုတ်) အရေးပေါ် ကုသမှုများလုပ်ဆောင်ခြင်း၊ ညစ်ပတ် သော အဝတ်အစားများချက်ချင်း ချွတ်ရမည်။ အဝတ်အစားများအား ဆပ်ပြာနှင့်သေချာစွာဆေးကြောရပါမည်။ မျိုချ မိပါက ရေကို အလုံအလောက် သောက်သုံးရပါမည်။ သွေးများအန်လာပါက အရေးပေါ် ကုသမှုခံယူရပါမည်။ ရှရှိုက်မိပါက အသက်ရှု လမ်းကြောင်း လွယ်ကူစေရန်အတွက် အောက်ဆီဂျင်ကို ရှုရှိုက်ပါ။ အသက်ရှုပုံမှန်ရရှိစေရန်အတွက် CPR ပြုလုပ် ရပါမည်။ သက်တောင့်သက်သာဖြစ်၍ နွေးထွေးသော နေရာတွင်လဲလျောင်းရပါမည်။ ပြီးလျှင် ဆေးကုသမှုကို ခံယူရပါမည်။

6. ပေါက်ကွဲမှုဂုဏ်သတ္တိနှင့်မီးဘေးအန္တရာယ်အစီအမံများ

Flammable, Flammable © (404) အပူချိန် (

# **Cross-Linking Agent**

### TACHIA CHEMICAL CO..LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

### 安全資料表 Safety Data Sheet

# ကုန်ပစ္စည်းလုံခြုံရေးအချက်အလက်ဇယား

1、化學品名稱與廠商資料 Identification of the substance / preparation and company

ကုန်ပစ္စည်းအမည်နှင့်ပေးသွင်းသူအမည်

仁學品名稱: No.9485 硬化劑 Chemicals Name: No.9485 Cross-linking Agent

ကုန်ပစ္စည်းအမည် : NO.9485 အမာခံဆေးရည်

仁學品鉅號: No.9485 硬化劑

Chemicals Number: No.9485 Cross-linking Agent

ကုန်ပစ္စည်းအမည် : NO.9485 အမာဓံဆေးရည်

製造者、輸入者或供應者名稱、地址及電話 Names, addresses, and phone numbers of the

manufacturer, importer or supplier.

大甲化工實業(股)公司 台中市大甲區中山路一段 525 號 886-4-26871012

Tachia Chemical Co., Ltd. 525, Sec. 1, Chung Sun Rd., 43707 Tachia, Taiwan 886-4-26871012

緊急連絡電話/傳真電話 Emergency Phone / Fax: 886-4-26871012 / 886-4-26875563

ထုတ်လုပ်စက်ရုံအမည်၊ လိပ်စာနှင့်ဖုန်းနံပါတ် : Tachia Chemical Co., Ltd. 525, Sec. 1, Chung Sun Rd., 43707 Tachia,

Taiwan 886-4-26871012 Emergency Phone / Fax: 886-4-26871012 / 886-4-26875563

### TACHIA CHEMICAL CO.,LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

2、危害辨識資料 Hazard Identification အန္တရာယ်ရှိခွဲခြားအချက်အလက်

化學品危害分類:腐蝕損傷/刺激眼睛物質第 2A 級、吸入性危害物質第 2 級

Chemicals hazard Class: Serious eye damage/eye irritation-category2A, Aspiration hazard - category2

အန္တရာယ်ရှိပစ္စည်းအမျိုးအစား- တိုက်စားထိခိုက်မှု / မျက်လုံးစူးရှမှုသတ္တုအဆင့် 2 A ၊ စုပ်ယူဓာတ်အွန္တရာယ်ရှိသတ္တုအဆင့် 2

Index contents ညွှန်ပြထားသောအကြောင်းအရာ

象徵符號:

Symbol: သင်္ကေတ



警示語:警告

Signal word: warning သတိပေးသင်္ကေတ -အန္တရာယ်ရှိသည်

危害警告訊息: 如果吞食並進入呼吸道可能有害、造成眼睛刺激

Harmful warning; May be harmful if swallowed and enters airways. Causes eye irritation .

အန္တရာယ်ရှိသတိပေးအချက်အလက် -သာမာန်အသုံးပြလျှင်အွန္တရာယ်မရှိ၊ မျိုချလျှင်အွန္တရာယ်ရှိသည်၊ အရေပြားထိတွေ့ လျှင် အဆိပ်ရှိသည်၊ မျက်လုံးစူးရှမှုဖြစ်တတ်သည်။

危害防箱措施:1.勿進入水源或土壤避免污染 2.置於陰涼、乾燥、通風良好、陽光無法直接照射處 3. 遠離食物. 避免孩童接觸

Hazardous Prevention/Storage: 1.Do not enter water source or soil to prevent contamination.

2.Stored at cool . dry . ventilated place 3. Keep away from food and reach of children.

အွန္တရာယ်ကာကွယ်စနစ်- 1. ရေအရင်းအမြစ်(သို့ )မြေဆီလွှာမညစ်ညမ်းစေရ၊ 2. အေးမြပြီး၊ ခြောက်သွေ့သော၊ လေဝင်လေ ထွက် ကောင်းသော၊ နေရောင်တိုက်ရိုက်မထိသောနေရာတွင်ထားပါ။ 3. အစာနှင့်ဝေးခွာထားပါ၊ ကလေးသူငယ်မထိမိစေရ။ 其他危害:-

Other hazards:-

အခြားအွန္တရာယ်ရှိမှု -

### 3、成份辨識資料 Composition / Information on Ingredients ပါဝင်သောပစ္စည်းအချက်အလက်

| 化學性質 Chemical Characteristic   | :油性聚異氰酸酯 Solvent-based                     | aliphatic polyise | ocyanate   |
|--|--|-------------------|--|
| 危害成分中英文名稱<br>Chinese and English names of the<br>hazardous ingredients<br>ஆஷைல்ஜீசைஜ்.வூல்ஜூல்கூலூ | 濃度或濃度範圍(成分百分比)<br>Concentration/Percentage | CAS#              | 危害成分<br>The hazardous<br>ingredient s<br>a&spいいのとy |
| 聚異氰酸酯<br>Aliphatic Polyisocyanate  | 100%                                       | 28182-81-2        | -  |

#### 4、急救措施 First Aid Measures: အရောပေါ် ကယ်ဆယ်နည်း

不同暴露途徑之急救方法 Emergency and First Aid Procedures:

မတူသောနေရာပေါ် လွင်မှု၏အရေးပေါ် ကယ်ဆယ်နည်း

吸入:若呼吸困難,移至空氣新鮮處並供給氧氣及就醫。

· Inhalation: If breathing is difficult, move to fresh air, give oxygen. Seek medical attention.

စုပ်ယူမိခြင်း - အကယ်၍အသက်ရှုရခက်ပါက လေကောင်းလေသန့် ရှိသောနေရာသို့ ရွေ့ပါ၊ အသက်ရှုကယ်ဆယ်နည်းဖြင် ကယ်ဆယ်ပါ

12 - 2 SDS 安全資料表 No.9485 2016/01/05

#### TACHIA CHEMICAL CO.,LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

皮膚接觸:用纱布將沾在皮膚上的污物擦掉,再用大量的水和肥皂清洗乾淨。
 Skin Contact: Wine off mechanically and wash affected areas thoroughly with same of the contact.

- Skin Contact: Wipe off mechanically and wash affected areas thoroughly with soap and plenty of water.
- အရေပြားထိမိခြင်း ပိတ်စဖြင့်ညစ်ပေရာကိုသုတ်ပါ၊ ရေများများနှင့်ဆပ်ပြာဖြင့်ဆေးကြောပါ။
- ·眼睛接觸:立刻以大量清水沖洗,至少須沖洗 15 分鐘以上,並立即就醫。
- Eye Contact: Rinse carefully and thoroughly with water for at least 15 minute and seek medical advice.
- ရက်လုံးထိဖိခြင်း ရက်ရင်းရေရှားများဖြင့်အနည်းဆုံး 15 မိနှစ်အထက်ဆေးပါ ဆက်လက်နာကျင်နေပါက ရက်ရင်းဆေးကုသခံယူပါ။
   食人:立刻吞食消水。不要對意識不清者催吐或給予任何飲食。

Ingestion: Drink clean water! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR EAT ANY THING!

စားမီခြင်း - မအော့အန်စေရ၊ ပါးစပ်မှအသိစိတ်မရှိသူကို မည်သည့် အစာမျှမကျွေးရပါ။

最重要症狀及危害效應:刺激效應。

Major Disease and Harm Effect: Irritation.

အရေးပါသောလက္ခကာနှင့် အန္တရာယ်ရှိတုံ့ပြန်မှ -စူးရှမှုရှိသည်။

對急效人員之防護:戴手套避免和污物直接接觸。

First-Aid Personal Protection: Protective gloves to prevent contact with the contaminated materials.

အရေးပေါ် ကယ်ဆယ်ဝန်ထမ်းများကာကွယ်ခြင်း - ကာကွယ်လက်အိတ်များတပ်ဆင်ခြင်းဖြင့် ညစ်ပေရာများကိုမထိမိစေရ။

對醫師之提示:-

Prompt to Doctor: -

ဆရာဝန်ကိုသတိပေးမှု -

#### 5、滅火措施 Fire Fighting Measure: 🎎 🖧 သတ်နည်း

適用滅火劑:二氧化碳、化學乾粉、泡沫。

Suitable Extinguishing Media: CO2, foam, dry powder.

အသုံးတည့်သောမီးသတ်ဆေး - ဓာတုအခြောက်မှုန့့်၊ အမြုပ်၊ ကာဗွန်ဒိုင်အောက်ဆိုဒ်

被火時可能延遲之特殊危害:火災時可能會分解出一氧化碳、氯氧化物、氰酸醣蒸氣、氰酸等。 Special Exposure Hazards: In case of fire, formation of carbon monoxide, nitrogen oxide, isocyanate vapor, and traces of hydrogen cyanide is possible.

မီးပြိမ်းရန်တွင် ကြံတွေ့ နိုင်သောထူးပြားအွန္တရာယ် - ကာငွန်ဒိုင်အောက်ဆိုဒ်၊ ကာငွန်မိုနောက်ဆိုဒ်၊ isocyanate vapor အဆိပ်ရှိအငွေ့ ဖြစ်နိုင်သည်

特殊滅火怨序:滅火時保持位於上風處以避免毒運。噴水柱可使暴露在火場的容器降溫。消防水不可流入水源或下水道。在確保安全之下,將火場內的容器移到安全處所。若污染水源,立即向主管 陰局雖告。

Special Extinguishing Procedure: Keep up-wind to avoid furnes. Water spray may be used to keep fire-exposed containers cool. Keep run-off water out of sewers and water sources. Dike for water control. Move container from fire, if it can be done without risk. If risk of water pollution occurs, notify appropriate authorities.

ထူးခြားမီးပြိမ်းသတ်စနစ် - လေဝင်နေရာကိုထိန်းထားပါ၊ အဝွေ့ပြင်ဆန်ခြင်းကိုရောင်ပါ ရေးမှုန်းခြင်းဖြင့် မီးလောင်နေသော နေရာ ပေါ်လွင်သောဗူးအိုးများကိုအေးစဝသည်။ မီးသတ်ရေများရေမြောင်းနှင့်ရေအရင်းအမြစ်များသို့ မရောက်စေရ၊ လုံခြုံသော အ နေအထားအောက်တွင် မီးမလောင်သောပစ္စည်းများကို လုံခြုံသောနေရာသို့ ရွေ့ပြောင်းပါ ရေအရင်းမြစ်များညစ်ပေသွား ပါက တာဝန်စံဌာနသို့ အကြောင်းကြားပါ။

消防人員之特殊防護設備:消防員必須配戴自給式空氣呼吸器。

Special Protection Equipment: Firemen have to wear self-contained breathing apparatus.

မီးသတ်ဝန်ထမ်း၏ထူးခြားကာကွယ်ပစ္စည်းများ - မီးသတ်ဝန်ထမ်းများ အောင်စီဂျင်ပေးအသက်ရှုကိရိယာပြင်ဆင်ထားရမည်။

#### 6、洩漏處理方法 Accidental Release Measures ల్గి8ల్లీయార్యంల్ ఫ్రామ్ట్

個人應注意事項:禁止閒雜人員進入洩濕區。穿戴適當的個人防護裝備、勿吸入含污染物的粉塵或

12 - 3 SDS 安全資料表 No.9485 2016/01/05

## TACHIA CHEMICAL CO.,LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

#### 蒸氣

Personal Protection: Keep unnecessary and unprotected personnel from entering. Wear appropriate personal protective equipment. Do not breathe vapors / dust.

ပုပ္ဂိုလ်သတိထားရမည့်အချက် - မသက်ဆိုင်သူမဝင်စေရ၊ အလုပ်လုပ်ရိန်တွင် ရာဘာလက်အိတ်တပ်ရမည်၊ အငွေ့ နှင့် အမှုန့် များ မစုပ်ဝိစေရပါ။

環境注意事項:1. 對該區域進行通風換氣

- 2. 撲滅或移走所有發火源,嚴禁吸煙
- 3. 勿讓洩漏物進入下水道或污染水源及土壤
- 4. 重大洩漏發生時必須報告政府安全衛生與環保相關單位。

Environmental Protection: 1. Ventilate area of leak or spill.

- 2. Keep away from sources of ignition-no smoking.
- Prevent product from entering drains. Do not contaminate surface water. Avoid subsoil penetration.
- Report to the authority if spills and releases to soil.

ပတ်ဝန်းကျင်သတိထားရန် - 1. ၎င်းနေရာကိုလေဝင်လေထွက်ကောင်းအောင်ပြုလုပ်ပါ။

- 2. မီးငြိမ်းသတ်ချိန် (သို့ )ရှေ့ပြောင်းချိန်တွင် ဆေးလိပ်သောက်ခြင်းလုံးဝမပြုလုပ်ရပါ။
- 3. ယိုစိမ့်အရာကို ရေအောက်မြောင်း(သို့)မြေဆီလွှာသို့ မရောက်စေရပါ။
- 4. အစိုးရလုံခြုံမှုအဖွဲ့ နှင့်ပတ်ဝန်းကျင်ထိန်းသိမ်းအဖွဲ့ ကိုအကြောင်းကြားရမည်။

清理方法:不可進入排水消。允收污染物,再用濕的吸收材(木屑、矽酸鈣、砂等)覆蓋在幾留物上面大約一小時後,將吸收材和幾留物全部移到縣棄物桶內,但不可加蓋(因為會釋放出二氧化碳)。 全部污染物保濕並存放在通風良好的地方數天後,可以用獎化的方式處理。

Methods for Cleaning Up:

Do not empty into drains. Remove mechanically, cover remainders with wet, absorbent material (e.g. sawdust, chemical binder based on calcium silicate hydrate, sand). After approx. one hour transfer to waste container and do not seal (evolution of CO<sub>2</sub>). Keep damp in a safe ventilated area for several days. Further disposal by incineration.

ထောင်ရွက်နည်း-ရေအောက်မြောင်းသို့ မဝင်စေရပါ။ ညစ်ပေရာကိုဦးစွာသိမ်းပါ၊ စိုသောစုပ်ယူပစ္စည်း(သစ်သားစ၊ သိစသည်) များမြင့်ယိုစိမ်အရောကိုန်းပါ၊ တစ်နာရီခန့်ကြာလျှင် စုပ်ယူအရောနှင့်ကျွန်ရစ်ရာအားလုံးကို စွန့် မဝ်ပုံးသို့ ဝတ္ထည်ပါ။ အမိုးမစုံးရ (ကာ ဇွန်ခိုင်အောက်ဆိုဒ်ထုတ်လှုင့်နိုင်သောကြောင့်မြစ်သည်။) ညစ်ညပ်ရာအားလုံးကိုအစိုထိန်းထားပြီး လေဝင်လေထွက်ကောင်း သောနေရာတွင် ထားပါ၊ ရက်အနည်းငယ်ကြာမြီးနောက် စီးရီ သောနည်းလမ်းခြင့်ဆောင်ရွက်မမှည်။

## 7、安全處置與儲存方法 Handling and Storage လုံခြဲစွာဆောင်ရွက်နည်းနှင့်သိုလှောင်နည်း

處置:工作場所保持良好的通風和排氣。戴手套和護目鏡防止皮膚和眼睛接觸。噴途時必須有排風 裝置,作業人員必須配戴可趟遊粉廳及有機溶劑的口罩或供氣式面罩。

Handling: Ensure adequate ventilation or exhaust ventilation in the working area. Avoid contact with skin and eyes by wearing safety goggles and protective gloves. Exhaust ventilation necessary if product is sprayed. During spray application the respiratory organs should be protected from spray mist. တောင်ရွက်နည်း - လုပ်ငန်းခွင်တွင်ကောင်းမွန်တောငေမကာင်းလေသနဲ့ ထိန်ဆားရမည်၊ လက်အိတ်နှင့်ကာကွယ်မျက်မှန် တာဝိရေညီ၊ ဆေးဗန်းချိန်တွင် လေထုတ်ကိရိယာရှိရမည်။ ကိုင်သွယ်သူသည် အမှုန့် အစစ်ပါသော ဩဂနနစ်မျက်နာ ဖုံးစသည်မျာာတဝ်ရေညီ။

傑存:傑存於陰涼(5~40℃)、乾燥、通風良好的地區。容器蓋必須緊閉。

Storage: Keep container dry and tightly closed in a cool(5~40°C) and well ventilated place. නිලෝහිම්

အေးမြသော(10~40˚C) ၊ မြောက်သွေ့ ခြင်း၊ လေဝင်လေထွက်ကောင်းခြင်းနှင့်နေရောင်တိုက်ရိုက်မထိသောနေရာ တွင်ထား မည်။ အဖုံးကိုလုံအောင်ပိတ်ထားရမည်။

12 - 4 SDS 安全資料表 No.9485 2016/01/05

# TACHIA CHEMICAL CO.,LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

8、暴露預防措施 Exposure Control/Personal Protection ပေါ် လွှင်မှုကိုကြိုတင်ကာကွယ်နည်း

|   | E制式或局部排氣氣裝置。局部   |   |   |
|---|--|---|---|
| 到其他區域。  |  |   |   |
|   | em of local and/or general exhaus  |   |   |
|   | se it can control the emissions of   | of the contaminant at it  | s source, prevention                    |
| dispersion of it into the gene  |  |   |   |
|   | စ်ထိန်းချုပ်ပုံစံ(သို့)အစိတ်အပိုင်းလေထု  |   |   |
|   | ပျံ့ကျဲစေနိုင်သောကြောင့် ဗဟိုထိန်းချုပ်  |   | 1                                       |
|   | 空制參數 Control parameters 22   |   |   |
| 八小時量平均容許濃度  | 短時間時量平均容許濃度  | 最高容許濃度  | 生物指標                                    |
| TWA   | STEL   | Ceiling   | BEIs                                    |
| Eight-hour average  | Short amount of time to allow  | Maximum allowable   | Biological                              |
| concentration allowed   | the average concentration  | concentration   | indicators                              |
| 8နာရီနှန်းပျမ်းမှုခွင့်ပြုအပျစ်နှန်း  | အချိန်တိုနှန်းပျမ်းမျှခွင့်ပြုအပျစ်နှန်း   | အမြင့်ဆုံးခွင့်ပြုအပျစ်နှုန်း   | ဇီဝညွှန်ကိန်း                           |
| -   | -  | -   | LD50 大鼠(吞食):                            |
|   |  |   | >5000mg/kg                              |
|   |  |   | LD50 oral, rat: >                       |
|   |  |   | 5000mg/kg                               |
|   |  |   | LD50ကြွက်ကြီး(မျိုချ)                   |
|   |  |   | :>5000mg/kg                             |
| <ul> <li>saxxが利用が収め - 図ののののでは</li> <li>手音防護: 防護手養 Hand Protection: Wear ながかのない気を: - 中のからなる</li> <li>眼睛防護: 護日鏡収証 - Fye Protection: Wear はずれないのない気を: - 4ずれないのない気を - 4ずれないのないのないのないのでは</li> <li>皮膚及身備防護: 達該</li> </ul> | Respiratory protection required in during spraying. An air-fed mask of charcoal filter and particulate is apply and a special specia | . or for short periods of<br>ilter is recommended.<br>ကွယ်ကိန်ယာတစ်ဆင်ရဆည်<br>စိဆောင်ပါက ဘတ်ခဲ့ခိ<br>e of PVC or rubber.) | work, a combination<br>။အကောင်းဆုံးက လေ |
| Skin & Body Protection  | : Wear suitable protective clothi  | ng.   |   |
|   | ြင်း - သင့်တော်သောအဝတ်အစားများဖြင့် ထိ   |   |   |
| 衛生措施:工作後、進食前  | ]洗手。儘速脫掉污染之衣物並<br>抗衣人員污染物之危害性。   |   | 後才可再穿戴或丟                                |
|   | at the end of each wok shift and   | before eating, smoking  | and using the toilet.                   |
|   | tly remove any clothing that bec   |   |   |
|   | placed in closed container until d   |   |   |
|   | nel of chemical's hazardous prope  |   |   |
| အလုပ်လုပ်ပြီးအမြန်ဆုံး ညစ်ပေအဝတ်း   | အစားများကိုချတ်ပါ၊ ပြောင်အောင်လျှော်ပြီးမှပြ   | န်ဝတ်ပါ၊ (သို့ )ပစ်ပါ။ အဝတ်လျေ  | ဂ်သူကိုအန္တရာယ်ရှိမှုရှင်း <u>ပြ</u> ပါ |

12 - 5 SDS 安全資料表 No.9485 2016/01/05

# TACHIA CHEMICAL CO.,LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

9、物理及化學性質 Physical and Chemical Properties/Characteristics ရှာစေဒနှင့်ဓာတ္တစေဒရက်သတ္တိ

| 12 - 12 - 12 - 1 - 1 - 1 - 1 - 1 - 1 - 1                | 11 7 1 1 05  |
|---|--|
| 外觀:透明或微黃黏凋液狀  | <b>氣味:幾乎無味</b>   |
| Appearance: Clear to yellowish Viscous liquid           | Odor: Nearly odorless  |
| ပြင်ပသက္ကာန် -အကြည်(သို့ )အနည်းငယ်ဝါအပျစ်ရည်            | အနံ့ - မရှိလုန်းပါး  |
| 嗅覺閱值 2-85ppm(偵測)、5.4-55ppm(察覺)                          | <b>於點:-</b>  |
| Olfactorythreshold:2~85ppm(detection), 5.4-55ppm        | Melting point:-  |
| (to detect)   | ပျော်မှတ်-   |
| အနံ့တန်ဖိုး- 2-85ppm(စစ်ဆေးခြင်း) ,5.4-55ppm (သိရှိမည်) | (5.1)  |
| pH 值:不適用  | 沸點 / 沸點範圍:不會沸騰,高溫時會分解。   |
| PH value: Not applicable                                | Boiling Point/Boiling Range:   |
|   | Not measurable (Owing to decomposition).<br>ရေဆူမှတ်/အတိုင်းအတာ -မဆူတတ်ပါ၊ အမှုချိန်များရှိန်တွင် ခွဲဖြစ်<br>တတ်သည်။ |
| 分解溫度:-  | 院火點:>120℃  |
| Decomposition Temperature: -                            | 測試方法:() )  |
| 易燃性(固體,氣體):-:   | Flash Point: >120°C  |
| Flammable (solid, gas):-                                | Test Method: ( ) Open Cup ( ) Close Cup<br>လျှင်ရှိဇို့ ->120 C<br>စမ်းသပ်နည်းလမ်း - ( )စွက်ဖွင့် (V )စွက်ဒိတ်       |
| 自燃温度:480℃   | 爆炸界限:-   |
| Spontaneous Temperature: 480°C                          | Explosive Limits : Not applicable.   |
| oponanicous remperature. 100 C                          | ပေါက်ကွဲအတိုင်းအတာ-  |
| 蒸氣壓: <0.0001mbar @ 20℃                                  | 蒸氣密度:-   |
| Vapor Pressure: <0.0001 mbar @ 20°C                     | Vapor Density: -   |
|   | အငွေ့ သိပ်သည်းဆ -  |
| 密度: 1.14 g/cm³ @ 20℃                                    | 溶解度:不溶於水但會和水反應,如10及12節   |
| Density: 1.14g/cm <sup>3</sup> @ 20°C                   | 所述。  |
|   | Solubility in Water: Insoluble; reacts as described in   |
|   | paragraph 10 and 12  |
|   | ပျော်မှတ် ရေတွင်မပျော်ဝင်နိုင်ဘဲ တုံ့ပြန်မှုရှိနိုင်သည်၊ ဥပမာ 10 နှင့်   |
|   | 12 တွင်ဖော်ပြထားချက်အရ။  |
| 辛醇/水分配係數:1.08   | 揮發速率: -  |
| Log Kow:1.08  | Vaporization Rate: -   |
|   | ကွင့်ပြန်ရုန်း -   |

# 10、安定性及反應性 Stability and Reactivity రామక్రోహిందు స్టాఫ్స్ టైక్ బర్జి

安定性:正常儲存或操作下呈安定狀態

Stability: Stable under ordinary conditions of use and storage.

တည်ငြိမ်ဓာတ် - သာမာန်အခြေအနေအောက်တွင် တည်ငြိမ်သည်။

特殊狀況下可能之危害反應:選胺類或剪類會產生放熱反應、選水會緩慢反應產生二氧化碳,如果 容器密閉可能會因高壓而爆裂。

Special Conditions of Hazardous Reaction:

Exothermic reaction with amines and alcohols; reacts slowly with water forming CO2, in closed containers risk of bursting owing to increase of pressure.

containers has to instantig own for increase. A pressure, or increase of inc

Conditions to Avoid: Heat, flames, ignition sources and incompatibles.

12 - 6 SDS 安全資料表 No.9485 2016/01/05

## TACHIA CHEMICAL CO.,LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

ရှောင်ကျဉ်ရမည့်အခြေအရ - ဒီဗေ အပူ ဒီဇေဟင်နိုင်အရာ၊ မာဘည့်ဆာသတ္တများနှင့်ရောင်ပါး
應避免之物質: 淨酸、強敵、強氣任劑、水。
Incompatibility: Strong acids, strong alkalis, strong oxidizing agents, water.
ရောင်ကျည်စည်ထတ္တများ - အာရှင်အတေစေစေတစ်မှာ chlorinated solvent,! oxidents! േရ
危害分解的:正常結合成操作下不會產生危險性的分解的。火災時可能會分解出一氧化碳、氯氧化物、氨酸醬蒸氣、氨酸等。
Hazardous Decomposition Products:
No hazardous decomposition products when stored and handled correctly. In case of fire, formation of carbon monoxide, nitrogen oxide, isocyamate vapor, and traces of hydrogen cyanide is possible.
အရွက္မယ်ရွိခြင်းတည္။ ဘာဟန်သိုရဟုင်မှုအောက်တွင် အျွန္ဓာလ်ရှိသောချိပြီဆမာများမြစ်လောက်မ်း ခံလေကာင်မှု ကျွန်မိရာက်လိုဒါ

#### 11、毒性資料 Toxicological Information ශාන්රිගත් ශාඛාරිත හර

#### 12、生態資料 Ecological Information သဘာဝအချက်အလက်

```
生態毒性:LC50(魚類):-
Eco-toxicity: LC50 (fish) : -
EC50(水生無脊椎動物):-
 EC50 (aquatic invertebrates):-
 生物濃縮係數(BCF):-
 သဘာဝအဆိပ်ဓာတ် - LC50(ငါးအမျိုးအစား)
EC50 (ရေပေါက်ကျောရိုးမပါသတ္တဝါ)-
ဇီဝအပျစ်ညွှန်ကိန်း - BCF : 1
持久性及降解性:-
 Persistence and degradability:- ကြာရှည်ခံနိုင်မှုနှင့်ဖြန်ဖြေမှု
   半衰期(空氣):-
  Half-life (air): -
  အားနည်းကာလ(လေထု)
   半衰期(水表面):-
   Half-life (water surface): -
   အားနည်းကာလ(ရေအပေါ် ယံမျက်နာ)
```

12 - 7 SDS 安全資料表 No.9485 2016/01/05

## TACHIA CHEMICAL CO.,LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

半衰期(地下水):-Half-life (water): -အားနည်းကာလ(မြေအောက်ရေ)-半衰期(一壤):-Half-life (soil): -အားနည်းကာလ(မြေဆီလွှာ) Bioaccumulation: **ဇီဝစုဆောင်းဓာတ်** 一壤中之流動性: The soil of mobility: -မြေဆီလွှာအတွင်းစီးဆင်းဓာတ် 其他不良效應: 本產品週水會產生二氧化碳及高熔點的不溶性 Polyurea,變成 Polyurea 後雖對環境 無害,但仍應避免洩漏至水源或土壤中 Other adverse effects: Avoid to escape into waters or soil. The product reacts with water to form CO2 and an insoluble polyurea with high melting point. The final reaction product is not harmful to environment. အခြားဆိုးကျိုးတုံ့ပြန်မှု-ရေနင့်တွေ့ လျှင် ကာဗွန်ဒိုင်အောက်ဆိုဒ်နှင့်ပျော်မှတ်မြင့်သောမပျော်ဓာတ် ployurea မှPolyurea ဖြစ် ပြီးနောက် ပတ်ဝန်းကျင်အတွက်ထိခိုက်မှမရှိသော်လည်း ရေတွင်းနင့်မြေဆီလွှာအတွင်းဝင်ရောက်ခြင်းကာကွယ်ပါ။

## 13、廢棄處置方法 Disposal Information စွန့် ပစ်ဆောင်ရွက်နည်းလမ်း

廢棄處置方法:交合格的廢棄物處理公司處理或焚化。空桶可用氨水和異丙醇的混合物中和,然後 數去警示標籤並依一般廢容器慮理。

Disposal Information: May be incinerated in a suitable facility provided local regulations are observed by the legal specialist of industrial waste. Empty containers may be disposed of after neutralizing any product remaining on the walls of the container with a mixture of isopropanol, ammonia and water . Afterwards, remove warning labels.

စွန့် ပစ်နည်းလမ်း - အညေ်အချင်းရှိ သောစွန့် ပစ်ရှင်းလင်း ကုမ္ပကီမှ ဆောင်ရွက်ရန်း ပုံးအလွှတ်ကို ammonia , isopropanol ရောစဝ်ရာဖြင့်သမ နိုင်သည်။ ပြီးလျှင်သတိပေးသင်္ကေတကိုဖြံပြီး သာမာန်စွန့် ပစ်ပစ္စည်းအရ စွန့် ပစ်နိုင်သည်။

#### 14、運送資料 Transport Information သယ်ယူဝို့ ဆောင်အရက်အလက်

國際運送規定:非列管的危險物質

International Transport Regulation: Not regulated as dangerous goods.

နိုင်ငံတကာသယ်ယူပို့ ဆောင်ရေးသတ်မှတ်ချက် - ထိန်းသိမ်းထားသောအွန္တရာယ်ရှိပစ္စည်းအရာမဟုတ်ပါ။

聯合國編號:-

The United Nations Number (Un-No): -

聯合國運輸名稱:-

International Transport Name: -

運輸危害分類: 非列管的危險物質

Hazard Class: not regulated as dangerous goods.

သယ်ယူပို့ ဆောင်အန္တရာယ်ရှိအမျိုးအစား -ထိန်းသိမ်းထားသောအန္တရာယ်သတ္တုမဟုတ်ပါ။

包裝類別:-

Packing Group : -

ထုတ်ပိုးအမျိုးအစာ -

海洋污染物(是/否):否

Marine pollutants (Yes / No): No

Marine poliutants (Yes / No): No

ပင်လယ်ညစ်ညမ်းအရာ(ဟုတ်/မဟုတ်)-မဟုတ်

12 - 8 SDS 安全資料表 No.9485 2016/01/05

# TACHIA CHEMICAL CO.,LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

特殊運送方法及注意事項:保持乾燥、勿和食品一定裝運。 Special Transport Way and Note: Keep dry. Keep separated from foodstuffs. ထူးမြားပို့ ထောင်နည်းလမ်းနှင့်သတိထားရန်- မြောက်သွေ့ စေမြင်း၊ အစာနှင့်အတူမထားမှ။

# 15、法規資料 Regulation Information ဥပဒေအချက်အလက်

適用法規: Application of Regulation: အသုံးတည့်သောဥပဒေ-職業安全衛生設施規則 Occupational Safety and Hygiene Regulation လုပ်ငန်းလုံခြုံမှုသန့် ရှင်းရေးတပ်ဆင်ပစ္စည်းသတ်မှတ်ချက် 危害性化學是標示及通識規則 Regulation of labelling and Hazard Communication of Hazardous Chemicals. အန္တရာယ်ရှိဓာတုဝတ္ထုသင်္ကေတနှင့်အသိပညာသတ်မှတ်ချက် 有機溶劑中毒預防規則 Toxication Prevention Regulation for Organic Solvent ဇီဝပျော်ရည်အဆိပ်သင့်ကြိုတင်ကာကွယ်သတ်မှတ်ချက် 作業場所容許暴露標準 Exposure Concentration Allowance Standard for Work Place. လုပ်ငန်းခွင်ခွင့်ပြထားသောပေါ် လုင်သတ်မှတ်အဆင့် 道路交通安全規則 Traffic Safety Regulation လမ်းယန်းဆက်သွယ်လုံရြံသောသတ်မှတ်ချက် 事業廢棄物斯·存清除處坦方法及設施標準 Storage & Disposal Procedures and Facility Standard for Industrial Waste လုပ်ငန်းစွန့် ပစ်အရာထားသို့ခြင်းရှင်းလင်းဆောင်ရွက်နည်းလမ်းနှင့်တပ်ဆင်ပစ္စည်းစံနှန်းသတ်မှတ်ချက်

## 16、其他資料 の同いののかののか

| 参考文献<br>Reference<br>ကိုးကားရန်  | -   |                   |            |  |        |  |
|----------------------------------|---|-------------------|------------|--|--------|--|
| 製表者單位<br>Make Unit               | Name:Tachi<br>地址/電話:                                      | one: 525, Sec.    | 路一段 525 號  | (886)4-26871012<br>iun Rd Tachia, Taiwai | n TEL: |  |
| 製表人                              | 截稱:總經理  | E                 | 姓名:        | 幹翰聲                                      |        |  |
|                                  | Professional Post : General Manager Name : Michael Junior |                   |            |  |        |  |
| Make People                      | Professional F  | ost: General Mana | ger Name : | Michael Junior                           |        |  |
| Make People<br>製表∃期<br>Make Date | 2016/01/05  | ost: General Mana | ger Name:  | Michael Junior                           |        |  |

12 - 9 SDS 安全資料表 No.9485 2016/01/05

# Solvent-based Screen-Printing Ink

## TACHIA CHEMICAL CO.,LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

#### 安全資料表

# Safety Data Sheet (ကုန်ပစ္စည်းလုံခြုံရေးအချက်အလက်ဖယား)

1、化學品名稱與廠商資料 Identification of the substance / preparation and company

# ကုန်ပစ္စည်းအမည်နှင့်ပေးသွင်းသူအမည်

化學品名稱: No.100 系列油性網印油墨

Chemicals Name: No.100 Series solvent-based Screen-Printing Ink

ကုန်ပစ္စည်းအမည် : NO.100 ဆေးဆိုးပန်းရိုက်မင်ရည်

其他名稱:塗料、油漆

Other Name: Paint, Ink

အခြားအမည်။ ။ ဆေးရည်၊ မင်ရည်။

製造者、輸入者或供應者名稱、地址及電話 Names, addresses, and phone numbers of the manufacturer, importer or supplier .

大甲化工實業(股)公司 台中市大甲區中山路一段 525 號 886-4-26871012

Tachia Chemical Co., Ltd. 525, Sec. 1, Chung Sun Rd., 43707 Tachia, Taiwan

886-4-26871012 緊急連絡電話/傳真電話 Emergency Phone / Fax: 886-4-26871012 /

886-4-26875563

ထုတ်လုပ်စက်ရုံအမည်၊ လိပ်စာနှင့်ဖုန်းနံပါတ် : Tachia Chemical Co., Ltd. 525, Sec. 1, Chung Sun Rd., 43707 Tachia, Taiwan 886-4-26871012 Emergency Phone / Fax : 886-4-26871012 / 886-4-26875563

2、危害辨識資料 Hazard Identification အန္တရာယ်ရှိသောအချက်အလက်များခွဲခြားခြင်း။

12 - 1 SDS 安全資料表 No.100 2022/07/05

## TACHIA CHEMICAL CO.,LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

化學品危害分類: 易燃液體第 2 級、急毒性物質第 4 級(吞食)、急毒性物質第 4 級(吸入) 急毒性物質第 4 級(皮膚)、嚴重損傷(刺激問題情物質第 2A 級。

Chemicals hazard Class: Flammable liquids Category 2. Acute toxicity (Oral) Category 4. Acute toxicity (inhale) Category 4. Acute toxicity (skin) Category 4. Serious eye damage/eye irritation Category 2A.

ဓာတ္အာန္တရာယ် အမျိုးအစား- မီးလောင်လွယ်သော အရည် အမျိုးအစား 2. ပြင်းထန်သော အဆိပ်သင့်မှု (ခံတွင်း) အမျိုးအစား 4. ပြင်းထန်သော အဆိပ်သင့်မှု (ရှုသွင်း) အမျိုးအစား 4. စူးရှ သော အဆိပ်သင့်မှု (အရေပြား) အမျိုးအစား 4. ပြင်းထန်သော မျက်လုံးထိနိုက်မှု/ မျက်လုံးယားယံခြင်း အမျိုးအစား 2A။

#### 標示內容

Index contents ညွှန်ပြထားသောအကြောင်းအရာ

## 象徵符號

Symbol: သင်္ကေတ



# 警示語:警告

Signal word: Danger သတိပေးသင်္ကေတ -အန္တရာယ်ရှိသည်

危害警告訊息:高度易燃液體和蒸氣、吞食有害、吸入有害、皮膚接觸有害、造成嚴重眼睛 越驗

Harmful waming: Highly flammable liquid and vapor. Harmful if swallowed. Harmful if inhaled. Harmful in contact with skin. Causes serious eve irritation.

အန္တရာယ်ရှိသော သတိပေးချက်- မီးလောင်လွယ်သော အရည်နှင့် အငွေ့ ။ မျိုချမိလျှင် အန္တရာယ်ရှိသည်။ ရှုမိလျှင် အန္တရာယ်ရှိသည်။ အရေပြားနဲ့ ထိတွေ့ ရင် အန္တရာယ်ဖြစ်စေတယ်။ ပြင်းထန်သော မျက်လုံး ယားယံခြင်းကို ဖြစ်စေသည်။

危害防範錯施:置容器於通風良好的地方、遠離引燃品·禁止吸煙、若覺得不適則沿詢醫療 群免長期暴露

Hazardous Prevention : Place containers in a ventilated place, Keep away from sources of ignition-No smoking v If feeling ill, seek medical attention; Avoid long-term exposure. ကွန်တိန်နာများကို လေဝင်လေထွက်ကောင်းသော နေရာတွင် ထားပါ၊ မီးလောင်ကျွမ်းမှု အရင်းအမြစ် များနှင့် ဝေးဝေးတွင်ထားပါ- ဆေးလိပ်မသောာက်ရ၊ နေမကောင်းဖြစ်လျှင် ဆေးကုသမှုမ်ယူပါ။ ရေရှည် ထိတွေ့မှုကို ရောင်ကြဉ်ပါ။

12 - 2 SDS 安全資料表 No.100 2022/07/05

# TACHIA CHEMICAL CO.,LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

| 其他危害:-                |
|-----------------------|
| Other hazards: -      |
| အခြားအန္တရာယ်ရှိမှု - |

# 3、成份辨識資料 Composition / Information on Ingredients ပါဝင်သောပစ္စည်းအချက်အလက်များ

混合物 Mixture: ပေါင်းစပ်ခြင်း။

| 化學性質 Chemical Characteri   | stic:油性聚異氰酸酯 Solvent-b                                   | ased aliph | atic polyurethane   |
|--|--|------------|---|
| resin  |  |            |   |
| 危害成分中英文名稱<br>Chinese and English names of<br>the hazardous ingredients<br>အန္တရာယ်ရှိအရာဖွဲ့ စည်းပစ္စည်းအ<br>မည် | 濃度或濃度範圍(成分百/<br>Concentration/Percenta<br>ပါဝင်ရှုန်း(%) |            | CAS#  |
| PU 樹脂 (PU Resin)   | 15-25%   |            | 51852-81-4  |
|  | 100 Medium 金油 (အလယ်အလတ်)                                 | 0%         |   |
| 顔料 Pigment (ဆေးရောင်စုံ)   | 102 Fire Red 朱紅 (အနီရောင်)                               | 25-30%     |   |
|  | 107 Original Red 大紅 (မူလအနီရောင်)                        | 25-30      | 2786-76-7   |
|  | 112 Red 街 (အနီရောင်)                                     | 25-30      |   |
|  | 113 Rose Red 玫瑰紅 (နှင်းဆီနီရောင်)                        | 25-30      | 61951-98-2  |
|  | 120 Lemon Yellow 檸檬黃 (သိပုရာအဝါ)                         | 25-30      |   |
|  | 121 Light Yellow 淺黃 (အဝါတောက်)                           | 30-35%     | 22094-93-5  |
|  | 122 Original Yellow 原黄 (မူလအဝါ)                          | 25-30      | NO. 74 (00 CHO) 1000.   |
|  | 124 Yellow 高濃黃 (39이)                                     | 30-35%     | - 5468-75-7   |
|  | 125 Transparent Yellow 透明黃                               | 25-30      | 5567-15-7   |
|  | 126 Fluorescent Yellow 螢光黃                               | 25-30      | 5468-75-7 1223-92-6   |
|  | 127 Fluorescent Yellow 螢光黃                               | 30-35%     | 12223-92-6  |
|  | 135 Ultramarine Blue 群青                                  | 30-35%     | 100 Marit Color Color (100 Marit 100 Mari |
|  | 136 Fluorescent Blue 螢光藍                                 | 30-35%     | 147-14-8 7128-64-5  |

12 - 3 SDS 安全資料表 No.100 2022/07/05

# TACHIA CHEMICAL CO.,LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

| 137 Fluorescent Blue 螢光藍    | 30-35% |                     |
|-----------------------------|--------|---------------------|
| 138 Permanent Blue 翠藍       | 25-30  |                     |
| 139 Permanent Blue 翠藍       | 25-30  | 147-14-8            |
| 147 Fluorescent Orange 螢光桔  | 30-35% | 0.00.000.000.000    |
| 148 Fluorescent Orange 螢光桔  | 30-35% | 6262-21-1           |
| 149 Orange Red 桔紅           | 25-30  | 15793-73-4          |
| 157 Fluorescent Pink 螢光桃    | 30-35% | 18472-87-2          |
| 158 Pink 桃紅                 | 25-30  | 980-26-7            |
| 159 Fluorescent Pink 螢光桃    | 30-35% | 18472-87-2          |
| 163 White 白                 |        |                     |
| 164 White 白                 | -      |                     |
| 166 White 白                 | 45-55% | 13463-67-7          |
| 167 Bright White 亮白         | -      |                     |
| 168 High Density White 高濃白  | 55-60% | -                   |
| 176 Fluorescent Green 螢光綠   | 30-55% | 12223-92-6 147-14-8 |
| 179 Deep Green 特線           | 25-30  | 1328-53-6           |
| 183 Violet 紫                |        |                     |
| 184 Violet 紫                | 25-30  | 57971-98-5          |
| 185 Fluorescent Violet 螢光紫  | 30-35% | 7128-64-5           |
| 186 Rich Gold 青口金           |        |                     |
| 187 Rich Gold 青口金           | -      | 7429-90-5           |
| 188 Pale Gold 赤口金           | 17-25% |                     |
| 189 Pale Gold 赤口金           | -      |                     |
| 191 Black 黑                 |        |                     |
| 192(D) Black 黑              | 25-30  | 7429-90-5           |
| 192H High Density Black 高濃黑 | 30-35  | 1425-50-5           |
| 195 Silver 銀                | 10-12% | 7429-90-5           |
|                             |        |                     |

12 - 4 SDS 安全資料表 No.100 2022/07/05

# TACHIA CHEMICAL CO..LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

|                     | 196 Rich Gold | 青口金細 |             |                      |  |
|---------------------|---------------|------|-------------|----------------------|--|
|                     | 197 Rich Gold | 青口金粗 |             |                      |  |
|                     | 189 Pale Gold | 赤口金細 | 15-20%      | 12001-26-2 1317-70-0 |  |
|                     | 189 Pale Gold | 赤口金粗 |             |                      |  |
| 環己酮 (Cyclohexanone) | 加至合計          | 100% | Add to make | 08-94-1              |  |

# 4、急救措施 First Aid Measures:အရေးပေါ် ကယ်ဆယ်နည်း

不同暴露途徑之急救方法 Emergency and First Aid Procedures:

မတူသောနေရာပေါ် လွင်မှု၏အရေးပေါ် ကယ်ဆယ်နည်း

(a) 吸入:將患者移至新鮮空氣處,上身直立,解開衣服。若呼吸困難,施行人工呼吸。讓 患者盡速送 醫。

Inhalation: Move the victim to fresh air area, sit upright position, loosen clothing. Begin artificial respiration if the victim has difficulty breathing. Seek immediately medical attention.

ရှူရှိုက်မိခြင်း- ထိခိုက်မိသူအား လေကောင်းလေသန့်ရသောနေရာကို ရွှေ့ပါ၊ မတ်တတ်ထိုင်ပါ၊ အဝတ်အစားများကို ဖြည်ပါ။ အသက်ရှုရခက်ခဲပါက အသက်ရှုတုကို စတင်ပါ။ ချက်ချင်း ဆေးကုသမှု ခံယူပါ။

(」) 皮膚接觸:脫掉沾有油墨或溶劑的衣物。立刻用肥皂和水沖洗污染物。送醫。

Skin Contact: Remove contaminated shoes and clothing and cleans affected area(s) thoroughly by washing with mild soap and water. Seek medical attention.

ညစ်ညမ်းနေသောဖိနပ်နှင့် အဝတ်အစားများကို ဖယ်ရှားပြီး ဆပ်ပြာအပျော့စားနှင့် ရေဖြင့် သေချာစွာ ဆေးကြောသန့်စင်ပါ။ ဆေးကုသမှုခံယူပါ။

(2) 眼睛接觸:立刻以大量清水沖洗,至少須沖洗15分鐘以上,並立即就醫。

Eye Contact: Flush eyes with clean water and seek medical attention immediately မျက်လုံးကို သန့်ရှင်းသောရေဖြင့် ဆေးကြောပြီး ဆေးကုသမှု ချက်ချင်းခံယူပါ။

(၄) 食人:不要催吐以免吸入肺部,用水漱口,盡速送醫。不要經口給予意識不清者任何飲食。

Ingestion: Do not induce vomiting to prevent inhalation into the lungs. Rinse mouth with water. Seek medical attention. Do not give anything by mouth if the victim is unconscious စားသုံးခြင်း- အဆုတ်ထဲသို့ ရှူရှိုက်မိခြင်းမှ ကာကွယ်ရန် အော့အန်ခြင်းကို မဖြစ်စေရ။ ပါးစပ်ကို ရေနဲ့

12 - 5 SDS 安全資料表 No.100 2022/07/05

# TACHIA CHEMICAL CO..LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

ဆေးပါ။ ဆေးကုသမှုခံယူပါ။ သတိလစ်နေပါက ပါးစပ်ဖြင့် ဘာမှ မပေးသင့်ပါ။

(g) 最重要症狀及危害效應:長期暴露在高濃度蒸氣中會影響中樞神經系統,可能損壞肝和 腎。

Major Symptoms and Hazard Effect: Prolonged exposure to high concentrations of vapors may cause signs of central nervous system depression. Damage to the liver and kidneys အဓိက လက္ခဏာများနှင့် အန္တရာယ်သက်ရောက်မှု- အခိုးအငွေ့များ ပြင်းအားကို ကြာရှည်စွာ ထိတွေ့ခြင်းသည် ဗဟိုအာရုံကြောစနစ် စိတ်ဓာတ်ကျခြင်း၏ လက္ခဏာများ ဖြစ်နိုင်ပါသည်။

(G) 對急救人員之防護: 戴防護手套,以免接觸污染物。

First-Aid Personal Protection: Wear Protective gloves to prevent contact with contaminated materials.

ရေးဦးသူနာပြုစုခြင်း ကိုယ်ရေးကိုယ်တာ အကာအကွယ်- ညစ်ညမ်းသောပစ္စည်းများနှင့် မထိတွေ့စေရန် အကာအကွယ်လက်အိတ်များ ဝတ်ဆင်ပါ။

對醫師之提示:小量食人時不需洗胃,大量食人時因可能經由腸胃吸收而中毒,建議洗胃。 Suggestions to Physician: If small ingestions, the gastric lavage is not recommended. If larger ingestions, it may cause toxication by gastrointestinal absorption and gastric lavage is

သမားတော်အား အကြံပြုချက်- သေးငယ်သော စားသုံးမိပါက အစာအိမ်ဆေးကြောခြင်းကို အကြံပြု ထားခြင်း မရှိဘဲ စားသုံးမိပါက အစာအိမ်အူလမ်းကြောင်းမှ စုပ်ယူမှုနှင့် အစာအိမ်ဆေးကြောခြင်းကြောင့် အဆိပ်ဖြစ်စေနိုင်သည်။

# 5、滅火措施 Fire Fighting Measure: အရေးပေါ်မီးငြှိမ်းသတ်နည်း

適用滅火劑:化學乾粉、泡沫、二氧化碳。

Suitable Extinguishing Media: Dry chemical, foam or carbon dioxide.

သင့်လျော်သောမီးသတ်မီဒီယာ- ခြောက်သွေ့သောဓာတု၊ အမြှုပ် သို့မဟုတ် ကာဗွန်ဒိုင်အောက်ဆိုဒ်။

滅火時可能遭遇之特殊危害:遇高溫或燃燒可能會分解出二氧化碳、一氧化碳及其他有毒 氣體、密閉的桶子遇高溫可能會爆裂。溫度超過閃點,且蒸氣 和空氣混合比在爆炸範圍之內 時會爆炸。

Special Exposure Hazards: Carbon dioxide and carbon monoxide and toxic fumes may be generated under high temperatures. Fire exposed containers may explode. Above flash point, vapor-air mixtures are explosive within flammable limits.

မြင့်မားသောအပူချိန်အောက်တွင် ကာဗွန်ဒိုင်အောက်ဆိုဒ်နှင့် ကာဗွန်မိုနောက်ဆိုဒ် နှင့်အဆိပ် အတောက် များကို ထုတ်ပေးနိုင်သည်။ မီးလောင်နေသော ကွန်တိန်နာများ ပေါက်ကွဲနိုင်သည်။ မီးပွိုင့်အထက်တွင် အခိုးအငွေ့-လေအရောအနှောများသည် မီးလောင်လွယ်သည့်ကန့်သတ်ချက်များအတွင်း

12 - 6 SDS 安全資料表 No.100 2022/07/05

## TACHIA CHEMICAL CO.,LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

# ပေါက်ကွဲနိုင်သည်။

## 特殊滅火程式:

- 1. 撤退並自安全距離或受保護的地點滅火。
- 2. 位於上風處以避免吸入危險的蒸氣和有毒的分解物。
- 3. 滅火前先阻止溢漏,如果不能阻止溢漏且周圍無任何危險,讓火燒完。
- 隔離未著火物質且保護人員。
- 5. 安全情況下將容器搬離火場
- 以水霧冷卻暴露火場的容器。
- 7. 以水柱滅火可能無效,除非消防人員受過各種易燃液體之滅火訓練,否則盡可能撤離火場並允許完 Special Extinguishing Procedure:
  - 1. Retreat and extinguish the fire from a safe distance or a protected location.
  - 2. Locate upwind to avoid inhaling dangerous vapors and toxic decomposition products.
  - Stop the leak before extinguishing the fire. If you cannot stop the leak and there is no danger around it, let the fire burn out.
  - 4. Isolate unfired material and protect personnel.
  - 5. Move the container away from the fire in a safe condition.
  - 6. Cool the exposed fire container with water mist.
- 7. Fire extinguishing with water jets may not be effective unless the firefighters are trained in fire extinguishing with various flammable liquids. If possible, leave the fire as far as possible and allow the fire to be completed
- 1. မီးကို ဘေးကင်းသောအကွာအဝေး သို့မဟုတ် အကာအကွယ်ရှိသောနေရာမှ ဆုတ်ခွာပြီး ငြှိမ်းသတ်ပါ။
- အန္တရာယ်ရှိသော အခိုးအငွေ့များနှင့် အဆိပ်အတောက်များ ပြိုကွဲပျက်စီးနေသော ထုတ်ကုန်များကို ရှူရိုက်မိခြင်းမှ ရောင်ကြဉ်ရန် လမ်းကြောင်းကို ရှာဖွေပါ။
- 3. မီးမငြိမ်းမီ ယိုစိမ့်မှုကို ရပ်ပါ။ ယိုစိမ့်မှုကို မတားနိုင်ဘဲ ဘေးပတ်ပတ်လည်တွင် အန္တရာယ်မရှိပါက မီးကို လောင်ကျွမ်းပါစေ။
- 4. မီးမရသေးသော ပစ္စည်းများကို သီးခြားခွဲထုတ်ပြီး ဝန်ထမ်းများကို ကာကွယ်ပါ။
- 5. ကွန်တိန်နာကို မီးဘေးကင်းဝေးသော အခြေအနေတွင် ရွှေ့ပါ။
- 6. ထိတွေ့နေသော မီးပုံးကို ရေမှုန်ရေဖြင့် အအေးခံပါ။
- 7. မီးသတ်သမားများသည် မီးလောင်လွယ်သော အရည်အမျိုးမျိုးဖြင့် မီးငြှိမ်းသတ်ရာတွင် လေ့ကျင့် သင်ကြားထားခြင်းမရှိပါက ရေဂျက်လေယာဉ်များဖြင့် မီးသတ်ဆေးဘူးဖြင့် ငြှိမ်းသတ်ခြင်းမှာ ထိရောက်မှု မရှိနိုင်ပါ။ ဖြစ်နိုင်ရင် မီးကို တတ်နိုင်သလောက် ချန်ထားပြီး မီးကို ပြီးအောင်လုပ်ပါ။

消防人員之特殊防護設備:滅火時,配戴含面罩之正壓式或自動供氣式空氣呼吸器及防護 衣。

Special Protection Equipment: In the event of a fire, wear full protective clothing and

12 - 7 SDS 安全資料表 No.100 2022/07/05

# TACHIA CHEMICAL CO..LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

အထူးကာကွယ်ရေးပစ္စည်း- မီးလောင်မှုဖြစ်ပွားသည့်အခါတွင် ဖိအားတောင်းဆိုမှု သို့မဟုတ် အခြားအပြု သဘောဖိအားမုဒ်တွင် တပ်ဆင်ထားသော မျက်နှာဖုံးအပြည့်အစုံဖြင့် အကာအကွယ် အဝတ်အစားအ ပြည့်အစုံနှင့် အသက်ရှုကိရိယာကို ဝတ်ဆင်ပါ။

# 6、洩漏處理方法 Accidental Release Measures ယိုစိမ့်ဆောင်ရွက်နည်း

#### 個人應注意事項 Personal measures:

1. 在污染區尚未完全清理乾淨前,限制人員接近該區。

Isolate hazard area. Keep unnecessary and unprotected personnel from entering before the contaminated area is clean up completely.

အန္တရာယ်ဧရိယာကို သီးခြားခွဲထားပါ။ ညစ်ညမ်းနေသောနေရာကို လုံးဝရှင်းလင်းခြင်းမပြုမီ မလိုအပ် သောနှင့် အကာအကွယ်မဲ့ပုဂ္ဂိုလ်များ ဝင်ရောက်ခြင်းမှ ရှောင်ကြဉ်ပါ။

2. 確定清理工作是由受過訓練的人員負責。

Clean of hazard area should only be administered by qualified personnel.

အန္တရာယ်ရှိသောနေရာကို သန့်ရှင်းအောင် အရည်အချင်းပြည့်မီသော ဝန်ထမ်းများကသာ စီမံခန့်ခွဲသင့် သည်။

3. 穿戴適當的個人防護裝備。

Wear appropriate personal protective equipment.

သင့်လျော်သော တစ်ကိုယ်ရေ အကာအကွယ်ပစ္စည်းများကို ဝတ်ဆင်ပါ။

環境注意事項:1. 對該區域進行通風換氣。

- 2. 撲滅或移走所有發火源。
- 3. 報告政府安全衛生與環保相關單位。

Environmental Protection: 1. Ventilate area of leak or spill.

- 2. Keep away from sources of ignition-no smoking.
- 3. Report to the authority.

ပတ်ဝန်းကျင်ကာကွယ်ရေး- 1. ယိုစိမ့်မှု သို့မဟုတ် ယိုဖိတ်သည့်နေရာကို လေဝင်လေထွက်လုပ်ပါ။

- 2. မီးလောင်ကျွမ်းစေသော အရင်းအမြစ်များနှင့် ဝေးဝေးနေပါ ဆေးလိပ်မသောက်ပါနှင့်။
- 3. သက်ဆိုင်ရာတာဝန်ရှိသူထံသို့ သတင်းပို့ပါ။

清理方法 Clean up Methods:သန့်ရှင်းရေးပြုလုပ်သည့်နည်းလမ်းများ

12 - 8 SDS 安全資料表 No.100 2022/07/05

# TACHIA CHEMICAL CO..LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

## 1. 勿碰觸泄漏物。

Do not touch the spillage. ယိုဖိတ်နေသောနေရာအား မထိပါနှင့်။

2. 在安全許可狀況下, 設法阻止或減少泄漏。

When conditions are safe, try to stop or reduce leakage.

အခြေအနေများ ဘေးကင်းသောအခါ၊ ယိုစိမ့်မှုကို ရပ်ရန် သို့မဟုတ် လျှော့ချရန် ကြိုးစားပါ။

在安全許可狀況下,將泄漏容器移至室外或通風良好之隔離區,並將殘餘液轉裝適當容器內。

When conditions are safe, remove leaking containers to ventilate area, and place the residual liquid in proper containers.

အခြေအနေများ ဘေးကင်းသောအခါ၊ လေဝင်လေထွက်ကောင်းသော နေရာတွင် ယိုစိမ့်နေသော ကွန်တိန်နာများကို ဖယ်ရှားပြီး ကျန်အရည်များကို သင့်လျော်သော ကွန်တိန်နာများတွင် ထားပေးပါ။ 4. 避免外泄物進入下水道或密閉空間內。

Prevent leakage from entering drains or airtight spaces.

မြောင်းများ သို့မဟုတ် လေလုံသောနေရာများအတွင်းသို့ ယိုစိမ့်မှုမှ ကာကွယ်ပါ။

5. 小量溢漏: 用惰性吸收劑吸起並置於加蓋且標示的適當容器內,再用水清洗泄漏區。 For small spills, absorb with inert absorbent and put into a sealable / labeled container . Then use water to clean the hazard area.

သေးငယ်သော ယိုဖိတ်မှုများအတွက် အားအင်မတန်စုပ်ယူနိုင်သော ပစ္စည်းဖြင့် စုပ်ယူပြီး အလုံပိတ် /တံဆိပ်တပ်ထားသော ကွန်တိန်နာထဲသို့ ထည့်ပါ။ ထို့နောက် အန္တရာယ်ရှိသောနေရာကို သန့်စင်ရန် ရေကိုအသုံးပြုပါ။

6. 大量泄漏: 聯絡消防, 緊急處理單位及供應商以尋求協助。

For large spills, contact local emergency agencies and suppliers for assistance.

ကြီးမားသော ယိုဖိတ်မှုများအတွက် အကူအညီရယူရန်အတွက် ဒေသတွင်း အရေးပေါ် အေဂျင်စီများနှင့် ပေးသွင်းသူများထံ ဆက်သွယ်ပါ။

# 7、安全處置與儲存方法 Handling လုံခြုံစွာဆောင်ရွက်နည်း

此物質是毒性和可燃性液體,作業時排氣機應運轉及善用個人防護具;工作人員應受適當有關物質之危險性及安全使用法之訓練

This material is toxic and flammable liquid. Turn on exhausting equipment and use personal protective equipment during operation; operators should receive appropriate training related to hazardous materials and safe usage.

ဤပစ္စည်းသည် အဆိပ်သင့်ပြီး မီးလောင်လွယ်သော အရည်ဖြစ်သည်။ ပင်ပန်းနွမ်းနယ်နေသော

TACHIA CHEMICAL CO.,LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

စက်ပစ္စည်းများကို ဖွင့်ပြီး လည်ပတ်နေစဉ်အတွင်း တစ်ကိုယ်ရည် အကာအကွယ်ပစ္စည်းများကို အသုံးပြုပါ။ အော်ပရေတာများသည် အန္တရာယ်ရှိသောပစ္စည်းများနှင့် ဘေးကင်းသော အသုံးပြုမှု နှင့်ပတ်သက်သည့် သင့်လျော်သောသင်တန်းကို လက်ခံသင့်သည်။

2. 除去所有發火源並遠離熱及不相容物

Remove all sources of ignition and keep away from heat and incompatible materials. မီးလောင်ကျွမ်းမှု အရင်းအမြစ်အားလုံးကို ဖယ်ရှားပြီး အပူနှင့် သဟဇာတမဖြစ်သော ပစ္စည်းများနှင့် ဝေးဝေးထားပါ။

3. 工作區應有"禁止抽煙"標誌

There should be "Smoking Prohibited or No Smoking" signs at work area. အလုပ်ဧရိယာတွင် "ဆေးလိပ်သောက်ခြင်းကို တားမြစ်ထားသော သို့မဟုတ် ဆေးလိပ်မသောက်ရ" ဆိုင်းဘုတ်များ ရှိသင့်သည်။

4. 空的桶槽、容器和管線可能仍具危害性的殘留物,未清理前不得從事任何焊接、切割、鑽孔和其他熱的工作進行

There may still be harmful residue in empty containers and pipelines. Any welding, cutting, drilling and other heat-related work must not be undertaken until the containers and pipelines are thoroughly cleaned.

ကွန်တိန်နာအလွတ်များနှင့် ပိုက်လိုင်းများတွင် အန္တရာယ်ရှိသော အကြွင်းအကျန်များ ရှိနေနိုင်သည်။ ကွန်တိန်နာများနှင့် ပိုက်လိုင်းများကို သေချာစွာ မသန့်စင်မချင်း ဂဟေဆက်ခြင်း၊ ဖြတ်တောက်ခြင်း၊ တူးဖော်ခြင်း နှင့် အခြားအပူဆိုင်ရာလုပ်ငန်းကို မလုပ်ရပါ။

5. 需隨時備有可用於滅火及處理溢漏的緊急應變設備

Emergency equipment should be always prepared for fire-fighting and containment. မီးငြိမ်းသတ်ရန် နှင့် မီးငြိမ်းသတ်ရန်အတွက် အရေးပေါ်သုံးပစ္စည်းများ အမြဲပြင်ဆင်ထားသင့်သည်။

6. 作業避免產生霧滴或蒸氣,在通風良好的指定區內操作並採用最小使用量,操作區與儲存區分開

Avoid formation of droplet or vapor during operation. Work in a well-ventilated and designated area and operate only the minimum amount. Storage and operating areas should be separated.

လည်ပတ်နေစဉ်အတွင်း အမှုန်အမွှားများ သို့မဟုတ် အငွေ့များထွက်ခြင်းကို ရှောင်ကြဉ်ပါ။ လေဝင်လေ ထွက်ကောင်းပြီး သတ်မှတ်ထားသောနေရာတွင် အလုပ်လုပ်ပြီး အနည်းဆုံးပမာဏကိုသာ လုပ်ဆောင် ပါ။ သိုလှောင်မှုနှင့် လုပ်ငန်းလည်ပတ်မှုနေရာများကို ခွဲခြားထားသင့်သည်။

7. 必要時穿戴適當的個人防護設備以避免與此化學品或受污染的設備接觸

Wear appropriate personal protective equipment in order to avoid direct contact with the

2 - 9 SDS 安全資料表 No.100 2022/07/05

12 - 10 SDS 安全資料表 No.100 2022/07/05

# TACHIA CHEMICAL CO..LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

chemicals and contaminated equipment.

ဓာတုပစ္စည်းများနှင့် ညစ်ညမ်းနေသော ပစ္စည်းများနှင့် တိုက်ရိက်ထိတွေ့ ခြင်းမှ ရှောင်ရှားနိုင်ရန် သင့်လျော်သော ကိုယ်ရေးကိုယ်တာ အကာအကွယ်ပစ္စည်းများကို ဝတ်ဆင်ပါ။

8. 不要與不相容物一起使用(如強氧化劑)

Do not use along with incompatible material (such as the strong oxidant).

ခြိုင်ခံ့သော ဓာတ်တိုးဆန့်ကျင်ပစ္စည်း (ဥပမာ) နှင့် တွဲဖက် အသုံးမပြုပါနှင့်။

9. 使用相容物質製成的儲存容器,分裝時小心不要噴灑出來

Store with compatible containers. Be careful to prevent splatter when repacking. တွဲဖက်သုံးနိုင်သော ကွန်တိန်နာများဖြင့် သိမ်းဆည်းပါ။ ပြန်လည်ထုပ်ပိုးသည့်အခါ ကွဲအက်ခြင်း မဖြစ် အောင် သတိထားပါ။

10. 所有開啟、傾倒和混合的操作應位於上風處

Any procedure involving opening, dumping and mixing should be in an up-wind area. အဖွင့်၊ စွန့်ပစ်ခြင်းနှင့် ရောနှောခြင်း ပါဝင်သည့် မည်သည့်လုပ်ထုံးလုပ်နည်းမဆို လေဝင်လေထွက် ကောင်းသောနေရာတွင် ဖြစ်သင့်သည်။

11. 不要將受污染的液體倒回原儲存的容器

Do not pour the contaminated liquid back into the original storage containers.

ညစ်ညမ်းသောအရည်ကို မူလသိုလှောင်ပုံးထဲသို့ ပြန်မလောင်းပါနှင့်။

12. 容器要標示,不使用時保持緊密並避免受損

Containers should be labeled. Keep containers tightly closed when not in use and avoid damage.

ကွန်တိန်နာများကို တံဆိပ်တပ်သင့်သည်။ အသုံးမပြုသည့်အခါတွင် ကွန်တိန်နာများကို တင်းတင်း ကျပ်ကျပ် ပိတ်ထားပြီး ထိခိုက်မှုမဖြစ်စေရန်။

13. 使用經認可的可燃性液體儲存容器和調配設備

Use the approved liquid storage containers and mixing equipment.

გင့်ပြုထားသော အရည်သိုလှောင်သည့် ကွန်တိန်နာများနှင့် ရောစပ်သည့် ကိရိယာများကို အသုံးပြုပါ။ 14. 儲存於陰涼(10~40°C)、乾燥、 通風良好以及陽光無法直接照射的地方,遠離熱源、發火源及不相 容物

Store in cool(10~40°C), dry, well-ventilated area. Do not store in direct sunlight. Keep away from heat, source of ignition and incompatible material.

အေးမြသော (10 ~ 40 ဒီဂရီစင်တီဂရိတ်)၊ ခြောက်သွေ့ပြီး လေဝင်လေထွက်ကောင်းသောနေရာတွင် သိမ်းဆည်းပါ။ နေရောင်ခြည် တိုက်ရိက်မထိပါနဲ့။ အပူရှိန်၊ မီးလောင်ရာနေရာနှင့် သဟဇာတ မဖြစ်သော ပစ္စည်းများကို ဝေးဝေးတွင်ထားပါ။

12 - 11 SDS 安全資料表 No.100 2022/07/05

# TACHIA CHEMICAL CO..LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

## 15. 儲存設備應以耐火材料構築

Storage areas should be constructed with fire-proof material.

သိုလှောင်သည့်နေရာကို မီးခံပစ္စည်းဖြင့် ဆောက်လုပ်သင့်သည်။

16. 地板應以不滲透材料構築以免自地板吸收

The floor should be made of non-seeping material to avoid floor absorption.

ကြမ်းပြင်သည် ကြမ်းပြင်ကို စုပ်ယူမှုမှ ကင်းဝေးစေရန် စိမ့်ဝင်သော ပစ္စည်းဖြင့် ပြုလုပ်ထားသင့်သည်။

儲存 Storage : သိုလှောင်ခြင်း။

儲存區與工作區、飲食區或保護設備區應分開。

Work areas and storage areas, catering area or areas of protective equipment should be separated.

အလုပ်နေရာများနှင့် သိုလှောင်ရာနေရာများ၊ အစားအသောက်ကျွေးမွေးသည့်နေရာ သို့မဟုတ် အကာ အကွယ်ပစ္စည်းများ၏ နေရာများကို ခွဲခြားထားသင့်သည်။

2. 儲存區附近應有適當的滅火器和清理溢漏設備。

Storage area should be maintained with fire extinguisher and spill clean-up equipment. သိုလှောင်သည့်နေရာကို မီးသတ်ဆေးဘူးနှင့် ဖိတ်စင်အောင် သန့်ရှင်းရေးကိရိယာများဖြင့် ထိန်းသိမ်း ထားသင့်သည်။

3. 定期檢查儲存容器是否破損或溢漏及儲存物是否過期。

Periodically inspect the storage containers for any damage or spill and product expiration. ပျက်စီးခြင်း သို့မဟုတ် ယိုဖိတ်ခြင်းနှင့် ထုတ်ကုန်သက်တမ်းကုန်ဆုံးခြင်းအတွက် သိုလှောင်သည့် ကွန်တိန်နာများကို အခါအားလျော်စွာ စစ်ဆေးပါ။

4. 檢查所有新進容器是否適當標示並無破損,更換破損容器,並魔時備有備用容器及標籤。
Inspect all newly delivered containers for the appropriate label and no damage. Replace the damage containers. Have a stock of replacement containers and labels readily available for use.

သင့်လျော်သောတံဆိပ်အတွက် အသစ်ပေးပို့ထားသော ကွန်တိန်နာအားလုံးကို စစ်ဆေးပြီး ထိခိုက်မှု မရှိစေပါ။ ပျက်စီးနေသော ကွန်တိန်နာများကို အစားထိုးပါ။ အသုံးပြုရန် အလွယ်တကူ ရနိုင်သော အစားထိုး ကွန်တိန်နာများနှင့် တံဆိပ်များ စတော့ရှယ်ယာများ ထားရှိပါ။

5. 以相容物製成的儲存容器裝溢漏物。

Use compatible storage containers for the spillage.

ယိုဖိတ်မှုများအတွက် တွဲဖက်အသုံးပြုနိုင်သော သိုလှောင်မှုကွန်တိန်နာကို အသုံးပြုပါ။

6. 儲存區使用接地、不產生火花的通風系統,核可防爆設備及安全的電器系統。

12 - 12 SDS 安全資料表 No.100 2022/07/05

# TACHIA CHEMICAL CO..LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

Use grounded and non-sparking ventilation system in the storage area. The storage area should also have approved explosion-proof equipment and security system. သိုလှောင်ဧရိယာတွင် မြေပြင်နှင့် မီးမလောင်ဘဲ လေဝင်လေထွက်စနစ်ကို အသုံးပြုပါ။ သိုလှောင်သည့် နေရာသည် ပေါက်ကွဲဒဏ်ခံနိုင်သော ကိရိယာများနှင့် လုံခြုံရေးစနစ်တို့လည်း ရှိသင့်သည်။ 7. 限量儲存。

Limit the stored volume. သိမ်းဆည်းထားသော ပမာဏကို ကန့်သတ်ပါ။

# 8、暴露預防措施 Exposure Control/Personal Protection ပေါ် လွင်မှုကိုကြိုတင်ကာကွယ်နည်း

工程控制:必須安裝中央控制式或局部排氣氣裝置。局部排氣較佳,因可就地制發生源 發色增數到其他區域。

Engineering Control: A system of local and/or general exhaust is recommended. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

ထိန်းချုပ်ခြင်း - ဗဟိုနည်းစနစ်ထိန်းချုပ်ပုံစံ(သို့)အစိတ်အပိုင်းလေထုတ်ကိရိယာတပ်ဆင်ရမည်။ အစိတ်အပိုင်းလေ ထုတ်ခြင်းသည် ဖြစ်ပေါ် သောနေရာတွင် ပျံ့ကျဲစေနိုင်သောကြောင့် ဗဟိုထိန်းချုပ် နည်းထက်ပို ကောင်းသည်။

|                                | 控制參數 Control Factor &                | န်းချုပ်မှုအချက်        |                      |
|--------------------------------|--------------------------------------|-------------------------|----------------------|
| 八小時量平均容許濃度                     | 短時間時量平均容許濃度                          | 最高容許濃度                  | 生物指標                 |
| TWA                            | STEL                                 | Ceiling                 | BEIs                 |
| Eight-hour average             | Short amount of time to              | Maximum allowable       | Biological           |
| concentration allowed          | allow the average                    | concentration           | indicators           |
| 8နာရီနှုန်းပျမ်းမျှခွင့်ပြုအပျ | concentration                        | အမြင့်ဆုံးခွင့်ပြုအပျစ် | ဇီဝညွန်ကိန် <u>း</u> |
| စ်နှုန်း                       | အချိန်တိုနှုန်းပျမ်းမျှခွင့်ပြုအပျစ် | శ్లీశ్లీకి              |                      |
|                                | နှုန်း                               |                         |                      |
| 225ppm 環己酮                     | 37.5ppm 環己酮                          |                         | -                    |
| 225ppm Cyclohexanone           | 37.5ppm                              |                         |                      |
|                                | Cyclohexanone                        |                         |                      |

個人防護設備 Personal Protection Equipment:တစ်ကိုယ်ရေကာကွယ်ရေးပစ္စည်းများ

- · 呼吸防護 respiratory protection:
- 1.700ppm 以下:含有機蒸氣濾毒罐的動力型空氣淨化式或全面型化學濾罐式呼吸防護
   具、含有機蒸氣濾罐的防毒面罩、全面型自攜式或供氣式呼吸防護具
- Below 700ppm: Use a full-face piece positive-pressure or air-supplied or self-contained

2 - 13 SDS 安全資料表 No.100 2022/07/05

# TACHIA CHEMICAL CO..LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

respirator or a respirator with organic vapor cartridge.

- 700ppm အောက်တွင်- မျက်နှာအပြည့် အပြုသဘောဆောင်သော ဖိအား သို့မဟုတ် လေဖြင့် ပံ့ပိုးပေးသော သို့မဟုတ် ကိုယ်တိုင်ပါရှိသော အသက်ရှူကိရိယာ သို့မဟုတ် အော်ဂဲနစ် အငွေ့ပုံတောင့် ပါရှိသော အသက်ရှုကိရိယာကို အသုံးပြုပါ။
- 2.未知濃度:正壓自攜式呼吸防護具、正壓全面型供氣式呼吸防護具輔以正壓自攜式呼吸防護具
- Unknown concentration: Use a full-face piece positive-pressure or air-supplied respirator
- အမည်မသိ အာရုံစူးစိုက်မှု- မျက်နှာအပြည့် အပြုသဘောဆောင်သော ဖိအား သို့မဟုတ် လေဖြင့် ပံ့ပိုးထားသော အသက်ရှူကိရိယာကို အသုံးပြုပါ။
- · 手部防護:丁基橡膠、4H、聚乙烯醇等防滲手套。
- · Hand Protection: Butyl rubber, 4H, polyvinyl alcohol, and other impervious gloves.
- လက်ကာကွယ်မှု- Butyl ရာဘာ၊ 4H၊ ပေါ် လီဗီနိုင်အယ်လ်ကိုဟော၊ နှင့် အခြားရေစိုခံလက်အိတ်များ
- 眼睛防護:化學安全護目鏡、護面罩。
- · Eye Protection: Safety eyeglasses or goggles or full-face shield.
- · မျက်လုံးအကာအကွယ်- ဘေးကင်းရေးမျက်မှန် သို့ပောုတ် မျက်မှန် သို့ပောုတ် မျက်နှာအပြည့် အကာ။
- 皮膚及身體防護:皮膚及身體防護:化學防護衣、手套、工作鞋
- Skin & Body Protection: Wearing chemical impervious protective gloves or whole-body
  suit
- အရေပြားနှင့် ခန္ဓာကိုယ်ကာကွယ်မှု- ဓာတုမပျက်စီးအောင် အကာအကွယ်လက်အိတ်များ သို့မဟုတ် တစ်ကိုယ်လုံးဝတ်စုံကို ဝတ်ဆင်ပါ။

衛生措施:工作後、進食前洗手。儘速脫掉污染之衣物並放在密閉容器內,洗淨後才可再 穿戴或丟棄,且須告知洗衣人員污染物之危害性。

Hygiene Procedures: Wash at the end of each wok shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Contaminated clothing to be placed in closed container until disposal or decontamination. Warn cleaning personnel of chemical's hazardous properties

သန့်ရှင်းရေးလုပ်ဆောင်ချက်များ။ wok shift တစ်ခုစီတိုင်း၏အဆုံးတွင်၊ အစာမစားဖီ၊ ဆေးလိပ် သောက်ခြင်းနှင့် အိမ်သာကို အသုံးမပြုမီ ဆေးကြောပါ။ ညစ်ညမ်းနေသော အဝတ်အစားများကို ချက်ချင်းဖယ်ရှားပါ။ ညစ်ညမ်းသော အဝတ်အစားများကို စွန့်ပစ်ခြင်း သို့မဟုတ် ညစ်ညမ်းစေသည်အထိ အလုံပိတ်ကွန်တိန်နာတွင် ထားရှိရမည်။ ဓာတုပစ္စည်းများ၏ အန္တရာယ်ရှိသော ဂုဏ်သတ္တိများကို သန့်ရှင်းရေးဝန်ထမ်းများအား သတိပေးပါ။

12 - 14 SDS 安全資料表 No.100 2022/07/05

# TACHIA CHEMICAL CO.,LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

## 9、物理及化學性質 Physical and Chemical Properties/Characteristics

# ရူပဗေဒနှင့်ဓာတုဗေဒဂုဏ်သတ္တိ

| 外觀:膏狀液體,顏色依編號而不同                           | 信吐・右継波劇的信吐                                |
|--|---|
| Appearance: Liquid paste, color depending  |   |
| on item number                             | အနံ့- သာမာန် အော်ဂဲနစ်ပျော်ရည်            |
| အသွင်အပြင်- ပစ္စည်းနံပါတ်ပေါ် မူတည်၍       |   |
| အရည်ငါးပိ၊ အရောင်                          |   |
| 嗅覺閾值:0.06~100ppm(偵測)、                      | 熔點:-                                      |
| 0.12~55ppm( 察 覺 ) Olfactory threshold:     | Melting point:-                           |
| 0.06~100ppm (Instrument detection),        | ပျော်ရည်အမှတ်။                            |
| 0.12~55ppm (Olfaction detection) Olfactory |   |
| အဆင့်- 0.06~100ppm (ကိရိယာ ထောက်လှမ်းမှု), |   |
| 0.12~55ppm (Olfaction detection)           |   |
| pH 值:-                                     | 沸點/沸點範圍:157°C                             |
| pH value: -                                | Boiling Point/Boiling Range: 157℃         |
| 分解温度:-                                     | 閃火點:44℃                                   |
| Decomposition Temperature: -               | 測試方法: ()開杯 (V)閉杯                          |
| 易燃性(固體,氣體):-:                              | Flash Point: 44℃                          |
| Flammable (solid, gas):-                   | Test Method: ( ) Open Cup (V) Close Cup   |
| 自燃温度:480℃                                  | 爆炸界限:-1.3%~15.6%                          |
| Spontaneous Temperature: 480°C             | Explosive Limits: 1.3% ~ 15.6%.           |
|  | ပေါက်ကွဲမှုကန့်သတ်ချက်။ 1.3% ~ 15.6%      |
| 蒸氣壓:77.5mmHg @ 20℃                         | 蒸氣密度: 3.38 (空氣=1)                         |
| Vapor Pressure: 77.5mmHg @ 20℃             | Vapor Density: 3.38 (Air=1.0)             |
| 比重: 0.94~1.2 (水 = 1) 依顏色不同                 | 溶解度:不溶于水                                  |
| Specific Gravity: 0.94 - 1.2 (Water=1)     | Solubility in Water: Insoluble            |
| Depending on item number.                  | ရေတွင်ပျော်ဝင်နိုင်မှု- မပျော်ဝင်နိုင်ပါ။ |
| တိကျသောဆွဲငင်အား- 0.94 - 1.2 (ရေ=1)        |   |
| ပစ္စည်းနံပါတ်ပေါ် မူတည်.                   |   |
| 辛醇/水分配係數:                                  | 揮發速率: - 0.29                              |
| 111.11.11.11.11.11.11.11.11.11.11.11.11    | Ly.                                       |

12 - 15 SDS 安全資料表 No.100 2022/07/05

# TACHIA CHEMICAL CO.,LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

| Log Kow: | Vaporization Rate: - 0.29 |  |
|----------|---------------------------|--|
|          | လွှင့်ပြန်နှုန်း -        |  |

# 10、安定性及反應性 Stability and Reactivity တည်ငြိမ်ဓာတ်နှင့်တုံ့ပြန်သတ္တိ

安定性:正常儲存或操作下呈安定狀態。

Stability: Stable under ordinary conditions of use and storage.

တည်ငြိမ်ဓာတ် - သာမာန်အခြေအနေအောက်တွင် တည်ငြိမ်သည်၊

特殊狀況下可能之危害反應:

Possible Hazardous Reaction under Special Conditions:

အထူးအခြေအနေများအောက်တွင် ဖြစ်နိုင်သော အန္တရာယ်ရှိသော တုံ့ပြန်မှု-

正常狀況下安定,在長期暴露於空氣或受熱下,則可能爆炸,故應避開火焰、火花、靜電、熱及其他引火源。

It's stable under normal conditions. Since prolonged exposure to air or heat may cause explosion, it should be kept away from flame, sparks, static electricity, heat and other ignition sources.

၎င်း၏ပုံမှန်အခြေအနေအောက်တွင်တည်ငြိမ်သည်။ လေ သို့မဟုတ် အပူကို ကြာရှည်စွာ ထိတွေ့ခြင်း ကြောင့် ပေါက်ကွဲစေတတ်သောကြောင့် မီးတောက်များ၊ မီးပွားများ၊ ငြိမ်လျှပ်စစ်၊ အပူနှင့် အခြား မီးလောင်ရာနေရာများမှ ဝေးဝေးနေသင့်သည်။

2. 氧化劑(如過氧化物、硝酸鹽、過氯酸鹽): 增加火災、爆炸的危險。

Oxidants (for example, peroxide, nitrate, perchlorate): Increase chances of fire and explosion.

အောက်ဆီဂျင်များ (ဥပမာ၊ ပါအောက်ဆိုဒ်၊ နိုက်ထရိတ်၊ ပါကလိုရတ်)- မီးနှင့် ပေါက်ကွဲနိုင်ခြေကို တိုးမြင့်စေသည်။

3. 強酸, 強鹼: 引起反應並產生熱及壓力

Reaction with strong acid and strong alkali will produce heat and pressure.

ပြင်းထန်သော အက်ဆစ်နှင့် ပြင်းထန်သော အယ်လကာလီတို့ တုံ့ပြန်မှုသည် အပူနှင့် ဖိအားကို ဖြစ်ပေါ်စေသည်။

應避免之狀況:避開過熱、火焰、火花、靜電及其他引火源。避免和不相容物質共存 Conditions to Avoid: Avoid overheating, Should be kept away from flame, sparks, static electricity, other ignition sources and incompatible materials.

ရှောင်ကြဉ်ရမည့်အခြေအနေများ- အပူလွန်ကဲခြင်းကို ရှောင်ကြဉ်ပါ၊ မီးတောက်များ၊ မီးပွားများ၊ တည်ငြိမ်လျှပ်စစ်ဓာတ်၊ အခြားသော မီးပွားအရင်းအမြစ်များနှင့် ကိုက်ညီမှုမရှိသော ပစ္စည်းများနှင့်

12 - 16 SDS 安全資料表 No.100 2022/07/05

# TACHIA CHEMICAL CO..LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

ဝေးဝေးတွင် ထားသင့်သည်။

應避免之物質: 強酸、含氯化溶劑、強鹼、氧化劑

Incompatibility: Strong acid, chlorinated solvent, strong alkali and oxidants.

မလိုက်ဖက်နိုင်မှု- ပြင်းထန်သော အက်ဆစ်၊ ကလိုရင်းပါသော ပျော်ရည်၊ ပြင်းထန်သော အယ်လကာ လီနှင့် ဓာတ်တိုးဆန့်ကျင်ပစ္စည်းများ။

危害分解物:-

Hazardous Decomposition Products: -

အန္တရာယ်ရှိသော ပျက်စီးယိုယွင်းနေသော ထုတ်ကုန်များ-

## 11、毒性資料 Toxicological Information အဆိပ်ဓာတ်အချက်အလက်

暴露途徑: 吸入、皮膚接觸、眼睛接觸、食入

Exposure means: Inhalation, skin contact, eye contact, ingestion.

ထိတွေ့ခြင်းဆိုသည်မှာ ရှူသွင်းခြင်း၊ အရေပြားထိတွေ့ခြင်း၊ မျက်လုံးချင်းဆုံခြင်း၊

症狀:頭痛、噁心、頭暈、嗜睡、精神混淆、喪失意識、刺激眼睛和皮膚

Symptoms: Headache, nausea, dizziness, drowsiness, mental confusion, loss of

consciousness, Irritation or thermal burns of skin and eyes.

လက္ခဏာများ- ခေါင်းကိုက်ခြင်း၊ ပျို့အန်ခြင်း၊ မူးဝေခြင်း၊ အိပ်ငိုက်ခြင်း၊ စိတ်ရှုပ်ထွေးခြင်း၊ သတိလစ်

ခြင်း၊ ယားယံခြင်း သို့မဟုတ် အရေပြားနှင့် မျက်လုံးများ အပူလောင်ခြင်းများ။

急毒性 Acute: စူးရသည်။

皮膚 Skin Contact:အရေပြားနှင့်ထိတွေ့ခြင်း။

1. 其液體會造成中度至嚴重的刺激,視濃度而定。

The liquid can cause moderate to severe irritation, depending on the concentration.

အရည်သည် ပြင်းအားပေါ် မူတည်၍ အလယ်အလတ်မှ ပြင်းထန်သော ယားယံမှုကို ဖြစ်စေနိုင်သည်။

2. 會經皮膚吸收引起抑制中樞神經系統的症狀如吸入所述。

Will be absorbed by skin and cause some central nervous system symptoms like which described in inhalation.

အရေပြားမှ စုပ်ယူခံရပြီး ရှူရိုက်မှုတွင် ဖော်ပြထားသည့် တူညီသော ဗဟိုအာရုံကြောစနစ် လက္ခဏာများ ဖြစ်ပေါ်စေမည်ဖြစ်သည်။

吸入 Inhalation : ရူရှိုက်မိခြင်း။

1. 暴露時間 3~5 分鐘,75ppm 會刺激鼻子和喉嚨,50ppm 會刺激喉嚨,25ppm 沒有感覺 Exposure time from 3 to 5 minutes, 75ppm: cause nose and throat irritation. 50ppm: cause throat irritation. 25ppm: no symptom.

12 - 17 SDS 安全資料表 No.100 2022/07/05

# TACHIA CHEMICAL CO..LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

ထိတွေ့ချိန် ၃ မိနစ်မှ ၅ မိနစ်၊ 75ppm- နှာခေါင်းနှင့် လည်ချောင်းများ ယားယံစေသည်။ 50ppm -လည်ချောင်းယားယံစေတယ်။ 25ppm: ရောဂါလက္ခဏာမရှိပါ။

2. 高濃度蒸氣會引起抑制神經系統,如頭痛、噁心、頭暈、嗜睡和精神混淆

High concentrations of vapor will cause nervous system depression, such as headache, nausea, dizziness, lethargy and mental confusion.

အခိုးအငွေ့ပါဝင်မှု မြင့်မားခြင်းသည် ခေါင်းကိုက်ခြင်း၊ ပျို့အန်ခြင်း၊ မူးဝေခြင်း၊ ထုံထိုင်းခြင်းနှင့် စိတ်ရှုပ် ထွေးခြင်းကဲ့သို့သော အာရုံကြောစနှစ်ကို စိတ်ဓာတ်ကျစေပါသည်။

3. 非常高濃度可能引起喪失意識和死亡

Very high concentrations may cause loss of consciousness and death

အလွန်မြင့်မားသော အာရုံစူးစိုက်မှုသည် သတိလစ်ခြင်းနှင့် သေဆုံးခြင်းတို့ကို ဖြစ်စေနိုင်သည်။

食入:大量食人可能引起抑制中樞神經系統的症狀如吸入所述

Ingestion: High volume ingestion can cause central nervous system symptoms as caused by inhalation.

စားသုံးမိခြင်း- ပမာဏများသော စားသုံးမိခြင်းသည် ရှူရိုက်မိခြင်းကြောင့် ဖြစ်ရသည့် ဗဟိုအာရုံကြော စနစ်ကို လက္ခဏာများ ဖြစ်စေနိုင်သည်။

眼睛 Eye Contact:မျက်လုံးနှင့်ထိတွေ့မိခြင်း။

1.濃度>15%的溶液會引起嚴重及腐蝕性的眼睛傷害,可能導致永久傷害或失明。濃度<10%可能引起輕微刺激

Concentration over 15% will cause serious and corrosive eye damage and can lead to permanent injury or blindness. Concentration less than 10% may cause irritation.

အာရုံစူးစိုက်မှု 15% ထက်ပိုပါက ပြင်းထန်ပြီး အဆိပ်သင့်သော မျက်လုံးကို ပျက်စီးစေပြီး အမြဲတမ်း ထိနိုက်ဒဏ်ရာရခြင်း သို့မဟုတ် မျက်စိကွယ်ခြင်းအထိ ဖြစ်စေနိုင်သည်။ အာရုံစူးစိုက်မှု 10% ထက်နည်း ပါက ယားယံစေနိုင်သည်။

2.蒸氣會刺激眼睛

Vapor can cause eyes irritation. အငွေ့သည် မျက်လုံးကို ယားယံစေနိုင်သည်။

LD50(測試動物、吸收途徑) : 1535mg/kg (大鼠, 吞食); 948 mg/kg(兔子, 皮膚)--環己酮

LD50 (animal testing, the absorption means):1535mg/kg (rats, devour);948mg/kg (rabbits, skin) - Cyclohexanone

LC50(測試動物、吸收途徑) :8000ppm/4H (大鼠, 吸入) --環己酮

500mg (兔子,皮膚)造成輕微刺激--環己酮

20mg (兔子,眼睛)造成嚴重刺激--環己酮

LC50 (animal testing, absorption means): 8000ppm/4H (rat, inhalation) - Cyclohexanone

12 - 18 SDS 安全資料表 No.100 2022/07/05

# TACHIA CHEMICAL CO..LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

500mg ( rabbit , skin ), Moderate irritation-- Cyclohexanone

20mg (rabbit, eyes), Serious irritation.—Cyclohexanone

LC50 (တိရစ္ဆာန်စမ်းသပ်မှု၊ စုပ်ယူမှုဆိုသည်မှာ- 8000ppm/4H (ကြွက်၊ ရှူသွင်းခြင်း) -- Cyclohexanone

500mg (ယုန်၊ အရေပြား)၊ အလွန်အမင်း ယားယံခြင်း-- Cyclohexanone

20mg (ယုန်၊ မျက်လုံး)၊ ပြင်းထန်စွာ ယားယံခြင်း။-- Cyclohexanone

慢毒性或長期毒性:-

Chronic: -

အနှေးအဆိပ်(သို့)ကြာရှည်အဆိပ်ဓာတ်

1. 其液體為脫脂劑,長期暴露可能造成皮膚炎。

This ink is a degreasing agent. Long-term exposure may cause dermatitis

ဤမှင်သည် အဆီပြန်ဆေးဖြစ်သည်။ ရေရှည်ထိတွေ့ခြင်းက အရေပြားရောင်ရမ်းခြင်းကို ဖြစ်စေနိုင်ပါ တယ်။

2. 可能傷害腎臟。

May cause kidneys damage.

ကျောက်ကပ်ကို ပျက်စီးစေနိုင်ပါတယ်။

3. 白血球數會降低。

White blood cell count may decrease.

သွေးဖြူဥအရေအတွက် လျော့နည်းသွားနိုင်သည်။

11gm/Kg(懷孕 8-12 天雌鼠,吞食)造成新生鼠中毒

11gm/Kg (female rat of 8-12 days pregnancy, swallowed) resulted in neonatal rat poisoning

11gm/Kg (ကိုယ်ဝန် 8-12 ရက်အတွင်း ကြွက်အမ၊ မျိုချ) ကြောင့် မွေးကင်းစကြွက်အဆိပ်သင့်ခြင်း၊

IARC 將其列為 Group 3: 無法判斷為人體致癌性

IARC: classified as Group 3: human carcinogenicity cannot be judged

IARC- အုပ်စု 3 အဖြစ် သတ်မှတ်ထားသည်- လူတွင် ကင်ဆာဖြစ်နိုင်ခြေကို အကဲဖြတ်၍ မရပါ။

ACGIH 將之列為 A4: 無法判斷為人類致癌性

ACGIH: classified as A4: human carcinogenicity cannot be judged

ACGIH- A4 အဖြစ် ခွဲခြားထားသည်- လူတွင် ကင်ဆာဖြစ်စေနိုင်မှုကို မစီရင်နိုင်ပါ။

# 12、生態資料 Ecological Information ചാാാരാമച്ചന്മാന്

生態毒性 Eco-toxicity:

LC50(魚類): 1690-5640 mg/1/96H LC50 (fish): 1690-5640 mg/1/96H

12 - 19 SDS 安全資料表 No.100 2022/07/05

# TACHIA CHEMICAL CO..LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

EC50(水生無脊椎動物):- EC50 (aquatic invertebrates):-

生物濃縮系數(BCF):1 BCF: 1

持久性及降解性 Persistence and degradability:စွဲမြဲမှုနှင့် ဆုတ်ယုတ်မှု

1. 當釋放至大氣中,預期會與氣氧自由基反應,半衰期為 1~2 天。

When released into the atmosphere, it will react with hydroxyl free radical. Its half-life is

လေထုထဲသို့ လွှတ်လိုက်သောအခါ၊ ၎င်းသည် ဟိုက်ဒရော့စ်ဖရီးရယ်ဒီကယ်နှင့် ဓာတ်ပြုမည်ဖြစ်သည်။ ၎င်း၏တစ်ဝက်သက်တမ်းသည် 1 ~ 2 ရက်ဖြစ်သည်။

2.當此化合物排放到水中亦可經水面揮發到大氣中。

When released to water, it will evaporate to the air.

ရေသို့လွှတ်လိုက်သောအခါ လေထဲသို့ အငွေ့ပျံသွားမည်ဖြစ်သည်။

3.此物質可經生物分解,其分解速率大約在20 天之內可分解掉80%。

This substance is biodegradable. 80% of it will be decomposed in 20 days.

ဤအရာသည် ဇီဝဖြစ်စဉ်ကို ချေဖျက်နိုင်သည်။ 80% သည် ရက် 20 အတွင်း ပြိုကွဲသွားလိမ့်မည်။

半衰期(空氣):24~642 小時 Half-life (air):24~642 hours

半衰期(水表面):24~8720 小時 Half-life (water surface): 24~8720 hours

半衰期(地下水):48~336 小時 Half-life (groundwater): 48~336 hours

半衰期(十壤):24~168 小時 Half-life (soil): 24~168 hours

生物蓄積性:不太可能蓄積。

Bioaccumulation: The accumulation is unlikely.

Bioaccumulation- စုဆောင်းမှုသည် မဖြစ်နိုင်ပါ။

土壤中之流動性:當釋放至土壤中,預期會揮發及進行生物分解。

The mobility in soil: When released to soil, is expected to vaporize and be biodegradable.

မြေဆီလွှာအတွင်း ရွေ့လျားနိုင်မှု- မြေဆီလွှာသို့ စွန့်ထုတ်သောအခါတွင် အငွေ့ပျံပြီး ဇီဝရုပ်ကြွင်းဖြစ်ရန် မျှော်လင့်သည်။

其他不良效應:對水中生物有害。

Other harmful effects: Harmful to aquatic life.

အခြားအန္တရာယ်ရှိသောသက်ရောက်မှုများ- ရေနေသတ္တဝါများကို အန္တရာယ်ဖြစ်စေသည်။

# 13、廢棄處置方法 Disposal Information စွန့်ပစ်ဆောင်ရွက်နည်းလမ်း

廢棄處置方法:將容器密閉以避免泄漏,並於容器外觀標示清楚為『可燃性液體』,依據『有 害事業廢棄物清理法』交合格的廢棄物清理公司處理。

12 - 20 SDS 安全資料表 No.100 2022/07/05

# TACHIA CHEMICAL CO.,LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563 525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

Disposal Measures: Seal the container tightly to prevent leaking or spilling. Mark clearly "Flammable liquid" on the container. Follow the disposal Regulation of harmful industrial waste. Consign the disposal to a qualified company that handles industrial waste. စွန့်ပစ်ခြင်းအစီအမံများ- ယိုစိန်ခြင်း သို့မဟုတ် ယိုဖိတ်ခြင်းမှ ကာကွယ်ရန် ကွန်တိန်နာကို တင်းတင်း ကျပ်ကျပ် ပိတ်ထားပါ။ ကွန်တိန်နာပေါ် တွင် "မီးလောင်လွယ်သောအရည် ကိုရှင်းလင်းစွာမှတ်သားပါ။ အန္တရာယ်ရှိသော စက်မှုစွန့်ပစ်ပစ္စည်းများ စွန့်ပစ်ခြင်းဆိုင်ရာ စည်းမျဉ်းကို လိုက်နာပါ။ စွန့်ပစ်ပစ္စည်းများကို စက်မှုလုပ်ငန်းသုံး စွန့်ပစ်ပစ္စည်းများကို ကိုင်တွယ်သည့် အရည်အချင်းပြည့်မိသော ကုမ္ပဏီထံ ပေးပို့ပါ။

# 14、運送資料 Transport Information သယ်ယူပို့ဆောင်အချက်အလက်

聯合國編號: UN1210

The United Nations Number (Un-No): UN1210

聯合國運輸名稱:油墨

International Transport Name: Ink

運輸危害分類:第三類易燃液體

Hazard Class: 3rd grade (Flammable liquid)

包裝類別:Ⅲ Packing Group: Ⅲ

海洋污染物(是/否):否

Marine pollutants (Yes / No): No

特殊運送方法及注意事項:

Special Transport Way and Note:

ထူးခြားပို့ဆောင်နည်းလမ်းနှင့်သတိထားရန်-

# 15、法規資料 Regulation Information ဥပဒေအချက်အလက်များ

適用法規:

Application of Regulation:

အသုံးတည့်သောဥပဒေ-

職業安全衛生設施規則

Occupational Safety and Hygiene Regulation

လုပ်ငန်းလုံခြုံမှုသန့်ရှင်းရေးတပ်ဆင်ပစ္စည်းသတ်မှတ်ချက်

危害性化學品標示及通識規則

Regulation of labelling and Hazard Communication of Hazardous Chemicals.

Exposure Concentration Allowance Standard for Workplace.

အန္တရာယ်ရှိဓာတုဝတ္ထုသင်္ကေတနှင့်အသိပညာသတ်မှတ်ချက်

Toxication Prevention Regulation for Organic Solvent

<sup>®</sup>ဝပျော်ရည်အဆိပ်သင့်ကြိုတင်ကာကွယ်သတ်မှတ်ချက်

道路交通安全規則

Traffic Safety Regulation

有機溶劑中毒預防規則

作業場所容許暴露標準

လမ်းပန်းဆက်သွယ်လုံခြုံသောသတ်မှတ်ချက်

事業廢棄物貯存清除處理方法及設施標準

Storage & Disposal Procedures and Facility Standard for Industrial Waste

လုပ်ငန်းစွန့်ပစ်အရာထားသိုခြင်းရှင်းလင်းဆောင်ရွက်နည်းလမ်းနှင့်တပ်ဆင်ပစ္စည်းစံနှုန်းသတ်မှတ်ချက်

TACHIA CHEMICAL CO..LTD.

TEL: (886)4-2687-1012 FAX: (886)4-2687-5563

525, Section 1, Chung-Sun Rd., Tachia 43707, Taiwan, R.O.C.

# 16、其他資料 Other Information အခြေားအချက်အလက်များ

| 參考文獻               | -                               |                |            |                  |        |      |
|--------------------|---------------------------------|----------------|------------|------------------|--------|------|
| Reference          |                                 |                |            |                  |        |      |
| ကိုးကားချက်        |                                 |                |            |                  |        |      |
|                    | 名稱:大甲                           | 化工實業(股)公司      | ij         |                  |        |      |
| thirefore type (). | Name: Tachia Chemical Co., Ltd. |                |            |                  |        |      |
| 製表者單位<br>Make Unit | 地址/電話:                          | 台中市大甲區中        | 山路一段 525   | 5 號 (886)4-26871 | 012    |      |
| make onic          | Addresses/P                     | hone: 525, Sec | . 1, Chung | Sun Rd., Tachia, | Taiwan | TEL: |
|                    | (886)4-2687                     | 1012           |            |                  |        |      |
| 製表人                | 職稱:總經                           | 理              | 姓名:        | 薛翰聲              |        |      |
| Make People        | Professional                    | Post: General  | Name       | : Michael Junior |        |      |
|                    | Manager                         |                |            |                  |        |      |
| 製表日期               | 2022/07/05                      |                |            |                  |        |      |
| Make Date          | 2022/01/03                      |                |            |                  |        |      |
| 文件編號               | 100                             | 版次             | 12         | 文件類別             |        |      |
| Document No.       | 100                             | Version        | 12         | Document type    |        |      |

12 - 21 SDS 安全資料表 No.100 2022/07/05

## Water-based Three-Dimensional Goal Oil

#### DONGYING INK AND PAINT MANUFACTURING FACTORY.

TEL: 867-769-85889836/86-769-85034269

Address: Chenwu Management area, Houjie Town, Dongguan City, Guangdong 安全資料表

# Safety Data Sheet (ကုန်ပစ္စည်းလုံခြုံရေးအချက်အလက်ဖယား)

1、化學品名稱與廠商資料 Identification of the substance / preparation and company

# ကုန်ပစ္စည်းအမည်နှင့်ပေးသွင်းသူအမည်

化學品名稱:Water-based thick plate three-dimensional metallic oil (水性厚板立体金油)

Chemicals Name: Water-based thick plate three-dimensional metallic oil

ကုန်ပစ္စည်းအမည် : ရေဆေး

其他名稱:水性厚板立体金油

Other Name: Water-based

အခြားအမည်။ ။ ရေဆေး

製造者、輸入者或供應者名稱、地址及電話 Names, addresses, and phone numbers of the

manufacturer, importer or supplier.

东营市油墨涂料制造厂

DONGYING Ink and Paint Manufacturing Factory

Chenwu Management area, Houjie Town, Dongguan City, Guangdong

緊急連絡電話/傳真電話 Emergency Phone / Fax: 867-769-85889836/86-769-85034269 ထုတ်လုပ်စက်ရုံအမည်၊ လိပ်စာနှင့်ဖုန်းနံပါတ် :DONGYING Ink and Paint Manufacturing Factory

Chenwu Management area, Houjie Town, Dongguan City, Guangdong 867-769-85889836

/86-769-85034269

#### DONGYING INK AND PAINT MANUFACTURING FACTORY.

TEL: 867-769-85889836/86-769-85034269

Address: Chenwu Management area, Houjie Town, Dongguan City, Guangdong

2 • 危害辨識資料 Hazard Identification အန္တရာယ်ရှိသောအချက်အလက်များခွဲခြားခြင်း။

仆學品份害分類:可燃性:相邻容器上有 UN 1133 标签(易燃液体),表明该产品可能储存 在易燃材料附近或与易燃材料一起,存在潜在危险。

Chemicals hazard Class: Flammability: The presence of a UN 1133 label (Flammable Liquid) on the adjacent container suggests this product might be stored near or with flammable materials, indicating some potential hazard.

ဓာတ္မအန္တရာယ် အမျိုးအစား- မီးလောင်လွယ်ခြင်း- ကပ်လျက်ကွန်တိန်နာတွင် UN 1133 အညွှန်း (Flammable Liquid) ရှိနေခြင်းသည် ဤထုတ်ကုန်ကို မီးလောင်လွယ်သောပစ္စည်းများနှင့် အနီးအနား တွင် သိမ်းဆည်းထားနိုင်ပြီး ဖြစ်နိုင်ခြေအန္တရာယ်အချို့ကို ညွှန်ပြနေပါသည်။

Index contents ညွှန်ပြထားသောအကြောင်းအရာ

象徵符號

Symbol: သင်္ကေတ







Signal word: Danger သတိပေးသင်္ကေတ -အန္တရာယ်ရှိသည်

危害警告訊息:高度易燃液體和蒸氣、吞食有害、吸入有害、皮膚接觸有害、造成嚴重眼睛

Harmful warning: Highly flammable liquid and vapor. Harmful if swallowed. Harmful if inhaled. Harmful in contact with skin. Causes serious eye irritation.

အန္တရာယ်ရှိသော သတိပေးချက်- မီးလောင်လွယ်သော အရည်နှင့် အငွေ့။ မျိုချမိလျှင် အန္တရာယ်ရှိသည်။ ရှုမိလျှင် ယားယံနိုင်ပါသည်။ အရေပြားနဲ့ ထိတွေ့မိလျှင် ယားယံနိုင်ပါသည်။ ပြင်းထန်သော မျက်လုံး ယားယံခြင်းကို ဖြစ်စေသည်။

危害防範措施:置容器於通風良好的地方、遠離引燃品-禁止吸煙、若覺得不適則冷詢醫療 避免長期暴露.

Hazardous Prevention: Place containers in a ventilated place, Keep away from sources of ignition-No smoking · If feeling ill, seek medical attention; Avoid long-term exposure. ကွန်တိန်နာများကို လေဝင်လေထွက်ကောင်းသော နေရာတွင် ထားပါ၊ မီးလောင်ကျွမ်းမှု အရင်းအမြစ် များနှင့် ဝေးဝေးတွင်ထားပါ- ဆေးလိပ်မသောက်ရ၊ နေမကောင်းဖြစ်လျှင် ဆေးကုသမှုခံယူပါ။ ရေရှည် ထိတွေ့မှုကို ရောင်ကြဉ်ပါ။

#### DONGYING INK AND PAINT MANUFACTURING FACTORY.

TEL: 867-769-85889836/86-769-85034269

Address: Chenwu Management area, Houjie Town, Dongguan City, Guangdong

3、成份辨識資料 Composition / Information on Ingredients ပါဝင်သောပစ္စည်းအချက်အလက်များ

Ingredients: Include water-based, metallic pigments, and other additives.

成分:包括水性、金属颜料、及其他添加剂。

ရေနှင့် အရောင်မရှိသော အော်ဂဲနစ်ဒြပ်ပေါင်းများ၊ ရောင်ခြယ်ပစ္စည်းများနှင့် အခြားပါဝင်ပစ္စည်းများဖြင့်

ဖွဲ့စည်းထားပါသည်။

| 成份类別<br>Categories<br>အမျိုးအစား | 成份名称<br>Composition name<br>ပါဝင်သည့်အမည် | CAS NO          | 比例 Proportion |
|----------------------------------|---|-----------------|---------------|
| 稀释剂<br>Diluents                  | 7 <b>K</b><br>water                       | 7732-18-5       | 2-5%          |
| 树脂                               | 水性乙酸乙烯酯<br>Aqueous vinyl acetate          | 24937-78-8      | 20-25%        |
| Resin                            | 水性聚氨酯树脂<br>polyurethane resin             | 9009-54-5       | 70-80%        |
|                                  | 增稠剂<br>Thickening agent                   | 900-28-6        | 2%            |
| 助剂<br>Additive                   | 乙二醇<br>ethylene glycol                    | <u>107-21-1</u> | 1.5-3%        |
|                                  | 消泡剂<br>defoamer                           | 9006-65-9       | 2-3%          |
| 填料<br>filler                     | 二氧化硅<br>Cristobalite                      | 14464-46-1      | 2-3%          |
| 合计 Sum                           |   |                 | 100%          |

4、急救措施 First Aid Measures:အရေးပေါ် ကယ်ဆယ်နည်း

不同暴露途徑之急救方法 Emergency and First Aid Procedures:

12 - 3 SDS 安全資料表 Water-based 2024/07/01

## DONGYING INK AND PAINT MANUFACTURING FACTORY.

TEL: 867-769-85889836/86-769-85034269

Address: Chenwu Management area, Houjie Town, Dongguan City, Guangdong

အရေးပေါ် ကယ်ဆယ်နည်း

(a) 眼睛接触:用水小心冲洗几分钟。如果戴隐形眼镜且容易取下,请取下。继续冲洗。如果刺激按缝,请对医。

果刺激持续,请就医。 Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention if irritation persists.

မျက်လုံးထိတွေ့ခြင်း- မိနစ်အနည်းငယ်ကြာအောင် ရေဖြင့်သတိထားပြီး ဆေးကြောပါ။ မျက်ကပ်မှန် ပါရှိ၍ ပြုလုဝ်ရလွယ်ကူပါကဖြုတ်ပါ။ ဆက်လက်ဆေးကြောပါ။ ယားယံမှုဆက်ရှိနေပါက ဆေးကုသမှု ခံယူပါ။

(j) 皮肤接触:用肥皂和水清洗。脱掉受污染的衣服并彻底冲洗皮肤。如果刺激加剧,请就 医。

Skin Contact: Wash with soap and water. Remove contaminated clothing and rinse skin thoroughly. Seek medical attention if irritation develops.

အရေပြားထိတွေ့ခြင်း- ဆပ်ပြာနှင့် ရေဖြင့် ဆေးကြောပါ။ ညစ်ညမ်းနေတဲ့ အဝတ်အစားတွေကို ဖယ်ရားပြီး အရေပြားကို သေချာဆေးကြောပါ။ ယားယံမှုဖြစ်လာပါက ဆေးကုသမွှခံယူပါ။

(२) 吸入:将患者移至新鲜空气处。如果呼吸困难,请提供氧气。如果症状持续,请就医。 Inhalation: Move the person to fresh air. If breathing is difficult, provide oxygen. Seek medical attention if symptoms persist.

ရှူသွင်းမိခြင်း- ရှူရိုက်မိလျှင် လူကို လေကောင်းလေသန့်သို့ ရွှေပါ။ အသက်ရှုကျပ်လျှင် အောက်ဆီဂျင် ပေးပါ။ ရောဂါလက္ခဏာများ ဆက်ရှိနေပါက ဆေးကုသမှုခံယူပါ။

(c) 食入:不要催吐。用水漱口。立即就医。

Ingestion: Do not induce vomiting. Rinse mouth with water. Seek immediate medical attention.

စားသုံးခြင်း- အော့အန်ခြင်းကို မဖြစ်စေရ။ ပါးစပ်ကို ရေနဲ့ဆေးပါ။ ဆေးကုသမှု ချက်ချင်းခံယူပါ။

(n)對急救人員之防護:戴防護手套,以免接觸污染物。

First-Aid Personal Protection: Wear Protective gloves to prevent contact with contaminated materials.

ရှေးဦးသူနာပြုစုခြင်း ကိုယ်ရေးကိုယ်တာ အကာအကွယ်- ညစ်ညမ်းသောပစ္စည်းများနှင့် မထိတွေ့စေရန် အကာအကွယ်လက်အိတ်များ ဝတ်ဆင်ပါ။

對醫師之提示: 小量食入時不需洗胃,大量食入時因可能經由陽胃吸收而中毒,建議洗胃。 Suggestions to Physician: If small ingestions, the gastric lavage is not recommended. If larger ingestions, it may cause toxication by gastrointestinal absorption and gastric lavage is

12 - 4 SDS 安全資料表 Water-based 2024/07/01

#### DONGYING INK AND PAINT MANUFACTURING FACTORY.

TEL: 867-769-85889836/86-769-85034269

Address: Chenwu Management area, Houjie Town, Dongguan City, Guangdong သမားတော်အား အကြံပြုချက်- သေးငယ်သော စားသုံးမိပါက အစာအိမ်ဆေးကြောခြင်းကို အကြံပြု ထားခြင်း မရှိဘဲ စားသုံးမိပါက အစာအိမ်အူလမ်းကြောင်းမှ စုပ်ယူမှုနှင့် အစာအိမ်ဆေးကြောခြင်းကြောင့် အဆိပ်ဖြစ်စေနိုင်သည်။

# 5、滅火措施 Fire Fighting Measure: အရေးပေါ်မီးငြှိမ်းသတ်နည်း

適用滅火劑:化學乾粉、泡沫、二氧化碳。

Suitable Extinguishing Media: Dry chemical, foam or carbon dioxide.

သင့်လျော်သောမီးသတ်မီဒီယာ- ခြောက်သွေ့သောဓာတု၊ အမြှုပ် သို့မဟုတ် ကာဗွန်ဒိုင်အောက်ဆိုဒ်။ 滅火時可能遭遇之特殊危害: 選高溫或燃燒可能會分解出二氧化碳、一氧化碳及其他有毒

氣體、密閉的桶子遇高溫可能會爆裂。溫度超過閃點,且蒸氣和空氣混合比在爆炸範圍之 內 時會爆炸。

Special Exposure Hazards: Carbon dioxide and carbon monoxide and toxic fumes may be generated under high temperatures. Fire exposed containers may explode. Above flash point, vapor-air mixtures are explosive within flammable limits.

မြင့်မားသောအပူချိန်အောက်တွင် ကာဗွန်ခိုင်အောက်ဆိုဒ်နှင့် ကာဗွန်မိုနောက်ဆိုဒ် နှင့်အဆိပ် အတောက် များကို ထုတ်ပေးနိုင်သည်။ မီးလောင်နေသော ကွန်တိန်နာများ ပေါက်ကွဲနိုင်သည်။ မီးပွိုင့်အထက်တွင် အခိုးအငွေ့-လေအရောအနှောများသည် မီးလောင်လွယ်သည့်ကန့်သတ်ချက်များအတွင်း ပေါက်ကွဲနိုင်သည်။

### 持殊滅火程式:

- 撤退並自安全距離或受保護的地點滅火。
- 2. 位於上風處以避免吸入危險的蒸氣和有毒的分解物。
- 3. 滅火前先阻止溢漏,如果不能阻止溢漏且周圍無任何危險,讓火燒完。
- 隔離未著火物質且保護人員。
- 5 安全体沿下够宏界协能少担。
- 6. 以水霧冷卻暴露火場的容器。
- 7. 以水柱滅火可能無效,除非消防人員受過各種易燃液體之滅火訓練,否則盡可能撤離火場並允許完 Special Extinguishing Procedure:
- 1. Retreat and extinguish the fire from a safe distance or a protected location.
- 2. Locate upwind to avoid inhaling dangerous vapors and toxic decomposition products.
- 3. Stop the leak before extinguishing the fire. If you cannot stop the leak and there is no danger around it, let the fire burn out.
- 4. Isolate unfired material and protect personnel.
- 5. Move the container away from the fire in a safe condition.
- 6. Cool the exposed fire container with water mist.

#### DONGYING INK AND PAINT MANUFACTURING FACTORY.

TEL: 867-769-85889836/86-769-85034269

Address: Chenwu Management area, Houjie Town, Dongguan City, Guangdong

- 7. Fire extinguishing with water jets may not be effective unless the firefighters are trained in fire extinguishing with various flammable liquids. If possible, leave the fire as far as possible and allow the fire to be completed
- . မီးကို ဘေးကင်းသောအကွာအဝေး သို့မဟုတ် အကာအကွယ်ရှိသောနေရာမှ ဆုတ်ခွာပြီး ငြှိမ်းသတ်ပါ။
- 2. အန္တရာယ်ရှိသော အခိုးအငွေ့ များနှင့် အဆိပ်အတောက်များ ပြိုကွဲပျက်စီးနေသော ထုတ်ကုန်များကို ရှူရိုက်မိခြင်းမှ ရောင်ကြဉ်ရန် လမ်းကြောင်းကို ရှာဖွေပါ။
- ခီးမြင်ြိမ်းမီ ယိုစိမ့်မှုကို ရပ်ပါ။ ယိုစိမ့်မှုကို မတားနိုင်ဘဲ ဘေးပတ်ပတ်လည်တွင် အန္တရာယ်မရှိပါက မီးကို လောင်ကျွမ်းပါစေ။
- 4. မီးမရသေးသော ပစ္စည်းများကို သီးခြားခွဲထုတ်ပြီး ဝန်ထမ်းများကို ကာကွယ်ပါ။
- 5. ကွန်တိန်နာကို မီးဘေးကင်းဝေးသော အခြေအနေတွင် ရွှေ့ပါ။
- 6. ထိတွေ့နေသော မီးပုံးကို ရေမှုန်ရေဖြင့် အအေးခံပါ။
- 7. မီးသတ်သမားများသည် မီးလောင်လွယ်သော အရည်အမျိုးမျိုးဖြင့် မီးငြွိမ်းသတ်ရာတွင် လေ့ကျင့် သင်ကြားထားခြင်းမရှိပါက ရေဂျက်လေယာဉ်များဖြင့် မီးသတ်ဆေးဘူးဖြင့် ငြွိမ်းသတ်ခြင်းမှာ ထိရောက်မှု မရှိနိုင်ပါ။ ဖြစ်နိုင်ရင် မီးကို တတ်နိုင်သလောက် ချန်ထားပြီး မီးကို ပြီးအောင်လုပ်ပါ။

消防人員之特殊防護設備:滅火時,配戴含面罩之正壓式或自動供氣式空氣呼吸器及防護 衣。

Special Protection Equipment: In the event of a fire, wear full protective clothing and self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

အထူးကာကွယ်ရေးပစ္စည်း- မီးလောင်မှုဖြစ်ပွားသည့်အခါတွင် ဖိအားတောင်းဆိုမှု သို့မဟုတ် အခြားအပြု သဘောဖိအားမုဒ်တွင် တပ်ဆင်ထားသော မျက်နှာဖုံးအပြည့်အစုံဖြင့် အကာအကွယ် အဝတ်အစားအ ပြည့်အစုံနှင့် အသက်ရှုကိရိယာကို ဝတ်ဆင်ပါ။

# 6、洩漏處理方法 Accidental Release Measures ယိုစိမ့်ဆောင်ရွက်နည်း

# 個人應注意事項 Personal measures:

1. 在污染區尚未完全清理乾淨前,限制人員接近該區。

Isolate hazard area. Keep unnecessary and unprotected personnel from entering before the contaminated area is clean up completely.

အန္တရာယ်ဧရိယာကို သီးခြားခွဲထားပါ။ ညစ်ညမ်းနေသောနေရာကို လုံးဝရှင်းလင်းခြင်းမပြုမီ မလိုအပ် သောနှင့် အကာအကွယ်မဲ့ပုဂ္ဂိုလ်များ ဝင်ရောက်ခြင်းမှ ရှောင်ကြဉ်ပါ။

2. 確定清理工作是由受過訓練的人員負責。

Clean of hazard area should only be administered by qualified personnel.

12 - 5 SDS 安全資料表 Water-based 2024/07/01

12 - 6 SDS 安全資料表 Water-based 2024/07/01

#### DONGYING INK AND PAINT MANUFACTURING FACTORY.

TEL: 867-769-85889836/86-769-85034269

Address: Chenwu Management area, Houjie Town, Dongguan City, Guangdong အန္တရာယ်ရှိသောနေရာကို သန့်ရှင်းအောင် အရည်အချင်းပြည့်မီသော ဝန်ထမ်းများကသာ စီမံခန့်ခွဲသင့်

သည်။

3. 穿戴適當的個人防護裝備。

Wear appropriate personal protective equipment.

သင့်လျော်သော တစ်ကိုယ်ရေ အကာအကွယ်ပစ္စည်းများကို ဝတ်ဆင်ပါ။

環境注意事項:1. 對該區域進行通風換氣。

2. 撲滅或移走所有發火源。

3. 報告政府安全衛生與環保相關單位。

Environmental Protection: 1. Ventilate area of leak or spill.

2. Keep away from sources of ignition-no smoking.

3. Report to the authority.

ပတ်ဝန်းကျင်ကာကွယ်ရေး- 1. ယိုစိမ့်မှု သို့မဟုတ် ယိုဖိတ်သည့်နေရာကို လေဝင်လေထွက်လုပ်ပါ။

2. မီးလောင်ကျွမ်းစေသော အရင်းအမြစ်များနှင့် ဝေးဝေးနေပါ ဆေးလိပ်မသောက်ပါနှင့်။

3. သက်ဆိုင်ရာတာဝန်ရှိသူထံသို့ သတင်းပို့ပါ။

清理方法 Clean up Methods:သန့်ရှင်းရေးပြုလုပ်သည့်နည်းလမ်းများ

1. 勿碰觸泄漏物。

Do not touch the spillage. ယိုဖိတ်နေသောနေရာအား မထိပါနှင့်။

2. 在安全許可狀況下, 設法阻止或減少泄漏。

When conditions are safe, try to stop or reduce leakage.

အခြေအနေများ ဘေးကင်းသောအခါ၊ ယိုစိမ့်မှုကို ရပ်ရန် သို့မဟုတ် လျှော့ချရန် ကြိုးစားပါ။

3. 在安全許可狀況下,將泄漏容器移至室外或運風良好之隔離區,並將殘餘液轉裝適當容器內。

When conditions are safe, remove leaking containers to ventilate area, and place the residual liquid in proper containers.

အခြေအနေများ ဘေးကင်းသောအခါ၊ လေဝင်လေထွက်ကောင်းသော နေရာတွင် ယိုစိမ့်နေသော ကွန်တိန်နာများကို ဖယ်ရှားပြီး ကျန်အရည်များကို သင့်လျော်သော ကွန်တိန်နာများတွင် ထားပေးပါ။ 4. 避免外泄物維人下水道或溶閉空間內。

Prevent leakage from entering drains or airtight spaces.

မြောင်းများ သို့မဟုတ် လေလုံသောနေရာများအတွင်းသို့ ယိုစိမ့်မှုမှ ကာကွယ်ပါ။

5. 小量溢漏: 用惰性吸收劑吸起並置於加蓋且標示的適當容器內,再用水清洗泄漏區。 For small spills, absorb with inert absorbent and put into a sealable / labeled container

12 - 7 SDS 安全資料表 Water-based 2024/07/01

#### DONGYING INK AND PAINT MANUFACTURING FACTORY.

TEL: 867-769-85889836/86-769-85034269

Address: Chenwu Management area, Houjie Town, Dongguan City, Guangdong

Then use water to clean the hazard area.

သေးငယ်သော ယိုဖိတ်မှုများအတွက် အားအင်မတန်စုပ်ယူနိုင်သော ပစ္စည်းဖြင့် စုပ်ယူပြီး အလုံပိတ် /တံဆိပ်တပ်ထားသော ကွန်တိန်နာထဲသို့ ထည့်ပါ။ ထို့နောက် အန္တရာယ်ရှိသောနေရာကို သန့်စင်ရန် ရေကိုအသုံးပြုပါ။

6. 大量泄漏: 聯絡消防, 緊急處理單位及供應商以尋求協助。

For large spills, contact local emergency agencies and suppliers for assistance. ကြီးမားသော ယိုဖိတ်မှုများအတွက် အကူအညီရယူရန်အတွက် ဒေသတွင်း အရေးပေါ် အေဂျင်စီများနှင့် ပေးသွင်းသူများထံ ဆက်သွယ်ပါ။

## 7、安全處置與儲存方法 Handling လုံခြုံစွာဆောင်ရွက်နည်း

此物質是毒性和可燃性液體,作業時排氣機應運轉及善用個人防護具;工作人員應受適當有關物質之危險性及安全使用法之訓練

This material is toxic and flammable liquid. Turn on exhausting equipment and use personal protective equipment during operation; operators should receive appropriate training related to hazardous materials and safe usage.

ဤပစ္စည်းသည် အဆိပ်သင့်ပြီး မီးလောင်လွယ်သော အရည်ဖြစ်သည်။ ပင်ပန်းနွမ်းနယ်နေသော စက်ပစ္စည်းများကို ဖွင့်ပြီး လည်ပတ်နေစဉ်အတွင်း တစ်ကိုယ်ရည် အကာအကွယ်ပစ္စည်းများကို အသုံးပြုပါ။ အော်ပရေတာများသည် အန္တရာယ်ရှိသောပစ္စည်းများနှင့် ဘေးကင်းသော အသုံးပြုမှု နှင့်ပတ်သက်သည့် သင့်လျော်သောသင်တန်းကို လက်ခံသင့်သည်။

2. 除去所有發火源並遠離熱及不相容物

Remove all sources of ignition and keep away from heat and incompatible materials. မီးလောင်ကျွမ်းမှု အရင်းအမြစ်အားလုံးကို ဖယ်ရှားပြီး အပူနှင့် သဟဇာတမဖြစ်သော ပစ္စည်းများနှင့် ဝေးဝေးထားပါ။

3. 工作區應有"禁止抽煙"標誌

There should be "Smoking Prohibited or No Smoking" signs at work area. အလုပ်ဧရိယာတွင် "ဆေးလိပ်သောက်ခြင်းကို တားမြစ်ထားသော သို့မဟုတ် ဆေးလိပ်မသောက်ရ" ဆိုင်းဘုတ်များ ရှိသင့်သည်။

4. 空的桶槽、容器和管線可能仍具危害性的殘留物,未清理前不得從事任何焊接、切割、鑽孔取其他熱的工作進行

There may still be harmful residue in empty containers and pipelines. Any welding, cutting, drilling and other heat-related work must not be undertaken until the containers and pipelines are thoroughly cleaned.

12 - 8 SDS 安全資料表 Water-based 2024/07/01

#### DONGYING INK AND PAINT MANUFACTURING FACTORY.

TEL: 867-769-85889836/86-769-85034269

Address: Chenwu Management area, Houjie Town, Dongguan City, Guangdong ကွန်တိန်နာအလွတ်များနှင့် ဝိုက်လိုင်းများတွင် အန္တရာယ်ရှိသော အကြွင်းအကျန်များ ရှိနေနိုင်သည်။ ကွန်တိန်နာများနှင့် ဝိုက်လိုင်းများကို သေချာစွာ မသန့်စင်မချင်း ဂဟေဆက်ခြင်း၊ ဖြတ်တောက်ခြင်း၊ တူးဖော်ခြင်း နှင့် အခြားအပူဆိုင်ရာလုပ်ငန်းကို မလုပ်ရပါ။

5. 需隨時備有可用於滅火及處理溢漏的緊急應變設備

Emergency equipment should be always prepared for fire-fighting and containment. မီး(၄ှိမ်းသတ်ရန် နှင့် မီး(၄ှိမ်းသတ်ရန်အတွက် အရေးပေါ်သုံးပစ္စည်းများ အမြဲပြင်ဆင်ထားသင့်သည်။

6. 作業避免產生霧滴或蒸氣,在通風良好的指定區內操作並採用最小使用量,操作區與儲存區分開

Avoid formation of droplet or vapor during operation. Work in a well-ventilated and designated area and operate only the minimum amount. Storage and operating areas should be separated.

လည်ပတ်နေစဉ်အတွင်း အမှုန်အမွှားများ သို့မဟုတ် အငွေ့များထွက်ခြင်းကို ရှောင်ကြဉ်ပါ။ လေဝင်လေ ထွက်ကောင်းပြီး သတ်မှတ်ထားသောနေရာတွင် အလုပ်လုပ်ပြီး အနည်းဆုံးပမာဏကိုသာ လုပ်ဆောင် ပါ။ သိုလှောင်မှုနှင့် လုပ်ငန်းလည်ပတ်မှုနေရာများကို ခွဲခြားထားသင့်သည်။

7. 必要時穿戴適當的個人防護設備以避免與此化學品或受污染的設備接觸

Wear appropriate personal protective equipment in order to avoid direct contact with the chemicals and contaminated equipment.

ဓာတုပစ္စည်းများနှင့် ညစ်ညမ်းနေသော ပစ္စည်းများနှင့် တိုက်ရိုက်ထိတွေ့ခြင်းမှ ရှောင်ရှားနိုင်ရန် သင့်လျော်သော ကိုယ်ရေးကိုယ်တာ အကာအကွယ်ပစ္စည်းများကို ဝတ်ဆင်ပါ။

8. 不要與不相容物一起使用(如強氧化劑)

Do not use along with incompatible material (such as the strong oxidant).

ခိုင်ခံ့သော ဓာတ်တိုးဆန့်ကျင်ပစ္စည်း (ဥပမာ) နှင့် တွဲဖက် အသုံးမပြုပါနှင့်။

9. 使用相容物質製成的儲存容器,分裝時小心不要噴灑出來

Store with compatible containers. Be careful to prevent splatter when repacking. တွဲဖက်သုံးနိုင်သော ကွန်တိန်နာများဖြင့် သိမ်းဆည်းပါ။ ပြန်လည်ထုပ်ပိုးသည့်အခါ ကွဲအက်ခြင်း မဖြစ် အောင် သတိထားပါ။

10. 所有開啟、傾倒和混合的操作應位於上風處

Any procedure involving opening, dumping and mixing should be in an up-wind area. အဖွင့်၊ စွန့်ပစ်ခြင်းနှင့် ရောနှောခြင်း ပါဝင်သည့် မည်သည့်လုဝ်ထုံးလုဝ်နည်းမဆို လေဝင်လေထွက် ကောင်းသောနေရာတွင် ဖြစ်သင့်သည်။

11. 不要將受污染的液體倒回原儲存的容器

Do not pour the contaminated liquid back into the original storage containers.

#### DONGYING INK AND PAINT MANUFACTURING FACTORY.

TEL: 867-769-85889836/86-769-85034269

Address: Chenwu Management area, Houjie Town, Dongguan City, Guangdong

ညစ်ညမ်းသောအရည်ကို မူလသိုလှောင်ပုံးထဲသို့ ပြန်မလောင်းပါနှင့်။

12. 容器要標示,不使用時保持緊密並避免受損

Containers should be labeled. Keep containers tightly closed when not in use and avoid damage.

ကွန်တိန်နာများကို တံဆိပ်တပ်သင့်သည်။ အသုံးမပြုသည့်အခါတွင် ကွန်တိန်နာများကို တင်းတင်း ကျပ်ကျပ် ပိတ်ထားပြီး ထိခိုက်မှမဖြစ်စေရန်။

13. 使用經認可的可燃性液體儲存容器和調配設備

Use the approved liquid storage containers and mixing equipment.

ခွင့်ပြုထားသော အရည်သိုလှောင်သည့် ကွန်တိန်နာများနှင့် ရောစပ်သည့် ကိရိယာများကို အသုံးပြုပါ။

14. 儲存於陰涼(10~40℃)、乾燥、通風良好以及陽光無法直接照射的地方,遠離熱源、發火源及不相容物

Store in cool(10~40°C), dry, well-ventilated area. Do not store in direct sunlight. Keep away from heat, source of ignition and incompatible material.

အေးမြသော (10 ~ 40 ဒီဂရီစင်တီဂရိတ်)၊ ခြောက်သွေ့ပြီး လေဝင်လေထွက်ကောင်းသောနေရာတွင် သိမ်းဆည်းပါ။ နေရောင်ခြည် တိုက်ရိုက်မထိပါနဲ့။ အပူရှိန်၊ မီးလောင်ရာနေရာနှင့် သဟဇာတ မဖြစ်သော ပစ္စည်းများကို ဝေးဝေးတွင်ထားပါ။

15. 儲存設備應以耐火材料構築

Storage areas should be constructed with fire-proof material.

သိုလှောင်သည့်နေရာကို မီးခံပစ္စည်းဖြင့် ဆောက်လုပ်သင့်သည်။

16. 地板應以不滲透材料構築以免自地板吸收

The floor should be made of non-seeping material to avoid floor absorption.

ကြမ်းပြင်သည် ကြမ်းပြင်ကို စုပ်ယူမှုမှ ကင်းဝေးစေရန် စိမ့်ဝင်သော ပစ္စည်းဖြင့် ပြုလုပ်ထားသင့်သည်။

儲存 Storage : သိုလှောင်ခြင်း။

儲存區與工作區、飲食區或保護設備區應分開。

Work areas and storage areas, catering area or areas of protective equipment should be separated.

အလုပ်နေရာများနှင့် သိုလှောင်ရာနေရာများ၊ အစားအသောက်ကျွေးမွေးသည့်နေရာ သို့မဟုတ် အကာ အကွယ်ပစ္စည်းများ၏ နေရာများကို ခွဲခြားထားသင့်သည်။

2. 儲存區附近應有適當的滅火器和清理溢漏設備。

Storage area should be maintained with fire extinguisher and spill clean-up equipment. သိုလှောင်သည့်နေရာကို မီးသတ်ဆေးဘူးနှင့် ဖိတ်စင်အောင် သန့်ရှင်းရေးကိရိယာများဖြင့် ထိန်းသိမ်း ထားသင့်သည်။

12 - 9 SDS 安全資料表 Water-based 2024/07/01

12 - 10 SDS 安全資料表 Water-based 2024/07/01

#### DONGYING INK AND PAINT MANUFACTURING FACTORY.

TEL: 867-769-85889836/86-769-85034269

Address: Chenwu Management area, Houjie Town, Dongguan City, Guangdong

3. 定期檢查儲存容器是否破損或溢漏及儲存物是否過期。

Periodically inspect the storage containers for any damage or spill and product expiration. ပျက်စီးခြင်း သို့မဟုတ် ယိုဖိတ်ခြင်းနှင့် ထုတ်ကုန်သက်တမ်းကုန်ဆုံးခြင်းအတွက် သိုလှောင်သည့် ကွန်တိန်နာများကို အခါအားလျော်စွာ စစ်ဆေးပါ။

4. 檢查所有新進容器是否適當標示並無破損,更換破損容器,並隨時備有備用容器及標籤。 Inspect all newly delivered containers for the appropriate label and no damage. Replace the damage containers. Have a stock of replacement containers and labels readily available for use.

သင့်လျော်သောတံဆိပ်အတွက် အသစ်ပေးပို့ထားသော ကွန်တိန်နာအားလုံးကို စစ်ဆေးပြီး ထိခိုက်မှု မရှိစေပါ။ ပျက်စီးနေသော ကွန်တိန်နာများကို အစားထိုးပါ။ အသုံးပြုရန် အလွယ်တကူ ရနိုင်သော အစားထိုး ကွန်တိန်နာများနှင့် တံဆိပ်များ စတော့ရှယ်ယာများ ထားရှိပါ။

5. 以相容物製成的儲存容器裝溢漏物。

Use compatible storage containers for the spillage.

ယိုဖိတ်မှုများအတွက် တွဲဖက်အသုံးပြုနိုင်သော သိုလှောင်မှုကွန်တိန်နာကို အသုံးပြုပါ။

6. 儲存區使用接地、不產生火花的通風系統,核可防爆設備及安全的電器系統。

Use grounded and non-sparking ventilation system in the storage area. The storage area should also have approved explosion-proof equipment and security system.

သိုလှောင်ဇရိယာတွင် မြေပြင်နှင့် မီးမလောင်ဘဲ လေဝင်လေထွက်စနစ်ကို အသုံးပြုပါ။ သိုလှောင်သည့် နေရာသည် ပေါက်ကွဲဒဏ်ခံနိုင်သော ကိရိယာများနှင့် လုံခြုံရေးစနစ်တို့လည်း ရှိသင့်သည်။

7. 限量儲存。

Limit the stored volume. သိမ်းဆည်းထားသော ပမာဏကို ကန့်သတ်ပါ။

## 8、暴露預防措施 Exposure Control/Personal Protection ပေါ် လွင်မှုကိုကြိုဘင်ကာကွယ်နည်း

工程控制:必須安裝中央控制式或局部排氣氣裝置。局部排氣較佳,因可就地制發生源, 避免擴散到其他區域。

Engineering Control: A system of local and/or general exhaust is recommended. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

ထိန်းချုပ်ခြင်း - ဗဟိုနည်းစနစ်ထိန်းချုပ်ပုံစံ(သို့)အစိတ်အပိုင်းလေထုတ်ကိရိယာတပ်ဆင်ရမည်။ အစိတ်အပိုင်းလေ ထုတ်ခြင်းသည် ဖြစ်ပေါ် သောနေရာတွင် ပျံ့ကျဲစေနိုင်သောကြောင့် ဗဟိုထိန်းချုပ် နည်းထက်ပို ကောင်းသည်။

個人防護設備 Personal Protection Equipment:တစ်ကိုယ်ရေကာကွယ်ရေးပစ္စည်းများ

12 - 11 SDS 安全資料表 Water-based 2024/07/01

#### DONGYING INK AND PAINT MANUFACTURING FACTORY.

TEL: 867-769-85889836/86-769-85034269

Address: Chenwu Management area, Houjie Town, Dongguan City, Guangdong

- 呼吸防護 respiratory protection:
- 含有機蒸氣濾毒罐的動力型空氣淨化式或全面型化學濾罐式呼吸防護具、含有機蒸 氣濾罐的防毒面罩、全面型自攜式或供氣式呼吸防護具
- Use a full-face piece positive-pressure or air-supplied or self-contained respirator or a respirator with organic vapor cartridge.
- မျက်နှာအပြည့် အပြုသဘောဆောင်သော ဖိအား သို့မဟုတ် လေဖြင့် ပံ့ပိုးပေးသော သို့မဟုတ် ကိုယ် တိုင်ပါရှိသော အသက်ရှူကိရိယာ သို့မဟုတ် အော်ဂဲနစ် အငွေ့ပုံတောင့် ပါရှိသော အသက်ရှုကိရိ ယာကို အသုံးပြုပါ။
- 2.未知濃度:正壓自攜式呼吸防護具、正壓全面型供氣式呼吸防護具輔以正壓自攜式呼吸防護具
- Unknown concentration: Use a full-face piece positive-pressure or air-supplied respirator
- အမည်မသိ အာရုံစူးစိုက်မှု- မျက်နှာအပြည့် အပြုသဘောဆောင်သော ဖိအား သို့မဟုတ် လေဖြင့် ပံ့ပိုးထားသော အသက်ရူကိရိယာကို အသုံးပြုပါ။
- 手部防護:丁基橡膠、4H、聚乙烯醇等防滲手套。
- · Hand Protection: Butyl rubber, 4H, polyvinyl alcohol, and other impervious gloves.
- လက်ကာကွယ်မှု- Butyl ရာဘာ၊ 4H၊ ပေါ် လီဗီနိုင်အယ်လ်ကိုဟော၊ နှင့် အခြားရေစိုခံလက်အိတ်များ
- 眼睛防護:化學安全護目鏡、護面罩。
- · Eye Protection: Safety eyeglasses or goggles or full-face shield.
- မျက်လုံးအကာအကွယ်- ဘေးကင်းရေးမျက်မှန် သို့ပောုတ် မျက်မှန် သို့ပောုတ် မျက်နှာအပြည့် အကာ။
- 皮膚及身體防護:皮膚及身體防護:化學防護衣、手套、工作鞋
- Skin & Body Protection: Wearing chemical impervious protective gloves or whole-body
  suit.
- အရေပြားနှင့် ခန္ဓာကိုယ်ကာကွယ်မှု- ဓာတုမပျက်စီးအောင် အကာအကွယ်လက်အိတ်များ သို့မဟုတ်
   တစ်ကိုယ်လုံးဝတ်စုံကို ဝတ်ဆင်ပါ။

衛生措施:工作後、進食前洗手。儘速脫掉污染之衣物並放在密閉容器內,洗淨後才可再 穿戴或丟棄,且須告知洗衣人員污染物之危害性。

Hygiene Procedures: Wash at the end of each wok shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Contaminated clothing to be placed in closed container until disposal or decontamination. Warn cleaning personnel of chemical's hazardous properties

သန့်ရှင်းရေးလုပ်ဆောင်ချက်များ။ wok shift တစ်ခုစီတိုင်း၏အဆုံးတွင်၊ အစာမစားမီ၊ ဆေးလိပ် သောက်ခြင်းနှင့် အိမ်သာကို အသုံးမပြုမီ ဆေးကြောပါ။ ညစ်ညမ်းနေသော အဝတ်အစားများကို

12 - 12 SDS 安全資料表 Water-based 2024/07/01

#### DONGYING INK AND PAINT MANUFACTURING FACTORY.

TEL: 867-769-85889836/86-769-85034269

Address: Chenwu Management area, Houjie Town, Dongguan City, Guangdong ချက်ချင်းဖယ်ရှားပါ။ ညစ်ညမ်းသော အဝတ်အစားများကို စွန့်ပစ်ခြင်း သို့မဟုတ် ညစ်ညမ်းစေသည်အထိ အလုံပိတ်ကွန်တိန်နာတွင် ထားရှိရမည်။ ဓာတုပစ္စည်းများ၏ အန္တရာယ်ရှိသော ဂုဏ်သတ္တိများကို သန့်ရှင်းရေးဝန်ထမ်းများအား သတိပေးပါ။

## 9、安定性及反應性 Stability and Reactivity တည်ငြိမ်ဓာတ်နှင့်တုံ့ပြန်သတ္တိ

安定性:正常儲存或操作下呈安定狀態。

Stability: Stable under ordinary conditions of use and storage.

တည်ငြိမ်ဓာတ် - သာမာန်အခြေအနေအောက်တွင် တည်ငြိမ်သည်။

特殊狀況下可能之危害反應:

Possible Hazardous Reaction under Special Conditions:

အထူးအခြေအနေများအောက်တွင် ဖြစ်နိုင်သော အန္တရာယ်ရှိသော တုံ့ပြန်မှု-

正常狀況下安定,在長期暴露於空氣或受熱下,則可能爆炸,故應避開火焰、火花、靜電、熱及其他引火源。

It's stable under normal conditions. Since prolonged exposure to air or heat may cause explosion, it should be kept away from flame, sparks, static electricity, heat and other ignition sources.

၎င်း၏ပုံမှန်အခြေအနေအောက်တွင်တည်ငြိမ်သည်။ လေ သို့မဟုတ် အပူကို ကြာရှည်စွာ ထိတွေ့ခြင်း ကြောင့် ပေါက်ကွဲစေတတ်သောကြောင့် မီးတောက်များ၊ မီးပွားများ၊ ငြိမ်လျှပ်စစ်၊ အပူနှင့် အခြား မီးလောင်ရာနေရာများမှ ဝေးဝေးနေသင့်သည်။

2. 氧化劑(如過氧化物、硝酸鹽、過氯酸鹽): 增加火災、爆炸的危險。

Oxidants (for example, peroxide, nitrate, perchlorate): Increase chances of fire and explosion.

အောက်ဆီဂျင်များ (ဥပမာ၊ ပါအောက်ဆိုဒ်၊ နိုက်ထရိတ်၊ ပါကလိုရတ်)- မီးနှင့် ပေါက်ကွဲနိုင်ခြေကို တိုးမြင့်စေသည်။

3. 強酸, 強鹼: 引起反應並產生熱及壓力

Reaction with strong acid and strong alkali will produce heat and pressure.

ပြင်းထန်သော အက်ဆစ်နှင့် ပြင်းထန်သော အယ်လကာလီတို့ တုံ့ပြန်မှုသည် အပူနှင့် ဖိအားကို ဖြစ်ပေါ်စေသည်။

應避免之狀況:避開過熱、火焰、火花、靜電及其他引火源。避免和不相容物質共存 Conditions to Avoid: Avoid overheating, Should be kept away from flame, sparks, static electricity, other ignition sources and incompatible materials.

ရှောင်ကြဉ်ရမည့်အခြေအနေများ- အပူလွန်ကဲခြင်းကို ရှောင်ကြဉ်ပါ၊ မီးတောက်များ၊ မီးပွားများ၊ တည်ငြိမ်လျှပ်စစ်ဓာတ်၊ အခြားသော မီးပွားအရင်းအမြစ်များနှင့် ကိုက်ညီမှုမရှိသော ပစ္စည်းများနှင့်

12 - 13 SDS 安全資料表 Water-based 2024/07/01

#### DONGYING INK AND PAINT MANUFACTURING FACTORY.

TEL: 867-769-85889836/86-769-85034269

Address: Chenwu Management area, Houjie Town, Dongguan City, Guangdong

ဝေးဝေးတွင် ထားသင့်သည်။

應避免之物質: 強酸、含氯化溶劑、強鹼、氧化劑

Incompatibility: Strong acid, chlorinated solvent, strong alkali and oxidants.

မလိုက်ဖက်နိုင်မှု- ပြင်းထန်သော အက်ဆစ်၊ ကလိုရင်းပါသော ပျော်ရည်၊ ပြင်းထန်သော အယ်လကာ လီနှင့် ဓာတ်တိုးဆန့်ကျင်ပစ္စည်းများ။

危害分解物:-

Hazardous Decomposition Products: -

အန္တရာယ်ရှိသော ပျက်စီးယိုယွင်းနေသော ထုတ်ကုန်များ-

## 10、毒性資料 Toxicological Information အဆိပ်ဓာတ်အချက်အလက်

暴露途徑: 吸入、皮膚接觸、眼睛接觸、食入

Exposure means: Inhalation, skin contact, eye contact, ingestion.

ထိတွေ့ခြင်းဆိုသည်မှာ ရှူသွင်းခြင်း၊ အရေပြားထိတွေ့ခြင်း၊ မျက်လုံးချင်းဆုံခြင်း၊

症狀:頭痛、噁心、頭暈、嗜睡、精神混淆、喪失意識、刺激眼睛和皮膚

Symptoms: Headache, nausea, dizziness, drowsiness, mental confusion, loss of

consciousness, Irritation or thermal burns of skin and eyes.

လက္ခဏာများ- ခေါင်းကိုက်ခြင်း၊ ပျို့အန်ခြင်း၊ မူးဝေခြင်း၊ အိပ်ငိုက်ခြင်း၊ စိတ်ရှုပ်ထွေးခြင်း၊ သတိလစ် ခြင်း၊ ယားယံခြင်း သို့မဟုတ် အရေပြားနှင့် မျက်လုံးများ အပူလောင်ခြင်းများ။

急毒性 Acute: စူးရသည်။

皮膚 Skin Contact:အရေပြားနှင့်ထိတွေ့ခြင်း။

1. 其液體會造成中度至嚴重的刺激,視濃度而定。

The liquid can cause moderate to severe irritation, depending on the concentration.

အရည်သည် ပြင်းအားပေါ် မူတည်၍ အလယ်အလတ်မှ ပြင်းထန်သော ယားယံမှုကို ဖြစ်စေနိုင်သည်။

2. 會經皮膚吸收引起抑制中樞神經系統的症狀如吸入所述。

Will be absorbed by skin and cause some central nervous system symptoms like which described in inhalation.

အရေပြားမှ စုပ်ယူခံရပြီး ရှူရှိုက်မှုတွင် ဖော်ပြထားသည့် တူညီသော ဗဟိုအာရုံကြောစနစ် လက္ခဏာများ ဖြစ်ပေါ်စေမည်ဖြစ်သည်။

吸入 Inhalation : ရူရှိုက်မိခြင်း။

1. 暴露時間 3~5 分鐘,75ppm 會刺激鼻子和喉嚨,50ppm 會刺激喉嚨,25ppm 沒有感覺 Exposure time from 3 to 5 minutes, 75ppm: cause nose and throat irritation. 50ppm: cause throat irritation. 25ppm: no symptom.

12 - 14 SDS 安全資料表 Water-based 2024/07/01

#### DONGYING INK AND PAINT MANUFACTURING FACTORY.

TEL: 867-769-85889836/86-769-85034269

Address: Chenwu Management area, Houjie Town, Dongguan City, Guangdong

ထိတွေ့ချိန် ၃ မိနစ်မှ ၅ မိနစ်၊ 75ppm- နှာခေါင်းနှင့် လည်ချောင်းများ ယားယံစေသည်။ 50ppm လည်ချောင်းယားယံစေတယ်။ 25ppm: ရောဂါလက္ခဏာမရှိပါ။

2. 高濃度蒸氣會引起抑制神經系統,如頭痛、噁心、頭暈、嗜睡和精神混淆

High concentrations of vapor will cause nervous system depression, such as headache, nausea, dizziness, lethargy and mental confusion.

အခိုးအငွေ့ပါဝင်မှု မြင့်မားခြင်းသည် ခေါင်းကိုက်ခြင်း၊ ပျို့အန်ခြင်း၊ မူးဝေခြင်း၊ ထုံထိုင်းခြင်းနှင့် စိတ်ရှုပ် ထွေးခြင်းကဲ့သို့သော အာရုံကြောစနစ်ကို စိတ်ဓာတ်ကျစေပါသည်။

3. 非常高濃度可能引起喪失意識和死亡

Very high concentrations may cause loss of consciousness and death

အလွန်မြင့်မားသော အာရုံစူးစိုက်မှုသည် သတိလစ်ခြင်းနှင့် သေဆုံးခြင်းတို့ကို ဖြစ်စေနိုင်သည်။

食入:大量食入可能引起抑制中樞神經系統的症狀如吸入所述

Ingestion: High volume ingestion can cause central nervous system symptoms as caused by inhalation.

စားသုံးမိခြင်း- ပမာဏများသော စားသုံးမိခြင်းသည် ရှူရိုက်မိခြင်းကြောင့် ဖြစ်ရသည့် ဗဟိုအာရုံကြော စနစ်ကို လက္ခဏာများ ဖြစ်စေနိုင်သည်။

眼睛 Eye Contact:မျက်လုံးနှင့်ထိတွေ့မိခြင်း။

1.濃度>15%的溶液會引起嚴重及腐蝕性的眼睛傷害,可能導致永久傷害或失明。濃度<10%可能引起輕微刺激</p>

Concentration over 15% will cause serious and corrosive eye damage and can lead to permanent injury or blindness. Concentration less than 10% may cause irritation.

အာရုံစူးစိုက်မှု 15% ထက်ပိုပါက ပြင်းထန်ပြီး အဆိပ်သင့်သော မျက်လုံးကို ပျက်စီးစေပြီး အမြဲတမ်း ထိခိုက်ဒဏ်ရာရခြင်း သို့မဟုတ် မျက်စိကွယ်ခြင်းအထိ ဖြစ်စေနိုင်သည်။ အာရုံစူးစိုက်မှု 10% ထက်နည်း ပါက ယားယံစေနိုင်သည်။

2.蒸氣會刺激眼睛

Vapor can cause eyes irritation. အငွေ့ သည် မျက်လုံးကို ယားယံစေနိုင်သည်။

LD50(測試動物、吸收途徑) :1535mg/kg (大鼠, 吞食); 948 mg/kg(兔子,皮膚)--環己酮

LD50 (animal testing, the absorption means):1535mg/kg (rats, devour);948mg/kg (rabbits,

skin) - Cyclohexanone

LC50(測試動物、吸收途徑) : 8000ppm/4H (大鼠, 吸入) --環己酮

500mg (兔子,皮膚)造成輕微刺激--環己酮

20mg (兔子,眼睛)造成嚴重刺激--環己酮

LC50 (animal testing, absorption means): 8000ppm/4H (rat, inhalation) - Cyclohexanone

#### DONGYING INK AND PAINT MANUFACTURING FACTORY.

TEL: 867-769-85889836/86-769-85034269

Address: Chenwu Management area, Houjie Town, Dongguan City, Guangdong

500mg ( rabbit , skin ), Moderate irritation-- Cyclohexanone

20mg (rabbit, eyes), Serious irritation.—Cyclohexanone

LC50 (တိရစ္ဆာန်စမ်းသပ်မှု၊ စုပ်ယူမှုဆိုသည်မှာ- 8000ppm/4H (ကြွက်၊ ရှူသွင်းခြင်း) -- Cyclohexanone

500mg (ယုန်၊ အရေပြား)၊ အလွန်အမင်း ယားယံခြင်း-- Cyclohexanone

20mg (ယုန်၊ မျက်လုံး)၊ ပြင်းထန်စွာ ယားယံခြင်း။-- Cyclohexanone

慢毒性或長期毒性:-

Chronic: -

အနှေးအဆိပ်(သို့)ကြာရှည်အဆိပ်ဓာတ်

1. 其液體為脫脂劑,長期暴露可能造成皮膚炎。

This ink is a degreasing agent. Long-term exposure may cause dermatitis

ဤမှင်သည် အဆီပြန်ဆေးဖြစ်သည်။ ရေရှည်ထိတွေ့ခြင်းက အရေပြားရောင်ရမ်းခြင်းကို ဖြစ်စေနိုင်ပါ တယ်။

2. 可能傷害腎臟。

May cause kidneys damage.

ကျောက်ကပ်ကို ပျက်စီးစေနိုင်ပါတယ်။

3. 白血球數會降低。

White blood cell count may decrease.

သွေးဖြူဥအရေအတွက် လျော့နည်းသွားနိုင်သည်။

11gm/Kg(懷孕 8-12 天雌鼠,吞食)造成新生鼠中毒

11gm/Kg (female rat of 8-12 days pregnancy, swallowed) resulted in neonatal rat poisoning

11gm/Kg (ကိုယ်ဝန် 8-12 ရက်အတွင်း ကြွက်အမ၊ မျိုချ) ကြောင့် မွေးကင်းစကြွက်အဆိပ်သင့်ခြင်း၊

IARC 將其列為 Group 3: 無法判斷為人體致癌性

IARC: classified as Group 3: human carcinogenicity cannot be judged

IARC- အုပ်စု 3 အဖြစ် သတ်မှတ်ထားသည်- လူတွင် ကင်ဆာဖြစ်နိုင်ခြေကို အကဲဖြတ်၍ မရပါ။

ACGIH 將之列為 A4: 無法判斷為人類致癌性

ACGIH: classified as A4: human carcinogenicity cannot be judged

ACGIH- A4 အဖြစ် ခွဲခြားထားသည်- လူတွင် ကင်ဆာဖြစ်စေနိုင်မှုကို မစီရင်နိုင်ပါ။

## 11、廢棄處置方法 Disposal Information စွန့်ပစ်ဆောင်ရွက်နည်းလမ်း

廢棄處置方法: 將容器密閉以避免泄漏, 並於容器外觀標示清楚為『可燃性液體』, 依據『有害事業廢棄物清理法』交合格的廢棄物清理公司處理。

Disposal Measures: Seal the container tightly to prevent leaking or spilling. Mark clearly

2 - 15 SDS 安全資料表 Water-based 2024/07/01

12 - 16 SDS 安全資料表 Water-based 2024/07/01

#### DONGYING INK AND PAINT MANUFACTURING FACTORY.

TEL: 867-769-85889836/86-769-85034269

Address: Chenwu Management area, Houjie Town, Dongguan City, Guangdong

"Flammable liquid" on the container. Follow the disposal Regulation of harmful industrial waste. Consign the disposal to a qualified company that handles industrial waste. စွန့်ပစ်ခြင်းအစီအမံများ- ယိုစိမ့်ခြင်း သို့မဟုတ် ယိုဖိတ်ခြင်းမှ ကာကွယ်ရန် ကွန်တိန်နာကို တင်းတင်း ကျပ်ကျပ် ဝိတ်ထားပါ။ ကွန်တိန်နာပေါ် တွင် "မီးလောင်လွယ်သောအရည် ကိုရှင်းလင်းစွာမှတ်သားပါ။ အန္တရာယ်ရှိသော စက်မှုစွန့်ပစ်ပစ္စည်းများ စွန့်ပစ်ခြင်းဆိုင်ရာ စည်းမျဉ်းကို လိုက်နာပါ။ စွန့်ပစ်ပစ္စည်းများကို စက်မှုလုပ်ငန်းသုံး စွန့်ပစ်ပစ္စည်းများကို ကိုင်တွယ်သည့် အရည်အချင်းပြည့်မီသော ကုမ္ပဏီထံ ပေးပို့ပါ။

## 12、運送資料 Transport Information သယ်ယူပို့ဆောင်အချက်အလက်

聯合國編號:

The United Nations Number (Un-No): No data

聯合國運輸名稱:油墨

International Transport Name:

運輸危害分類:第三類易燃液體

Hazard Class: 包裝類別:Ⅲ

Packing Group:

.....

海洋污染物(是/否):否

Marine pollutants (Yes / No): No

特殊運送方法及注意事項:

Special Transport Way and Note:

ထူးခြားပို့ဆောင်နည်းလမ်းနှင့်သတိထားရန်-

## 13、法規資料 Regulation Information ဥပဒေအချက်အလက်များ

適用法規:

Application of Regulation:

အသုံးတည့်သောဥပဒေ-

職業安全衛生設施規則

Occupational Safety and Hygiene Regulation

လုပ်ငန်းလုံခြုံမှုသန့်ရှင်းရေးတပ်ဆင်ပစ္စည်းသတ်မှတ်ချက်

危害性化學品標示及通識規則

Regulation of labelling and Hazard Communication of Hazardous Chemicals.

အန္တရာယ်ရှိဓာတ္ဝတ္ထုသင်္ကေတနှင့်အသိပညာသတ်မှတ်ချက်

有機溶劑中毒預防規則

12 - 17 SDS 安全資料表 Water-based 2024/07/01

#### DONGYING INK AND PAINT MANUFACTURING FACTORY.

TEL: 867-769-85889836/86-769-85034269

Address: Chenwu Management area, Houjie Town, Dongguan City, Guangdong

Toxication Prevention Regulation for Organic Solvent

ဇီဝပျော်ရည်အဆိပ်သင့်ကြိုတင်ကာကွယ်သတ်မှတ်ချက<u>်</u>

作業場所容許暴露標準

Exposure Concentration Allowance Standard for Workplace.

လုပ်ငန်းခွင်ခွင့်ပြုထားသောပေါ် လွင်သတ်မှတ်အဆင့်

道路交通安全規則

Traffic Safety Regulation

လမ်းပန်းဆက်သွယ်လုံခြုံသောသတ်မှတ်ချက်

事業廢棄物貯存清除處理方法及設施標準

Storage & Disposal Procedures and Facility Standard for Industrial Waste

လုပ်ငန်းစွန့်ပစ်အရာထားသို့ခြင်းရှင်းလင်းဆောင်ရွက်နည်းလမ်းနှင့်တပ်ဆင်ပစ္စည်းစံနှန်းသတ်မှတ်ချက်

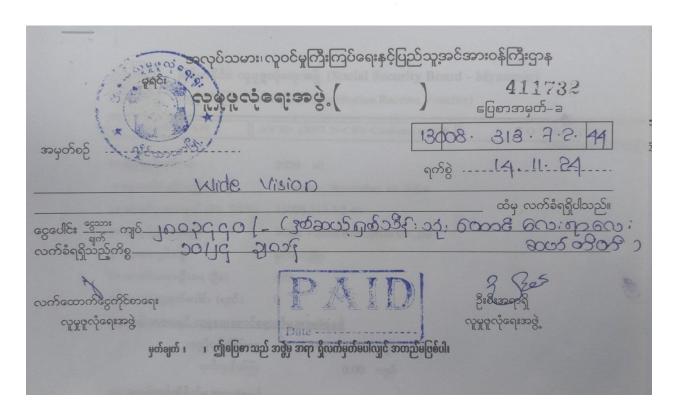
### 14、其他資料 Other Information အခြေားအချက်အလက်များ

| 參考文獻<br>Reference    |   |                       |                      |                       |              |  |  |
|----------------------|---|-----------------------|----------------------|-----------------------|--------------|--|--|
| ကိုးကားချက်          |   |                       |                      |                       |              |  |  |
|                      | 名稱:大甲化工   | 實業(股)公司               | N<br>S               |                       |              |  |  |
| 製表者單位<br>Make Unit   | Name: DONGYII<br>地址/電話: 东营<br>Addresses/Phone<br>Guangdong 867- | 宇宙墨涂料<br>e: Chenwu Ma | 制造厂<br>anagement are | ea, Houjie Town, Doi  | ngguan City, |  |  |
| 製表人                  | 職稱:總經理  |                       | 姓名:薛翰聲               |                       |              |  |  |
| Make People          | Professional Pos  | t:                    | Name:                | Name:                 |              |  |  |
| 製表日期<br>Make Date    | 2024/7/01   |                       | •                    |                       |              |  |  |
| 文件編號<br>Document No. |   | 版 实<br>Version        |                      | 文件類別<br>Document type |              |  |  |

12 - 18 SDS 安全資料表 Water-based 2024/07/01

## APPENDIX M Social Security Board





## APPENDIX N Diesel Voucher



|     |  |                                       |  | Profe               | orma Invo               | ice              |         |            |           |                      |                         |
|-----|--|---------------------------------------|--|---------------------|-------------------------|------------------|---------|------------|-----------|----------------------|-------------------------|
|     | Wide Vision Enterprise Cor                               | npany Limited                         |  |                     |                         |                  |         |            |           | Myan Oil Termina     | d Company Limited       |
|     | Ship To Address:   |                                       |  |                     |                         |                  |         |            |           | No. 56, Unit 401, Le | evel 4, Yankin Township |
|     | No. (Sethmu - 19,20,21,81)                               |                                       |  |                     |                         |                  |         |            |           | Yangon, Myanmar      |                         |
|     | St, Kan Gyi Kone Kwin, Ware<br>Township                  | d No (4), Htan I a Bin                |  |                     |                         |                  |         |            |           | Phone No.: 95-1-86   | 603471/1-9              |
|     |  |                                       |  |                     |                         |                  |         |            |           | Email:               |                         |
|     |  | Deal No                               |  | D6042               |                         |                  |         |            |           |                      |                         |
|     |  | Invoice No.                           |  | 501000043           |                         |                  |         |            |           |                      |                         |
|     |  | Invoice Date                          |  | 12 Aug 2024         |                         |                  |         |            |           |                      |                         |
|     |  | Due Date                              |  |                     |                         |                  |         |            |           |                      |                         |
|     |  | Customer Number                       |  | 600260              |                         |                  |         |            |           |                      |                         |
|     |  | PO No                                 |  | MPTA/Own-OS-Z       | one-PO/2024(001)        |                  |         |            |           |                      |                         |
|     |  | Loading Terminal                      |  | Thilawa Termina     | r.                      |                  |         |            |           |                      |                         |
| No. | Loading Date   | Order No.                             | PO Number                              | <b>Product</b> Code | Product                 | Quantity         | UoM     | Unit Price | Discount  | Final Price          | Amount                  |
| 1   | 1 Aug 2024   | S21121                                | OwnOSZone001(24)                       | 30050               | Premium Diesel (50 PPM) | 1,655            | Lt      | 2920.00    | 0.00      | 2920.00              | 4,832,600.0             |
| 2   |  |                                       |  |                     |                         |                  |         |            |           |                      |                         |
| 3   |  |                                       |  |                     |                         |                  |         |            |           |                      |                         |
| 5   |  |                                       |  |                     |                         | -                |         |            |           |                      |                         |
|     |  |                                       | Total                                  |                     |                         | 1,655            | Lt      |            | Total (5% | CT inclusive)        | 4,832,600.0             |
|     |  |                                       |  |                     |                         | INVOICE EXCLUDI  | NG TAX: |            |           | ммк                  | 4,602,476.1             |
|     |  |                                       |  |                     |                         | COMMERCIAL TAX   | AMOUN   | T:         |           | MMK                  | 230,123.8               |
|     |  |                                       |  |                     |                         | INVOICE INCLUDIN | NG TAX: |            |           | ммк                  | 4,832,600.0             |
|     |  |                                       |  |                     |                         | Service Charge   |         |            |           | ммк                  | 794,400.0               |
|     |  |                                       |  |                     |                         | Transport Charge |         |            |           | MMK                  | 66,200.0                |
|     |  |                                       |  |                     |                         | INVOICE TOTAL A  | MOUNT:  |            |           | MMK                  | 5,693,200.0             |
|     | AccountName  | Account Number                        | Bank                                   |                     |                         |                  |         |            |           |                      |                         |
|     | Myan Oil Terminal Co., Ltd                               | 0411060100002472                      | UAB Bank ( Kyauk Kone                  | )                   |                         |                  |         |            |           |                      |                         |
|     | Myan Oil Terminal Co., Ltd<br>Myan Oil Terminal Co., Ltd | 0022011000005669<br>20651320602477801 | A Bank (Pabetan)<br>KBZ Bank (Pabetan) |                     |                         |                  |         |            |           |                      |                         |
|     | Myan Oil Terminal Co., Ltd<br>Myan Oil Terminal Co., Ltd | 0094100900006599                      | CB Bank (Shwe Gone Da                  | ion Vautandone)     |                         |                  |         |            |           |                      |                         |
|     | Myan Oil Terminal Co., Ltd                               | 10004450727                           | AYA Bank (Kyauktada)                   | ay tan anay)        |                         |                  |         |            |           |                      |                         |
|     | Myan Oil Terminal Co., Ltd                               | 0790183079005126014                   | MAB Bank (Myanmar Pl                   | aza)                |                         |                  |         |            |           |                      |                         |

Myan Oil Terminal Company Limited No. 56, Unit 401, Level 4, Yankin Township, Yangon, Myanmar

information@myanoil.com.mm



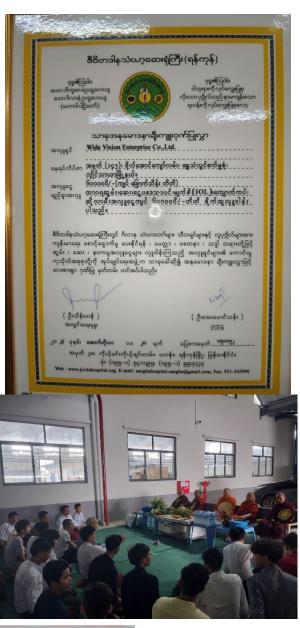
|  |                       |                       | Profe            | orma Invo               | ice              |          |            |           |                     |                         |
|--|-----------------------|-----------------------|------------------|-------------------------|------------------|----------|------------|-----------|---------------------|-------------------------|
| Wide Vision Enterprise Co              | mpany Limited         |                       |                  |                         |                  |          |            |           | Myan Oil Termin     | al Company Limited      |
| Ship To Address:                       |                       |                       |                  |                         |                  |          |            |           | No. 56, Unit 401, L | evel 4, Yankin Township |
| No. (Sethmu - 19,20,21,81)             |                       |                       |                  |                         |                  |          |            |           | Yangon, Myanmar     |                         |
| St, Kan Gyi Kone Kwin, War<br>Township | d No (4), Htan Ta Bin |                       |                  |                         |                  |          |            |           | Phone No.: 95-1-86  | 503471/1-9              |
| Township                               |                       |                       |                  |                         |                  |          |            |           | Email:              |                         |
|  | Deal No               |                       | D6476            |                         |                  |          |            |           |                     |                         |
|  | Invoice No.           |                       | S01000335        |                         |                  |          |            |           |                     |                         |
|  | Invoice Date          |                       | 26 Aug 2024      |                         |                  |          |            |           |                     |                         |
|  | Due Date              |                       |                  |                         |                  |          |            |           |                     |                         |
|  | Customer Number       |                       | 600260           |                         |                  |          |            |           |                     |                         |
|  | PONo                  |                       | MPTA/Own-OS-Z    | Ione-PO/2024(003)       |                  |          |            |           |                     |                         |
|  | Loading Terminal      |                       | Thilawa Termina  |                         |                  |          |            |           |                     |                         |
| o. Loading Date                        | Order No.             | PO Number             | Product Code     | Product                 | Quantity         | UoM      | Unit Price | Discount  | Final Price         | Amount                  |
| 1 22 Aug 2024                          | S21455                | OwnOSZone003(24)      | 30050            | Premium Diesel (50 PPM) | 2,482            | Lt       | 3210.00    | 0.00      | 3210.00             | 7,967,220.0             |
| 2                                      |                       |                       |                  |                         |                  |          |            |           |                     |                         |
| 3                                      |                       |                       |                  |                         |                  |          |            |           |                     |                         |
| ki .                                   |                       |                       |                  |                         |                  |          |            |           |                     |                         |
| 5                                      |                       |                       |                  |                         | *                |          |            |           |                     |                         |
|  |                       | Total                 |                  |                         | 2,482            | I.t      |            | Total (5% | CT inclusive)       | 7,967,220.0             |
|  |                       |                       |                  |                         | INVOICE EXCLUDI  | NG TAX:  |            |           | MMK                 | 7,587,828.5             |
|  |                       |                       |                  |                         | COMMERCIAL TAX   | AMOUN    | Tr.        |           | MMK                 | 379,391.4               |
|  |                       |                       |                  |                         | INVOICE INCLUDIN | G TAX:   |            |           | ммк                 | 7,967,220.0             |
|  |                       |                       |                  |                         | Service Charge   |          |            |           | MMK                 | 1,960,780.0             |
|  |                       |                       |                  |                         | Transport Charge |          |            |           | MMK                 | 99,280.0                |
|  |                       |                       |                  |                         | INVOICE TOTAL A  | MOINT    |            |           | MMK                 | 10,027,280.0            |
| Account Name                           | Account Number        | Bank                  |                  |                         | INVOICE TOTAL A  | 40 ON I. |            |           | PIPIK               | 10,027,200.0            |
| Myan Oil Terminal Co., Ltd             | 0411060100002472      | UAB Bank ( Kyauk Kone | )                |                         |                  |          |            |           |                     |                         |
| Myan Oil Terminal Co., Ltd             | 0022011000005669      | A Bank ( Pabetan)     | 5                |                         |                  |          |            |           |                     |                         |
| Myan Oil Terminal Co., Ltd             | 20651320602477801     | KBZ Bank (Pabetan)    |                  |                         |                  |          |            |           |                     |                         |
| Myan Oil Terminal Co., Ltd             | 0094100900006599      | CB Bank (Shwe Gone Da | ing, Yaytarshay) |                         |                  |          |            |           |                     |                         |
| Myan Oil Terminal Co., Ltd             | 10004450727           | AYA Bank (Kyauktada)  |                  |                         |                  |          |            |           |                     |                         |
| Myan Oil Terminal Co., Ltd             | 0790183079005126014   | MAB Bank (Myanmar Pl. | axal             |                         |                  |          |            |           |                     |                         |

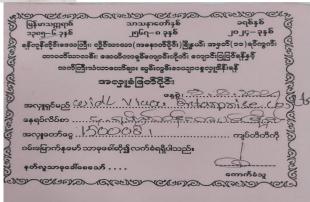
Myan Oil Terminal Company Limited No. 56, Unit 401, Level 4, Yankin Township, Yangon, Myanmar information@myanoil.com.mm

## APPENDIX O Corporate Social Responsibility

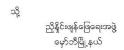








# **APPENDIX P Workplace Coordination Committee**



ရက်စွဲ၊ ၂၀၂၄ခုနှစ်၊ ဧပြီလ၊၁၁ရက်

| အကြောင်းအရာ။             | ညှိနှိုင်းရေးကော်မတီလ | ිများ၏ အမည်  | ၌စာရင်း               |              |                               |                      |                              | 1 0 0 0/11  |         |
|--------------------------|-----------------------|--------------|-----------------------|--------------|-------------------------------|----------------------|------------------------------|---|---------|
| စဉ်အမည်                  | မှတ်ပုံတင်အမှတ်       | အဘအမည်       | ပညာ<br>အရည်အချင်<br>း | မွေးသက္ကရာဇ် | အလုပစတငဂ<br>င်ရောက်သည့်<br>နေ | အလုပ်အ<br>ကိုင်ရာထူး | ကော်မတီဂင်ဖြစ်သ<br>ည့်ရက်စွဲ | နေရပ်လိပ်စာ   | လက်မှတ် |
| ၁။ မဇူးဇူးသဥ္စာကျော်     | ၁၂/သလန(နိုင်)၁၃၇၅၂း   | ဦးအေးကျော်   | ઝુૅရ                  | ეჟ.၁.၁၉၉၄    | 15.5.2019                     | HR<br>Assistance     | 16.5.2023                    | ဦးပိုင်စက်မှု ၁၉၊၂ပ၊၂၁၊စ၁၊အကွက်အ<br>မှတ်(၁)၊(၄)ရပ်ကွက်၊ထန်းတပင်မြို့နယ် | 5       |
| ၂။ မပြည့်သဥ္စာကျော်<br>· | ၁၂/သလန(နိုင်)၁၂၇၂၇၀   | ဦးအေးကျော်   | <i>ે</i> ટ્રેન        | 6.6.၁၉၉၁     | 15.5.2019                     | Accountant           | 16.5.2023                    | ဦးပိုင်စက်မှု ၁၉၊၂ပ၊၂၁၊၁ေ၊အကွက်အ<br>မှတ်(၁)၊(၄)ရပ်ကွက်၊ထန်းတပင်မြို့နယ် | Pager.  |
| ၃။ မချစ်နှင်းစံ          | ၉/မကန(နိုင်)၁၅၅၀၀၃    | ဦးကျော်ဝင်း  | ઝુૅન                  | ാ.ൊപ്പറററ    | 19.12.2022                    | Translator           | 16.5.2023                    | ဦးပိုင်စက်မှ ၁၉၊၂(၊၊၂၁၊၁ေ၊အကွက်အ<br>မှတ်(၁)၊(၄)ရပ်ကွက်၊ထန်းတပင်မြို့နယ် | Ogen    |
| ၄။ မကြည်ကြည်ဝေ           | ၁၂/ကမန(နိုင်)ပ၉၄၂၇၁   | ဦးဝန်းမြင့်  | အထက်တန်း              | 6.00.0860    | 27.5.2019                     | Supervisor           | 16.5.2023                    | ဦးပိုင်စက်မှု ၁၉၊၂၀၊၂၁၊၁ေ၊အကွက်အ<br>မှတ်(၁)၊(၄)ရပ်ကွက်၊ထန်းတပင်မြို့နယ် | Bab.    |
| ၅။ မအိအိမွန်             | ၆/တသရ(နိုင်)ပဂု၅ ၅၈၂  | ဦးကျော်ဆင့်  | အထက်တန်း              | 16.7.1999    | 27.5.2019                     | Supervisor           | 1.4.2024                     | ဦးပိုင်စက်မှု ၁၉၊၂ပ၊၂၁၊၁ေ၊အကွက်အ<br>မှတ်(၁)၊(၄)ရပ်ကွက်၊ထန်းတပင်မြို့နယ် | ર્લ     |
| ၆။ မန္တဲ့ခါလီဝင်း        | ၁၄/မမက(နိုင်)၃၁၇ ၉၆(  | ဦးမျိုးနိုင် | အထက်တန်း              | 4.11.2000    | 7.5.2019                      | Supervisor           | 1.4.2024                     | ဦးပိုင်စက်မှု ၁၉၊၂ပ၊၂၁၊၁ေ၊အကွက်အ<br>မှတ်(၁)၊(၄)ရပ်ကွက်၊ထန်းတပင်မြို့နယ် | 08:     |



# APPENDIX Q Public Consultation Meeting

## **Invitation List**



No (001),17 Residence, Min Ye Kyaw Swar Street, Yankin Township, Yangon Region, The Republic of the Union of Myanmar.

Office: (+95) 9777929885, 9777922169, Mobile: (+95) 9421137569; Website: www.myanweiconsulting .com

ဖိတ်စာလက်ခံရရှိခြင်း

| စဉ်            | အမည်                     | ဋ္ဌာန/အဖွဲ့အစည်း           | ဆက်သွယ်ရန်ဖုန်း | လက်မှတ်     |
|----------------|--------------------------|----------------------------|-----------------|-------------|
| 0              | ભ્યુર્ટ ૧૬૦૦ તે કહ્યો    | ဌာန/အဖွဲ့အစည်း<br>တွေ/୬၇ပ် | 09-792412309    | 0           |
| <b>*</b> J     | P. 00 m/ 6 500 6         | ന്യൂട്ട്.പോദവു:            | 09-793824673    | Wet         |
| 9 <sub>2</sub> | 5% 65<br>E: OU WAY 630 6 | ලි <sub>නාව</sub>          | 0               | <del></del> |
| 9              |                          |                            |                 |             |
| ວ              |                          |                            |                 |             |
| G              |                          |                            |                 |             |
| ૧              |                          |                            |                 |             |
| ၈              |                          |                            |                 |             |
| G              |                          |                            |                 |             |
| 20             |                          |                            |                 |             |
| 22             |                          |                            |                 |             |
| อใ             |                          |                            |                 |             |
| ၁၃             |                          | 100                        |                 |             |
| ၁၄             |                          |                            |                 |             |
| ၁၅             |                          |                            |                 |             |
| <b>Dc</b>      |                          |                            |                 |             |
| ၁၇             |                          |                            |                 |             |

## **Attendance List**

#### WIDE VISION ENTERPRISE COMPANY LIMITED လူထုတွေ့ ဆုံဆွေးနွေးပွဲသို့တက်ရောက်အကြံပြုသူများစာရင်း ရက်စွဲ - ၇ ရက်၊ နိုဝင်ဘာလ ၊ ၂၀၂၄ ခုနှစ်။ လက်မှတ် ဇုန်းနံပါတ် ဌာန/အဖွဲ့အစည်း အမည် ရာထူး οδ 0000 ME at 30 ml 0996 2637055 02 5:00 www. 3 west to the 09963272269 3-2100 8.8. gu 537wg 1-09 457750845 15 Sam B. Siche \$ 5.3. AIT, ह से हुन 09-420760016 ංග පුවල क्लाकि 03 00 pg 60 pg a 09.420120 598 so : 00 : 000; 9. ales : 00 . 05. 29.796359501 800: 3 co 60; c esteen 19952844483 2 asonh wish JU 4-781643190 Translator on. Phys wai Trant luide vision Greenise 03-752315177 IR E. Ha Thero, Ou Admin 09-153172029 Record While Migion Entryprise 20. Race Thinzer lyan

## WIDE VISION ENTERPRISE COMPANY LIMITED

လူထုတွေ့ဆုံဆွေးနွေးပွဲသို့တက်ရောက်အကြံပြုသူများစာရင်း

| ന്റെ -   | ၈ ရက်၊     | နိုဝင်ဘာလ ၊ | ၂၀၂၄ ခုနှစ်။ |  |
|----------|------------|-------------|--------------|--|
| elcook - | il elessi. |             | 3-37 11      |  |

| စဉ်        | အမည်                      | ရာထူး            | ဌာန/အဖွဲ့ အစည်း | ဖုန်းနံပါတ်    | လက်မှတ် |
|------------|---------------------------|------------------|-----------------|----------------|---------|
| 20.        | 23 680 00 80              | Supervisor       | printing.       | 09-789459426   | 2       |
|            | विकार्य किर्म १६०.        | Saparvisor       | live - A.       | 07.768500088   | @aS     |
| 55.<br>51. | भ्युप्रस्तु<br>इस्तिम्बर् | Supernieror      | line-C          | 05-764615411   | Ei      |
| 24.        | 0                         | energy I make    | wwwsial.        | 09. 420201320  | A STORY |
| _          | No No Shee Sho            | Environmentalist | Myanwei         | 09 - 254800652 | \$      |
|            | Aung Yell Thaw            | Envisanmentalist | Myanwei         | 09-950721400   | Old I   |
|            | Htun lin Kyaw             | u                | •               | ०१०१४८४४ . २०  | 3       |
|            |                           |                  |                 |                | 12.40   |
|            |                           |                  |                 |                |         |
|            |                           |                  |                 | = -/           |         |

## Suggestion



| အမည်                                   | 37455446  |
|--|---|
| ဖုန်းနံပါတ်                            | 0996 PG 3705 F  |
| လိပ်စာ/ဌာန                             | ECD   |
| Chemical<br>Tolofiscosi<br>mile; al.o. | injections Anting Section Josephas (S. maticipal) word in Section Josephas (S. Emp<br>Impact to mt gatern Monitoring  Soop as agong if infamilians. |
| n EaEd                                 | કે.જીમ.પુ જ્યુનહીનાગ રજી કૃષ્ટિલાહી. નૃતર્જયુતા રજા છે<br>100%: હરેલાગુન્ડ ૧૦૯૧, જિલ્લા ૧૦૦૦ને તુનના તે તર્જનાહીન હ                                 |



| အကြုံပြုသဘောထားမှတ်ချက်ပေးခြင်း |  |  |  |
|---------------------------------|--|--|--|
| အမည်                            | egleban i el@ wkitels.   |  |  |
| ဖုန်းနံပါတ်                     | 09-796359501   |  |  |
| လိပ်စာ/ဌာန                      | artion real of a seekers   |  |  |
| કુંકું, હક્સું,                 | ရွိက်များကို စနစ်တကျ <u>ွန</u> ွင့် မရာန <sup>ို</sup> င် စလည်း များစနစ် |  |  |

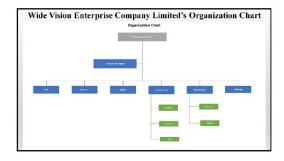


## **PowerPoint Presentation**



|                 | အစည်းအဝေး အကြောင်းအရာ   |
|-----------------|---|
| OII             | Wide Vision Enterprise Company Limited အား မိတ်ဆက်ခြင်း                                       |
| JII             | ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်အား မိတ်ဆက်ခြင်း  |
| <b>5</b> п      | စီမံကိန်း၏ ပတ်ဝန်းကျင်အရည်အသွေး ကွင်းဆင်းတိုင်းတာမှုများအကြောင်း ရှင်းလင်းခြင်း               |
| ĢII             | စီဗံကိန်းကြောင့် ပတ်ဝန်းကျင်အပေါ် သက်ရောက်ခိုင်မှုများနှင့် လျော့နည်းစေရေး လုပ်ဆောင်ထားမှုမျာ |
| ၅။              | ပတ်ဝန်းကျင်ဆိုင်ရာစောင့်ကြပ်ကြည့်ရှုမှု အဓိအစဉ်နှင့်  |
| G <sub>11</sub> | စက်ရုံ၏ဆောင်ရွက်ထားရှိမှု အခြေအနေများအားရှင်းလင်းတင်ပြခြင်း                                   |

| Wide Vision Enterprise Company Limited |   |  |  |  |
|--|---|--|--|--|
| လုပ်ငန်းအမျိုးအစား                     | CMP စနစ်ဖြင့် အိတ်အမျိုးမျိုးချုပ်လုပ်ခြင်းလုပ်ငန်း   |  |  |  |
| အတည်ပြုမိန့်အမှတ်                      | ရန်ကုန်တိုင်းဒေသကြီးရင်းနှီးဖြွယ်နမူကော်မတီ၏ အတည်ပြုစိန့်အမှတ် (ရကတ-<br>၁၆၉/၂၀၁၉] ၂၀၁၉ ခုနှစ်၊ မတ်လ ၁၂ ရက်။   |  |  |  |
| ရင်းနှီးမြှုင်နှံမှု                   | ရာနှုန်းပြည့်နိုင်ငံခြားရင်းနှီးမြှုပ်နှံမှု  |  |  |  |
| <u>ම</u> ෙදේගා                         | မြေရိေယာစုစုပေါင်း ၂.၆၈၆ ကေ   |  |  |  |
| အဆောက်အဦ                               | (၅၇၆၁.၀၃ စတုရန်းမီတာ) ရှိ အဆောက်အဦ (၁) လုံး၊ (၂၄၇၀.၄၈ စတုရန်း မီတာ) နဲ<br>အဆောက်အဦ (၁) လုံး၊ (၁၀၄၄.၆၁ စတုရန်းမီတာ) ရှိ အဆောက်အဦ (၁) လုံးနှင့်<br>(၂၁၁.၅၈ စတုရန်းမီတာ) ရှိ အဆောက်အဦ (၁) လုံး |  |  |  |
| ရင်းနှီးမြှုပ်နှံသည့်ကာလ               | ၁၀ နှစ် ရင်းနီမျုပ်နှံမှု   |  |  |  |
| ရင်းနှီးမြှုင်နှံသည့်ပမာဏ              | အမေရိကန်ဝင်္ဂလာ ၅.၀၉၄ သန်း  |  |  |  |
| စက်ရုံလိပ်စာ                           | စက်မှု (၁၉/၂၀/၂၁/၈၁)၊ (အကွက်အမှတ်-၁) ၊ ကံကြီးကုန်းကွင်း၊ အမှတ် (၄) ရပ်ကွက်<br>ထန်းတပင်မြို့နယ်၊ ရန်ကုန်တိုင်းဒေသကြီး။   |  |  |  |



| ရေအရင်းအဖြစ်                     | အဝီစီတွင်းရေ (၂တွင်း)၊ အနတ်ပေ (၂၅ဝရန့်)  |
|----------------------------------|--|
| ငရသုံးစွဲမှုအခြေအနေ              | သောက်ရေး လုပ်ငန်းသုံးရေနှင့် အထွေထွေသုံးရေ- တစ်ရက်လျှင် (၂.၅)တန်ခန့်   |
| လျှပ်စစ်နှင့်လောင်စာဆီသုံးစွဲမှု | 800 kVA ရှိသော Transformer ၁ခု - တစ်လလျှင် (၃၀,၀၀၀) ယူနစ်ခန့်<br>440 kVA နှင့် 94 kVA ရှိသော ဒီးဝက် ၂လုံး - တစ်လလျှင် ဒီဇယ် (၁,၂၅၁) ဂါလံခန့် |
| လက်ရှိဝန်ထမ်းဦးရေ                | ပြည်တွင်းဝန်ထပ်း - ကျား ၆၀ ဦး ၊ မ ၂၆၂ ဦး၊<br>ပြည်ဝဝန်ထပ်း - ကျား ၈ ဦး ၊ မ ၃ ဦး၊ (စုစုပေါင်း ၃၃၃ ဦး)  |
| ကုန်ကြမ်းပစ္စည်း                 | အိတ်အမျိုးမျိုးချုပ်လုပ်ရာတွင် လိုအပ်သောပစ္စည်းများကို တရုတ်နိုင်ငံမှ မှာယူတင်သွင်<br>ပါသည်။   |
| ကုန်ချော                         | ရရှိလာသော အိတ်အမျိုးမျိုးအား US နှင့် Europe သို့တင်ပို့ပါသည်။   |
| နှစ်စဉ်ကုန်ချောထွက်ရှိမှုပမာဏ    | တစ်နှစ်လျှင် (၄၁၂,၄၇၀) ခန့်အထိ ထွက်ရှိပါသည်။   |

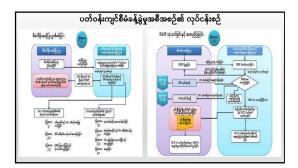


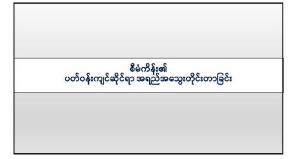




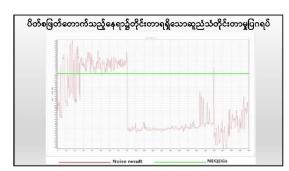


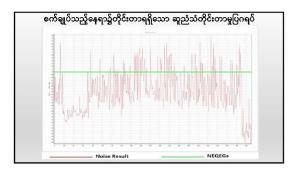
ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ် (EMP) ၏ လုပ်ငန်းစဉ်များအား မိတ်ဆက်ခြင်း



















| ပတ်ငန်းကျင်<br>အရည်အသွေး | လုဝ်ငန်းကြောင့် ဖတ်စန်းကျင်ထိခိုက်နိုင်မှုများ  | စလျာနည်းစစရေး စတိရှိမှ ဆောင်ရွက်ထားမှုများ  |  |  |
|--------------------------|---|---|--|--|
| ecocp                    | <ul> <li>விவிவுள்ளின் அக்கு வகிவுக்காண்டியாடுக் காரிவுக்<br/>இரு மூக் விலிவிக்காகது எனுகிறிக்<br/>கொழிக் செல்றிவுள்ள விவைவருரியில்<br/>கொழிக் செல்றிவுள்ள விவைவருரியில்<br/>கிறிவுகர்வுள் திறிவிவுகிகும் காலக்கான காத்கானர் எனுள்<br/>நிறிக்<br/>கருக்கும் கூற்றிக்கும் கூறிகிறிக்<br/>கருக்கும் கூறிவிவுகரியில் நிறிவிக்கும் கருக்கும்.</li> </ul> | <ul> <li>పిజంగేశ్రీ పారంప్రస్థాల్లున్నాని అయిస్తున్నిక్కుంటానిశ్రీట్లి ప్రశిశవలున్నానికి కేందునాని<br/>సిక్కుమినికి సుమీటున్నాన్ని ప్రశిశ్రీ<br/>- ఉన్నికింట్లు కేంద్రమంలో అన్నాన్నికిం<br/>- మీటుండినికి ప్రశిశ్రమంలో అన్నికింటున్నానికి ప్రామానికి అనికి ఆమె ఈ శ్రేశ్రీమండిన్నే ప్రస్తాన్నానికి ప్రామాన్లో ప్రామానికి ప్రామాన్లో ప్రశిశ్రమంతో ప్రశిశ్రమంతో ప్రామానికి ప్రామానికి ప్రశిశ్రమంతో ప్రశిశ్రమంతో ప్రామానికి ప్రామానికి ప్రశిశ్రమంతో ప్రశిశ్రమంతో ప్రామానికి ప్</li></ul> |  |  |
| «Heligo                  | · włajubyc Awystwiejcz Alchego file Tudjifili   | <ul> <li>జనీపుపానీలున్రామున్నారు.</li> <li>జనీపుపానీలున్నారు.</li> <li>జనీపుపానీలుని జనీపుపానీలుని జనీపుపానీ జనీపి జనీపుపానీ జనీపుపానీ జనీపుపానీ జనీపుపానీ జనీపుపానీ జనీపుపానీ జనీపుపానీ జనీపుపానీ జనీపుపానీ జనీపి జనీపుపానీ జనీపుపానీ జన</li></ul>   |  |  |
| # <u>25</u> 55           | - Šarnčeuzčisyčejų sp <u>ež</u> ež ognčeužijiče   | ခိုမေလိုအေး သိယာန်အခန်းချိန် ဘာရင်ခြင်း     ဆူညီသံ ရောက်ရှိ၌ ရရှိအဝန် စီးစက်နှင့် ထုတ်လုပ်မှုခရိယာအလ သို့သောက်သော အတ္တာအဝေ<br>သွင် ဘာရရှိ၌မ်း   |  |  |
| (adgray)<br>dgrgnkije    | <ul> <li>ဘာသီလွယ်နှင့်နှင်မင်းတွေနဲ့ ရှောက်ရှိသော ဗိတိပြင်းစားနှား ကရာရှင့်၊</li> <li>အလောင်းများ၊ ကွက်ရှိရာတွင် အပုံရပြာသ၌ ပလစ်လေစ်ဆိုတဲ့များ</li> <li>ကာလောင်းစားကို ရာသေးတာတဲ့နှင့် ရုံအနှံစ ရှင်းစစ်ရှိတို့မှုနှစ်</li> </ul>   | <ul> <li>သင်တို့တည်။ ပဋိပတို့သည့် မွန်ခစ်အပြိုယ်ရာရောင် ဝန်ယစ်ရောအစ် အလေ့သည့် ခွန်မစ်အမြိုက်ရာသ<br/>အသည့်သို့အရှင်တို့ဖြင့်</li> </ul>  |  |  |
| စွန်းကို (အရည်)          | <ul> <li>ကေသာက်ကောင်နှင့် လက်မောင်လောမ်းများမှ ခွန့်တွက်မရ</li> <li>ညီကွာမေစီ</li> <li>Poletry Section မှ ရန်ကစ်လေ့ရက်ရှိခြင်း</li> </ul>   | <ul> <li>ကျောင်းရာသာလ မတို့အလွှာသလာတာကို ရှင်မရာနှင့် ပုံချိပ်ရန်းရှိသော ပြုလုံးပြုပါ<br/>သို့သားခါတွင် မိတ္တာတုံရေး ပျိုင်တာ သက်ထိပိုလျှော်မှာ ကို ပေါ်ကျားရှိရှန်းများခဲ့လ<br/>သက်ကာရေအသေး စာတုံရောက် မိတ်ပေါ့ရှိ နေချိတာ ရှင် မကြွန်တို့ သို့သော လို့လွှာသော<br/>သည်သွားစေးပြင်<br/>Thirty States လှုတ်ပြီးသောရန်ဝင်းရောက်သော အပည်ချောက်ပြုသည့်သို့ နှုပ်စ်ခြင်း</li> </ul>  |  |  |

| ပတ်ဝန်းကျင်<br>အရည်အသွေး                             | လုပ်ငန်းကြောင့် ပတိဝန်းကျင်ထိခဲ့က်နိုင်မှုများ  | လျှော့နည်းစေရေး ဧက်ရဲမှ ဆောင်ရွက်တားမှုများ   |  |  |
|--|---|---|--|--|
| discres<br>regapid                                   | <ul> <li>ం ప్రభుత్వుందినాశ్వే అయ్యానుక్కరా కేంద్రాల్లు అయ్యాన్నారు. గ్రేశ్రం</li> <li>అట్టాన్నారు అయ్యానుక్కల అయ్యాన్ని తీటుగాక్కులను గ్రేశ్రంగా శ్రీలేద్దిం</li> </ul>                 | <ul> <li>ဝေါင်နယ်မှုပြီး မိန်မိတတ်သည့် တိန်းထားမှု အဆင်သန် သာရန်ခြင်း (၁၈ ဝနင်း) ရှိ<br/>ဆုံးသော်လောင်လောန်းတာရှိခဲ့သီး အာရေသို့ ထွင်လုပ်ငယ်နှင့်လုပ်ပွင်သန်းမှုသည်။<br/>ဝေါင်မီသည့် ထားခွဲနာ တိတ်ရှိသန်းတော့ ငေစားဆောင်ချင်းပြီး<br/>ပေ ပြင်သည်ပြောင်မှာ သေခါကြောင်မှာသော သေခိုန်ခဲ့သူ မှန် ငေစာကြောင်းရှိခဲ့သြီး<br/>ပြင်ဆင်မြင်များ ပြင်ပေါ်ခြင်းမှ မာသာအနှလုပ်ပြန်ခေါ်ပါက ခြေခွင်ခိုင်ကို သင်သန်<br/>ရာ တစ်ခွစ်လမြည်အတွင်က</li> </ul> |  |  |
| သုပ်ငန်းခွင်<br>ကျန်လမေန<br>နော့်တောက်<br>သုံခြုံရေး | ంచైన మృకలాను బ్రామక్కుల లోకేవ్యుడుకుపెద్ది ఇంట్ల అయినాయ్యు<br>ప్రక్రించిక్ (జైక్ బ్యాక్ వ్యాక్షింక్లు కామాని ఇక్కట్టేంప్రుప్రేకల కోయం<br>ప్రామంగానిక్ కొట్టుక్కుపెట్టికల్లో (మెక్కికల్) | င်းပါသာရေရအာင် လောင်နှိုင်ရမှာကြောရွာရှိသည်။သည်ရှာရှုနှင့် ပတ်သက်၍ ချနှစ်<br>တကာ သင်ကြားသေရှိသီး လုပ်ငန်းရန်ကီတွေငံး အချိန်ကာခင်ခဲ့လော်မိန်လောင်နိုင်ငံ<br>တင်းရွှေငံမှုရာ အချွှတ်ပါတစ်မှာ တယ်၍ ဦးချိန် ထိုလောက်သော သာပင်းရေးနှင့်<br>လေနိုင်ငံသည့် စီးရေးနှင်၏ စီလုံရောင် တင်အကောက်၍ပို့သိ<br>- Piec ské စီးသူ နှင့် လကာသောင်သတို့ရှိသို့  |  |  |





| cogo  | အမျိုးအတေ  | ∰δ <u>α</u> ξι                                    | e-pep                  | ကုန်ကျနရိတ်  | ထားနေရှိသူ   |
|---|--|---|------------------------|--------------|--|
|   |  | 6   | လုပ်ငန်းရက်သိန်းမြန်   |              | 10   |
| acnol   | PALLING SO, NOUR.<br>ISKINGG OG NO   | జైనేసికేస్తుగాను<br>ఇంద్రదేశ (5) త్రోతే           | ရယ်သိမ်း ဂရိယ <u>ာ</u> | တပါန်း ကျင်  | E scennantil Mongement Teach<br>Wide Valen Emergère Co., and     |
| <b>అందిన</b>  | riving cours   | ချင်သိမ်းမှုကာသ<br>ဆတွင်း (၁) ကြိမ်               | ဗ္.ကိ.ထိခ်ခဲ့ မရိလာ    | 2-dip org5   | Esternmental Management from a<br>Wide Voirn Entereda Co., Lel.  |
| ရှင်းစ်အချိပ်<br>(                                      | a-constact gritilians<br>nghilprocesselphacibh<br>gra  | grhibbymoco<br>moglis                             | ရက်သို့ရုံး ကိုယာ      | geusányá     | E scremantal M-rayment Tea -<br>wide Valen Emergine Co., and     |
| လုပ်ငန်လွှင်တေး<br>နေရုက်ပိုင်းချင်း<br>လုပ်ငန်လွှင်တေး | idescend of propherous, FPAs,<br>Crastings research, observiously<br>must used in the project.       | angi.   | ရက်သိန်းမှ မရှိသာ      | political.   | Unicomonal Minagener Semi<br>Wak Vaim E teacing Oo, 31           |
| Japansyde <b>A</b> Jab                                  | သစ်လ်မှု မြော်လှည်စိုယ်ရှိခြင်း<br>ခြေသီလွှာကို မြင်လည်<br>ထိန်းသိန်းမှ လည်းနှံများ<br>ဆောင်ရွက်ရှိသ | ြန်လည်ရှန်းနိုင်နိုင်<br>လူဝီငန်ပြီးဆုံသည်<br>အဆိ | grading alpernancy     | on different | E to remain Management for a<br>Wile Valent Externities (2), 2rd |

4



















