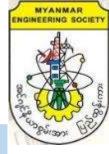
## **Myanmar Engineering Society**

#### **Categories of Industries which need to conduct EMPs during 2018**

Sr.	Type of Industrial Sector
1	Alcohol, Wine and Beer Production Factories
2	Food and Beverage Facilities
3	Pesticide Manufacturing, Formulation and Packaging Plants
4	Cement and Lime Manufacturing
5	Textile and Drying Facilities (Pretreatment or Dyeing of Textile or Fibre)
6	Sugar Manufacturing Plant
7	Foundry Industry (Base Metal Smelting & Refining Plant, Manufacture of Pig Iron, Raw and Low Alloy Steel from Iron Ore and Scrap Metal, Foundry, Non-ferrous Metal Melting , Smithy and Filigree)
8	Training and Leather Finishing
<b>9</b> 3/8/2	Pulp and Paper Mill



### **Myanmar Engineering Society**

Mining Sector Environmental and Social Impact Assessment Guidelines

### Mining Environmental Impact Assessment Guidelines

#### November 2018

**By ADB** 

# Background

- Mining EIA Guidelines Working Group established by Minister of MONREC
- Workgroup members include ECD, and the five mining agencies (DOM, DGSE, ME 1, ME 2, Gem Enterprise), Pearl Enterprise, Forest Department, Department of Health, Department of Labor, and GAD.
- While not formally appointed, WWF, MCRB, and ADB also also participate in Working Group
- ADB and WWF assistance to the Working Group

# Mining EIA Guidelines Coverage

- Screening and Categorization new mines
- Scoping and Terms of Reference EIA Type Projects
- Preparation of an Environmental Impact Assessment
- Preparation of Initial Environmental Examinations
- New Mines: Preparation of a Stand-alone Environmental Management Plan
- Existing Mines: Preparation of a Stand-alone Environmental Management Plan



- All new mines or expansions must undergo environmental screening
- Preparing and Submitting the Project Proposal
- Determining the Screening Category (EIA, IEE, EMP)
- Guidance on the Content of Project Proposal

### **Scoping and Terms of Reference**

#### Focuses on:

- issues and concerns
- information to be collected
- Planning the analysis and consultation
- identification of likely environmental and social risks.
- Key Element in Scoping
  - Preparing a detailed Project Description
  - Analysis of Alternatives
  - Identification of Environmental and Social Issues
  - Community Engagement and Community Development
- Scoping Report Contents
- Terms of Reference for Conducting EIA

### **Terms of Reference**

- ToR are to include:
  - Scope of the environmental assessment
  - Environmental and Social Field Studies
  - Responsibilities EIA Team
  - Table of Contents for the EIA Report
- Example TOR are included in the Guideline

# Preparing an Environmental Impact Assessment

- Conducting the Assessment
  - Steps in the EIA Investigation (based on EIA Procedure (2015)
- Annotated EIA Report Contents
- Detailed EIA Report Outline

### **EIA Investigation Steps**

- Defining Geographic Boundaries
- Defining the Time Frame
- Preparing the Project Description
- Analysis of Alternatives
- Environmental and Social Description
- Assessment of Impacts
- Designing Mitigation Measures

### **EIA Investigation Steps**

- Designing Environmental Quality Monitoring Programs.
- Risk Assessment and Emergency Response Planning
- Cumulative Impact Assessment
- Community Engagement and Community Development
- Mine Closure Planning
- Environmental and Social Management Planning
- Conclusion

## **Space and Time**

Study area on a geo-referenced map

0

- Study area includes mine site and other areas that will be directly affected off-site facilities
- Area may need to be expanded to properly assess impacts of environmental and social components
- Time Frame all stages of mining life cycle
  - pre-construction; construction; operation closure; and post closure

# **Project Description**

- Clear statement of the purpose and need with a justification of for the mine
- The description should cover all stages preconstruction through construction to operation to closure.
- Technical Guidance is provided for preparation of project description

### **Project Description**

#### **Box 1. Basic Elements of a Project Description**

- Project justification and need
- Project Location (including detailed map)
- Basic Components, Facilities, and Activities
- Site Layout Map or Schematic Diagram
- Overview of Operations
- Mine Development
- Mining Method
- Ore Processing, Treatment, and Final Products
- By-Products and Waste Rock: Stockpiles, Dumps, and Tailings
- Haulage and Transportation Facilities
- Mine Power Supply and Support Facilities
- Offsite Ancillary Facilities
- Water Management
- Mine Closure
- Employment, Local Hiring, and Local Purchasing
- Amount and type of emissions to air, effluent discharges to water; amount of type solid waste disposal; and amount and type of hazardous waste
- Project Development and Implementation Schedule
- Construction Material and Equipment Use
- Water Use
- Energy Use

# **Analysis of Alternatives**

- No Project Alternative
- Alternative Technologies
  - mining methods
  - processing methods
- Alternative Locations
  - sites of mine facilities
  - alignment of roads, railways, and pipelines

## **Assessment of Impacts**

#### Summary Tables of Potential Impacts (Annex 1)

- Environmental and Social Impacts
  - Exploration
  - Construction
  - Operation
  - Mine Closure