# REPUBLIC OF THE UNION OF MYANMAR



MONREC

# MINISTRY OF NATRURAL RESOURCES AND ENVIRONMENTAL CONSERVATION

### (Environmental Compliance Certificate - ECC)

ECC  $(1/2015)(1^{st}$  Extension)

Date: 15 - 2023

1. Pursuant to the Environmental Conservation Law (No. 9/ 2012) and Article 91 of the Environmental Impact Assessment Procedure, this Environmental Compliance Certificate (ECC) is granted for an extension for the first time to the following Project after a five-year validation of the previous ECC has expired.

(a) Project Proponent Name - Myanmar Wanbao Mining Copper Limited
(MWMCL)

(b) Project Proponent - No. 70 (I) Bo Chein Street, Pyay Road,
Address Hlaing Township Yangon, Myanmar

Phone No. 01-654757, 01-507239

Fax-01 664756

mwmcl2016@gmail.com

(c) Types of Project - Production of Copper

(d) Life of Mine Project - 30 years

(e) Size of Project - Ore mining: 95,000 t/d copper ore

Copper production: 100,000 t/a

Area: 32.73km<sup>2</sup>

(f) Project Location - Sagaing Region, Myanmar, approximately

4.5 km to the southwest of Monywa

Township (22°04'N, 95°05'E (716100mE,

2443199 mN, Zone 46Q)

(g) Extension period - 5 years (First Time)

Date of Issue: 20-12-2022

Date of Expiry: 19-12-2027

#### **CONDITIONS**

- 2. The conditions attached to this ECC are required to:
  - (i) Prevent, minimize, and/ or offset adverse environmental and social impacts;
  - (ii) Confirm the project commitments and obligation of the Porject Proponent;
  - (iii) Set standards and performance measures for acceptable environmental performance.
  - (iv) Require regular monitoring and reporting; and
  - (v) Provide for the ongoing environmental management of the Project.

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Ha Maung Thein

(Hla Maung Thein)

Permanent Secretary

Ministry of Natural Resources and Environmental Conservation

#### Schedule 1

Application No: 1/2015 (1st Extension)

Project Proponent: Myanmar Wanbao Mining Copper Limited (MWMCL)

Details of Contact Person: Wanaging Zhentang, Managing Director

#### Description of the Project:

The project in its broader context consists of:

- An open cut mine from which copper ore and mine waste are extracted;
- A network of crushers which break the ore down to a size suitable for leaching;
- A series of three (3) heap leach pads (HLPs) which will be progressively increased in height, as the optimum leaching period is reached, to a full height of 84 meters (m);
- A solvent extraction and electro-winning plant (SX/EW plant) which is used to extract the copper from the solution from the HLPs and then plate the copper onto electrodes for sale and export.
- Associated mines works and transportation links
- The estimated mine life is 30 years.
- A total of 92,500 tonnes of ore will be mined and placed onto the HLPs daily.

### Existing infrastructure is limited to:

- Accommodation camps including laydown areas and workshops located at the foot of the hills northwest of the proposed pit and in the south of the site;
- A small starter pit on the eastern side of Letpadaung Hill;
- Site access roads, along the western and northern boundaries of the future pit,
- A haul road accessing the starter pit from adjacent to the main camp area in the north-western corner of the Project area; and
- A haul road access from the Chindwin River and the S&K mine operations

# Land on which the Project is located:

The Project site is located around the geographic location 22° 04'N, 95° 05'E (716100mE, 2443100mN, Zone 46Q) and occupies an area of 32.73 km2.

See Figures 1.2 and 1.3 sourced from Myanmar Wanbao Mining Copper Ltd.

Letpadaung Copper Project Environmental and Social Impact Assessment prepared

by Knight Piesold Pty Limited submitted dated PE701-00022/13, Rev 6, January, 2015.

#### Schedule 2

#### Part A - General Conditions

- Al The Project Proponent shall bear full legal and financial responsibility for all adverse impacts and all actions and omissions of itself and its contractors, subcontractors, officers, employees, agents, representatives, and consultants employed, hired or authorized by the Project Proponent acting for or on behalf of the Project Proponent, in carrying out work on the Project. The Project Proponent shall fully implement all environmental and social measures, and is liable for ensuring that all contractors and subcontractors comply fully with all relevant environmental and social standards and measures, and other requirements.
- A2 The Project Proponent shall carry out the Project in accordance with the documents submitted to Ministry including:
  - i. The Myanmar Wanbao Mining Copper Ltd. Letpadaung Copper Project Environmental and Social Impact Assessment prepared by Knight Piesold Pty Limited submitted dated PE701-00022/13, Rev 6, January, 2015 (ESIA)
  - ii. Any amendments and updated submitted to the Ministry;
  - iii. Environmental Management Plan (EMP) and Environmental Monitoring Programs submitted to the Ministry;
  - iv. The Resettlement Action Plan;
  - v. The Conditions contained in this ECC; and
  - vi. Environmental and Social Monitoring Plans and Environmental and Social Monitoring Programs submitted to the Ministry (Referred to Annex 1); and
  - vii. The Project Commitments (Referred to in Annex 2).
- A3 The Project Proponent shall inform the Ministry prior to any proposed amendments to the Project design and operations. The Ministry may modify this after consultations with the Project Proponent.



- A4 The Project Proponent shall implement the Environmental and Social Management Plans and Environmental and Social Monitoring Programs (Annex 1 of this Schedule 2).
- A5 The Project Proponent shall ensure that all bidding documents and contracts for Project works contain provisions that require contractors to:
  - Comply with the measures relevant to the contractor set forth in a Project EMP, and any corrective or preventative actions set forth in an Environmental Monitoring Report;
  - ii. Make available a budget for all such environmental and social measures; and
  - iii. Provide the Project Proponent and the Ministry with a written notice of any unanticipated environmental and social risk that may rise during the operation of the Project that were not considered in the Project EIA Report and the EMP.
- A6 The Project Proponent shall provide all necessary financial and human resources to:
  - i. fully implement the Environmental and Social Management Plans and Environmental and Social Monitoring Programs (referred to in Annex 1 of Schedule 2); and
- ii. fulfill all Project Commitments set out in this ECC (Annex 2 of Schedule 2).

  A7 The Project Proponent shall, unless otherwise instructed in writing by the Ministry, undertake self-monitoring as specified in a Project EMP and this ECC. The Project Proponent shall maintain records of all self-monitoring results described in an EMP, including records of taking and analysis of samples, instrument measurements (periodic and continuous), calibrations, examinations, tests and surveys, and any assessments made on the basis of such data. All records shall be legible, made as soon as reasonably practicable, and if amended, amended in such a way that both original and any subsequent amendments remain legible, or capable of retrieval. All records shall be retained, unless otherwise agreed in writing by the Ministry, for at least three (3) years from the date when the records

were made.

- A8 To enable the Ministry to monitor Project compliance, the Project Proponent shall:
  - Grant the Ministry and/or its representatives, at any time during normal business hours, access to the Project's offices and the Project site and any other location at which the Project's activities or activities related to the Project are performed;
  - ii. In the event of an emergency, or where in the opinion of the Ministry, there is or may exist a violation or risk of violation of the compliance of the Project with all applicable environmental and social requirements, grant full and immediate access to the Ministry at any time as may be required by the Ministry; and
  - iii. If upon inspection, the Ministry identifies any non-compliance with the conditions in this ECC, the Ministry may require the Project Proponent to undertake remedial measures and/or may impose penalties as provided for in the EIA Procedure (2015).
  - A9 The Project Proponent shall submit semi-annual Environmental Monitoring Reports to the Ministry, and promptly publically disclose such reports. Reports shall include without limitation the issues listed in section D of this ECC.
  - A10 The Project Proponent shall ensure that all reporting in compliance with this ECC is made available to the Ministry and to the public. This information shall be made available at the local Ministry or departmental office or other location with consent of the Ministry and electronically on a Project Proponents or Project website.
  - All This extension of ECC is valid for a period of five (5) years. Six (6) months prior to the expiration of this ECC, the Project Proponent may apply to the Ministry for an extension.
  - A12 The Ministry has the right to terminate this ECC with immediate effect if:
    - i. Substantial implementation of the Project has not commenced within two (2) years after the issuance of this ECC, unless the Project Proponent has applied in writing to the Ministry providing reasons why it has not been able to commence substantial implementation of the Project, including what further period of time is needed before substantial commencement of the

Project can take place, and the Ministry has in its discretion granted an extension;

- ii. The Project Proponent fails to comply with any condition in this ECC and fails to implement corrective actions within the period (if any) allowed by the Ministry.
- A13 The Ministry may unilaterally modify conditions in this ECC and/or require the Project Proponent to revise and resubmit an EMP to the Ministry for review and approval, if at any time the Ministry determines that:
  - i. The mitigation measures are insufficient or inadequate to mitigate the actual or likely impacts of the Project;
  - ii. New information becomes known as to how harmful the adverse impacts of the Project are, or are likely to become;
  - iii. The adverse impacts of the Project which could not have been foreseen at the time the originally approved Initial Environmental Examination (IEE) report / EIA report and EMP were approved;
  - iv. The adverse impacts of the Project are greater than those anticipated impacts that formed the basis for the preparation, submission, and approvals of the original IEE report/EIA report and EMP and the issuance of this ECC and conditions therein;
  - v. New techniques conforming to the definition best available techniques are available which would significantly reduce the adverse impacts of the Project;
  - vi. The adverse impacts of the Project can be reduced through adherence to good practice without commercially significant extra cost to the Project; or
  - vii. The measures and conditions stipulated in an EMP and/or this ECC are determined to be unnecessary to mitigate the adverse impacts.
- Where, in the opinion of the Ministry, the Project is not in compliance with, or is likely not to comply with, its obligations, the Ministry shall promptly inform the Project Proponent and may recommend and warn the Project Proponent to strictly implement its obligations. The Ministry shall indicate the manner in which

environmental and social obligations are not being complied with by the Project Proponent and shall give a specified time within which to bring the Project into compliance. The Ministry may take such enforcement actions as considered appropriate to suspend, at the Ministry's discretion, this ECC in whole or part for reason of the Project Proponent's failure materially to comply with any condition of this ECC and fails to cure such non-compliance within the period specified by the Ministry.

This ECC does not a grant to the Project Proponent any right or authorization to use any resources, nor is it a permit to engage in any commercial activities. This ECC does not relieve the Project Proponent from identifying, obtaining, and maintaining in force all other licenses, permits and approvals from relevant authorities. It is the obligation of the Project Proponent to ensure that all these licenses, permits and approval are valid during the life of the Project. All such documents must be available for inspection during the life of the Project.

The Project Proponent shall submit final Environmental and Social Management Plans and Environmental and Social Monitoring Programs (referred to in Part C) to the Environmental Conservation Department (ECD) prior to commencement of construction or operations (as required). No construction or operations shall commence until the ECD has received the final Environmental and Social Management Plans and Environmental and Social Monitoring Programs.

A17 The Ministry may, upon joint application of a Project Proponent and a proposed transferee, transfer to the proposed transferee an ECC or any part of an ECC.

A18 If resettlement or relocation of any people is required by the Project, the Project Proponent shall comply with a Resettlement Action Plan that has been assessed and approved by the Ministry in accordance with the EIA Procedure (2015).

A19 If during the course of construction or operations an item of cultural heritage is discovered or found, the Project Proponent must take all reasonable action to protect the item of cultural heritage until the ECD and other relevant Ministries have had the opportunity to assess the value of the item of cultural and determine any action to be taken to protect the item of cultural heritage.

- A20 Following construction, the Project Proponent shall provide to ECD a copy of the final plans of the Project, including site layout and worker accommodation plans, and a certificate that the Project has been constructed in accordance with this ECC.
- A21 The Ministry may prescribe conditions in this ECC to require the Proponent to make contributions to the Environmental Management Fund in accordance with Article 30 of the Environmental Conservation Rules: (i) pollution charges (emissions, waste), and (ii) charges on the use of natural resources and benefits from ecosystem services.
- A22 All financial guarantees, in a form to be agreed between the Proponent and the Government of Myanmar, shall be provided by the Proponent on the agreed date.
- A23 The project proponents shall fund US\$ 2 million for environmental management annually.
- A24 The project proponents shall apportion 2 % their respective net profit from the project for CSR activities once the project is in full operation.



# Part B- Environmental Performance (Standards) Conditions

B1 The Project Proponent will ensure that the Project will comply with the following environmental standards during all stages of the Project.

## **Emission Standards**

- Applicable General and Industry-Specific guidelines in the Myanmar National Environmental Quality (Emission) Guidelines (December 2015).
- Any additional proposed Project environmental quality guidelines and standards, described in the EIA, as accepted by the Ministry.

### **Ambient Standards**

- General Air Emission Guidelines in the Myanmar National Environmental
  Quality (Emission) Guidelines (December 2015).
- Applicable Myanmar National Water, Soil, Noise, and Odour Standards.
- Any additional proposed Project environmental quality guidelines and standards, described in the EIA, as accepted by the Ministry.
- B2 The Project Proponent shall use best available techniques in complying with these Environmental Performance Conditions unless otherwise specified.
- B3 **Standards Applicable to the Project.** The specific standards applicable to the Project are set out in B4 to B10

# B4 Effluent Standards for Mining Sites

The following standards apply to all mining activities including runoff and discharges from mine pit, heap leach pads, waste rock dumps, storm water ponds, and process water ponds. The standards also apply to runoff and discharges from roads, construction work sites and temporary sedimentation ponds.

Water releases from the heap leach pads, waste rock dumps, storm water ponds, and process water ponds during the Mine Closure Period shall comply with these Effluent Standards.

During the Post Closure Period water releases from the heap leach pads, waste rock dumps, storm water ponds, and process water ponds shall comply with these Ambient Water Quality Standards.

Table 1. Effluent limit values for mining sites

Parameter	Unit	Effluent Limit Value	Reference
Arsenic	mg/l	0.1	Myanmar National
			Environmental Quality
			(Emission) Guidelines,
			December 2015.
Cadmium	mg/l	0.05	As above
Chemical oxygen	ma/l	150	As above
demand	mg/l		
Chromium (hexavalent)	mg/l	0.1	As above
Copper	mg/l	0.3	As above
Cyanide	mg/l	.1	As above
Cyanide (free)	mg/l	0.1	As above
Cyanide (weak acid	ma/l	0.5	As above
dissociable)	mg/l	0.5	
Iron (total)	mg/l	2	As above
Lead	mg/l	0.2	As above
Mercury	mg/l	0.002	As above
Nickel	mg/l	0.5	As above
рН	S.U.a	6-9	As above
Temperature	°C	<3 degree differential	As above
Total suspended solids	mg/l	50	As above
Zinc	mg/l	0.5	As above

# B5. Effluent Standards for Work Camps, Sanitary Facilities, Domestic Wastewater, and Landfills

The following standards apply to domestic wastewater, and discharges, drainage and runoff from work camps, sanitation facilities and landfills.



Table 2. Effluent limit values for work camps, sanitary facilities, domestic wastewater, and landfills

Parameter	Unit	Effluent Limit Value	Reference
5-day Biochemical oxygen	mg/l	50	Pollution prevention and
demand			abatement handbook.
			1998. The World Bank.
Ammonia	mg/l	10	As above
Arsenic	mg/l	0.1	As above
Cadmium	mg/l	0.1	As above
Chemical oxygen demand	mg/l	250	As above
Chlorine (total residual)	mg/l	0.2	As above
Chromium (hexavalent)	mg/l	0.1	As above
Chromium (total)	mg/l	0.5	As above
Copper	mg/l	0.5	As above
Cyanide (free)	mg/l	0.1	As above
Cyanide (total)	mg/l	1	As above
Fluoride	mg/l	20	As above
Heavy metals (total)	mg/l	10	As above
Iron	mg/l	3.5	As above
Lead	mg/l	0.1	As above
Mercury	mg/l	0.01	As above
Nickel	mg/l	0.5	As above
Oil and grease	mg/l	10	As above
рН	S.U.	6-9	As above
Phenols	mg/l	0.5	As above
Selenium	mg/l	0.1	As above
Silver	mg/l	0.5	As above

Parameter	Unit	Effluent Limit Value	Reference
Sulphide	mg/l	1	As above
Temperature increase	°C	<3ª	As above
Total coliform bacteria	100 ml	400	As above
Total phosphorus	mg/l	2	As above
Total suspended solids	mg/l	50	As above
Zinc	mg/l	2	As above

<sup>&</sup>lt;sup>a</sup> At the edge of a mixing zone extending 100 meters from the point of discharge

#### **B6** National Ambient Water Quality Standards

The Proponent is responsible for ensuring that effluents, drainage or runoff from the Project or its related activities do not result in ambient water quality downstream of a discharge point(s) exceeding these Ambient Water Quality Standards. As part of its monitoring program, the Proponent shall therefore calculate the load from the Project to the ambient water and model the resulting ambient water quality, taking into account baseline water quality conditions before the Project started or upstream of the discharge point. If the model results show that any Ambient Water Quality Standard will be exceeded, then the Proponent shall take the necessary measures to reduce the load from the Project sufficiently to comply with the Ambient Water Quality Standards.

If actual water quality measurements show that any Ambient Water Quality Standards is being exceeded or are likely to be exceeded, then the Proponent shall report to ECD and in cooperation with ECD investigate the matter in detail. The Proponent shall be responsible for any non-compliance or contribution to non-compliance that can be attributed to the Project or its related activities.

During the Post Closure Period water releases from heap leach pads, waste rock dumps, storm water ponds, water conditioning pond, and process water ponds shall at all times meet the Ambient Water Quality Standards.

Water quality standards/guidelines include drinking water guidelines (B6.1),

surface water guidelines (B6.2), and groundwater guidelines (B6.3).

# **B6.1** Drinking Water Quality Standards

Drinking water quality should meet the standards in Table 3.

Table 3. Drinking water quality standards

Parameter	Unit	Concentration	Reference
Aluminum	mg/l	0.2	National drinking water quality
			standards. 2014. Ministry of Health,
			Myanmar.
Ammonia-	mg/l	1.5	As above
Nitrogen	1		
Antimony	mg/l	0.02	As above
Arsenic	mg/l	0.05	As above
Barium	mg/l	0.7	As above
Boron	mg/l	2.4	As above
Cadmium	mg/l	0.003	As above
Calcium	mg/l	200	As above
Chloride	mg/l	250	As above
Chromium	mg/l	0.05	As above
Coliforms (total)	MPN/100	3	As above
	ml		
Coliforms	MPN/100	0	As above
(faecal)	ml		
Color	TCU	15	As above
Copper	mg/l	2	As above
Cyanide	mg/l	0.07	As above
Fluoride	mg/l	1.5	As above
Hardness	mg/L as	500	As above
	CaCO <sub>3</sub>		
Iron	mg/l	1	As above

Parameter	Unit	Concentration	Reference	
Lead	mg/l	0.01	As above	
Magnesium	mg/l	150	As above	
Manganese	mg/l	0.4	As above	
Mercury (total)	mg/l	0.001	As above	
Nickel	mg/l	0.07	As above	
Nitrate (as NO <sub>3</sub> )	mg/l	50	As above	
Nitrate (as NO <sub>2</sub> )	mg/l	3	As above	
Odor	-	Acceptable/No	As above	
		objectionable		
		odor		
рН	-	6.5-8.5	As above	
Selenium	mg/l	0.04	As above	
Sodium	mg/l	200	As above	
Sulphate	mg/l	250	As above	
Sulphide	mg/l	0.05	As above	
Taste	-	Acceptable/No	As above	
		objectionable		
		taste		
Total dissolved	mg/l	1000	As above	
solids				
Turbidity	NTU	5	As above	
Uranium	mg/l	0.03	As above	
Zinc	mg/l	3	As above	

# **B6.2** Ambient Water Quality Standards for the Protection of Aquatic Life

Ambient surface water quality should meet the standards in Table 4.



Table 4. Ambient water quality standards for the protection of aquatic life

Parameter	Unit	Concentration	Reference
Aluminum	mg/l	0.005 (if pH < 6.5)  0.1 (if pH > 6.5)	Australian and New Zealand guidelines for fresh and marine water quality. 2000. Australian and New Zealand Environment Conservation Council.  Water Quality Guidelines for the Protection of Aquatic Life. 2016. Canadian Council of Ministers of the Environment.  Metal mining technical guidance for environmental effects monitoring. 2012. Environment Canada.
Ammonia	mg/l	0.02	As above
Arsenic	mg/l	0.05	As above
Boron	mg/l	0.5	As above
Cadmium	mg/l	0.0002	As above
Chloride	mg/l	0.86	As above
Chromium (hexavalent)	mg/l	0.01	As above
Chromium (trivalent)	mg/l	0.0089	As above
Coliforms (total)	MPN/100 ml	5000	As above
Coliforms (faecal)	MPN/100 ml	1000	As above
Color	mg/l	Not significantly higher that	As above

Parameter	Unit	Concentration	Reference
		seasonally	
		adjusted	
		background	
		value	
Copper	mg/l	0.002	As above
Cyanide (free)	mg/l	0.005	As above
Dissolved oxygen	mg/l	6	As above
Ethanol	mg/l	1.4	As above
Fluoride	mg/l	0.2	As above
Iron	mg/l	0.3	As above
Lead	mg/l	0.001	As above
Manganese	mg/l	0.05	As above
Mercury	mg/l	0.0001	As above
Molybdenum	mg/l	0.073	As above
Naphthalene	mg/l	0.016	As above
Nickel	mg/l	0.015	As above
Nitrate	mg/l	5	As above
Nitrite	mg/l	0.06	As above
Oil & grease	-	Substantially	As above
		absent, no	
		iridescent sheen	
рН	-	6.5-9	As above
Phenols	mg/l	0.004	As above
Phosphorus	mg/l	0.15	As above
Selenium (total)	mg/l	0.005	As above
Silver	mg/l	0.0001	As above
Sulphide	mg/l	0.002	As above

Parameter	Unit	Concentration	Reference
Temperature	°C	< 2 increase	As above
Thallium	mg/l	0.004	As above
Total suspended	mg/l	10	As above
solids			
Tributyltin	mg/l	0.000008	As above
Turbidity	-	< 10% change	As above
Uranium	mg/l	0.015	As above
Zinc	mg/l	0.005	As above

# **B6.3** Groundwater Quality Standards

Groundwater is an essential water resource for many aquatic ecosystems, and for substantial periods it can be the sole source of water to some rivers, streams and wetlands. Groundwater is also very important for primary and secondary industry as well as for domestic drinking water, particularly in low rainfall areas with significant underground aquifers. Ambient Water Quality Standards should therefore apply to both surface and groundwater since the environmental values which they protect relate to the same above ground uses (e.g. drinking water, irrigation, and maintenance of aquatic ecosystems).

# **B7** Ambient Air Quality Standards

Air quality should not exceed the levels presented in Table 5.

Table 5. Ambient air quality standards

Substance	Averaging Period	Standard µg/m³	Reference
Sulfur dioxide	24 hours	20	Myanmar National Environ-
	10 minutes	500	mental Quality (Emission)
			Guidelines, December 2015.
Nitrogen dioxide	1 year	40	As above

Substance	Averaging Period	Standard µg/m³	Reference
	1 hour	200	
Particulate matter	1 year	20	As above
PM <sub>10</sub>	24 hours	50	
Particulate matter	1 year	10	As above
PM <sub>2.5</sub>	24 hours	25	
Ozone	8-hour daily	100	As above
	maximum		
Mercury	1 year	1	Air Quality Guidelines. 2000.
			World Health Organization.
Acid mist	8-hour shift	1 mg//m <sup>3</sup>	Report on Carcinogens. 2011.
(workplace);			U.S. Department of Health and
Sulfuric acid			Human Services.
			http://ntp.niehs.nih.gov/ntp/ro
			c/twelfth/profiles/StrongInorga
			nicAcidMists.pdf viewed on
			10/10/2013.
			As referenced in Myanmar
			Wanbao Mining Copper Ltd.
			Letpadaung Copper Project
			Environmental and Social
			Impact Assessment prepared
			by Knight Pie' sold Pty Limited
			submitted dated PE701-
			00022/13, Rev 6, January, 2015.
Acid mist (public);	Per incident	0.1mg/m <sup>3</sup> per	U.S. Department of Labor,
Sulfuric acid		incident	Sulphuric Acid: Exposure Limits
S. of rolling			and Health Effects.

Substance	Averaging Period	Standard μg/m³	Reference
			https://www.osha.gov/dts/che
			micalsampling/data/CH_26870
			0.html, viewed on 10/10/2013.
			As referenced Myanmar
			Wanbao Mining Copper Ltd.
			Letpadaung Copper Project
			Environmental and Social
			Impact Assessment prepared
			by Knight Piesold Pty Limited
			submitted dated PE701-
			00022/13, Rev 6, January, 2015.

## B8 Ambient Noise Standards

Noise impacts should not exceed the levels presented in Table 6, or result in a maximum increase in background levels of 3 dB at the nearest receptor location off-site.

Table 6. Ambient noise standards

	One Hour	L <sub>Aeq</sub> (dBA)	
Receptor	Daytime 07:00-22:00	Nighttime 22:00-07:00	Reference
Residential, institutional, educational	55	45	Noise Management, General EHS Guideline. 2007. International Finance Corporation.
Industrial, commercial	70	70	As above

Residential, institutional,	60 LAmax	40 LAmax	Guidelines for Community	
educational	[dB]	indoor [dB]	Noise. 1999. World Health	
			Organization.	

#### B9 Air Blasting

The maximum level for air blast is 115 dBLinear.

The level of 115 dBLinear may be exceeded on up to 5% of the total number of blasts over a period of 12 months; however, the level should not exceed 120 dBLinear at any time.

The recommended maximum level for ground vibration is 5 mm/s (peak particle velocity ppv). The ppv level of 5 mm/s may be exceeded on up to 5% of the total number of blasts over a period of 12 months. The level should not exceed 10 mm/s at any time.

Blasting is only permitted during daylight hours.

References: Australian and New Zealand Environment Council (ANZEC) Guidelines, 1990 and Best Practice Environmental Management in Mining, Noise, Vibration and Air Blast Control, Environment Australia, 1998.

B10 Table Heap Leach Pads, Waste Rock Dumps, Storm Water Ponds, Water Conditioning Pond, and Process Ponds Containment Liners

To control pollutant discharges from heap leach pads, waste rock dumps, storm water ponds, the water conditioning pond and process water ponds, the Proponent will ensure that all liners (Table 7) are properly installed and maintained throughout the life of the mine, as prescribed in the Myanmar Wanbao Mining Copper Ltd. Letpadaung Copper Project Environmental and Social Impact Assessment (ESIA) prepared by Knight Piesold Pty Limited submitted dated PE701-

00022/13, Rev 6, January, 2015 and relevant environmental management plans.



Table 7. Heap leach pads, waste rock dumps, storm water ponds, water conditioning pond, and process water ponds containment liners

Component  Heap leach	Type of Liner	Relevant Environmental  Management and Monitoring  Plan	ESIA Reference
Heap leach	High-density	Erosion Control and	Appendix C
paus	polyethylene	Sediment Guidelines	
	(HDPE) above a	Surface Water Management	Appendix D
	clay layer	Plan	
Waste rock	Clay layer liner	Erosion Control and	Appendix C
dump		Sediment Guidelines	
		Surface Water Management	Appendix D
		Plan	
Process water	Two layers of	Erosion Control and	Appendix C
ponds	HDPE above a clay	Sediment Guidelines	
	layer	Surface Water Management	Appendix D
		Plan	
Storm water	HDPE above a clay	Erosion Control and	Appendix C
pond	layer	Sediment Guidelines	
		Surface Water Management	Appendix D
		Plan	
Water	Soil liner	Erosion Control and	Appendix C
conditioning		Sediment Guidelines	
pond		Surface Water Management	Appendix D
		Plan	





# Part C- Environmental and Social Management Conditions

C1 Hours of Construction and Operation. The hours of construction and operation of the Project shall be limited to the following hours:

Construction - 24 hours per day subject to meeting the relevant environmental, social and community health quality standards and only if there is no impact on surrounding villages.

Operation - 24 hours per day subject to meeting the relevant environmental, social and community health quality standards.

- C2.1 Environmental and Social Management System. MWMCL shall establish an ISO 14001-compliant and certified Environmental Management System (EMS) within three years of commencing operations. Prior to this time, the site will operate under a Construction Environmental Management System (CEMS), comprising various environmental and social management plans. The site will continue to operate under the Construction Environmental Management System until ISO certification is received.
- C2.2 The CEMS and subsequent EMS will include a centralized document control system that allows recovery of information on request and response to information requests to be prepared and stored for recovery in an auditable process. The system will include the development of an environmental database for the storage of all data collected on site, including baselines, construction, operation and closure data. The database will be continuously updated and will be used for reporting to Government.
- C3.1 Safety and Environment Department. MWMCL shall establish a Safety and Environment Department. MWMCL shall establish an OHSAS 18001:2007 compliant and certified Occupational Health and Safety System within three years of commencing operations The Safety and Environment (SE) Department will comprise 14 permanent employees. The Department's organization structure and the job descriptions for each staff member shall be based on Appendix V of the

Myanmar Wanbao Mining Copper Ltd. Letpadaung Copper Project Environmental

and Social Impact Assessment, 16 January, 2015).

# C3.2 Responsibilities of Key Personnel. The responsibilities of key personnel are:

### a. Safety and Environmental Superintendent

The Safety and Environmental Superintendent will be responsible for all aspects of safety and environment. Environmental responsibilities include:

- i. Identifying activities with the potential to impact on the environment and developing management strategies to ensure these risks are mitigated;
- ii. Investigating reported environmental incidents and monitoring implementation of preventative actions;
- iii. Managing and reviewing onsite environmental records;
- iv. Manage and reviewing weekly, monthly and quarterly environmental reporting requirements;
- v. Ensure all employees, contractors, agents and sub-contractors are aware of their environmental responsibilities;
- vi. Managing the development and implementation of management strategies and sub-plans to ensure compliance with all legal and other requirements; and
- vii. Managing and reviewing the implementation of actions in the Site Environmental Action Plan.

# **b.** Safety and Environmental Coordinator

The Safety and Environmental Coordinator will control all matters relating to the environment and reporting requirements as delegated by the Safety and Environmental Superintendent, including:

- i. Identifying activities with the potential to impact on the environment and developing management strategies to ensure these risks are mitigated;
- ii. Assisting in the investigating of reported environmental incidents and monitoring implementation of preventative actions;
- iii. Coordinating onsite environmental records;
- iv. Coordinating weekly, monthly and quarterly environmental reporting requirements;
- v. Ensure all employees, contractors, agents and sub-contractors are aware of their environmental responsibilities;

Implementation of management strategies and sub-plans to ensure compliance with all legal and other requirements;

- vii. Coordinating the implementation of actions in the Site Environmental Action Plan;
- viii. Maintaining the records relating to environmental compliance audits and inspections; and
- ix. General site environmental advice and support.
- c. Environmental Monitoring and Research Officer

#### d. Community Development Officer

The Community Development Officer will be responsible supervision and monitoring all activities relating to community development including:

- i. Community and Social Development Plan
- ii. Corporate Social Responsibility
- iii. Stakeholder Engagement
- iv. Human Resources, Training and Employment; and
- v. Resources, Training and Employment Monitoring

#### e. Health Officer

The Health officer will be responsible for supervising implementing and monitoring for all activities all matters relating to health including:

- i. Health Action Plan; and
- ii. Community Health and Safety

# C4 Environmental and Social Management Plans and Environmental and Social Monitoring Programs.

The Project Proponent shall implement the Environmental and Social Management Plans and Environmental and Social Monitoring Programs (Annex 1 of this Schedule 2) in accordance with the requirements of the Ministry.

#### C5 Human Resources and Financial Commitments.

The Project Proponent will provide detailed budgets, human resources and financial commitments for the preparation and implementation of the Environmental and Social Management Plans and Environmental and Social

Monitoring Programs (Annex 1 of this Schedule 2) prior to commencement of construction.

# C6 Sustainable Production and Consumption

The Project Proponent shall take appropriate measures to ensure the Project's efficient use of raw materials, energy, and water. The Project Proponent shall maintain records of raw materials and water used in Project Activities, and shall review and record at least every three (3) years whether there are suitable alternative materials that could reduce environmental impact, or opportunities to improve efficiency of use of raw materials and water. The Project Proponent shall take any further appropriate measures identified by such review.



### Part D - Monitoring and Reporting for Compliance with the ECC

- D1 The Project Proponent shall monitor the Project for compliance with this ECC.

  Monitoring shall be in accordance with the Part B Environmental Performance
  (Standards) Conditions, Part C Environmental and Social Management
  Conditions (including Annex 1 Environmental and Social Management Plans and
  Environmental and Social Monitoring Programs), Part E Project Commitments
  (including Annex 2), and Part G Closure and Post-Closure Conditions.
- D2 The Project Proponent shall notify and identify in writing to the Ministry any breaches of its obligations or other performance failures or violations of this ECC and EMPs as soon as reasonably possible and in any event, in respect to any breach which would have a serious impact or where the urgent attention of ECD is or may be required, within not later than twenty-four (24) hours, and in all cases within seven (7) days of the Project Proponent becoming aware of such incident.
- D3 Contemplated breaches of this ECC and the Environmental and Social Management Plans and Environmental and Social Monitoring Programs that should be reported to the Ministry without delay including the detection of:
  - i. Any malfunction, breakdown or failure of equipment or techniques;
  - ii. Accident, or emission of a substance not controlled by an emission limit which has caused, or is causing or may cause significant pollution;
  - iii. The breach of a limit as specified in this ECC; and
  - iv. Any significant adverse environmental and health effects.

The notification shall contain a description of the mitigation measures already undertaken and proposed changes to Project operations.

Unanticipated Impacts. If any unanticipated environmental and/or social risks and impacts arise during construction, operation, closure or decommissioning of the Project that were not considered in the EIA/IEE and the Environmental and Social Management Plans, the Project Proponent shall promptly inform the Ministry of the occurrence of such risks or impacts, with detailed description of the event and

a proposed corrective action plan.

- Monitoring Reports. The Project Proponent shall submit semi-annual Environmental and Social Monitoring Reports to the Ministry within thirty (30) days of the end of reporting period. The monitoring reports shall include:
  - i. Documentation of compliance with all conditions of this ECC;
  - ii. Progress made to date on implementation of the Environmental and Social Management Plans against the submitted implementation schedule;
  - iii. Difficulties encountered in implementing the Environmental and Social Management Plans and recommendations for remedying difficulties and steps to prevent or avoid similar future difficulties;
  - iv. Number and type of non-compliances with the Environmental and Social Management Plans and proposed remedial measures and timelines for completion of remediation;
  - v. Summary of site inspections by the Project environmental management unit;
  - vi. Summary of self-monitoring reports including explanatory remarks;
  - vii. Summary of accidents or incidents relating to the occupational and community health and safety;
  - viii. Summary of complaints and grievances;
  - ix. Community relations; and
  - x. Monitoring data for environmental parameters and conditions as committed in EMPs or otherwise required.
- Within ten (10) days of completing a monitoring report, the Project Proponent shall make such report on the Project Proponent's or Project website, at public meeting places (e.g. libraries, community halls) and at the Project offices. Any organization or person may request a digital copy of a monitoring report and the Project Proponent shall, within ten (10) days of receiving such request, submit a digital copy via email or as may otherwise be agreed upon with the requestor.
- D7 If required by the Ministry, the Project Proponent shall undertake an independent environmental audit of the Project or any part of the Project. This independent environmental audit shall be submitted to the Ministry.

- D8 The Project Proponent shall agree with ECD and other relevant Government Ministries on the costs of audits and payment for audits.
- D9 The Project Proponent shall provide details to ECD to demonstrate compliance with all insurance and financial guarantees as required by the Government of the Union of Myanmar.
- Prior to the commencement of construction the Project Proponent shall establish a Project website or use the Project Proponent's website for disclosure of information. This website shall be regularly updated with information about the status of the Project, copies of all approvals, plans and reports and permits required for the Project and any details of compliance reviews and audits of the Project.
- D11 The Ministry has the right, using the ECD officers at national, regional, state, Nay Pyi Taw Union Territory and/or local offices, the services of any consultant, or both, to conduct monitoring and inspections of a Project and activities related thereto in order to control and determine compliance by the Project with the ECC.
- D12 If the Ministry identifies any non-compliance with the conditions in the ECC, the Ministry may require the Project Proponent to undertake remedial measures and/or may impose penalties as provided for in the EIA Procedure (2015).
- D13 ECD may take photographs and make other audio and video recordings of any type, take soil, sediment, water, and air samples, and examine computers, copy documents including digital files, interview persons, and carry out any other investigation which the Ministry believes to be necessary or appropriate.
- D14 These monitoring or inspections may include without limitation sites, facilities, vehicles, computers, archives, documents and all other forms and types of media and information storage, and may include interviews with any employee or contractor or sub-contractor.
- D15 All costs of the Ministry to conduct inspection and monitoring of the Project shall be borne by the Project Proponent. Such costs shall not exceed that which is necessary to ensure the Project's compliance with the Project commitments as set

out in the Environmental and Social Management Plans and in the ECC.

- D16 An Independent Monitoring Team (IMT) team will be appointed by the Ministry after consultations with other relevant Ministries.
- D17 The IMT will be comprised of:
  - (i) a qualified lead environmental auditor with at least 10 years of experience in the mining industry,
  - (ii) a social scientist with mining industry experience,
  - (iii) an environmental professional, and
  - (iv) two community representatives.
- The IMT will conduct random site visits during **construction** to audit the Project's environmental and social compliance with the relevant environmental, social and community health management and monitoring plans. The site visits will occur at frequencies consistent with the level of activity on site, and the audit findings will be reported to the Implementation Committee.
- D19 The Independent Monitoring Team will conduct random and scheduled site visits during operation to audit the Project's environmental and social compliance with the relevant environmental, social and community health management and monitoring plans. The site visits will occur at frequencies consistent with the level of activity on site, and the audit findings will be reported to the Implementation Committee and Environmental Conservation Department.
- D20 The reports of the IMT shall be submitted to the Ministry and Project Proponent.

  These reports shall also be placed on the project web-site and shall be made available in the Myanmar language.
- D21 All costs of IMT to conduct any audit, inspection, and monitoring of the Project shall be borne by the Project Proponent., which shall make available necessary financial resources for the IMT to conduct for any audit, inspection, or monitoring of the Project.

## Part E - Project Commitments

- E1 The Project Proponent agrees to comply with all Project commitments made in the EIA.
- E2 The Project Proponent agrees to the following Project-specific commitments by the date set out in this ECC (Annex 2 of this Schedule 2).
- E3 The Project Proponent shall provide all necessary financial and human resources to fulfill all Project Commitments set out in this ECC (Annex 2 of Schedule 2).
- E4 If the Project Proponent does not fulfill the Project commitments in this Part the Project will be suspended and no further work shall be undertaken until the Ministry is satisfied that the Project Proponent has fulfilled its commitments.



# Part F- Dispute Resolution Conditions

# F1 Complaints and Problems Management Mechanism.

The Project Proponent shall ensure that complaint and problem management mechanisms acceptable to the Ministry are established, and, where necessary, that a community consultative committee is functioning effectively to:

- review and document eligible complaints of Project stakeholders;
- ii. proactively address grievances;
- iii. provide the complainants with notice of the chosen mechanism/action; and
- iv. prepare periodic reports to summarize the number of complaints received and resolved, and final outcomes of the grievances and chosen actions and make these reports available to the Ministry upon request. Eligible complaints include those related to the Project, any contractor or sub-contractor, any person responsible for carrying out the Project, complaints on misuse of funds and other irregularities, and grievances due to any safeguard issues, including resettlement, environment, and gender.

# F2 Project Complaints Procedure.

Prior to the commencement of construction, the Proponent shall ensure that the following are available for community complaints for the life of the project (including construction and operation) or as otherwise agreed by the Ministry:

- i. a 24-hour telephone number on which complaints about construction and operational activities at the site may be registered;
- ii. a postal address to which written complaints may be sent; and
- iii. an email address to which electronic complaints may be transmitted.

The telephone number, postal address and e-mail address shall be advertised in a newspaper circulating in the area on at least one occasion prior to the commencement of construction; and at six-monthly intervals during construction and for a period of two years following commencement of operation of the project. These details shall also be provided on the Proponent's internet site required by

the ECC. The telephone number, the postal address and the email address shall

be displayed on a sign near the entrance to the site(s), in a position that is clearly visible to the public.

- F3 The Proponent shall record details of all complaints received through the means listed in condition F2 of this ECC in an up-to-date Complaints Register. The Register shall record, but not necessarily be limited to:
  - i. the date and time, of the complaint;
  - ii. the means by which the complaint was made (telephone, mail or email);
  - iii. any personal details of the complainant that were provided, or if no details were provided, a note to that effect;
  - iv. the nature of the complaint;
  - v. any action(s) taken by the Proponent in relation to the complaint, including timeframes for implementing the action; and
  - vi. if no action was taken by the Proponent in relation to the complaint, the reason(s) why no action was taken.

The Complaints Register shall be made available for inspection by the Ministry upon request.

# F4 Community Consultation Committee

The Proponent will establish a Community Consultation Committee during the operation of the Project, in accordance with the Project Commitments 25.5.

# F5 Community Information Plan

Prior to the commencement of construction, the Proponent shall prepare and implement a Community Information Plan that sets out the community communication and consultation processes to be implemented during construction and operation of the project. The Plan shall include but not be limited to:

i. procedures to inform the local community of planned investigations and construction activities, including blasting works (if any);

- ii. procedures to inform the relevant community of construction traffic routes and any potential disruptions to traffic flows and amenity impacts;
- iii. procedures to consult with local landowners with regard to construction traffic to ensure the safety of people or animals and livestock and to limit disruption to livestock movements;
- iv. procedures to inform the community where work outside the construction hours specified in the ECC, in particular noisy activities, has been approved; and
- v. procedures to inform and consult with affected landowners to rehabilitate impacted land.

# F6 Worker Grievance Redress Mechanism

The Proponent will establish a mechanism to readdress complaints of workers during the operation of the Project, including to respond to any complaints arising from accommodation condition



#### Part G - Closure and Post-Closure Conditions

#### G1 Mine Closure and Post Closure Plan

The Proponent shall prepare a Mine Closure and Post Closure Plan.

A conceptual Mine Closure Plan has been prepared (Appendix Q of the ESIA). During mine operation, the Mine Closure and Post Closure Plan is to be updated every five years based on the results of the testing program and the changes in the operation and mine planning. The Proponent shall monitor the progress of the preparation of Mine Closure and Post Closure Plan and submit an annual report to the Ministry.

The final detailed Mine Closure and Post Closure Plan, together with a Care and Maintenance Plan, a Closure and Post-Closure Emergency Response Plan and a closure Environmental Management Plan and Social Management Plan shall be developed and approved by the relevant authorities five (5) years before mine closure.

The Mine Closure and Post Closure Plan is to include:

- i. a closure plan for each specific area / type of facility and structure on site:
- ii. rehabilitation completion standards for approval with the regulators:
- iii. testing program for assessment of short term and long term physical and chemical stability of waste dump and heap leach materials;
- iv. rehabilitation trials to assess the viability of the closure concept plan; and
- v. progressive rehabilitation plans for areas of the site which are no longer required for the ongoing operation.

Development of the closure design and the Mine Closure and Post Closure Plan are to include:

- i. ongoing design of the final land use and engineering development of the site;
- ii. integration of the closure design into operational design to reduce works on closure and promote progressive rehabilitation.
- iii. consultation with the local population to determine preferred final land use options;

consultation with government to establish final land use parameters;

- v. rehabilitation trials to assess most appropriate soil replacement and revegetation strategies for each key area on the site;
- vi. ongoing investigation and reviews of available rehabilitation materials and new technologies to improve rehabilitation outcomes;
- vii. A Care and Maintenance Plan for the management of seepage from Heap Leach Pads; or waste rock material into the groundwater, and the management of potential contamination resulting from slope failures of Heap Leach Pads;
- viii. minimizing the catchment area of the pit and maintaining a pit lake elevation at a suitable depth to minimize acid production whilst maintaining the pit as a hydraulic sink; and
- ix. a Closure and Post-Closure Emergency Response Plan, and a closure Environmental Management Plan and Social Management Plan. The Mine Closure and Post Closure Plan shall identify the entities responsible for implementing the closure Environmental Management Plan, Social Management Plan, and Emergency Response Plan.

### **G2** Post Closure Monitoring

The post closure monitoring period shall include short-term and long-term monitoring requirements, including monitoring and management of any occurrences of contaminated waste residue water. The post closure monitoring period may extend beyond five (5) years and shall be determined based on international standards.

Closure and post-closure monitoring shall document the progress of the closure and reclamation effort. The elements of monitoring programs are to include:

- i. inspection of the physical conditions (e.g., for evidence of erosion and landslides) at the end of the initial rainy season post-closure;
- ii. inspection of the plantings after the first-year post-closure;
- iii. after two years, evaluation of the effectiveness of the reclamation effort (e.g., number and type of plant species, plant heights, productivity);
- iv. demonstration that water quality objectives are met; and
- v. assessment of the adequacy and performance of drainage structures and sediment control systems.

## G3 Closure, decommissioning and rehabilitation fund

The Proponent shall calculate the costs associated with rehabilitation, decommissioning, closure and post closure care at any stage in the mine life including in case of temporary or early closure. The cost calculation shall utilize the services of a third party and shall be updated and submitted to the Ministry.

The Proponent shall establish a financial instrument ensuring that the calculated costs are available at all times throughout the mine life including closure and post closure periods to cover the costs of rehabilitation, decommissioning, closure and post closure care.

The financial instrument shall be in a form to be agreed between the Proponent and the Government of Myanmar.



## Environment Compliance Certificate Schedule 2, Annex 1

# Environmental, Social, and Community Health Management Plans and Environmental, Social, and Community Health Monitoring Programs

Myanmar Wanbao Mining Copper Ltd shall make available necessary financial and human resources to fully implement the environmental, social and community health management plans and environmental, social and community health monitoring programs in Section 11, Section 12, Section 13 and associated Appendices of *Myanmar Wanbao Mining Copper Ltd. Letpadaung Copper Project Environmental and Social Impact Assessment, 16 January, 2015).* 

A summary of the environmental, social and community health management plans and environmental, social and community health monitoring programs is provided in the table below.

## **Environmental Management Plans**

Environmental Component	Environmental  Management Plan  or  Environmental  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
11.6 Water Resources	11.6.1 Water Usage EMP	Monthly reporting to MWMCL Management Team Quarterly reporting to	11.6.1
		Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	-
E OF FOURT	11.6.1.1 Water Usage Monitoring	Water flows to, from and around the site will be measured and recorded.  This will include	11.6.1.1



	T		,
Environmental Component	Environmental  Management Plan  or  Environmental  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
		measurement on a daily basis of the following:  i. Raw water abstracted from the Chindwin River; Water pumped to the WCP;  ii. Water pumped from the WCP to the pit; Water flowing to the SWP;  iii. Water flowing from the SWP to the Water Treatment Plant;  iv. HLP irrigation water pumped from the solution ponds and the SWP; Groundwater pumped from dewatering wells; and v. Surface water pumped from the pit.  Monthly reporting to MWMCL Management Team	
of rath and	11.6.2 Surface Water EMP	Monthly reporting to MWMCL Management Team Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	11.6.2

Environmental Component	Environmental  Management Plan  or  Environmental  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
	116.2.1 Surface Water Monitoring	Parameters to be monitored monthly are: flow rate, water level, pH, electrical conductivity, temperature, turbidity, oil and grease, phosphates, sulphates, chlorides, phenols, COD, BOD5, TDS, TSS, and metals.  Monthly reporting to MWMCL Management Team	
	11.6.3 Groundwater Usage and Drawdown EMP	Monthly reporting to MWMCL Management Team Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	11.6.3
of of my an	11.6.3.1 Groundwater Monitoring	Parameters to be monitored monthly are: water level, pH, electrical conductivity, temperature alkalinity, nitrates, phosphates, sulphates, chlorides, COD, TDS, TSS, metals, and initially, total coliform bacteria.  Monthly reporting to MWMCL Management Team	11.6.3.1

Environmental Component	Environmental  Management Plan  or  Environmental  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
	11.6.4 Discharge to Groundwater	Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	11.6.4
	11.6.4.1 Discharge to Groundwater Monitoring	Parameters to be monitored monthly are: water level, pH, electrical conductivity, temperature alkalinity, nitrates, phosphates, sulphates, chlorides, COD, TDS, TSS, metals, and initially, total coliform bacteria.  Monthly reporting to MWMCL Management Team	11.6.4.1
	11.6.5 Groundwater Contamination	Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	11.6.5
S O & KOZEGO	11.6.5.1 Groundwater Contamination Monitoring	Parameters to be monitored monthly are: water level, pH, electrical conductivity, temperature alkalinity, nitrates, phosphates, sulphates, chlorides, COD, TDS, TSS, metals, and	11.6.5.1

	Environment		
Environmental Component	Environmental  Management Plan  or  Environmental  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
		initially, total coliform bacteria.  Monthly reporting to MWMCL Management Team	
11.7 Soil and Waste Rock	11.7.1 Construction Materials EMP	Monthly reporting to MWMCL Management Team Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	11.7.1
	11.7.2 Top Soil Removal and Storage	Monthly reporting to MWMCL Management Team Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	11.7.2
	11.7.2.1 Top Soil Removal and Storage Monitoring	Topsoil stripping, stockpiling and re-spreading for rehabilitation will be monitored continuously over the construction, operations and closure phases of the project. In addition, changes in topsoil conditions will be monitored to ensure that they do not undergo any	11.7.2.1

	r		
Environmental Component	Environmental  Management Plan  or  Environmental  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
		adverse changes over the life of the project.  Monitoring will be conducted with test pits located up and down gradient (and up and down wind) from mine facilities at designated control points.  Monthly reporting to MWMCL Management Team	
	11.7.3. Erosion and Sediment Control	Monthly reporting to MWMCL Management Team Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	11.7.3
Soft and the soft	11.7.3.1 Erosion and Sediment Control Monitoring	Monitoring will be conducted with test pits located up and down gradient (and up and down wind) from mine facilities at designated control points.  Monthly reporting to MWMCL Management Team	11.7.3.1

Environmental Component	Environmental  Management Plan  or  Environmental  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
	11.7.4 Acid Rock Drainage and Metals Leaching – Waste Rock Dumps	Monthly reporting to MWMCL Management Team Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	
	11.7.4.1 Acid Rock Drainage and Metals Leaching – Waste Rock Dumps Monitoring	In-Pit and HLPs Acid rock drainage, metal leaching from waste rock and seepage will be monitored on a monthly basis during operations and continue post mining.  A field assessment of waste rock net acid production potential shall be made on a flitch by flitch basis using the hydrogen peroxide oxidation method.  In addition, the need for treatment of ARD drainage will be assessed from water quality samples collected during the operations and	11.7.4.1
	11.7.5 Acid Rock Drainage and Metals	closure phases.  Monthly reporting to  MWMCL Management Team	11.7.5

Environmental Component	Environmental  Management Plan  or  Environmental  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
	Leaching – Heap Leach Pads	Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	
	11.7.6 Acid Rock Drainage and Metals Leaching – In Pit	Monthly reporting to MWMCL Management Team Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	11.7.6
	of Acid Rock Drainage and Metals Leaching – In Pit	Parameters to be monitored monthly are: water level, pH, electrical conductivity, temperature alkalinity, nitrates, phosphates, sulphates, chlorides, COD, TDS, TSS, metals, and initially, total coliform bacteria.  Monthly reporting to MWMCL Management Team	11.7.6.1
Re College	11.7. 7 Waste Rock Dumps		11.7.7

Environmental  Management Plan  or  Environmental  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
	Annually reporting to ECD and Department of Mines	
11.7.7.1 Waste Dumps Monitoring	During mining operations, runoff collection ditches and ponds will be inspected after every major rain event, and maintenance	11.7.7.1
	Physical stability of WRD slopes shall be assessed by regular pickups of survey pins installed at critical locations on dump batter slopes.	
	The physical stability of WRDs and the water diversion system will be monitored annually by an independent geotechnical engineer and a report prepared for MWMCL which	
	relevant government regulatory body.	
	Weekly visual inspections of these facilities will be conducted by mine personnel and observations logged for inspection by the	ne ko:
	Management Plan or Environmental Monitoring Program  11.7.7.1 Waste	Management Plan or Environmental Monitoring Program  Annually reporting to ECD and Department of Mines  During mining operations, runoff collection ditches and ponds will be inspected after every major rain event, and maintenance carried out as necessary. Physical stability of WRD slopes shall be assessed by regular pickups of survey pins installed at critical locations on dump batter slopes.  The physical stability of WRDs and the water diversion system will be monitored annually by an independent geotechnical engineer and a report prepared for MWMCL which will be forwarded to the relevant government regulatory body.  Weekly visual inspections of these facilities will be conducted by mine

Environmental Component  Environmental Component  Environmental Management Plan or Environmental Monitoring Program  engineer, and governmen regulators upon request.  11.7.8 Rehabilitation of Developed Landforms  Monthly reporting to MWMCL Management Team Quarterly reporting to Environmental Conservation Departmen (ECD)	Section t
regulators upon request.  11.7.8 Rehabilitation Monthly reporting to MWMCL Management Team Landforms Quarterly reporting to Environmental Conservation Departmen	11.7.8
of Developed  Landforms  Quarterly reporting to Environmental  Conservation Departmen	
Annually reporting to ECI and Department of Mines	
11.7.8 Rehabilitation of Developed Analysis (LFA) will be used Landforms LFA is a monitoring procedure developed by the Australian Commonwealth Scientific and Industria Research Organization (CSIRO). It provides a rapid, reliable, and easily applied method for assessing and monitoring landscape restoration or rehabilitation projects.	
11.7.9 Rehabilitation of Disturbed Areas MWMCL Management Team Quarterly reporting to Environmental Conservation Department (ECD)	

Environmental Component	Environmental  Management Plan  or  Environmental  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
		Annually reporting to ECD and Department of Mines	
	11.7.9,1Rehabilitation of Disturbed Areas Monitoring	Landscape Function Analysis (LFA) will be used. LFA is a monitoring procedure developed by the Australian Common- wealth Scientific and Industrial Research Organization (CSIRO). It provides a rapid, reliable, and easily applied method for assessing and monitoring landscape restoration or rehabilita- tion projects	11.7.9.1
	11.7.10 Ore Handling and Placement	Monthly reporting to MWMCL Management Team Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	11.7.10
11.8 Vegetation and Fauna	11.8.1 Weed Hygiene and Control	Monthly reporting to MWMCL Management Team Quarterly reporting to Environmental Conservation Department	11.8.1
OScools		(ECD)	( Same

11.8.1.1 Weed Hygiene and Control Monitoring 11.8.2 Fire	Annually reporting to ECD and Department of Mines Inspection for evidence of invasive flora shall be performed monthly Monthly reporting to MWMCL Management Team Monthly reporting to MWMCL Management Team Quarterly reporting to Environmental Conservation Department	11.8.1.1
Hygiene and Control Monitoring	invasive flora shall be performed monthly Monthly reporting to MWMCL Management Team Monthly reporting to MWMCL Management Team Quarterly reporting to Environmental	
.1.8.2 Fire	MWMCL Management Team Quarterly reporting to Environmental	11.8.2
	(ECD) Annually reporting to ECD and Department of Mines	
1.8.2.1 Fire Monitoring	Immediate reporting of all fires to MWMCL Management Team Monthly summary reporting to MWMCL Management Team	11.8.2.1
1.8.3 Fauna dentification and landling	Immediate reporting  Monthly reporting to  MWMCL Management Team  Quarterly reporting to  Environmental  Conservation Department  (ECD)	11.8.3
		Monthly reporting to MWMCL Management Team Quarterly reporting to Environmental

Environmental Component	Environmental  Management Plan  or  Environmental  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
	Identification and Handling Monitoring	Wildlife mortalities (e.g., from air strikes, vehicle strikes, shooting, other sources); Wildlife monitoring- weekly site inspections and wildlife counts.  Monthly reporting to MWMCL Management Team	11.8.3.1
	11.8.3.2 Flora Monitoring	Annual site inspections and flora surveys including vegetation types; and Species diversity	11.8.3.2
	Vegetation and Fauna Conservation Plan The protection and conservation of local vegetation and deer species through the development of a Deer Garden within the boundaries of the Project area, and the development of a separate Natural Forest within the	Monthly reporting plan implementation to MWMCL Management Team Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	11.8.4

Environmental Component	Environmental  Management Plan  or  Environmental  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
	11.8.5 Aquatic Monitoring Plan	Semi-annual reporting to MWMCL Management Team Annually reporting to ECD and Department of Mines	11.8.5
11.9 Industrial Waste Management	11.9.1 Non- hazardous Waste Management	Monthly reporting to MWMCL Management Team Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	11.9.1
	11.9.1.1 Non- hazardous Waste Management Monitoring	Monthly reporting to MWMCL Management Team	11.9.1.1
	11.9.2 Hazardous Waste Management	Monthly reporting to MWMCL Management Team Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	11.9.2
နှံ ဝန် ကျင် ထု ကို ပို့ပဲ ခြည့်ထောင်စု ခော ဝန် ကြုံရုံး	11.9.2.1 Hazardous Waste Materials Monitoring	MWMCL Construction Manager will conduct routine inspections of all hazardous substances storage areas, and worksite	11.9.2.1

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Environmental Component	Environmental  Management Plan  or  Environmental  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
		areas to look for spills, leaks, overflows and compliance with the procedures.  The MWMCL Environmental Manager will monitor all activities to do with explosives use and storage.  The MWMCL Commercial Department will collect and maintain records on hazardous substances in consultation with the Construction Manager  Monthly reporting to MWMCL Management Team	
	11.9.3 Sewage and Domestic Wastewater	Monthly reporting to MWMCL Management Team Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	11.9.3
Co of wall and	11.9.3.1 Sewage and Domestic Wastewater Monitoring  11.10 Mine Closure	Shallow groundwater quality will be monitored monthly  Monthly reporting to MWMCL Management Team  Monthly reporting to	11.9.3.1

Environmental Component  11.10 Conceptual Mine Closure	Environmental  Management Plan  or  Environmental  Monitoring Program	Reporting and Monitoring Schedule  MWMCL Management Team Quarterly reporting to Environmental	ESIA Reference Section
	11 10 1 Can say turk	Conservation Department (ECD)  Annually reporting to ECD and Department of Mines	
	11.10.1 Conceptual Closure Monitoring	Closure and post-closure monitoring will document the progress of the closure and reclamation effort. The elements of these monitoring programs will include:	11.10.1
		Inspection of the physical conditions (e.g., for evidence of erosion and landslides) at the end of the initial rainy season post-closure;	
		Inspection of the plantings after the first-year post-closure;	
ou of 10 gray		After two years, evaluation of the effectiveness of the reclamation effort (e.g., number and type of plant species, plant heights, productivity);	State No.

Environmental Component	Environmental  Management Plan  or  Environmental  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
		Demonstration that water quality objectives are met; and Assessment of the adequacy and performance of drainage structures and sediment control systems.	
Appendix D Surface Water Management Plan	Appendix D Surface Water Management Plan  MWMCL will operate the SWP (Storm Water Pond) and the WCP (Water Conditioning Pond) as specified in the Surface Water Management Plan. MWMCL will discharge no contaminated water from the site for events up to 1 in 100-year recurrence intervals. MWMCL will conduct	Monthly reporting to MWMCL Management Team Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	Appendix D
Software of the state of the st	additional flood modelling of the		A Second

Environmental Component	Environmental  Management Plan  or  Environmental  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
	Chindwin River to determine the impact of the Project on flood heights and local catchment flooding.		

## Social Management Plans

Social Component	Social  Management Plan  or  Social  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
12.1 Visual Amenity	12.1 Visual Amenity	Monthly reporting to	12.1
7 directinety		MWMCL Management Team  Annually reporting to ECD	
		and Department of Mines	
12.2 Cultural	12.2 Cultural	Monthly to MWMCL	12.2
Heritage	Heritage	Community and Social	
		Development Manager	and the second second
		Annually to MWMCL Project	
No of inglice		General Manager	(So we had

Social Component	Social  Management Plan  or  Social  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
12.3 Transport	12.2.1 Culture Heritage Monitoring	Community Relations Manager will conduct an inspection of any cultural heritage field activities and documentation that are implemented as a result of a chance find or other event that results in archaeo- logical field work.  Monthly MWMCL Community Relations will prepare monthly report to the MWMCL management team	12.2.1
12.5 Hansport	Transport	Monthly reporting to MWMCL Management Team Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	12.3.1
	12.3.2 River Transport	Monthly reporting to MWMCL Management Team Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	12.3.2



Social Component	Social  Management Plan  or  Social  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
	12.3.3 Transport  Monitoring	Monthly reporting to the Environment Manager on the implementation of the EMP Environment Manager shall inspect on a monthly basis Monthly reporting to MWMCL Management Team	12.3.3
12.4 Land Use and Resettlement	12.4.1 Natural Resource Management	Monthly reporting to MWMCL Management Team Annually reporting to ECD and Department of Mines	12.4.1
	12.4.2 Future Land Use	Monthly reporting to MWMCL Management Team Annually reporting to ECD and Department of Mines	12.4.2
	12.4.3 Resettlement	Monthly reporting to MWMCL Management Team and [Local and Regional Governments] Annually reporting MWMCL Management Team and [Local and Regional Governments]	12.4.3
12.5 Community Engagement		Monthly MWMCL Community Relations Manager Annually MWMCL Project General Manager Annually MWMCL CSD	12.5.1

Social Component	Social  Management Plan  or  Social  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
		Committee	
	12.5.1.1 Community and Social Development Monitoring	Monthly reporting to MWMCL Management Team	12.5.1.1
	12.5.2 Corporate Social Responsibility	Monthly reporting by MWMCL Community Relations Manager Annually MWMCL Project General Manager Annually MWMCL CSD Committee	12.5.2
	12.5.3 Stakeholder Engagement	Monthly MWMCL External Affairs Coordinator Annually MWMCL Project General Manager Annually MWMCL CSD Committee	12.5.3
် ကြည်ထောင်စု တို့	12.5.3.1 Stakeholder Engagement Monitoring	MWMCL will conduct regular consultation with local communities and governments and will make known any complaints regarding the project.  Monthly reporting by the Community Development Officer the Community	12.5.3.1

Social Component	Social  Management Plan  or  Social  Monitoring Program		ESIA Reference Section
		Relations Manager	
	12.5.4 Human Resources, Training and Employment	Monthly reporting to MWMCL Management Team Annual reporting to Ministry of Labor, Employment and Social Security	12.5.4
	12.5.4.1 Resources, Training and Employment Monitoring	Monthly inspection by the Human Resources Manager of recruitment offices and MWMCL / Contractor documentation	12.5.4.1
12.6 Accommodation	12.6 Accommodation	Monthly reporting to the MWMCL Management Team Annual Reporting to Ministry of Natural Resources and Environmental Conservation	12.6
Resettlement Action Plan	Resettlement Action Plan The resettlement action plan (RAP) is concerned with the resettlement of the four nominated villages, Wet Hmay, Kan Daw, Sae Tae and Zee Daw, the	The resettlement program has been the responsibility of Myanma Economic Holdings Limited (MEHL). MEHL has coordinated activities and consultation with the Local and Regional Government in relation to resettlement and land	Appendix U
ပြည်ထောင်စု မြို့ ဝန်ကြီးရုံး - မြို့		compensation, as described	1 4814 /57

Social Component	Social  Management Plan  or  Social  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
	re-establishment of the communities involved, and livelihood restoration.	in the Production Sharing Contract.  The Local and Regional Governments have coordinated consultation with the affected villages.	
E of 10716 op	The approach seeks to adopt and meet, as far as possible, recognized international standards as articulated by the Asian Development Bank (ADB) and World Bank Group, International Finance Corporation (IFC).	Monthly reporting to MWMCL Management Team and [Local and Regional Governments] Annually reporting MWMCL Management Team and [Local and Regional Governments]	



## Community Health Management Plans

Community Health Component	Community Management Plan or Community Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
13.1 Air Quality	13.1.1 Ambient Air Quality See Environmental Performance Standards Section B7 for standards or guidelines	Weekly reporting to MWMCL Management Team Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	13.1.1
	13.1.1.1 Ambient Air Quality Monitoring	Two permanent air quality monitoring stations are located on the Letpadaung site – one on the southern boundary near the village of Kyaukpyudaing and one on the north boundary at the construction camp site. These locations take into account the prevailing wind directions in the dry seasons and wet season and will enable ambient air quality entering and leaving the site at any particular time to be monitored.	13.1.1.1
tonic on the second of the sec	13.1.2 Dust  See Environmental Performance Standards Section B7 for standards or guidelines	Weekly reporting to MWMCL Management Team Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	13.1.2

Community Health Component	Community Management Plan or Community Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
	13.1.2.1 Dust Monitoring	Seven permanent dust monitoring stations are located on the Letpadaung site at the following locations: on the western boundary near the village of Moegyobyin South; at the southeast corner of the site adjacent to the SX/EW plant; at the northeast corner of the site near the village of Tan Daw; on the northern boundary near the village of Kyawywa; on the	13.1.2.1
ું જે દર્ફ મ્યાઈ જ		north-western boundary near the village of Paungga South; on the eastern boundary near the village of Shwehlay; and at the northeast corner near the construction camp site. These locations take into account the prevailing wind directions in the dry seasons and wet season.  There will be continuous monitoring of TSP, PM10, and PM2.5. These parameters will be downloaded on a weekly basis.	



Community Health Component	Community Management Plan or Community Monitoring Program 13.1.3 Acid Mist See Environmental Performance Standards Section B7	Reporting and Monitoring Schedule  Monthly [weekly] reporting to MWMCL Management Team Quarterly reporting to Environmental Conservation	ESIA Reference Section
	for standards or guidelines	Department (ECD)  Annually reporting to ECD and  Department of Mines	
	13.1.3.1 Acid Mist Monitoring	Two permanent monitoring stations are to be located on the Letpadaung site at the southeast corner of the site adjacent to the SX/EW plant and further to the west adjacent to HLP 2. Additional monitoring should be undertaken, using portable monitors, along the southern and western boundaries of the site in the vicinity of areas of the HLP being irrigated.  Monitoring inside the site should also be undertaken downwind of the areas of the HLPs being irrigated.	13.1.3.1
ယည် ဝန် ကျွင် <sub>လှ</sub>	13.1.4 Energy Efficiency An energy assessment will be undertaken to	Monthly reporting to MWMCL  Management Team	13.1.4

Community Health Component	Community  Management Plan  or  Community  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section	
	determine the opportunity for energy savings. The study will include:  • The energy profile of the site (where the most energy is used and where the most significant opportunities are likely to occur);  • The depth of the resource and the equipment used; • The mining or extraction method; • Crushing strategy proposed; and • Energy efficiency in materials movement and processing	Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines		
S. Of water of the state of the	13.1.4.1 Energy Efficiency Monitoring	MWMCL will conduct monitoring of GHG emissions Monitoring data will be used to prepare an annual GHG emissions inventory and to track emissions over the course of Project development	13.1.4.1	

Community Health Component	Community  Management Plan  or  Community  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
13.2 Noise	13.2 Noise		13.2
	See Environmental Performance Standards Section B8	Monthly reporting to MWMCL  Management Team  Quarterly reporting to	13.2
	for standards or	, ,	
	guidelines	Environmental Conservation	
	guidelines	Department (ECD)	
		Annually reporting to ECD and	
		Department of Mines	
	13.2.1 Noise and	Six noise monitoring stations	13.2.1
5	Vibration Monitoring	are located on the Letpadaung	
		site at the following locations:	
		on the western boundary near	
		the village of Moegyobyin	
		South; at the southeast corner	
		of the site adjacent to the	
		SX/EW plant; north of the site	
		near the village of Aungchansi;	
		on the northern boundary near	
		the village of Kyawywa; on the	
		eastern boundary near the	
		village of Shwehlay; and at the	
		northeast corner near the	
		construction camp site.	
13.3 Vibration	13 3 Vibration	Vibration monitoring will be	13.3
	Monitoring Plan	conducted at the same location	
	See Environmental	as for noise monitoring. Six	
	Performance	monitoring stations are located	
	Standards Section B8	on the Letpadaung site at the	
	for standards or	following locations: on the	12
०० वर्ष ग्यादिक	guidelines	western boundary near the	1 1 24
ල්විය.		\( \( \)	3

Community Health Component	Community Management Plan or Community Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section	
		village of Moegyobyin South; at the southeast corner of the site adjacent to the SX/EW plant; north of the site near the village of Aungchansi; on the northern boundary near the village of Kyawywa; on the eastern boundary near the village of Shwehlay; and at the northeast corner near the construction camp site. These locations take into account the location of sensitive receptors such as villages and the accommodation area.  Monthly reporting to MWMCL Management Team		
		Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines		
13.4 Blasting	13.4 Blasting and	Monthly reporting to MWMCL	13.4	
and	Explosives	Management Team		
Explosives	See Environmental Performance Standards Section B9 for standards or guidelines	Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	Tribal .	

Community Health Component	Community  Management Plan  or  Community  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
13.5	Monitoring Program  13.5 Community Health, Safety and Security This plan is designed to ensure that the Letpadaung Project protects the health, safety and security of people and communities within the vicinity of the mine site and along the transport route to the port of Pakokku.  It includes Community	Monthly reporting to MWMCL Management Team Annually reporting to ECD and Department of Mines	13.5
	Safety, Community Well Being, Community Health and Safety Awareness, Security and the Use of Force, and Emergency Response 13.5.1 Community	Activities will be monitored at	12 5 1
	Health, Safety and Security Monitoring	the mine site, as well as those that occur off-site, including transportation of supplies and concentrate to and from Letpadaung	13.5.1
13.6 Health Action Plan	13.6 Health Action Plan	The Plan will be prepared within 6 months of Project	13.6

Community Health Component	Community Management Plan or Community Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
	The Health Action Plan will provide a set of consolidated recommendations to mitigate identified health impacts associated with the Project.	approval. Management will be undertaken continuously over the construction, operations and closure phases of the Project.  Monthly reporting to MWMCL Management Team	
		Quarterly reporting to Environmental Conservation Department (ECD)	The second of th
		Annually reporting to ECD and Department of Mines	
13.7 Emergency Response	13.7 Emergency Response	Monthly reporting to MWMCL Management Team Quarterly reporting to Environ- mental Conservation Depart- ment (ECD) Annually reporting to ECD and Department of Mines	13.7
Sold of road of	13.7 Emergency Response Monitoring	Preparedness for emergencies is necessary to ensure that all preparations and emergency equipment are in place and functioning as intended. There are two aspects to this: routine site inspections; and training updates.  The Mining Manager shall report on a monthly basis to the	13.7.1

Community Health Component	Community Management Plan or Community Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
at anyte as		Environment Manager on the implementation of the Emergency Response Plan including:  i. training undertaken (numbers of staff, courses, duration); and  ii. PPE quantities and locations.	



## **Environment Compliance Certificate**

#### Schedule 2, Annex 2

#### **Project Commitments**

Myanmar Wanbao Mining Copper Ltd shall make available necessary financial and human resources to fulfill all Project Commitments presented in the *Myanmar Wanbao Mining Copper Ltd Letpadaung Copper Project Environmental and Social Impact Assessment, 16 January, 2015.* 

MWMCL shall implement and comply with the commitments in all project phases, from construction to operation, mine closure and post mine closure. Where relevant, the commitments are also documented in, and will be implemented through progression of, the environmental, social and community health management and monitoring plans.

A summary of the environmental, social and community health management plans and environmental, social and community health monitoring programs is provided in the table below.

Commitment Source	No.	Commitment	ESIA Reference
	1.1	MWMCL will comply with all Myanmar laws, rules and regulations, including the Mines Rules 106 and Clauses 14 and 15 of the Environmental Conservation Law (2012)	Section 2.2.1
	1.2	MWMCL will comply with the laws which are adopted by respective regional and state governments, departments and organizations.	Section 2.2.1
	1.3	MMCWL will comply will amendments of the laws which are adopted by respective regional or state parliaments as well as the rules, orders, notices, instructions, procedures and guidelines adopted by	Section 2.2.1
Jan of rong are		respective regional or state government departments and organizations	and the same of th

Commitment	No.	Commitment	ESIA Reference
Source			
Annual Reporting		MWMCL will prepare an annual report which addresses the sustainability reporting requirements of the Global Reporting Initiative (GRI). The report will address all of the GRI elements and the metrics to demonstrate performance consistent with the GRI's intent.  MWMCL will make the annual report	Chapter 14
		available for public review and comment and also communicate the findings through its community consultation with project-affected villages.	
Landform Rehabilitation	3.1	MWMCL will undertake progressive rehabilitation of Waste Rock Dumps (WRD) and other disturbed areas as they become available to a standard that achieves a safe, stable landform which supports self-sustaining native vegetation, is free draining and non-polluting and is visually compatible with the surrounding landscape.	Sections 5.22 & 11.7.8
	3.2	MWMCL will landscape and re-vegetate landforms back to their original character, or to a merged landform that emulates visual conformity to existing or previous landforms.	Section 11.7.8  Section 11.7.9
		MWMCL will rehabilitate construction areas after implementation.	Section 11.7.9
Energy Efficiency	4.1	MWMCL will complete an energy assessment in order to determine the opportunities for energy savings.	Section 13.1.4

Commitment Source	No.	Commitment	ESIA Reference
Greenhouse Gas	5.1	MWMCL will use low Sulphur fuel and	Section
Emissions		monitor fuel usage and engine performance	13.1.4
		to limit greenhouse gas emissions.	
	6.1	MWMCL will monitor groundwater level,	Section
		quality, and extraction during the life of the	11.6.3
		Project.	
	6.2	MWMCL will provide an alternative water	Section
		supply to users where their existing supply	11.6.2
		has been impacted by the Project.	
Groundwater	6.3	MWMCL will establish monitoring boreholes	Section
		in communities to monitor change in water	11.6.3
		levels at water supply points.	
		MWMCL will monitor water levels on a	
		quarterly basis and identify potential	
		alternative water sources if local wells are	
		significantly impacted.	
	7.1	MWMCL will complete a materials balance	Section
		study to determine the quantity of PAF and	11.7.4
		NAF material on the site.	
	7.2	MWMCL will classify all waste rock as either	Section
		benign, metal leaching or acid forming	11.7.4
Acid Rock		prior to its excavation. Waste rock will be	
Drainage		progressively placed within cells that are	
		lined and capped with low permeability fill	
		within the WRDs. On completion, the WRDs	
		will be capped with a 'store and release'	
		cover to reduce water ingress.	
	8.1	MWMCL will obtain approval from the	Section
Hazardous		relevant local authorities for the	5.16.2
Materials		transportation, storage and use of	TI
O of ruly of			
Find combined to		explosives.	2

Commitment Source	No.	Commitment	ESIA Reference
	8.2	All hazardous chemicals will be stored and handled in facilities that are engineered to prevent spillage or seepage of contaminants into soil or groundwater.	Section 5.16.1
	8.3	Storage of hazardous materials will be on an impermeable base and bunded to contain spillage.	Section 5.16.1
Surface Water Management	9.1	MWMCL will operate the SWP (Storm Water Pond) and the WCP (Water Conditioning Pond) as specified in the Surface Water Management report. The storm water from the Heap Leach Pads (HLP) will be stored in the storm water pond.  The ponds will be built, such that the WCP will be divided into a northern and southern cell. The southern cell of the WCP will be constructed with a spillway to discharge excess water into the northern WCP cell.	Appendix D
ingle of	9.2	MWMCL will discharge no contaminated water from the site for events up to 1 in 100-year recurrence intervals.  Sediment laden water released from the site must comply with IFC standards, with TSS levels within 10% of the receiving water body background value; or 50 mg/L.	Appendix D



Commitment Source	No.	Commitment	ESIA Reference
	9.3	MWMCL will conduct additional flood	Appendix D
		modelling of the Chindwin River to	
		determine the impact of the Project on	
		flood heights and local catchment flooding.	
		The flood modelling will take into account	
		the design (e.g. height) and construction of	
		the flood protection bund, the annual	
		sedimentation rate and other information	
		relevant to the Chindwin River, as provided	
		by the relevant government Ministries and	
		Departments. The Chindwin River	
		sedimentation rate will be analyzed and	
		calculated during the Project's operational	
		period.	
	9.4	MWMCL will develop and implement a	Section
		Surface Water Management Plan.	11.6.2
	9.5	MWMCL will monitor the water levels and	Section
		behavior of all of the ponds (including	11.6.2
		dewatering from the pit) on a monthly	
		basis, and will increase the monitoring	
		frequency as required. If the performance	
		of the ponds does not match the design	
		expectations (for example water storage	
		exceeds design capacity), then MWMCL will	
		install a water treatment system to allow	
		discharge outside the Project area at an	
		acceptable standard.	
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Commitment Source	No.	Commitment	ESIA Reference
	9.6		Section 11.6.2
	9.7	The detailed design will be determined by the water quality and water volume that need to be discharged in the Operations period.	Section 11.6.2
	9.8	The design of water treatment plant will be revised based on the monitoring data accordingly.	Section 11.6.2
	10.1	MWMCL will develop and implement a Soil Management Plan.	Section 11.7.2
Soil Management	10.2	Topsoil and subsoil will be stripped to an adequate depth and correctly stored for use in rehabilitation. Topsoil and subsoil stockpiles will consist of a layer of topsoil on top of a layer of subsoil. The maximum thickness of each layer will be 3 m.	Section 11.7.2
Erosion and Sediment Control	11.1	MWMCL will construct drainage areas, sediment control dams and use source control Best Management Practices to mitigate against erosion.	Section 11.7.3
Flora and Fauna	12.1	MWMCL will demarcate and protect the balance of primary woodland within the proposed mining area and prepare a Reforestation Plan.	Section 11.8.4
oo So i raye are	12.2	MWMCL will implement reforestation projects with district authorities.	<u>Section</u> <u>11.8.4</u>

Commitment Source	No.	Commitment	ESIA Reference
	12.3	MWMCL will plant buffer areas in and	Section
		around the site boundary and reserve	11.8.4
		remnant vegetation in surrounding areas.	
		Any buffer area destroyed by fire will be	
		rehabilitated.	
	12.4	MWMCL will relocate all rare or endemic	Section
		species found.	11.8.3
Weed and	13.1	MWMCL will clean vehicles and inspect	Section
Pest Control		containers prior to entering the site to limit	11.8.1
		the spread of invasive weeds and pest	
		species.	
-	14.1	MWMCL will construct the SX/EW Plant on	Section 5.13
		a structurally sound, impermeable	3666011 3.13
		concrete base which will be regularly	
		maintained to prevent leaks and cleaned	
		after spills.	
	14.2	MWMCL will develop and implement	Section 5.12
		procedures to clean up uncontrolled	36C0011 3.12
		release of Heap Leach Pad (HLP) materials.	
- 41		release of freup Leach Fad (FILE) materials.	
Pollution Control	14.3	Deliution control done will be a single	C1' 11 C
		Pollution control dams will be engineered	Section 11.6
		and constructed as per project proposal.	
	14.4	MWMCL will not allow contaminants to	Section
		permeate into the groundwater through	11.6.4
		the use of adequate foundation lining in	
		the HLPs, waste rock dumps and	
So of 10 Hotel		temporary storage facilities.	3)

			1
Commitment Source	No.	Commitment	ESIA Reference
	14.5	MWMCL will not allow effluents to be released. Effluents will be contained and treated.	Section 11.9
Wasta	15.1	Waste disposal will take place off-site until general and hazardous waste sites are developed.	Section 11.9
Waste Management	15.2	Care will be taken during decommissioning to prevent the release of contaminants and to manage contaminated water and sediment.	Section 11.10
	16.1	Any contaminated residue removed from the solution, storm water and wastewater ponds will be disposed of so as to minimize risk of soil contamination.	Section 11.6
Hazardous Waste Management	16.2	Facilities engineered to good international practice for the protection of groundwater are to be constructed on site by MWMCL for the disposal of general waste and hazardous waste.	Section 11.6 & 11.9
Sof ingel	16.3	MWMCL will construct and operate a bioremediation facility for the management of hydrocarbon contaminated soils.	Section 11.9.2



Commitment Source	No.	Commitment	ESIA Reference
	17.1	MWMCL will undertake continuous monitoring of air quality at two permanent monitoring stations as well as temporary mobile monitoring when complaints are made. MWMCL will ensure that air quality complies with the standards set out in the Air Quality EMP.	Section 13.1
	17.2	Acid mist emissions will meet the following standards; a) Workplace -1 mg H <sub>2</sub> SO <sub>4</sub> /m <sup>3</sup> air (8 hr. shift); and b) Public -0.1mg/m <sup>3</sup> per incident.	Section 13.1
Air Quality	17.3	MWMCL will develop and implement a Dust Management Plan to reduce concentrations of dust.	Section 13.1.2
	17.4	MWMCL will use HLP dripper irrigation and monitor wind direction during operation of the irrigation system to minimize sulphuric acid concentrations in the ambient air.	Section 13.1.3
	17.5	Dust emissions from the site will meet IFC ambient air quality standards at receptor locations.	Section 13.1.2
Sof engling	17.6	MWMCL will fully enclose the SW/EX plant if any acid mist arising from the plant is detected outside the Project boundaries.	Section 13.1.3



Commitment Source	No.	Commitment	ESIA Reference
	18.1	Noise emissions will conform to IFC (2007) standards at noise sensitive premises where baseline levels do not exceed those standards. Otherwise, noise levels will not increase by more than 5 dB(A) above baseline levels.	Section 13.2
	18.2	Blasting overpressure will not exceed a sound power level of 115 dB(A) for 95% of all blasts and no single blast event will exceed 120 dB(A).	Section 13.2
Noise	18.3	Vibration levels from blasting at sensitive receptors will not exceed a standard of 5mm/s for 95% of all blasts and no single blast will exceed 10mm/s PPV.	Section 13.2
	18.4	MWMCL will reduce noise disturbances by installing noise buffers in critical areas and around the perimeter, relocating noise receptors, notifying the public on blast times, limiting construction activities to daytime hours except when night time work is absolutely necessary and monitoring noise levels near sensitive receptors.	Section 13.2
Light	19.1	MWMCL will take measures to minimize light disturbances.	Section 11
Community Health and Safety	20.1	MWMCL will comply with the requirements of IFC Performance Standard 4 with respect to community health, safety and security.	Section 13.5

Commitment Source	No.	Commitment	ESIA Reference
	20.2	MWMCL will continue to support the	Section
		provision of progressively higher quality	13.5
		medical care through its usual efforts and	
		additional ones to upgrade clinics to	
		hospital standard facilities, recruit more	
		doctors and reduce the travel distance for	
		basic medical services, provide pre and	
		post-natal services and family planning	
		services, and provide nutritional advice.	
	20.3	MWMCL will support local policing	Section
		structures and programs to limit	13.5
		prostitution near the site.	
	20.4	MWMCL will develop and implement a	Section
		Sexually Transmitted Infections Education	13.5
		Policy for employees and contractors, with	
		specific controls enforced in	
		accommodation camps.	
	20.5	MWMCL will develop, in conjunction with	Section
		government, an integrated community STI	13.5
		awareness campaign.	
	20.6	MWMCL will support local health centers	Section
		prevent the spread of communicable	13.5
		diseases.	
	20.7	MWMCL will train and recruit medical staff	Section
		to the Project area through the provision of	13.5
		scholarships and provide medical supplies	
ू हु वर्ष भागारी कर के किया है। इस के किया किया है कि		and equipment.	



Commitment Source	No.	Commitment	ESIA Reference
	20.8	MWMCL will enforce measures to prevent the spread of malaria and bilharzia resulting from mosquitos and other pests.	Section 13.5
	20.9	MWMCL will be responsible for the impact caused by natural disasters less serious than the design parameters, which are less than or equal to a 100 year return flood and less than a Grade 8 earthquake.	Section 13.7
	20.10	In extreme conditions (more than a 100 year return flood and Grade 8 earthquake)  MWMCL will commit to assisting local government in recovery and reconstruction after the disaster.	Section 13.7
	20.11	MWMCL will develop and implement a Care and Maintenance Plan to manage potential contamination resulting from slope failure of HLPs.	Section 11.10.1
Traffic Management	21.1	MWMCL will take measures to minimize the safety risks associated with increased traffic, such as upgrading of the access route to the site, warning signage along the access road, and fencing around schools. It will also promote road safety through awareness programs, training drivers, using safe and serviced vehicles only, testing drivers for alcohol and drugs,	Section 12.3
John Walter		restricting working hours for drivers and enforcing rest breaks.	plane shell

Commitment Source	No.	Commitment	ESIA Reference
	21.2	MWMCL will progressively upgrade roads and road intersections.	Section 12.3
Barge Jetty and Load-out Facilities	22.1	MWMCL will upgrade existing barge jetty and load-out facilities at Pakokku and Letpadaung.	Section 5.18
OHS	23.1	MWMCL will develop an Occupational Health Management System before commencement of Operations and it will be certified as compliant with ISO 45000 within three (3) years of operation.	Section 10.4
	23.2	transport and seek to lower the incidence of harmful outcomes through training, restricted working hours for tasks requiring deep concentration, and strong supervision.	Section 10.4.1
	23.3	MWMCL will establish multiple controls to reduce the safety risk due to fly rock, WRD rock falls and land slips, explosion of hazardous materials, and bush fire.	Section 10.6.1
Community Development	24.1	MWMCL will support the improvement of farming practices to increase agricultural productivity to offset higher costs of living associated with a mining development. With the assistance of a local institute, the related research will be conducted in the Operations period and the results achieved compared with those in previous years.	Section 12.4
္တ <mark>က် စန် ယာမှုတ်</mark> လှန် ပြည်ထောင်စု တို့	24.2	Development of a Corporate Responsibility  Management Plan to guide the planning	Section 12.5.2

Commitment Source	No.	Commitment	ESIA Reference
		and implementation of the Company's philanthropic activities in the local	
		community. Specific actions to be included in this plan are:	
		1. MWMCL will set up a steering committee to allocate the 2% respective contributions of net profit from MEHL, Wanbao and ME1 for community social development in the form of community sub-projects/grants. The Steering Committee will consist of key representatives from the contributing organizations, including Regional Government planning authorities. Purpose of this Steering Committee is to rationally plan community development in line with local priorities and planned/prospective government infrastructure investments. It will decide the broad categories of subprojects to be financed in Five Year increments. It will also decide which of the	
		<ul><li>33 communities will be eligible to receive grant funding (the local community).</li><li>2. From the overall parameters set by</li></ul>	
		the Steering Committee, MWMCL will develop an operational project cycle for the subprojects. This will involve the following	
		4 phases: (i) preparation and planning, (ii) decision- making and approval, (iii)	
O\$ 1024F		implementation, (iv) operations and maintenance. It will detail the roles and responsibilities of local government	
Eo Eo		departments at each phase of the project	Secret 1

Commitment	Ma		ESIA
Source	No.	Commitment	Reference
		cycle. It will also take into account the participation of eligible communities in each phase with specific mechanisms for involvement. Requirements for beneficiary villages to maintain the infrastructure will be established along with the requisite training.	
		3. MWMCL will set up a new department responsible for implementing the "Corporate Social Responsibility (CSR)" program. This department will hire a local project manager with experience managing projects in Myanmar communities and the appropriate staff dedicated to this activity. It will also utilize foreign expertise to assist with training as required. The department's budget will be funded out of the 2% proceeds at an amount commensurate with the level of effort deemed required by MWMCL's General Manager.	
		The role of the CSD Department will be to manage the consultation with communities directly affected by the Project activities, so as to safeguard communities and their assets from harm and obtain local input in the Project planning and implementation process, and in the mitigation measures and management plans. The CSD Department will adopt consultation practices in line	Section 12.5.2
် ကို	1	with IFC Performance Standard 1. The following actions are required by MWMCL	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Commitment Source	No.	Commitment	ESIA Reference
		to effectively reorganize the CSD Department and the nature of its activities:  1. Recruit a CSD Team Project Manager with professional experience implementing community programs in Myanmar and who is, preferably, a Myanmar national.	
		<ol> <li>Replace the contracted CSD Team members with a small team of professional dedicated staff of Myanmar nationals with experience implementing community programs in Myanmar. The former CSD Team members can act as liaisons with the villages and assist in CSD activities on an informal basis.</li> <li>Develop roles and responsibilities for the CSD Team in relation to its mandate with respect to the communities and</li> </ol>	
		the Company.  4. There should be an arm's length relationship between the CSD Team and the Company.	
		5. Establish criteria for selecting the villages at the highest risk of being adversely impacted by the Project activities.	
of of ingeror		6. Apply the criteria for identifying the primary village stakeholders who will be consulted on all Project- related activities and for establishing which villages should be consulted for specific Project-related activities only.	The second second

Commitment Source	No.	Commitment	ESIA Reference
		<ol> <li>Develop a Consultation Plan for the construction phase with stakeholder group(s), timing and consultation method(s) specified for each Project activity/impact.</li> <li>Develop an internal plan for coordinating the consultations sufficiently early to obtain inform and adopt engagement protocols that set out the behavioral expectations for the CSD Team and visitors to adhere. These protocols should follow good practice in accordance with village norms and culture.</li> <li>Develop monitoring indicators that look at impact, such as measures of community satisfaction with the consultative process, rather than inputs</li> </ol>	
2	1	used.  MWMCL will give preference to local service	Section
	ŗ	providers and suppliers of goods.	12.5.4
	ii lo a m	MWMCL will support microfinance nitiatives and other means to promote ocal procurement opportunities, improve ccess to markets, and develop the non-nining sector.	Section 12.5.4
24	CI	later supply reserved for downstream reek users will be determined, if it was aused by the project, alternative water	Section 11.6.2

Commitment Source	No.	Commitment	ESIA Reference
Stakeholder Engagement	25.1 25.2 25.3	MWMCL will hire a local External Affairs Coordinator responsible for implementing the Project's Stakeholder Engagement Program and dedicated staff to carry out all but the village consultations. All staff will be Myanmar nationals with at least a university degree or equivalent qualification.  MWMCL will train staff working on CSR, CSD and public relations/social media in MWMCL's communication protocols for dealing with questions from the media and NGOs.  MWMCL will set out the principles for stakeholder engagement it will adopt in accordance with good practice.	Section 12.5.3  Section 12.5  Section 12.5
	25.5	MWMCL will develop an organizational structure for the newly established CSR Department, the CSD Department, Stakeholder Engagement Program, External Affairs, and Public Relations for the ESMS.  MWMCL will develop a Grievance Mechanism that quickly and fairly addresses complaints related to resettlement, compensation and livelihood restoration.	Section 12.5  Section 12.5.3
Resettlement	26.1	The Project Partners will develop a Resettlement Action Plan aligned with IFC Performance Standards 5, 6, and 7.	Appendix U



26.2 The project partners will provide compensation to entitled households commensurate with the market value of land. It will not pay compensation amounts grossly in excess of current land prices.  26.3 The project partners will prepare a Resettlement Action Framework for areas potentially requiring relocation of households.  27.1 Preference for jobs will go to eligible Project-affected households/persons in accordance with the amount of land taken from the household in the 33 affected villages.  MWMCL will allocate a minimum of one job to each household that was relocated from the Project area.  Livelihood and Income Restoration  MWMCL will provide a suitable form of livelihood assistance for those affected households fully reliant on farming in the Project area who are not capable of working for the Company or don't meet the eligibility criteria.	Commitment Source	No.	Commitment	ESIA Reference
Resettlement Action Framework for areas potentially requiring relocation of households.  27.1 Preference for jobs will go to eligible Project-affected households/persons in accordance with the amount of land taken from the household in the 33 affected villages.  MWMCL will allocate a minimum of one job to each household that was relocated from the Project area.  Livelihood and Income Restoration  27.2 MWMCL will provide a suitable form of livelihood assistance for those affected households fully reliant on farming in the Project area who are not capable of working for the Company or don't meet the		26.2	compensation to entitled households commensurate with the market value of land. It will not pay compensation amounts	U
Project-affected households/persons in accordance with the amount of land taken from the household in the 33 affected villages.  MWMCL will allocate a minimum of one job to each household that was relocated from the Project area.  Livelihood  and Income  Restoration  27.2 MWMCL will provide a suitable form of livelihood assistance for those affected households fully reliant on farming in the Project area who are not capable of working for the Company or don't meet the		26.3	Resettlement Action Framework for areas potentially requiring relocation of	
and Income Restoration  A WMCL will provide a suitable form of livelihood assistance for those affected households fully reliant on farming in the Project area who are not capable of working for the Company or don't meet the	Livelihood		Project-affected households/persons in accordance with the amount of land taken from the household in the 33 affected villages.  MWMCL will allocate a minimum of one job to each household that was relocated from	
	and Income	1	livelihood assistance for those affected households fully reliant on farming in the Project area who are not capable of working for the Company or don't meet the	

Commitment Source	No.	Commitment	ESIA Reference
	27.3	MWMCL will use its best endeavors to create job opportunities for the full-time graduates in the affected villages. As part of its efforts MWMCL will provide on-the-job training to those who volunteer to be trained. Those who are proven to be qualified after training will be provided opportunities to be employed by MWMCL provided they want to work for the Company.	Section 12.5
	27.4	MWMCL will develop a Community Natural Resources Management Plan to compensate for restricted access to medicinal plants and other botanic resources in the Project area.	Section 12.4
क के ग्लास कर के किस के कि	27.5	MWMCL will restore or improve livelihoods of relocated households through employment, training, and other assistance. It will provide transitional assistance (cash or in- kind) to relocated households in the interim period between relocation and three months receipt of wages with the Company.	Section 9.1



Commitment Source	No.	Commitment	ESIA Reference
	27.6	For those relocated households, whose members are physically incapable of working for the Company or do not meet the Company's employment criteria or are fully reliant on farming, the Company will provide tangible assistance, including monetary support.	
	27.7	MWMCL will work with government to identify alternative industries capable of absorbing mine site employees who will lose their jobs upon mine closure.	Section 9.1
	27.8	MWMCL will implement measures to curtail the loss of wood and other natural resources.	Section 12.4
	28.1	Experienced Myanmar nationals with transferable skills will be identified and retrained to the standards required for an international mining project.	Section 12.5.4
Employment and Training		All employees and relevant contractors will be trained for the requirements of the position they are holding, including specialized training indicated in EMP/SMP.	Section 12.5.4
		Working conditions will meet international standards, to which the Republic of the Union of Myanmar is a signatory, and national standards.	Section 12.5.4
30 0 10 10 10 10 10 10 10 10 10 10 10 10			July hid

Commitment Source	No.	Commitment	ESIA Reference
	28.4	MWMCL will promote local employment	Section
		by gradually replacing ex-pat personnel	12.5.4
		with locals and adopt training programs	
	28.5	to facilitate this process.	
	28.5	MWMCL will adopt recruitment procedures	Section
		that are fair, transparent, and public and	12.5.4
		open to all. These procedures will be	
		advertised in advance, especially in the	
		affected communities and local area	
		overall.	
In-migration	29.1	MWMCL will control migration influx by	Section 9.4
		restricting employment to local persons	
		and supporting local structures to manage	
		in-migration.	
	30.1	MWMCL will design the accommodation	Section
Town Planning		village in an appropriate town planning	5.21
		layout and incorporating local architectural	
		styles.	
	31.1	On closure, the water will be contained and	Section
		water levels managed such that the waste	11.7.6
		rock and rock within the pit walls that has	
		the potential to produce acid or leach	
		metals remains submerged in perpetuity.	
		Water levels will also be maintained at a	
		level lower than the surrounding	
		groundwater table to reduce seepage of	
		contaminated water from the pit lake into	
		groundwater, thus finished waste rock	
		levels in the pit should not exceed that	
Sof 1071 day		level in the pit.	

Commitment No.		Commitment	ESIA Reference
	31.2	MWMCL has committed to do the following:	Section
		<ul> <li>Further modelling of the pit lake to better define the water chemistry within the pit lake;</li> </ul>	11.7.6
		<ul> <li>Periodically integrate data collected from mine dewatering into the pit water models to verify the conclusions reached to date regarding the pit lake chemistry;</li> </ul>	
		<ul> <li>Assist the community and stakeholders to identify a suitable use for the pit water.</li> </ul>	
	31.3	MWMCL is committed to periodically	Section
		investigate the predicted behavior of the	11.7.6
		water inflow as additional data becomes	
		available during the mining period to verify	
		the pit lake model.	
	31.4	If the necessity of using the pit water is	Section
		confirmed, MWMCL commits to assisting	11.7.6
		the community and stakeholders to identify	
		a suitable use for pit water at least five (5)	
		years prior to mine closure.	
	32.1	MWMCL will develop and implement a Care	Section
		and Maintenance Plan for the management	11.10.1
		of seepage from HLP or waste rock material	
	1	into the groundwater. It will also minimize	
Mine Closure		the catchment area of the pit and maintain	
		a pit lake elevation at a suitable depth to	
	1 1	minimize acid production whilst	
of rate of		maintaining the pit as a hydraulic sink.	who have
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Commitment Source	No.	Commitment	ESIA Reference
	32.2	MWMCL will develop and implement a Care	Section
		and Maintenance Plan for the management	11.10.1
		of dirty water run-off from the plant area,	
		pit, and waste rock and HLP area and will	
		install a passive water treatment wetland	
		system.	
		MWMCL will identify the ponds to be used	
		on closure for the treatment of run-off and	
		storage of wastes.	
	32.3	MWMCL will erect a fence around the	Section
		Project site to restrict access to re-	11.10.1
		vegetated areas.	
Cultural Heritage	33.1	MWMCL will support local structures to	Section 9.3
outenat Heritage		retain/reinforce traditional values and	
		cultural systems should they be eroding	
		and causing intergenerational and/or	
		family tension as a result of information	
		diffusion and opportunities directly or	
		indirectly resulting from the Project.	
	33.2	Determine the boundaries of the Project	Section
		footprint.	12.2
	33.3	Survey and relocate archaeological/	Section
		cultural sites prior to intrusive construction	12.2
		works.	
	33.4	Relocation of cemeteries and gravesites	Section
		will be in accordance with legislative	12.2
		requirements and in consultation with	
		descendants and Tribal authorities.	
	33.5	A Phase II survey will be conducted for the	Section
<b>ဝန် ၊ကျ</b> င် <sub>တွင်</sub>		excavation and documentation of all	12.2
Samola Co		archaeological sites to be disturbed as a	San Contraction of the Contracti

Commitment Source	No.	Commitment	ESIA Reference	
		result of construction or operations.		
	33.6	Construction personnel will be trained to	Section	
		ensure proper management of construction	12.2	
		activities around cultural heritage sites and		
		to follow established procedures for		
To Story Say		handling chance finds.		



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Section 1

Environmental Component	Environmental  Management Plan  or  Environmental  Monitoring Program	Reporting and Monitoring Schedule	ESIA Reference Section
	11.8.3.1 Fauna Identification and Handling Monitoring	Wildlife mortalities (e.g., from air strikes, vehicle strikes, shooting, other sources); Wildlife monitoring- weekly site inspections and wildlife counts.  Monthly reporting to MWMCL Management Team	
	11.8.3.2 Flora Monitoring	Annual site inspections and flora surveys including vegetation types; and Species diversity	11.8.3.2
	Vegetation and Fauna Conservation Plan The protection and conservation of local vegetation and deer species through the development of a Deer Garden within the boundaries of the Project area, and the development of a separate Natural	Monthly reporting plan implementation to MWMCL Management Team Quarterly reporting to Environmental Conservation Department (ECD) Annually reporting to ECD and Department of Mines	11.8.4
कार वर्षः त्युर्द्ध कर्षः	Forest within the Salingyi township.		

		Sevenius end standarius Sevenius Sevenius	
		Appete light proorting, to settle and the testlement of Mines	
i üles engenerie   Wosty   Man «generies	i, mo, čoli Wasta Manserrum	Hördig tegring to Hit Colling pulsanches Machille tegrifies to brokenweich Loosenhaum Engrotings	:
	, a section of	Adumby reporting in Car age of plent moffers hashed repaiding to halvicharages wal Toos.	
	Modhodiig 1101 is saadus Node Meiremans.	nuaring reperting to subject with against Trust desprote hypolitics to	
		Continued of Mines	
	12.3.2.1. Hamidaan Waate Maariala Waatu dhg	MWMCL Constitution Mahager will conduct restlice inspections of all intracdous substances storage areas, and worksite	