

**ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR THE
PROPOSED *MANGANESE-MINING PROJECT (20817SSML) AT
DARANNA, BAGUDO LGA OF KEBBI STATE; BY SINO MINMETALS
COMPANY LIMITED (SMCL)***

Background Information Document (BID)

This Background Information Document (BID) provides information to assist stakeholders to participate in the Environment Impact Assessment (EIA) and environmental authorization process for the proposed *Manganese-Mining Project (20817SSML) at Daranna, Bagudo LGA of Kebbi State; by Sino Minmetals Company Limited (SMCL)*

What is the EIA About?

Basically, the EIA is the process of identifying, predicting, evaluating and mitigating the bio physical, social and other relevant effects of **SMCL** proposed project prior to major decisions being taken and commitments made.

In compliance with Nigeria regulatory bodies statutory provisions and in accordance with the EIA Act 86 of 1992, *the project-proponent* has commissioned Richflood International Limited, being a Nigerian based environmental consultant, to conduct an Environmental Impact Assessment (EIA) for the proposed Manganese Mining Operations at Daranna in Bagudo Local Government Area of Kebbi State, North-west, Nigeria.

Background

SMCL is a Chinese metals and mineral trading company currently undertaking mineral exploration and development in Nigeria. The company is known for its small scale mining operations of *Gold and Manganese*, by means of exploring, mining and processing the massive deposit of the mineral ore in the mineralized zone.

SMCL currently holds one small-scale mining lease for (**Reference Number 20817SSML**) The Mining Site having 15 Cadastral Units is equivalent to an area of 3.0km².



Figure 1: Satellite Imagery of Coordinate (corner) Points of the SINO MinMetals Co. Ltd. Mine-Site Location, Bagudo

Project Location

Kebbi is a state in North-Western Nigeria with its capital at Birnin Kebbi. The state was created out of a part of Sokoto State in 1991. Kebbi State is bordered by Sokoto State, Niger State, Zamfara State, Dosso Region in the Republic of Niger and the nation of Benin. It has a total area of 36,800 km².

Project Influenced Areas (Communities; Bagudu L.G.A)

- i. Daranna Community
- ii. Bakinruwa Community
- iii. Buya Community.



Fig 2: Showing the location of Birnin Kebbi, Capital of Kebbi State



Figure 3: Map of Nigeria showing Kebbi State (the project area)



Plate 1: Showing the mineralised area (proposed manganese mine site)

Objectives of the EIA

The objectives of the EIA for the project site are to:

- Provide information and evidence required for developing an Environmental Impact Statement for the project site;
- Establish baseline information for the project site.
- Identify associated/potential impacts of the project in the area;
- Recommend preventive, mitigative and control measures for the identified potential/associated adverse impacts of the project; and
- Develop a cost effective Environmental Management Plan (EMP) for the lifetime of the project.



Fig 2: Adopted EIA approach and stages

Project Overview

The Site Facilities Area would include moveable erections and demountable houses for site amenities such as:

- i. Office/administrative building
- ii. Clinic/first Aid building
- iii. Residential buildings (non-processing area); *this area is presently not proposed*
- iv. Industrial area (processing area)
- v. Stockpiling/loading area
- vi. Equipment maintenance workshop
- vii. Bath house/Toilet (convenience)
- viii. Water supply section (Borehole-source)
- ix. Mini tank farm (Area designated for the storage of petroleum product such as diesel, fuel, oils and other lubricant)
- x. Mine Pit area
- xi. Power house (*housing generating-sets supporting main power*)

Other Social Infrastructures may be constructed as deemed fit by the Company during project initiation.

Project-Site Facilities will include:

- Offices/Administrative block building
- Warehouse/storage area
- Sales/marketing/distribution section
- Workshop maintenance
- Security/Guard house
- Green-belt area
- Vehicle parking lot/space and transport-route map

The basic mining operations at the mine site will follow a systematic exploitation of the deposit, which involves the following chain (process flow) of activities:

- Stage 1: Overburden removal
- Stage 2: Excavation/Mining of deposits
- Stage 3: Disintegration of rock deposits (crushing/screening)
- Stage 4: Processing (burning with coal to remove impurities)
- Stage 5: Haulage of materials to Stockpiling area
- Stage 6: Loading of materials
- Stage 7: Sales to end users (*mainly exportations to China*)

POTENTIAL AND ASSOCIATED IMPACT ASSESSMENT

Environmental Impact Indicators

The environmental impact indicators for the study are easily observable parameters that will indicate change/deviation, which can be used to monitor the various environmental components.

The primary ***Biophysical Indicators*** for the on-going impact assessment are the following:

- Climate and meteorology;
- Air quality;
- Noise levels;
- Groundwater;
- Geology and geomorphology;
- Soils and soil erosion;
- Drainage patterns and flooding;
- Unique physical features; and
- Vegetation including economic trees and crops.

The primary ***Socio-Economic Indicators*** for the on-going impact assessment are the following:

- Land use;
- Employment and income;
- Community population and ethnicity;
- Community relations; and

- Services (e.g water and electricity supply).

For the proposed project, the summary preliminary environmental issues and social benefits envisaged is listed below:

1. Socio-Economic and Livelihood Impacts:

- Increased government revenue;
- Creation of employment opportunities and skills enhancement (A number of local businesses likely to secure contracts. Potential exists for creating income and building a more stable and diverse local economy);
- Social benefits for the host communities through on-going community development plans.
- Increased price inflation and economic vulnerability; and
- Community anger and resentment over unmet expectations.

2. Impacts Related to Project Induced In-Migration.

3. Changes to Socio-Cultural Heritage:

- Disturbance to cultural values, traditional leadership and intangible heritage.

4. Community Health, Safety and Security:

- Increased incidence of communicable diseases;
- Increased transmission of malaria; and
- Increased incidence of non-communicable diseases.

5. Impact on flora and fauna

- Destruction of habitat for plant species of special concern (SSC) within the farm development footprints.
- Destruction of habitat for faunal species of special concern (SSC).
- Loss of plant SSC due to vegetation clearing and disturbance
- Disruption of ecological corridors, patterns and processes
- Increased erosion risk and topsoil loss due to vegetation clearing and disturbances
- Loss of fauna species of special concern as a result of poaching, hunting and trapping.
- Loss of plant species of special concern (collection for ethno botanical use, firewood, etc.).

Call for Participation

The stakeholder engagement process is designed to conform to the Nigerian EIA Decree and international standards, including the IFC Performance Standards. Key objectives for stakeholder engagement for this project are:

1. Share information about the Project;
2. Gather local knowledge to improve understanding of the environmental and social context and understand locally-important issues;
3. Enable stakeholders to raise concerns / questions about the Project;
4. Gather responses on the EIA findings and incorporate stakeholder views into the design and management measures;
5. Respond to concerns and questions and report back on the findings of the EIA and proposed management measures;
6. Lay foundation for future stakeholder engagement.

Anyone who is interested or affected by the proposed project has a right to participate in the EIA process, and is invited to further participate in the EIA Process. Please make use of the following opportunities to be involved in the stakeholder engagement process:

- Study the information made available in this Background Information Document;
- Contact the Stakeholder Engagement Team to obtain further project information, and/or raise issues and concerns (contact details provided below);
- Attend the Stakeholder meetings to obtain further project information, interact with the Project Team, and/or raise issues and concerns. More information about the meetings will be circulated through letters, community leaders, radio announcements and through the project website.

Contact Information

Richflood International Ltd
Comfort Asokoro-Ogaji
info@richflood.com

Sino Minmetals Company Limited
Mr. Tobi Oke
tobioko19@yahoo.com